Peer-Reviewed Publications Citing Vapourtec

2023

Total publications as of November 2023: 1045
Year total as of November 2023: 112

[1045] X. Yuan, H. Fan, J. Liu, L. Qin, J. Wang, X. Duan, J. Qiu, K. Guo, "Recent advances in photoredox catalytic transformations by using continuous-flow technology," *Chinese Journal of Catalysis,* vol. 50, pp. 175-194, 2023.

[1044] S. Hammer, F. Nanto, P. Canu, S. B. Otvos, C. O. Kappe, "Application of an Oscillatory Plug Flow Reactor to Enable Scalable and Fast Reactions in Water Using a Biomass-Based Polymeric Additive," *ChemSusChem,* pp. e202301149, 2023.

[1043] J. H. Dunlap, J. G. Ethier, A. A. Putnam-Neeb, S. Iyer, S. L. Luo, H. Feng, J. A. Garrido Torres, A. G. Doyle, T. M. Swager, R. A. Vaia, P. Mirau, C. A. Crouse, L. A. Baldwin, "Continuous flow synthesis of pyridinium salts accelerated by multi-objective Bayesian optimization with active learning," *Chemical science,* vol. 14, no. 30, pp. 8061-8069, 2023.

[1042] T. Biremond, M. Riomet, P. Jubault, T. Poisson, "Photocatalytic and Electrochemical Borylation and Silylation Reactions," *Chemical record (New York, N.Y.),* pp. e202300172, 2023.

[1041] Q. Cao, J. D. Tibbetts, G. L. Wrigley, A. P. Smalley, A. J. Cresswell, "Modular, automated synthesis of spirocyclic tetrahydronaphthyridines from primary alkylamines," *Communications chemistry*, vol. 6, no. 1, pp. 215, 2023.

[1040] L. F. Peña, P. González-Andrés, L. G. Parte, R. Escribano, J. Guerra, A. Barbero, E. López, "Continuous Flow Chemistry: A Novel Technology for the Synthesis of Marine Drugs," *Marine drugs,* vol. 21, no. 7, 2023.

[1039] J. Nova-Fernández, G. Pascual-Coca, S. Cabrera, J. Alemán, "Rapid and Safe Continuous-Flow Simmons-Smith Cyclopropanation using a Zn/Cu Couple Column," *Advanced Synthesis & Catalysis,* 2023.

[1038] A. Ubale, M. Shaikh, N. Mohanta, B. Gnanaprakasam, "Peroxidation and Skeletal Rearrangement for the Synthesis of Dioxole-2-Carboxamide Derivatives under Continuous-Flow Conditions," *Advanced Synthesis & Catalysis,* vol. 365, no. 18, pp. 3094-3100, 2023.

[1037] J. García-Lacuna, M. Baumann, "Modular Photochemical Flow Synthesis of Structurally Diverse Benzyne and Triazine Precursors," *Advanced Synthesis & Catalysis*, vol. 365, no. 15, pp. 2628-2635, 2023.

[1036] E. Broumidis, C. G. Thomson, B. Gallagher, L. Sotorríos, K. G. McKendrick, S. A. Macgregor, M. J. Paterson, J. E. Lovett, G. O. Lloyd, G. M. Rosair, A. S. Kalogirou, P. A. Koutentis, F. Vilela, "The Photochemical Mediated Ring Contraction of 4H-1,2,6-Thiadiazines To Afford 1,2,5-Thiadiazol-3(2H)-one 1-Oxides," *Organic letters*, vol. 25, no. 37, pp. 6907-6912, 2023.

[1035] C. Bracken, M. Baumann, "Synthesis of Highly Reactive Ketenimines via Photochemical Rearrangement of Isoxazoles," *Organic letters*, vol. 25, no. 35, pp. 6593-6597, 2023.

[1034] M. Mhate, C. S. Mahanta, D. K. Dhaked, V. Ravichandiran, S. P. Swain, “Metal-free synthesis of selenoesters directly from carboxylic acids using bifunctional selenoureas under batch and continuous-flow conditions,” *Chemical communications (Cambridge, England),* vol. 59, no. 73, pp. 10920-10923, 2023.

[1033] E. Callard-Langdon, A. Steven, R. Kahan, “Shining a Light on the Advances, Challenges and Realisation of Utilising Photoredox Catalysis in Pharmaceutical Development,” *ChemCatChem,* vol. 15, no. 15, 2023.

[1032] M. O'Shaughnessy, A. C. Padgham, R. Clowes, M. A. Little, M. C. Brand, H. Qu, A. G. Slater, A. I. Cooper, “Controlling the crystallisation and hydration state of crystalline porous organic salts*,” Chemistry (Weinheim an der Bergstrasse, Germany),* pp. e202302420, 2023.

[1031] J. H. Griwatz, M. L. Kessler, H. A. Wegner, “Continuous-Flow Synthesis of Cycloparaphenylene Building Blocks on a Large Scale,” *Chemistry (Weinheim an der Bergstrasse, Germany),* pp. e202302173, 2023.

[1030] A. K. Mittal, P. Pathak, G. Prakash, D. Maiti, “Highly Scalable and Inherently Safer Preparation of Di, Tri and Tetra Nitrate Esters Using Continuous Flow Chemistry,” *Chemistry (Weinheim an der Bergstrasse, Germany),* pp. e202301662, 2023.

[1029] S. Vicinanza, F. Annunziata, D. Pecora, A. Pinto, L. Tamborini, “Lipase-mediated flow synthesis of nature-inspired phenolic carbonates,” *RSC advances*, vol. 13, no, 33pp. 22901-22904, 2023.

[1028] J. Liao, D. N. Hunter, U. N. Oloyede, J. W. McLaughlin, C. Wang, A. El Marrouni, “Metal-Free Addition of Alkyl Bromides to Access 3,3-Disubstituted Quinoxalinones Enabled by Visible-Light Photoredox Catalysis,” *The Journal of organic chemistry,* vol. 88, no. 16, pp. 11762-11766, 2023.

[1027] J. Noh, J. Y. Cho, M. Park, B. Y. Park, “Visible-Light-Mediated TiO2-Catalyzed Aerobic Dehydrogenation of N-Heterocycles in Batch and Flow,” *The Journal of organic chemistry,* vol. 88, no. 15, pp. 10682-10692, 2023.

[1026] P. Naik, J. García-Lacuna, P. O’Neill, M. Baumann, “Continuous Flow Oxidation of Alcohols Using TEMPO/NaOCl for the Selective and Scalable Synthesis of Aldehydes,” *Organic Process Research & Development,* 2023.

[1025] A. Bonner, M. Baumann, “Development of a Continuous Flow Baldwin Rearrangement Process and Its Comparison to Traditional Batch Mode,” *Organic Process Research & Development,* 2023.

[1024] M. Vasilev, A. Gangu, P. Gajula, N. Kaetzel, V. Natarajan, B. Desai, G. Sirasani, B. Qu, C. Senanayake, “Development of Continuous Flow Processes to Access Pyrrolo[2,1-f][1,2,4]triazin-4-amine: An RSM for the Synthesis of Antiviral Drugs,” *Organic Process Research & Development,* 2023.

[1023] J. Swierk, “The Cost of Quantum Yield,” *Organic Process Research & Development,* vol. 27, no. 7, pp. 1411-1419, 2023.

[1022] K. Kumar, M. Mhate, V. Ravichandiran, S. Swain, "Bis(pinacoloto)diboran/4-phenyl pyridine system for one-pot photocatalyzed borylation and reduction of aldehyde: synthesis of tavaborole in a flow reactor," Synthesis, 2023.

[1021] A. Petronilli, T. Carofiglio, P. Zardi, "Direct Arylation of Thiophenes in Continuous Flow," *ChemistrySelect,* vol. 8, no. 30, 2023.

[1020] T. Maschmeyer, D. J. Russell, J. G. Napolitano, J. E. Hein, "Reaction monitoring via benchtop nuclear magnetic resonance spectroscopy: A practical comparison of on-line stopped-flow and continuous-flow sampling methods," *Magnetic resonance in chemistry : MRC,* 2023.

[1019] S. Michałek, A. Powała, L. Gurba-Bryśkiewicz, N. Piórkowska, P. Olejkowska, A. Yamani, Z. Ochal, K. Dubiel, M. Wieczorek, "Fast Claisen condensation reaction optimization in a continuous flow reactor," *Monatshefte für Chemie - Chemical Monthly,* 2023.

[1018] S. Jana, V. Mayerhofer, C. Teskey, "Photo- und Electrochemische Cobalt-Katalysierte Wasserstoffatomübertragung für die Hydrofunktionalisierung von Alkenen," *Angewandte Chemie*, vol. 135, no. 41, 2023.

[1017] T. C. Lee, Y. Tong, W. C. Fu, "Advances in Continuous Flow Fluorination Reactions," *Chemistry, an Asian journal,* pp. e202300723, 2023.

[1016] R. Martin, C. Odena, M. Linares, N. Castellanos-Blanco, R. McGuire, J. Alonso, A. Dieguez, E. Tan, J. Alcazar, P. Buijnsters, S. Cañellas, "Late-Stage C(sp2)-C(sp3) Diversification via Nickel Oxidative Addition Complexes," *Organic Chemistry*, 2023.

[1015] F. Nanto, S. Otvos, C. Kappe, P. Canu, "Experimental and Computational Investigation of Fluid Dynamics and Solid Transport in Split-and-Recombine Oscillatory Flow Reactors Using Water as Medium," Chemical Engineering and Industrial Chemistry, 2023.

[1014] N. Petrović, B. Malviya, C. Kappe, D. Cantillo, "Scaling-up electroorganic synthesis using a spinning electrode electrochemical reactor in batch and flow mode," *Organic Chemistry,* 2023.

[1013] H. Grantham, R. Lee, G. Wardas, J. Mistry, M. Elsegood, I. Wright, G. Pritchard, M. Kimber, "Transition metal free continuous flow synthesis of 2,5-diaryl furans: access to medicinal building blocks and optoelectronic materials," *Organic Chemistry,* 2023.

[1012] M. Kraft, J. Bai, S. Mosbach, C. Taylor, D. Karan, K. Lee, S. Rihm, J. Akroyd, A. Lapkin, "From Platform to Knowledge Graph: Distributed Self-Driving Laboratories," *Research Square,* 2023.

[1011] T. A. Nguyen, T. H. Nguyen, V. D. Pham, M. T.Vu, "Research Activities at Faculty of Chemical Technology, Hanoi University of Industry-20 Years of Growth and Development, Vietnam Journal of CHEMISTRY," 2023.

[1010] J. Lowe, "4-π-Photocyclisation of Troponoids-Scope and Applications," *Thesis,* 2023.

[1009] M. Kraft, J. Bai, S. Mosbach, C. Taylor, D. Karan, K. Lee, S. Rihm, J. Akroyd, A. Lapkin, "Expanding the Scope of the Paternò-Büchi Reaction Methodology Development and Mechanistic Studies," *Thesis,* 2023.

[1008] P. Zambelli, “A biocatalytic approach for the synthesis of Lilybelle and other fragrances starting from citrus industry by-products,” *Thesis,* 2023.

[1007] E. Brenna, “A biocatalytic approach for the synthesis of Lilybelle® and other fragrances starting from citrus industry by-products,” *Thesis,* 2023.

[1006] L. Caron, “Étude de nouvelles méthodes d'oxydation d'hydrazones en composés diazoïques,” *Thesis,* 2023.

[1005] R. C. Epplin, “[2]-Ladderanes as Building Blocks for Medicinal Chemistry,” *Thesis,* 2023.

[1004] T. Jiang, G. Darlot, C. Ma, T. Gefflaut, V. De, “Enzyme activity prediction using neural networks, docking and high-throughput screening results.” *Conference,* 2023.

[1003] P. Sagmeister, M. Prieschl, D. Kaldre, C. G1adiyar, “Continuous Flow-Facilitated CB2 Agonist Synthesis, Part 1: Azidation and [3+ 2] Cycloaddition,” *Org. Process Res. Dev.*, https://pubs.acs.org/doi/full/10.1021/acs.oprd.3c00035, 2023.

[1002] S. B. H Patterson, R. Wong, G. Barker, F. Vilela, “Advances in continuous polymer analysis in flow with application towards biopolymers,” *Journal of Flow Chemistry,* https://link.springer.com/article/10.1007/s41981-023-00268-y, 2023.

[1001] M. Oliva, V. V. Chernobrovkina, E. Van Der Eyken, “Boronic acids and their derivatives as continuous flow friendly alkyl radical precursors,” *Synlett,* https://www.thieme-connect.com/products/ejournals/abstract/10.1055/a-2068-6038, 2023.

[1000] A. I. Alfano, S. Pelliccia, G. Rossino, O. Chianese, “Photo-Flow Technology for Chemical Rearrangements: A Powerful Tool to Generate Pharmaceutically Relevant Compounds,” *ACS Med. Chem. Lett.,* https://pubs.acs.org/doi/full/10.1021/acsmedchemlett.3c00072, 2023.

[999] P. Baronas, J. L. Elholm, K. Moth-Poulsen, “Efficient degassing and ppm-level oxygen monitoring flow chemistry system,” *Reaction Chemistry & Engineering,* https://pubs.rsc.org/en/Content/ArticleLanding/2023/RE/D3RE00109A, 2023.

[998] M. Smyth, T. S. Moody, S. Wharry, M. Baumann, “Continuous Flow Synthesis of Cyclobutenes Using LED Technology,” *Synlett,* https://www.thieme-connect.com/products/ejournals/abstract/10.1055/a-2086-0630, 2023.

[997] E. Cooper, E. Alcock, M. Power, G. McGlacken, “The α-alkylation of ketones in flow,” *Reaction Chemistry & Engineering,* https://pubs.rsc.org/en/content/articlelanding/2023/re/d3re00229b, 2023.

[996] S. Jana, V. J. Mayerhofer, C. Teskey, “Photo-and Electrochemical Cobalt Catalysed Hydrogen Atom Transfer for the Hydrofunctionalisation of Alkenes,” *Angewandte Chemie International Edition,* 2023.

[995] D. C. Salgueiro, “Tuning Reactivity in C (sp 3)—C (sp 2) Cross-Electrophile Coupling,” *The University of Wisconsin - Madison ProQuest Dissertations Publishing,* https://www.proquest.com/docview/2812309946?pq-origsite=gscholar&fromopenview=true, 2023.

[994] L. Chang, S. Wang, Q. An, L. Liu, H. Wang, Y. Li, K. Feng, "Resurgence and advancement of photochemical hydrogen atom transfer processes in selective alkane functionalizations," *Chemical Science,* https://pubs.rsc.org/en/content/articlehtml/2023/sc/d3sc01118f?page=search, 2023.

[993] B. Pijper, R. Martín, A. J. Huertas-Alonso, M. L. Linares, "Fully Automated Flow Protocol for C (sp3)–C (sp3) Bond Formation from Tertiary Amides and Alkyl Halides," *Organic Letters,* https://pubs.acs.org/doi/full/10.1021/acs.orglett.3c01390, 2023.

[992] Y. Hato, T. F. Jamison, "Multi-platform synthesis of ondansetron featuring process intensification in flow," *Reaction Chemistry & Engineering*, https://pubs.rsc.org/en/content/articlelanding/2023/re/d3re00249g, 2023.

[991] A. Slattery, Z. Wen, P. Tenblad, D. Pintossi, "An all-in-one multipurpose robotic platform for the self-optimization, intensification and scale-up of photocatalysis in flow," *ChemRxiv,* https://chemrxiv.org/engage/chemrxiv/article-details/64809b97e64f843f41767eac, 2023.

[990] P. G. Grützmacher, R. Neuhauser, K. Stagel, "Combining Tailored Ionic Liquids with Ti3C2T x MXenes for an Enhanced Load-Carrying Capacity under Boundary Lubrication," *Advanced Engineering Materials,* https://onlinelibrary.wiley.com/doi/10.1002/adem.202300721, 2023.

[989] A. Kukor, "Leveraging novel process analytical technologies to access chiral small molecule drug precursors via dynamic crystallization," *PhD Thesis,* https://scholar.google.es/scholar_url?url=https://open.library.ubc.ca/media/download/pdf/24/1.0432799/4&hl=en&sa=X&d=2653671971833952807&ei=JAV_ZL3VAYuGmgHon7D4DA&scisig=AGlGAw9TZnvqLLMguGatSSHSU_7r&oi=scholaralrt&html=&pos=1&folt=kw, 2023.

[988] A. Azizan, L. Venter, P. J. Jansen van Rensburg, "Metabolite Changes of Perna canaliculus Following a Laboratory Marine Heatwave Exposure: Insights from Metabolomic Analyses," *Metabolites,* https://www.mdpi.com/2218-1989/13/7/815, 2023.

[987] T. A. Nguyen, T. H. Nguyen, V. D. Pham, M. T. Vu, T. M. H. Pham, "Research Activities at Faculty of Chemical Technology, Hanoi University of Industry - 20 Years of Growth and Development," *Vietnam Journal of Chemistry,* https://onlinelibrary.wiley.com/doi/full/10.1002/vjch.202300081, 2023.

[986] J. Garcia-Lacuna, M. Baumann, "Modular Photochemical Flow Synthesis of Structurally Diverse Benzyne and Triazine Precursors," *Advanced Synthesis & Catalysis,* https://onlinelibrary.wiley.com/doi/full/10.1002/adsc.202300414, 2023.

[985] A. Cresswell, Q. Cao, J. Tibbetts, G. Wrigley, A. Smalley, "Modular, Automated Synthesis of Spirocyclic Tetrahydronaphthyridines from Primary Alkylamines," https://assets.researchsquare.com/files/rs-3146809/v1_covered_a2cbd9e6-0327-4c2b-a86d-f08b5c29e752.pdf?c=1689241276, 2023.

[984] E. E. Callard-Langdon, A. Steven, R. J. Kahan, "Shining a Light on the Advances, Challenges and Realisation of Utilising Photoredox Catalysis in Pharmaceutical Development," *ChemCatChem,* https://chemistry-europe.onlinelibrary.wiley.com/doi/abs/10.1002/cctc.202300537, 2023.

[983] Y. Sato, J. Liu, I. E. Ndukwe, M. V. S. Elipe, D. J. Griffin “Liquid/liquid heterogeneous reaction monitoring: Insights into biphasic Suzuki-Miyaura cross-coupling,” *Chem Catalysis,* https://www.cell.com/chem-catalysis/pdf/S2667-1093(23)00219-1.pdf, 2023.

[982] J. R. Swierk, “The Cost of Quantum Yield,” *Org. Process Res. Dev.,* https://pubs.acs.org/doi/full/10.1021/acs.oprd.3c00167, 2023.

[981] J. H. Dunlap, J. G. Ethier, A. A. Putnam-Neeb, S. Iyer, “Continuous flow synthesis of pyridinium salts accelerated by multi-objective Bayesian optimization with active learning,” *Chemical Science,* https://pubs.rsc.org/en/content/articlehtml/2023/sc/d3sc01303k, 2023.

[980] J. Noh, J. Y. Cho, M. Park, B. Y. Park, “Visible-Light-Mediated TiO2-Catalyzed Aerobic Dehydrogenation of N-Heterocycles in Batch and Flow,” *The Journal of Organic Chemistry,* https://pubs.acs.org/doi/full/10.1021/acs.joc.3c00743, 2023.

[979] L. F. Peña, P. González-Andrés, L. G. Parte, R. Escribano, “Continuous Flow Chemistry: A Novel Technology for the Synthesis of Marine Drugs,” *Marine Drugs,* https://www.mdpi.com/1660-3397/21/7/402, 2023.

[978] M. Kraft, J. Bai, S. Mosbach, C. Taylor, D. Karan, K. F. Lee, “From Platform to Knowledge Graph: Distributed Self-Driving Laboratories,” https://assets.researchsquare.com/files/rs-3141873/v1_covered_f61677f1-33b8-4fb3-aef8-a00d33ebfdfb.pdf?c=1690259002, 2023.

[977] L. Chang, S. Wung, Q. An, L. liu, H. Wang, Y. Li, K. Feng, Z. Zuo, “Resurgence and advancement of photochemical hydrogen atom transfer processes in selective alkane functionalizations,” *Chemical Science,* 2023.

[976] S. Jana, V. Mayerhofer, C. Teskey “Photo- and electrochemical cobalt catalyzed hydrogen atom transfer for the hydrofunctionalisation of Alkenes,” *Angewandte Chemie International Edition,* pp. e202304882, 2023.

[975] E. Cooper, E. Alcock, M. Power, G. McGlacken, “The α-alkylation of ketones in flow,” *Reaction Chemistry and Engineering,* 2023.

[974] M. Smyth, T. S. Moody, S. Wharry, M. Baumann, “Continuous flow synthesis of cyclobutenes using LED technology,” *Synlett,* 2023.

[973] P. Baronas, J. L. Elholm, K. Moth-Poulsen, “Efficient degassing and ppm level oxygen monitoring flow chemistry system. *Reaction Chemistry and Engineering,* 2023.

[972] M. Oliva, V. V. Chernobrovkina, E. V. Van der Eycken. U. K. Sharma, “Boronic acids and their derivatives as continuous flow-friendly alkyl radical precursors,” *Synlett,* 2023.

[971] S. B. H. Patterson, R. Wong, G. Barker, F. Vilela, “Advances in continuous polymer analysis in flow with application towards biopolymers,” *Journal of Flow Chemistry,* 2023.

[970] P. Sagmeister, M. Prieschl, D. Kaldre, C. Gadiyar, C. Moessner, J. Sedelmeier, J. D. Williams, C. O. Kappe, “Continuous Flow-Facilitated CB2 Agonist Synthesis, Part 1: Azidation and [3+2] cycloaddition,” *Organic Process Research & Development,* 2023.

[969] R. Ali, T. Patra, T. Wirth, "Alkene reactions with superoxide radical anions in flow electrochemistry," *Faraday Discussions,* 2023.

[968] M. Zhang, P. Roth, "Flow photochemistry – from microreactors to large-scale processing." *Science Direct,* 2023.

[967] M. Krstic, S. Rossi, M. Sanz, A. Puglisi, "Laboratory scale continuous flow systems for the Enantioselective Phase Transfer catalytic synthesis of quaternary amino acids," *Molecules,* vol. 28, no. 3, pp. 1002, 2023.

[966] M. Molnar, M. Baumann, "Continuous flow synthesis of phenyl glucosazone and its conversion to 2h-1,2,3- triazole building blocks," *Journal of Flow Chemistry,* 2023.

[965] A. A. Ryan, S. D. Dempsey, M. Smyth, K. Fahey, T. S. Moody, S. Wharry, P. Dingwall, D. W. Rooney, J. M. Thompson, P. C. Knipe, M. J. Muldoon, "Continuous flow epoxidation of alkenes using a homogenous manganese catalyst with paracetic acid," *ACS Publications,* vol. 27, no. 2, pp. 262-268, 2023.

[964] K. Veeramani, N. Nayak, N. R. Cameron, A. Kumar, "Process intensification of dendritic fibrous nanospheres (DFMS) via continuous flow: a scalable and sustainable alternative to the conventional batch synthesis," *Reaction Chemistry and Engineering,* no. 4, 2023.

[963] Y. Sato, "Development of process analytical technologies and application for complicated reaction conditions," *Thesis,* 2023.

[962] B. Pijper, J. Alcázar, G. Oksdath-Mansilla, F. Bisogno, "Continuous-flow photochemistry as an automated platform integrated with closed-loop AI/ML approaches," *Chem Catalysis,* vol.3, no. 1, pp. 100488, 2023.

[961] Q. Wu, L. Li, B. Xu, J. Sun, D. Ji, Y. Li, L. Shen, Z. Fang, J. Duan, B. Chen, K. Guo, "Iron-catalyzed [4 + 2] annulation of amidines with α,β-unsaturated ketoxime acetates toward 2,4,6-trisubstituted pyrimidines," *Green Synthesis and Catalysis,* 2023.

[960] G. Kiala Kinkutu, C. Louis, M. Roy, J. Blanchard, J. Oble, "C3-Alkylation of Furfural Derivatives by Continuous Flow Homogeneous Catalysis," *ChemRxiv Catalysis,* 2023.

[959] B. Wright, A. Matviitsuk, M. Black, P. García-Reynaga, L. Hanna, A. Herrmann, M. Ameriks, R. Sarpong, T. Lebold, "Skeletal Editing Approach to Bridge-Functionalized Bicyclo[1.1.1]pentanes from Aza-Bicyclo[2.1.1]hexanes," *ChemRxiv Organic Chemistry,* 2023.

[958] C. Taylor, K. Felton, D. Wigh, M. Jeraal, R. Grainger, G. Chessari, C. Johnson, A. Lapkin "Accelerated Chemical Reaction Optimization using Multi-Task Learning," *ChemRxiv Organic Chemistry,* 2023.

[957] K. Veeramani, M. Shinde, V. Eda, B. Darapaneni, R. Hindupur, S. Madarapu, S. Sen, S. Oruganti, "Alternate end-game strategies towards Nirmatrelvir synthesis: Defining a continuous flow process for the preparation of an anti-COVID drug," *Tetrahedron Letters,* vol. 116, pp. 154344, 2023.

[956] F. Fanini, A. Luridiana, D. Mazzarella, A. Alfano, P. van der Heide, J. Rincón, P. García-Losada, C. Mateos, M. Frederick, M. Nuño, T. Noël, "Flow photochemical Giese reaction via silane-mediated activation of alkyl bromides," *Tetrahedron Letters,* vol. 117, pp. 154380, 2023.

[955] K. Kiss, S. Ránky, G. Gyulai, L. Molnár, "Development of a novel, automated, robotic system for rapid, high-throughput, parallel, solid-phase peptide synthesis," *SLAS technology,* vol. 28, no. 2, pp. 89-97, 2023.

[954] A. Labiche, M. Norlöff, S. Feuillastre, F. Taran, D. Audisio, "Continuous Flow Synthesis of Non-Symmetrical Ureas from CO2," *Asian Journal of Organic Chemistry,* vol. 12, no.3, 2023.

[953] R. Rubert, R. Paul, "The applications of organozinc reagents in continuous flow chemistry: Negishi coupling," *Journal of Flow Chemistry,* 2023.

[952] M. Molnar, M. Baumann, "Continuous flow synthesis of phenyl glucosazone and its conversion to 2H-1,2,3-Triazole building blocks," *Journal of Flow Chemistry,* 2023.

[951] K. Simon, D. Znidar, J. Boutet, G. Guillamot, J. Lenoir, D. Dallinger, C. Kappe, "Generation of 1,2-Difluorobenzene via a Photochemical Fluorodediazoniation Step in a Continuous Flow Mode," *Organic Process Research & Development,* vol. 27, no. 2, pp. 322-330, 2023.

[950] D. Tarange, N. Nayak, A. Kumar, "Continuous Flow Synthesis of Substituted 3,4-Propylenedioxythiophene Derivatives," *Organic Process Research & Development,* vol. 27, no.2, pp. 358-366, 2023.

[949] K. Cole, J. Douglas, T. Hammerstad, C. Stephenson, "Visible-Light Photocatalysis Academic-Industrial Collaboration Retrospective: Shared Learning and Impact Analysis," *Organic Process Research & Development,* vol. 27, no. 2, pp. 399-408, 2023.

[948] M. Prieschl, P. Sagmeister, C. Moessner, J. Sedelmeier, J. Williams, C. Kappe, "Continuous Flow-Facilitated CB2 Agonist Synthesis, Part 2: Cyclization, Chlorination, and Amination," *Organic Process Research & Development,* 2023.

[947] H. Thankappan, C. Burke, B. Glennon, "Indium chloride catalysed benzyl bromination using continuous flow technology," *Organic & biomolecular chemistry*, vol. 21, no. 2, pp. 508-513, 2023.

[946] Y.M. Kang, R.H. Kim, S.R. Atriardi, S.K. Woo, "Visible-Light Photoredox-Catalyzed Giese Reaction of α-Silyl Ethers with Various Michael Acceptors," *The Journal of organic chemistry,* vol. 88, no. 6, pp. 3555-3566, 2023.

[945] D.V. Sutar, N.U. Sarang, A.B. Jamdade, B. Gnanaprakasam, "Continuous Flow Inter- and Intramolecular Macrolactonization under High Dilution Conditions," *The Journal of organic chemistry,* vol. 88, no. 6, pp. 3740-3759, 2023.

[944] A.I. Alfano, S. Pelliccia, G. Rossino, O. Chianese, V. Summa, S. Collina, M. Brindisi, "Continuous-Flow Technology for Chemical Rearrangements: A Powerful Tool to Generate Pharmaceutically Relevant Compounds," *ACS medicinal chemistry letters,* vol. 14, no. 3, pp. 326-337, 2023.

[943] M. Krstić, S. Rossi, M. Sanz, A. Puglisi, "Laboratory Scale Continuous Flow Systems for the Enantioselective Phase Transfer Catalytic Synthesis of Quaternary Amino Acid," *Molecules (Basel, Switzerland),* vol. 28, no. 3, 2023.

[942] R. Ali, R. Babaahmadi, M. Didsbury, R. Stephens, R.L. Melen, T. Wirth, "Flow Electrochemistry for the N-Nitrosation of Secondary Amines," *Chemistry (Weinheim an der Bergstrasse, Germany),* pp. e202300957, 2023.

[941] S. Michałek, A. Maj, L. Gurba-Bryśkiewicz, W. Maruszak, M. Zagozda, Z. Ochal, K. Dubiel, M. Wieczorek, "Development and optimization of a continuous flow ester reduction with LiAlH4 in the synthesis of a key intermediate for a PI3Kδ inhibitor (CPL302415*)," Reaction Chemistry & Engineering,* 2023.

[940] M. Chaudhari, P. Gupta, P. Llanes, M. Pericàs, "Polymer-Supported Phosphoric-Acid Catalysed Enantioselective Pictet-Spengler Cyclisation for the Synthesis of Quaternary Tryptolines in Batch/Continuous Flow," *Advanced Synthesis & Catalysis,* vol. 365, no. 4, pp. 527-534, 2023.

[939] M. Zhang, P. Roth, "Flow photochemistry — from microreactors to large-scale processing," *Current Opinion in Chemical Engineering,* vol. 39, pp. 100897, 2023.

[938] A. Burke, M. Di Filippo, S. Spiccio, A.M. Schito, D. Caviglia, C. Brullo, M. Baumann, "Antimicrobial Evaluation of New Pyrazoles, Indazoles and Pyrazolines Prepared in Continuous Flow Mode," *International journal of molecular sciences,* vol. 24. no. 6, 2023.

[937] F. Rodrigues, V.Masliy, M. Silva, A. Felgueiras, R. Carrilho, M. Pereira, "Catalytic multi-step continuous-flow processes for scalable transformation of eugenol into potential fragrances," *Catalysis Today,* vol. 418, pp. 114055, 2023.

[936] E. Brenna, V. De Fabritiis, F. Parmeggiani, F. Tentori, D. Tessaro, "Lipase-Mediated Synthesis of Oleoyl Ethanolamide Starting from High-Oleic Sunflower Oil Soapstock," *ACS Sustainable Chemistry & Engineering,* vol. 11, no. 7, pp. 2764-2772, 2023.

[935] C.J. Taylor, A. Pomberger, K.C. Felton, R. Grainger, M. Barecka, T.W. Chamberlain, R.A. Bourne, C.N. Johnson, A.A. Lapkin, "A Brief Introduction to Chemical Reaction Optimization," *Chemical reviews,* vol. 123, no. 6, pp. 3089-3126, 2023.

[934] T. Kliś, "Visible-Light Photoredox Catalysis for the Synthesis of Fluorinated Aromatic Compounds," *Catalysts,* vol. 13, no. 1, pp. 94, 2023.

2022

Year total: 122

[933] A. I. Benitez-Mateos, A. Schneider, E. Hegarty, B. Hauer, F. Paradisi, "Spheroplasts preparation boosts the catalytic potential of a squalene-hopene cyclase," *Nature Journal,* vol. 13, no. 6269, 2022.

[932] C. Cavedon, S. Gisbertz, S. Reischauer, S. Vogl, E. Sperlich, J. H. Burke, R. F. Wallick, S. Schrottke, W. Hsu, L. Aghileri, Y. Pfeifer, N. Richter, C. Teutloff, H. Muller-Werkmeister, D. Cambie, P. H. Seeberger, J. Vura-Weis, R. M. Van dee Veen, A. Thomas, B. Pieber, "Intraligand

charge transfer enables visible-light-mediated Nickel-catalysed cross-coupling reactions," *Angewandte Chemie International Edition,* vol. 61, no. 46, pp. e202211433, 2022.

[931] R. I. Rodriguez, M. Sicignano, M. J. Garcia, R. C. Enriquez, S. Cabrera, J. Aleman, "Taming photocatalysis in flow: easy and speedy preparation of α-aminoamide derivatives," *Green Chemistry,* no. 17, 2022.

[930] T. Cohen, N. Waiskopf, A. Levi, D. Stone, S. Remennik, U. Banin, "Flow synthesis of photocatalytic semiconductor-metal hybrid nanocrystals," *Nanoscale,* no. 5, 2022.

[929] K. Machida, H. Yasukouchi, "Innovative process development of pharamaceutical intermediates under continuous- flow system," *Flow and Microreactor Technology in Medicinal Chemistry,* 2022.

[928] W. Hsu, S. Reischauer, P. H. Seeberger, B. Pieber, D. Cambie, "Heterogenous metallophotoredox catalysis in a continuous-flow packed bed reactor," *Beilstein Journal of Organic Chemistry,* vol. 18, pp. 1123-1130, 2022.

[927] X. Tian, J. Kaur, S. Yakubov, J. P. Barham, "α-amino radical halogen atom transfer agents for metallaphotoredox catalyzed cross-electrophile couplings of distinct organic halides," *ChemSusChem,* vol. 15, no. 15, pp. e202200906, 2022.

[926] B. Lockett-Walters, S. Thuillier, E. Baudouin, B. Nay, "Total synthesis of phytotoxic radulanin A facilitated by the photochemical ring expansion of a 2,2-dimethylchromene in flow," *ACS Publications,* vol. 24, no. 22, pp. 4029-4033, 2022.

[925] C. F. Liang, H. S. Hahm, N. M. Sabbavarapu, P. H Seeberger, "Automated synthesis of chondroitin sulfate oligosaccharides," *MethodsMolBiol,* vol. 2303, pp. 319-327, 2022.

[924] G. Xu, H. Yan, S. Zhang, Q. Wu, J. Duan, K. Guo, "Iron-catalysed synthesis of pyridines from α,β-unsaturated ketoxime acetates and N-acetyl enamides," *Synlett,* vol. 33, no. 03, pp. 283-287, 2022.

[923] L. Candish, K. D. Collins, G. C. Cook, J. J. Douglas, A. Gomez-Suarez, A. Jolit, S. Keess, "Photocatalysis in the life science industry," *Chemical Reviews,* vol. 122, no. 2, pp. 2907-2980, 2022.

[922] Y. Ko, M. Kim, C. Noh, M. J. Kim, K. lee, J. Kim, S. D. Kim, S. S. Jee, "Organic-inorganic hybrid electro-optic material with disperse red 1 chromophore fabricated by flow chemistry," *Journal of Flow Chemistry,* vol. 12, pp. 79-90, 2022.

[921] L. Buglioni, F. Raymenants, A. Slattery, S. D. A. Zondag, T. Noel, "Technological Innovations in photochemistry for organic synthesis: Flow chemistry, high-Throughput Experimentation, scale-up, photochemistry," *Chemical Review,* vol. 122, no. 2, pp. 2752-2906, 2022.

[920] C. A. Shukla, B. Udaykumar, Y. Saisivanarayana, A. Ismaili, T. Haripriya, M. M. Shinde, S. Neti, M. Uppada, V. Eda, S. Sen, S. Oruganti, "Delineating a green, catalyst free synthesis of a popular ntraceutical methylsulfonylmethane (MSM) in continuous flow," *Journal of Flow Chemistry,* vol. 12, pp. 1-7, 2022

[919] K. Baldwin, "Photochemical approaches to azetidines," *Thesis,* 2022.

[918] T. Wan, Z. Wen, G. Laudadio, L. Capaldo, R. Lammers, J.A. Rincón, P. García-Losada, C. Mateos, M.O. Frederick, R. Broersma, T. Noël, "Accelerated and Scalable C(sp3)-H Amination via Decatungstate Photocatalysis Using a Flow Photoreactor Equipped with High-Intensity LEDs," *ACS central science,* vol. 8, no. 1, pp. 51-56, 2022.

[917] B. Casali, E. Brenna, F. Parmeggiani, F. Tentori, D. Tessaro, "Multi-step chemo-enzymatic synthesis of azelaic and pelargonic acids from the soapstock of high-oleic sunflower oil refinement," *Green Chemistry*, vol. 24, no. 5, pp. 2082-2093, 2022.

[916] A.I. Benítez-Mateos, F. Paradisi, "Sustainable Flow-Synthesis of (Bulky) Nucleoside Drugs by a Novel and Highly Stable Nucleoside Phosphorylase Immobilized on Reusable Supports," *ChemSusChem,* vol. 15, no. 1, pp. e202102030, 2022.

[915] J.L. Nova-Fernández, M.J. García, L. Mollari, G. Pascual-Coca, S. Cabrera, J. Alemán, "Continuous-flow synthesis of alkyl zinc sulfinates for the direct photofunctionalization of heterocycles*," Chemical communications (Cambridge, England),* 2022.

[914] J.B. Azeredo, F. Penteado, V. Nascimento, L. Sancineto, A.L. Braga, E.J. Lenardao, C. Santi, "Green Is the Color": An Update on Ecofriendly Aspects of Organoselenium Chemistry," *Molecules (Basel, Switzerland),* vol. 27, no. 5, 2022.

[913] T. Maschmeyer, L. Yunker, J. Hein, "Quantitative and convenient real-time reaction monitoring using stopped-flow benchtop NMR," *Reaction Chemistry & Engineering,* 2022.

[912] L. Wan, M. Jiang, D. Cheng, M. Liu, F. Chen, "Continuous flow technology-a tool for safer oxidation chemistry*," Reaction Chemistry & Engineering,* vol. 7, no. 3, pp. 490-550, 2022.

[911] H. Marçon, J. Pastre, "Continuous flow Meerwein-Ponndorf-Verley reduction of HMF and furfural using basic zirconium carbonate," *RSC Advances,* vol. 12, no. 13, pp. 7980-7989, 2022.

[910] H. Lehmann, T. Ruppen, T. Knoepfel,"Scale-Up of Diazonium Salts and Azides in a Three-Step Continuous Flow Sequence," *Organic Process Research & Development*, 2022.

[909] G. Gambacorta, I. Baxendale, "Continuous-Flow Hofmann Rearrangement Using Trichloroisocyanuric Acid for the Preparation of 2-Benzoxazolinone," *Organic Process Research & Development,* vol. 26, no. 2, pp. 422-430, 2022.

[908] S. Nabil, E. Shalaby, M. Elkady, Y. Matsushita, A. El-Shazly, "Optimizing the Performance of the Meso-Scale Continuous-Flow Photoreactor for Efficient Photocatalytic CO2 Reduction with Water Over Pt/TiO2/RGO Composites," *Catalysis Letters,* 2022.

[907] M. Werłos, G. Kachkovskyi, M. Cieślak, P. Graczyk, P. Zawadzki, J. Kalinowska-Tłuścik, "Photocatalytic Approach to α,α-Difluoroalkyl Alcohols," *Photocatalytic Approach to α,α-Difluoroalkyl Alcohols,* Synthesis, 2022.

[906] J. Forni, M. Czyz, D. Lupton, A. Polyzos, "An electrochemical γ-C-H arylation of amines in continuous flow," *Tetrahedron Letters,* vol. 91, pp. 153647, 2022.

[905] J. Bai, L. Cao, S. Mosbach, J. Akroyd, A.A. Lapkin, M. Kraft, "From Platform to Knowledge Graph: Evolution of Laboratory Automation," *JACS Au,* vol. 2, no. 2, pp. 292-309, 2022.

[904] A. Benítez-Mateos, A. Schneider, E. Hegarty, B. Hauer, F. Paradisi, “Spheroplasts preparation boosts the catalytic potential of a terpene cyclase,” *ChemRxiv,* 2022.

[903] M. Oliva, F. Martens, E. Van der Eycken, U. Sharma “A continuous-flow protocol for photoredox-catalyzed multicomponent Petasis reaction,” *STAR Protocols*, vol. 3, no.1, pp. 101162, 2022.

[902] J.R. Baker, P.J. Cossar, M.A.T. Blaskovich, A.G. Elliott, “Amino Alcohols as Potential Antibiotic and Antifungal Leads,” *Molecules,* 2022.

[901] D. Kyprianou, G. Rarata, G. Emma, G. Diaconu, M. Vahčič, “Flow chemistry and the synthesis of energetic materials,” *European Commission,* 2022.

[900] F. Sommer, R.G. Aeschbacher, U. Thurnheer, C.O. Kappe, “Sustainable and Scalable Synthesis of Noroxymorphone via a Key Electrochemical N-Demethylation Step,” *ChemRxiv,* 2022.

[899] C. Bracken, M. Baumann, “Assessment of the Impact of Continuous Flow Chhemistry on Modern Heterocyclic Chemistry,” *researchgate.net*, pp. 21-307, 2022.

[898] M.A. Quibus, “Hydrogénation de dérivés de cétones en flux continu par catalyse de paires de Lewis frustrées,” *Thesis,* 2022.

[897] A. Luridiana, D. Mazzarella, L. Capaldo, J.A. Rincón, P. García-Losada, C. Mateos, M.O. Frederick, M. Nuño, W. Jan Buma, T.Noël, “The Merger of Benzophenone HAT Photocatalysis and Silyl Radical-Induced XAT Enables Both Nickel-Catalyzed Cross-Electrophile Coupling and 1,2-Dicarbofunctionalization of Olefins,” *ACS catalysis,* vol. 12, no. 18, pp. 11216-11225, 2022.

[896] A. Putnam-Neeb, J. Kaiser, A. Hubbard, D. Street, M. Dickerson, D. Nepal, L. Baldwin, “Self-healing and polymer welding of soft and stiff epoxy thermosets via silanolates,” *Advanced Composites and Hybrid Materials,* 2022.

[895] N. Abd Razak, P. Cognet, Y. Pérès, L. Gew, M. Aroua, “Kinetics and hydrodynamics of Candida antartica lipase-catalyzed synthesis of glycerol dioleate (GDO) in a continuous flow packed-bed millireactor,” *Journal of Cleaner Production*, vol. 373, pp. 13381, 2022.

[894] H. Luo, J. Ren, Y. Sun, Y. Liu, F. Zhou, G. Shi, J. Zhou, “Recent advances in chemical fixation of CO2 based on flow chemistry,” *Chinese Chemical Letters*, pp. 107782, 2022.

[893] K. Kochetkov, N. Bystrova, P. Pavlov, M. Oshchepkov, A. Oshchepkov, “Microfluidic asymmetrical synthesis and chiral analysis,” Journal of Industrial and Engineering Chemistry, vol., 115, pp. 62- 91, 2022.

[892] D. Perumal, M. Krishnan, K. Lakshmi, “Eco-friendly based stability-indicating RP-HPLC technique for the determination of escitalopram and etizolam by employing QbD approach,” *Green Chemistry Letters and Reviews,* vol. 15, no. 3, pp. 671-682, 2022.

[891] M.A. Levenstein, K. Robertson, T.D. Turner, L. Hunter, C. O'Brien, C. O'Shaughnessy, A.N. Kulak, P. Le Magueres, J. Wojciechowski, O.O. Mykhaylyk, N. Kapur, F.C. Meldrum, “Serial small- and wide-angle X-ray scattering with laboratory sources,” *IUCrJ*, vol. 9, no. Pt 5, pp. 538-543, 2022.

[890] D. Taylor, T. Malcomson, A. Zhakeyev, S. Cheng, G. Rosair, J. Marques-Hueso, Z. Xu, M. Paterson, S. Dalgarno, F. Vilela, "4,7-Diarylbenzo[c][1,2,5]thiadiazoles as fluorophores and visible light organophotocatalysts," *Organic Chemistry Frontiers*, 2022.

[889] J. Feng, X. Jia, S. Zhang, K. Lu, D. Cahard, "State of knowledge in photoredox-catalysed direct difluoromethylation," *Organic Chemistry Frontiers,* vol. 9 , no. 13, pp. 3598-3623, 2022.

[888] M. Andresini, S. Carret, L. Degennaro, F. Ciriaco, J.F. Poisson, R. Luisi, "Multistep Continuous Flow Synthesis of Isolable NH2 -Sulfinamidines via Nucleophilic Addition to Transient Sulfurdiimide," *Chemistry (Weinheim an der Bergstrasse, Germany),* pp. e202202066, 2022.

[887] W. Li, M. Jiang, M. Liu, X. Ling, Y. Xia, L. Wan, F. Chen, "Development of a Fully Continuous-Flow Approach Towards Asymmetric Total Synthesis of Tetrahydroprotoberberine Natural Alkaloids," *Chemistry (Weinheim an der Bergstrasse, Germany),* vol. 28, no. 33, pp. e202200700, 2022.

[886] C. Carlucci, "An Overview on the Production of Biodiesel Enabled by Continuous Flow Methodologies," *Catalysts,* vol. 12, no. 7, pp. 717, 2022.

[885] O.M. Griffiths, S.V. Ley, "Multicomponent Direct Assembly of N-Heterospirocycles Facilitated by Visible-Light-Driven Photocatalysis," *The Journal of organic chemistry,* 2022.

[884] A.M. Pandey, S. Mondal, B. Gnanaprakasam, "Continuous-Flow Direct Azidation of Alcohols and Peroxides for the Synthesis of Quinoxalinone, Benzooxazinone, and Triazole Derivatives," *The Journal of organic chemistry*, vol. 87, no. 15, pp. 9926-9939, 2022.

[883] B. Venezia, D. Morris, A. Gavriilidis, "Taylor-vortex membrane reactor for continuous gas-liquid reactions," *AIChE Journal,* 2022.

[882] M. Mlakić, L. Rajič, A. Ljubić, V. Vušak, B. Zelić, M. Gojun, I. Odak, I. Čule, I. Šagud, A. Šalić, I. Škorić, "Synthesis of new heterocyclic resveratrol analogues in milli- and microreactors: intensification of the Wittig reaction," *Journal of Flow Chemistry,* 2022.

[881] W. Connors, R. DeKorte, S. Lucas, A. Gopalsamy, R. Ziegler, "Synthesis of Benzothiazinones from Benzoyl Thiocarbamates: Application to Clinical Candidates for Tuberculosis Treatment," *European Journal of Organic Chemistry,* vol. 2022, no. 34, 2022.

[880] K. Safo, H. Noby, M. Matatoshi, H. Naragino, A. El-Shazly, "Statistical optimization modeling of organic dye photodegradation process using slag nanocomposite," *Research on Chemical Intermediates,* vol. 48, no. 10, pp. 4183-4208, 2022.

[879] A. Mittal, G. Prakash, P. Pathak, D. Maiti, "Synthesis of CTA and DNAN Using Flow Chemistry," *Asian Journal of Organic Chemistry,* 2022.

[878] J.H. Griwatz, A. Kunz, H.A. Wegner, "Continuous flow synthesis of azobenzenes via Baeyer-Mills reaction," *Beilstein journal of organic chemistry*, vol. 18, pp. 781-787, 2022.

[877] V. Laude, M. Nuño, R.C. Moses, D. Guthrie, "Evaluation of unexpected protecting group removal in solid-phase peptide synthesis: Quantified using continuous flow methods," *Journal of peptide science : an official publication of the European Peptide Society,* pp. e3441, 2022.

[876] A. Riddell, P. Kvist, D. Bernin, "A 3D printed photoreactor for investigating variable reaction geometry, wavelength, and fluid flow," *The Review of scientific instruments*, vol. 93, no. 8, pp. 084103, 2022.

[875] E. Broumidis, C. Thomson, B. Gallagher, L. Sotorríos, K. McKendrick, S. Macgregor, M. Paterson, J. Lovett, G. Lloyd, G. Rosair, A. Kalogirou, P. Koutentis, F. Vilela, "Photochemical Ring Editing: Access to Privileged 1,2,5-Thiadiazole Scaffolds via Efficient Carbon Excision from Thiadiazines Under Ambient, Aerobic Conditions," *ChemRxiv Organic Chemistry*, 2022.

[874] S. Pillitteri, P. Ranjan, G. Ojeda-Carralero, L. Vázquez Amaya, J. Alfonso-Ramos, E. Van der Eycken, U. Sharma, "Merging dual photoredox/cobalt catalysis and boronic acid (derivatives) activation for the Minisci reaction," *ChemRxiv Organic Chemistry*, 2022.

[873] L. Wan, G. Kong, M. Liu, M. Jiang, D. Cheng, F. Chen, "Flow chemistry in the multi-step synthesis of natural products," *Green Synthesis and Catalysis,* vol. 3, no. 3, pp. 243-258, 2022.

[872] F. Akwi, P. Watts, "Application of Continuous-Flow Processing in Multistep API and Drug Syntheses," *Flow and Microreactor Technology in Medicinal Chemistry,* pp. 199-231, 2022.

[871] P. Richardson, "Flow Chemistry in Medicinal Chemistry: Applications to Bcr-Abl Kinase Inhibitors," *Flow and Microreactor Technology in Medicinal Chemistry,* pp. 103-158, 2022.

[870] H. Wang, "Analysis of the Current Uses and Future Possibilities of Flow Chemistry in Organic synthesis," *Highlights in Science, Engineering and Technology,* 2022.

[869] V. Masliy, "Sustainable synthesis of natural-based potential fragrances via flow chemistry," *Thesis,* 2022.

[868] A. Kremsmair, "Stereoretentive preparation and reactions of highly optically enriched secondary alkyllithium, alkylmagnesium and alkylzinc reagents," *Thesis,* 2022.

[867] F. Herbrik, "(Asymmetric) photocatalysi under homogenous and heterogenous conditions – optimization in continuo, novel catalytic reactors and materials," *Thesis,* 2022.

[866] M. Krystic, "In batch and in flow synthesis of quaternary amino acids/amino derivatives," *Thesis,* 2022.

[865] A. Santanilla, G. Cook, "Applications of High Throughput Chemistry to Medicinal Chemistry," *The Power of High-Throughput Experimentation: Case Studies from Drug Discovery, Drug Development, and Catalyst Discovery (Volume 2),* pp. 21-mar, 2022.

[864] A. Burke, S. Spiccio, M. Di Filippo, M. Baumann, "Photochemical Synthesis of Pyrazolines from Tetrazoles in Flow," *SynOpen,* 2022.

[863] J. Spils, T. Wirth, B. Nachtsheim, "Two-Step Continuous-Flow Synthesis of 6-Membered Cyclic Iodonium Salts via Anodic Oxidation," *ChemRxiv Organic Chemistry,* 2022.

[862] A. Kumar Mittal, G. Prakash, P. Pathak, D. Maiti, "Synthesis of Picramide Using Nitration and Ammonolysis in Continuous Flow," *Chemistry, an Asian journal,* pp. e202201028, 2022.

[861] J. Sharley, G. Gambacorta, A. Collado Pérez, E. Ferri, A. Miranda, I. Fernández, J. Quesada, I. Baxendale, "A simple one-pot oxidation protocol for the synthesis of dehydrohedione from Hedione," *Tetrahedron,* pp. 133068, 2022.

[860] M. Ivanova, T. Poisson, P. Jubault, J. Legros, "Flow platform for the synthesis of benzodiazepines," *Journal of Flow Chemistry,* 2022.

[859] E. Brown, "Minireview: recent efforts toward upgrading lignin-derived phenols in continuous flow," *Journal of Flow Chemistry,* 2022.

[858] S. Donzella, A. Colacicco, L. Nespoli, M.L. Contente, "Mimicking Natural Metabolisms: Cell-Free Flow Preparation of Dopamine," *Chembiochem : a European journal of chemical biology,* pp. e202200462, 2022.

[857] S. Lathrop, L. Mlinar, O. Manjrekar, Y. Zhou, K. Harper, E. Sacia, M. Higgins, A. Bogdan, Z. Wang, S. Richter, W. Gong, E. Voight, J. Henle, M. Diwan, J. Kallemeyn, J. Sharland, B. Wei, H. Davies, "Continuous Process to Safely Manufacture an Aryldiazoacetate and Its Direct Use in a Dirhodium-Catalyzed Enantioselective Cyclopropanation," *Organic Process Research & Development,* 2022.

[856] M.B. Chaudhari, P. Gupta, P. Llanes, L. Zhou, N. Zanda, M.A. Pericàs, "An enantio- and diastereoselective approach to indoloquinolizidines in continuous flow," *Organic & biomolecular chemistry,* vol. 20, no. 42, pp. 8273-8279, 2022.

[855] D. Drelinkiewicz, R.J. Whitby, "A practical flow synthesis of 1,2,3-triazoles," *RSC advances,* vol. 12, no. 45, pp. 28910-28915, 2022.

[854] S. Michałek, L. Gurba-Bryśkiewicz, W. Maruszak, M. Zagozda, A.M. Maj, Z. Ochal, K. Dubiel, M. Wieczorek, "The design of experiments (DoE) in optimization of an aerobic flow Pd-catalyzed oxidation of alcohol towards an important aldehyde precursor in the synthesis of phosphatidylinositide 3-kinase inhibitor (CPL302415)," *RSC advances,* vol. 12, no. 52, pp. 33605-33611, 2022.

[853] G. Righetti, F. Tentori, E. Brenna, C. Gambarotti, "Development of a flow process for an easy and fast access to 2-pyrone derivatives," *Reaction Chemistry & Engineering,* vol. 8, no.1, pp. 199-204, 2022.

[852] K. Veeramani, N. Nayak, N. Cameron, A. Kumar, "Process intensification of dendritic fibrous nanospheres of silica (DFNS) via continuous flow: a scalable and sustainable alternative to the conventional batch synthesis," *Reaction Chemistry & Engineering*, 2022.

[851] S. Mondal, A. Pandey, B. Gnanaprakasam, "Continuous-flow Fe-zeolite-catalyzed temperature-directed synthesis of bioactive tetraketones and xanthenes using epoxides and cyclic-1,3-diketones via a Meinwald rearrangement," *Reaction Chemistry & Engineering*, 2022.

[850] S. Zhu, H. Li, Y. Li, Z. Huang, L. Chu, "Exploring visible light for carbon-nitrogen and carbon-oxygen bond formation via nickel catalysis," *Organic Chemistry Frontiers,* 2022.

[849] B. Pijper, I. Abdiaj, D. Leonori, J. Alcázar, "Development of an automated platform for C(sp3)-C(sp3) bond formation via XAT chemistry," *ChemCatChem*, 2022.

[848] A. Cruise, M. Baumann, "TBADT-Mediated C-C Bond Formation Exploiting Aryl Aldehydes in a Photochemical Flow Reactor," *ChemCatChem*, 2022.

[847] R. Crawford, M. Di Filippo, D. Guthrie, M. Baumann, "Consecutive photochemical reactions enabled by a dual flow reactor coil strategy," *Chemical communications (Cambridge, England*), vol. 58, no. 95, pp. 13274-13277, 2022.

[846] H. Kim, J. Lee, S. Jae Lee, J. Eun Oh, S. Dong Kim, Y. Malpani, Y. Hwang, B. Park, "Improving the sustainability and safety of ursodeoxycholic acid synthesis in continuous flow process with water," *Journal of Industrial and Engineering Chemistry,* 2022.

[845] I. Abdiaj, S. Cañellas, A. Dieguez, M.L. Linares, B. Pijper, A. Fontana, R. Rodriguez, A. Trabanco, E. Palao, J. Alcázar, "End-to-End Automated Synthesis of C(sp3)-Enriched Drug-like Molecules via Negishi Coupling and Novel, Automated Liquid-Liquid Extraction," *Journal of medicinal chemistry*, 2022.

[844] J.J. Walkowiak, C. van Duijnhoven, P. Boeschen, N.A Wolter, J. Michalska-Walkowiak, M. Dulle, A. Pich, "Multicompartment polymeric colloids from functional precursor Microgel: Synthesis in continuous process," *Journal of colloid and interface science,* vol. 634, pp. 243-254, 2022.

[843] W.A. Ribeiro Junior, "Análise da distribuição de vapor de uma lavanderia hospitalar," *Thesis,* 2022.

[842] J. Sæle, "Design and Synthesis of xCT Inhibitor Candidates," *Thesis,* 2022.

[841] A. Bogdan, "Flow Chemistry at the Extremes: Turning Complex Reactions into Scalable Processes," *Flow and Microreactor Technology in Medicinal Chemistry,* pp. 31-Jan, 2022.

[840] M. Linares, E. López, E. Palao, J. Alcázar, "Flow Chemistry Opportunities for Drug Discovery," *Flow and Microreactor Technology in Medicinal Chemistry*, pp. 67-102, 2022.

[839] B. Heinz, "The Preparation of Ketones in Continuous Flow using Li- or MgOrganometallics and Convenient Ester and Amide Acylation Reagents and The Preparation of Functionalized Pyridines via Pyridyne Intermediates," *Thesis*, 2022.

[838] C. Lai, "Synthèse de sulfilimines et sulfoximines à partir de N-mésyloxycarbamates catalysée par des complexes de fer," *Thesis,* 2022.

[837] B. Lockett-Walters, S. Thuillier, E. Baudouin, B. Nay, "A concise total synthesis of phytotoxic radulanin A facilitated by the photochemical ring expansion of a 2,2-dimethylchromene in flow," *ChemRxiv,* 2022.

[836] Z. Wen, D. Pintossi, M. Nuno, T. Noel, "Membrane-based TBADT recovery: increasing the sustainability of continuous-flow photocatalytic HAT transformations," *ChemRxiv,* 2022.

[835] J. Harenberg, R. Reddy Annapureddy, K. Karaghiosoff, P. Knochel, "Herstellung von Benzylischen Natrium Metallorganylen im Kontinuierlichen Durchfluss," *Angewandte Chemie*, 2022.

[834] A. Ladosz, B. Martin, "Selected Topic: SCS Seminar on Flow Chemistry 2022: Flow Chemistry Highlights," *Conferrence,* 2022.

[833] F. Lou, Q. Cao, C. Zhang, N. Ai, Q. Wang, J. Zhang, "Continuous synthesis of benzaldehyde by ozonolysis of styrene in a micro-packed bed reactor," *Journal of Flow Chemistry,* 2022.

[832] C. Buonomano, M. Holtz-Mulholland, S. Sullivan, P. Forgione, "Development of a palladium-catalyzed decarboxylative arene cross-coupling of pyrrole derivatives in a flow reactor," *Journal of Flow Chemistry,* 2022.

[831] M. Ivanova, J. Legros, T. Poisson, P. Jubault, "A multi-step continuous flow synthesis of pomalidomide," *Journal of Flow Chemistry,* 2022.

[830] M.S. Phull, S.S. Jadav, C.S. Bohara, R. Gundla, P.S. Mainkar, "Continuous flow process for preparing budesonide," *Journal of flow chemistry*, vol. 12, no. 2, pp. 237-246, 2022.

[829] L. Vinet, L. Di Marco, V. Kairouz, A. harette, "Process Intensive Synthesis of Propofol Enabled by Continuous Flow Chemistry," *Organic Process Research & Development,* 2022.

[828] U. Wietelmann, J. Klösener, P. Rittmeyer, S. Schnippering, H. Bats, W. Stam, "Continuous Processing of Concentrated Organolithiums in Flow Using Static and Dynamic Spinning Disc Reactor Technologies," *Organic Process Research & Development,* vol. 26, no. 5, pp. 1422-1431, 2022.

[827] R. Radjagobalou, M. Imbratta, J. Bergraser, M. Gaudeau, G. Lyvinec, D. Delbrayelle, O. Jentzer, J. Roudin, B. Laroche, S. Ognier, M. Tatoulian, J. Cossy, P. Echeverria, "Selective Photochemical Continuous Flow Benzylic Monochlorination," *Organic Process Research & Development,* vol. 26, no. 5, pp. 1496-1505, 2022.

[826] B. Vandekerckhove, N. Piens, B. Metten, C. Stevens, T. Heugebaert, "Practical Ferrioxalate Actinometry for the Determination of Photon Fluxes in Production-Oriented Photoflow Reactors," *Organic Process Research & Development,* 2022.

[825] M. Hosoya, M. Tanaka, A. Manaka, S. Nishijima, N. Tsuno, "Integration of Liquid-Liquid Biphasic Flow Alkylation and Continuous Crystallization Using Taylor Vortex Flow Reactors," *Organic Process Research & Development,* vol. 26, no. 5, pp. 1531-1544, 2022.

[824] M. Rodriguez-Zubiri, F. Felpin, "Analytical Tools Integrated in Continuous-Flow Reactors: Which One for What?," *Organic Process Research & Development, vol. 26,* no. 6, pp. 1766-1793, 2022.

[823] N. Fuenzalida, E. Alme, F. Lundevall, H. Bjørsvik, "An environmentally benign and high-rate Appel type reaction," *Reaction Chemistry & Engineering*, vol. 7, no. 7, pp. 1650-1659, 2022.

[822] K. Donnelly, M. Baumann, "Continuous Flow Technology as an Enabler for Innovative Transformations Exploiting Carbenes, Nitrenes, and Benzynes," The Journal of organic chemistry, vol. 87, no. 13, pp. 8279-8288, 2022.

[821] A. Marchand, R. Mishra, A. Bernard, J.N. Dumez, "Online reaction monitoring with fast and flow-compatible diffusion NMR spectroscopy," *Chemistry (Weinheim an der Bergstrasse, Germany),* 2022.

[820] T. Shioiri, K. Ishihara, M. Matsugi, "Cutting edge of diphenyl phosphorazidate (DPPA) as a synthetic reagent - A fifty-year odyssey," *Organic Chemistry Frontiers*, vol. 9, no. 12, pp. 3360-3391, 2022.

[819] F. Herbrik, S. Rossi, M. Sanz, A. Puglisi, M. Benaglia, "Immobilized Eosin Y for the photocatalytic oxidation of tetrahydroisoquinolines in flow," *ChemCatChem,* 2022.

[818] K. Guo, G. Xu, X. Wang, C. Jia, H. Yan, S. Zhang, Q. Wu, N. Zhu, Z. Fang, J. Duan, "Synthesis of 2,4,6-Trisubstituted Pyrimidines via Iron-Catalyzed Homocoupling of α,β-Unsaturated Ketoximes," *Advanced Synthesis & Catalysis,* 2022.

[817] X. Li, Y. Yang, "Automated Chemical Solid-Phase Synthesis of Glycans," *Chinese Journal of Chemistry,* vol. 40, no. 14, pp. 1714-1728, 2022.

[816] B. Lockett-Walters, S. Thuillier, E. Baudouin, B. Nay, "Total Synthesis of Phytotoxic Radulanin A Facilitated by the Photochemical Ring Expansion of a 2,2-Dimethylchromene in Flow," *Organic letters,* vol. 24, no. 22, pp. 4029-4033, 2022.

[815] F. Annunziata, M.L. Contente, V. Anzi, S. Donzella, P. Conti, F. Molinari, P.A. Martino, G. Meroni, V.M. Sora, L. Tamborini, A. Pinto, "Enzymatic continuous-flow preparation of nature-inspired phenolic esters as antiradical and antimicrobial agents," *Food chemistry*, vol. 390, pp. 133195, 2022.

[814] J.H. Harenberg, R. Reddy Annapureddy, K. Karaghiosoff, P. Knochel, "Continuous Flow Preparation of Benzylic Sodium Organometallics," *Angewandte Chemie (International ed. in English),* pp. e202203807, 2022.

[813] Z. Huang, M. Shanmugam, Z. Liu, A. Brookfield, E.L. Bennett, R. Guan, D.E. Vega Herrera, J.A. Lopez-Sanchez, A.G. Slater, E.J.L. McInnes, X. Qi, J. Xiao, "Chemical Recycling of Polystyrene to Valuable Chemicals via Selective Acid-Catalyzed Aerobic Oxidation under Visible Light," *Journal of the American Chemical Society,* vol. 144, no. 14, pp. 6532-6542, 2022.

[812] S. Gnaim, A. Bauer, H.J. Zhang, L. Chen, C. Gannett, C.A Malapit, D.E. Hill, D. Vogt, T. Tang, R.A. Daley, W. Hao, R. Zeng, M. Quertenmont, W.D. Beck, E. Kandahari, J.C. Vantourout, P.G. Echeverria, H.D. Abruna, D.G. Blackmond, S.D. Minteer, S.E. Reisman, M.S. Sigman, P.S. Baran, "Cobalt-electrocatalytic HAT for functionalization of unsaturated C-C bonds," *Nature,* vol. 605, no. 7911, pp. 687-695, 2022.

2021

Year total: 110

[811] F. Anunziata, M. L. Contente, C. Pinna, L. Tamborini, A. Pinto, "Biocatalyzed flow oxidation of tyrosol to hydroxytyrosol and efficient production of their acetate esters," *Antioxidants,* vol. 10, no. 7, pp. 1142, 2021.

[810] C. G. Thomson, C. Banks, M. Allen, G. Baker, C. R. Coxon, A. L. Lee, F. Vilela, "Expanding the tool kit of automated flow synthesis: development of In-line flash chromatography purification," *Journal of Organic Chemistry,* vol. 86, no. 20, pp. 14079-14094, 2021.

[809] A. Scurria, M. Pagliaro, R. Ciriminna, “Quick, convenient, and clean: advancing education in green chemistry and nanocatalysis using solgel catalysts under flow,” *Current Research in Green and sustainable Chemistry,* vol. 4, 2021.

[808] A. Di Michele, S. Giovagnoli, P. Filipponi, F. Venturoni, A. Gioiello, “SBA 15-supported Nano-ruthenium catalyst for the oxidative cleavage of alkenes to aldehydes under flow conditions,” *Tetrahedron Letters,* vol. 86, pp. 153509, 2021.

[807] A. B. Wood, S. Plummer, R. I. Robinson, M. Smith, J. Chang, F. Gallou, B. H. Lipshutz, “Continuous slurry plig flow Fe/ppm Pd nanoparticle catalyzed Suzuki-miyaura couplings in water utilizing novel solid handling equipment,” *Green Chemistry,* no. 19, 2021.

[806] J. A. Souto, “Continuous-flow preparation of benzotropolones: combined batch and flow synthesis of epigenetic modulators of the (JmjC)- containing domain,” *Chemistry Select,* vol. 6, no. 39, pp. 10717-10721, 2021.

[805] M. Oliva, P. Ranjan, S. Pillitteri, C. A. Coppola, M. Messina, E. V. van der Eycken, U. K. Sharma “Photoredox-catalyzed multicomponent Petasis Reaction in Batch and Continuous Flow with Alkyl Boronic acids,” *iScience,* vol. 24, no. 10, pp. 103134, 2021.

[804] O. M. Griffiths, H. A. Esteves, Y. Chen, K. Sowa, O. S. May, P. Morse, D. C. Blakemore, S. V. Ley, “Photoredox-Catalyzed Dehydrogenative Csp3-Csp2 cross-coupling of alkylarenes to aldehydes in flow,” *Journal of Organic Chemistry,* vol. 86, no. 19, pp. 13559-13571, 2021.

[803] P. Richardson, I. Abdiaj, “Drug discovery automation and library synthesis in flow,” *Flow Chemistry in Drug Discovery,* pp. 421-479, 2021.

[802] T. Tiyasakulchai, N. Charoensekatul, T. Khamkhenshorngphanuch, C. Thongpanchanga, O. Srikun, Y. Yuthavong, N. Srimongkolpithak, “Scalable synthesis of favipiravir via conventional and continuous flow chemistry,” *RSC Advances,* no. 61, 2021.

[801] J. A. Souto, “Continuous-flow preparation of benzotropolones: combined batch and flow synthesis of epigenetic modulators of the (JmjC)- containing domain,” *Chemistry Select,* vol. 6, no. 39, pp. 10717-10721, 2021.

[800] M. Oliva, P. Ranjan, S. Pillitteri, C. A. Coppola, M. Messina, E. V. van der Eycken, U. K. Sharma “Photoredox-catalyzed multicomponent Petasis Reaction in Batch and Continuous Flow with Alkyl Boronic acids,” *iScience,* vol. 24, no. 10, pp. 103134, 2021.

[799] O. M. Griffiths, H. A. Esteves, Y. Chen, K. Sowa, O. S. May, P. Morse, D. C. Blakemore, S. V. Ley, “Photoredox-Catalyzed Dehydrogenative Csp3-Csp2 cross-coupling of alkylarenes to aldehydes in flow,” *Journal of Organic Chemistry,* vol. 86, no. 19, pp. 13559-13571, 2021.

[798] P. Richardson, I. Abdiaj, “Drug discovery automation and library synthesis in flow,” *Flow Chemistry in Drug Discovery,* pp. 421-479, 2021.

[797] T. Tiyasakulchai, N. Charoensekatul, T. Khamkhenshorngphanuch, C. Thongpanchanga, O. Srikun, Y. Yuthavong, N. Srimongkolpithak, “Scalable synthesis of favipiravir via conventional and continuous flow chemistry,” *RSC Advances,* no. 61, 2021.

[796] "Method for preparing epoxidized trans-1,4- polyisoprene by using microreaction device," CN113354758A, *Nanjing Advanced Biomaterials And Process Equipment Research Institute Co. ltd.* 2021.

[795] V. E. Murie, P. V. Nicolino, T. dos Santos, G. Gambacorta, R. H. V. Nishimura, I. S. Perovani, L. C. Furtado, L. V. Costa-lotufo, A. M. de Oliveira, R. Vessecchi, I. R. Baxendale, G. C. Closoki, "Synthesis of 7- chloroquinoline derivatives using mixed lithium-magnesium reagents," *Journal of Organic Chemistry,* vol. 86, no. 19, pp. 13402-13419, 2021.

[794] H. E. Askey, J. D. Grayson, J. D. Tibbetts, J. C. Turner-Dore, J. M. Holmes, G. Kociok-Kohn, G. L. Wrigley, A. J. Cresswell, "Photocatalytic hydroaminoalkylation of styrenes with unprotected primary alkylamines," *Journal of American Chemical Society,* vol. 143, no. 39, pp. 15936-15945, 2021.

[793] B. Poznansky, S. E. Cleary, L. A. Thompson, H. A. Reeve, K. A. Vincent, "Boosting the productivity of H2-driven biocatalysis in a commercial hydrogenation flow reactor using H2 from water electrolysis," *Frontiers Chemical Engineering,* 2021.

[792] M. Wernik, G. Sipos, B. Buchholcz, F. Darvas, Z. Novak, S. B. Otvos, C. O. Kappe, "Continuous flow heterogeneous catalytic reductive aminations under aqueous micellar conditions enabled by an oscillatory plug flow reactor," *Green Chemistry,* no. 15, 2021.

[791] P. Bianchi, J. D. Williams, C. O. Kappe, "Continuous flow processing of bismuth-photocatalyzed atom transfer radical addition reaction using an oscillatory flow reactor," *Green Chemistry,* no. 7, 2021.

[790] A. Pulcinella, D. Mazzarella, T. Noel, "Homogenous Catalytic C(sp3)-H functionalization of gaseous alkanes" *Chemical Communications,* no. 78, 2021.

[789] D. Polterauer, J. D. Williams, C. A. Hone, C. O. Kappe, "Telescoped lithiation, C –arylation and methoxylation in flow batch hybrid toward the synthesis of canagliflozin," *Tetrahedron Letters,* vol. 82, pp. 153351, 2021.

[788] F. Sommer, D. Cantillo, C. O. Kappe, "A small footprint ocycodone generator based on continuous flow technology and real time analytics," *Journal of Flow Chemistry,* vol. 11, pp. 707-715, 2021.

[787] P. Ranjan, S. Pillitteri, G. Coppola, M. Oliva, E. V. van der Eycken, U. K. Sharma, "Unlocking the accessibility of alkyl radicals from boronic acids through solvent-assisted organophotoredox activation," *American Chemical Society,* vol. 11, no. 17, pp. 10862-10870, 2021.

[786] B. J. M. Baker, W. J. Kerr, D. M. Lindsay, V. K. K. Patel, D. L. Poole, "A sustainable and scalable multicomponent continuous flow process to access fused imidazoheterocycle pharmacophores," *Green Chemistry,* no. 1, 2021.

[785] P. Alper, J. Deane, S. Jiang, Tao, Jiang, T. Knoepfel, P. Y. Michellys, D. Mutnic, W. Pei, P. Syka, G. Zhang, Y. Zhang, "Compounds and compositions as inhibitors of endosomal toll-like receptors," US201902110009A1, 2021.

[784] J. Orrego-Hernández, H. Hölzel, M. Quant, Z. Wang, K. Moth-Poulsen, "Scalable Synthesis of norbornadienes via in situ Cracking of Dicyclopentadiene Using Continuous Flow Chemistry," *European Journal of Organic Chemistry,* vol. 2021, no. 38, 2021.

[783] W. Shin, W. Ko, S. H. Jin, T. Earmme, Y. J. Hwang, "Reproducible and rapid synthesis of a conjugated polymer by stille polycondensation in flow effects of reaction parameters on molecular weight," *Chemical Engineering Journal* vol. 412, 2021.

[782] D. Li, H. Zhang, T. W. Lyons, T. A. Martinot, A. Achab, M. Lu, L. Nogle, S. McMinn, M. Mitcheltree, M. Childers, Q. Pu, S. Gathiaka, A. Palani, K. Chakravarthy, A. Decastro, J. O'neil, R. Afshar, N. C. Walsh, P. W. Fan, M. Cheng, R. Miller, A. Doty, R. Palte, H. Y. Kim, J. Sauri, A. Beard, C. Brynczka, C. Fischer, "Innovation in delivering synthethically challenging bicyclic arginase inhibitors to enhance immunotherapy," *Cancer Research,* vol. 81, no. 13, pp. 297, 2021.

[781] B. Winterson, T. Renningholtz, T. Wirth "Flow electrochemistry: a safe tool for fluorine chemistry," *Chemical Science,* vol. 12, pp. 9053-9059, 2021.

[780] T. Duhail, T. Bortolato, J. Mateos, E. Anselmi, B. Jelier, A. Togni, E. Magnier, G. Dagousset, L. Dell'Amico, "Radical alpha- trifluoromethoxylation of ketones by means of organic photoredox catalysis," *Organic Letters,* vol. 23, no. 8, pp. 7088-7093, 2021.

[779] C. M. Heckmann, B. Dominguez, F. Paradisi, "Enantio-complementary continuous-flow synthesis of 2-aminobutanes using covalently immobilized transaminases,"*ACS Sustainable Chemical, Engineering,* vol. 9, no. 11, pp. 4122-4129, 2021.

[778] W. Dermaut, B. Cappuyns, M. Moens, C. Stevens, "A process for making brominating agents in flow. 20210017024, 2021.

[777] E. Skrotzki, "Taming Highly Reactive Species for Use in Organic Synthesis," *Thesis,* 2021.

[776] F. Annunziata, A. Guaglio, P. Conti, L. Tamborini, R. Gandolfi, "Continuous-flow stereoselective reduction of prochiral ketones in a whole cell bioreactor with natural deep eutectic solvents," *Green Chemistry*, vol. 24, no. 2, pp. 950-956, 2021.

[775] J. Seitz, T. Wirth, "Electrochemical bromofunctionalization of alkenes in a flow reactor," *Organic & biomolecular chemistry,* vol. 19, no. 31, pp. 6892-6896, 2021.

[774] H. Grantham, M. Kimber, "Dimeric Cyclobutane Formation Under Continuous Flow Conditions Using Organophotoredox-Catalysed [2+2] Cycloaddition**," *ChemPhotoChem,* 2021.

[773] M. Haas, D. Krisch, S. Gonglach, M. Bechmann, M. Scharber, M. Ertl, U. Monkowius, W. Schöfberger, "Gallium(III) Corrole Complexes as Near-Infrared Emitter - Synthesis, Computational and Photophysical Study," *European Journal of Organic Chemistry*, vol. 2021, no. 10, pp. 1525-1537, 2021.

[772] T. Rosalba, S. Kas, A. Sampaio, C. Salvador, C. Andrade, "The Ugly Duckling Metamorphosis: The Ammonia/Formaldehyde Couple Made Possible in Ugi Reactions," *European Journal of Organic Chemistry*, vol. 2021, no. 20, pp. 2831-2842, 2021.

[771] A.P. Felgueiras, "Catalisadores para desenvolvimento de processos sequenciais sustentáveis," *Thesis,* 2021.

[770] A. Gelle, “Shining light on plasmonic silver nanoparticles for for catalysis,” *Thesis,* 2021.

[769] N. Leadbeater, “Flow Chemistry as an Enabling Technology for Synthetic Organic Chemistry,” *Methods in Pharmacology and Toxicology*, pp. 489-526, 2021.

[768] K. Donnelly, M. Di Filippo, C. Bracken, “Flow Chemistry – Fundamentals,” *Flow Chemistry–Fundamentals,* 2021.

[767] Z. Wang, Z. Wu, Z. Hu, J. Orrego-Hernandez, E. Mu, Z. Zhang, M. Jevric, Y. Liu, X. Fu, F. Wang, T. Li, K. Moth-Poulsen, “Chip-Scale Solar-Thermal-Electrical Power Generation,” *SSRN Electronic Journal*, 2021.

[766] L. Capaldo, S. Bonciolini, A. Pulcinella, M. Nuno, T. Noel, “Modular allylation of C(sp3)−H bonds by combining decatungstate photocatalysis and HWE olefination in flow,” *ChemRxiv,* 2021.

[765] H. Grantham, M. Kimber, “Dimeric cyclobutane formation under continuous flow conditions using organophotoredox catalysed [2+2]-cycloaddition,” *ChemRxiv,* 2021.

[764] A. Ladosz, B. Martin, “Review of recent literature on flow Chemistry:. Selected Topic: Academic-Industrial partnerships: Flow Chemistry Highlights,” *Chimia,* 2021.

[763] A. Abu-Hashem, A. El-Gazzar, A. Abdelgawad, M. Gouda, “Synthesis and chemical reactions of thieno[3,2-c]quinolines from arylamine derivatives, part (V): a review,” *Phosphorus, Sulfur, and Silicon and the Related Elements,* pp. 1-24, 2021.

[762] P. Sagmeister, D. Kaldre, J. Sedelmeier, C. Moessner, “Flow Chemistry Highlights,” *Conference,* 2021.

[761] J. Souto, “Continuous-Flow Preparation of Benzotropolones: Combined Batch and Flow Synthesis of Epigenetic Modulators of the (JmjC)-Containing Domain,” *ChemistrySelect,* vol. 6, pp. 10717-10721, 2021.

[760] D. Padrosa, M. Contente, “Multi-gram preparation of cinnamoyl tryptamines as skin whitening agents through a chemo-enzymatic flow process,” *Tetrahedron Letters,* vol. 86, pp. 153453, 2021.

[759] A. Di Michele, S. Giovagnoli, P. Filipponi, F. Venturoni, A. Gioiello, “SBA15-supported nano-ruthenium catalyst for the oxidative cleavage of alkenes to aldehydes under flow conditions,” *Tetrahedron Letters,* vol. 86, pp. 153509, 2021.

[758] M. Duffy, M. Di Filippo, M. Baumann, “Synthesis of 2H-indazoles via the Cadogan reaction in batch and flow mode,” *Tetrahedron Letters,* vol. 86, pp. 153522, 2021.

[757] A. Mohammadzadeh, S. Sharif, V. Semeniuchenko, N. Townsend, A. Corbett, M. Organ, “Lithium aluminum hydride in flow: overcoming exotherms, solids, and gas evolution en route to chemoselective reductions,” *Journal of Flow Chemistry,* 2021.

[756] M. Ivanova, J. Legros, T. Poisson, P. Jubault, “Continuous flow synthesis of Celecoxib from 2-bromo-3,3,3-trifluoropropene,” *Journal of Flow Chemistry,* pp. 1-5, 2021.

[755] J. Orrego-Hernández, H. Hölzel, M. Quant, Z. Wang, K. Moth-Poulsen, “Scalable Synthesis of Norbornadienes via in situ Cracking of Dicyclopentadiene Using Continuous Flow Chemistry,” European Journal of Organic Chemistry, vol. 2021, no. 38, pp. 5337-5342, 2021.

[754] R. Duvadie, A. Pomberger, Y. Mo, E. Altinoglu, H. Hsieh, K. Nandiwale, V. Schultz, K. Jensen, R. Robinson, “Photoredox Iridium-Nickel Dual Catalyzed Cross-Electrophile Coupling: From a Batch to a Continuous Stirred-Tank Reactor via an Automated Segmented Flow Reactor,” *Organic Process Research & Development,* vol. 25, no. 10, pp. 2323-2330, 2021.

[753] G. Glotz, K. Waniek, J. Schöggl, D. Cantillo, C. Stueckler, A. Arzt, A. Gollner, R. Schipfer, R. Baumgartner, C. Kappe, “Continuous Flow Synthesis of a Blocked Polyisocyanate: Process Intensification, Reaction Monitoring Via In-Line FTIR Analysis, and Comparative Life Cycle Assessment,” *Organic Process Research & Development,* vol. 25, no. 10, pp. 2367-2379, 2021.

[752] C. Sagandira, S. Nqeketo, K. Mhlana, T. Sonti, P. Watts, S. Gaqa, “Towards 4th industrial revolution efficient and sustainable continuous flow manufacturing of active pharmaceutical ingredients,” *Reaction Chemistry & Engineering*, 2021.

[751] N.P. Rossouw, M.A Rizzacasa, A. Polyzos, “Flow-Assisted Synthesis of Alkyl Citrate Natural Products,” *The Journal of organic chemistry*, vol. 86, no. 20. pp. 14223-14231, 2021.

[750] D. Djukanovic, B. Heinz, F. Mandrelli, S. Mostarda, P. Filipponi, B. Martin, P. Knochel, “Continuous Flow Acylation of (Hetero)aryllithiums with Polyfunctional N,N-Dimethylamides and Tetramethylurea in Toluene,” *Chemistry (Weinheim an der Bergstrasse, Germany),* vol. 27, no. 56, pp. 13977-13981, 2021.

[749] C. Pinna, P.A. Martino, G. Meroni, V.M. Sora, L .Tamborini, S. Dallavalle, M.L. Contente, A. Pinto, “Biocatalyzed Synthesis of Vanillamides and Evaluation of Their Antimicrobial Activity,” *Journal of agricultural and food chemistry,* 2021.

[748] C.E. Mowbray, S. Braillard, P.A. Glossop, G.A. Whitlock, R.T. Jacobs, J. Speake, B. Pandi, B. Nare, L. Maes, V. Yardley, Y. Freund, R.J. Wall, S. Carvalho, D. Bello, M. Van den Kerkhof, G. Caljon, I.H. Gilbert, V. Corpas-Lopez, I. Lukac, S. Patterson, F. Zuccotto, S. Wyllie, “DNDI-6148: A Novel Benzoxaborole Preclinical Candidate for the Treatment of Visceral Leishmaniasis,” *Journal of medicinal chemistry,* vol. 64, no. 21, pp. 16159-16176, 2021.

[747] B. He, L.K. Macreadie, J. Gardiner, S.G. Telfer, M.R. Hill, “In Situ Investigation of Multicomponent MOF Crystallization during Rapid Continuous Flow Synthesis,” *ACS applied materials & interfaces*, vol. 13, no. 45, pp. 54284-5429, 2021.

[746] C.D. Jones, L.J. Kershaw Cook, D. Marquez-Gamez, K.V. Luzyanin, J.W. Steed, A.G. Slater, “High-Yielding Flow Synthesis of a Macrocyclic Molecular Hinge,” *Journal of the American Chemical Society,* vol. 143, no. 19, pp. 7217-7590, 2021.

[745] J.T. Kohrt, P.H. Dorff, M. Burns, C. Lee, S.V. O’Neil, R.J. Maguire, R. Kumar, M. Wagenaar, L. Price, M.S. Lall, “Application of Flow and Biocatalytic Transaminase Technology for the Synthesis of a 1-Oxa-8-azaspiro [4.5] decan-3-amine,” *Organic Process Research & Development,* 2021.

[744] N. Amri and T. Wirth, "Flow Electrosynthesis of Sulfoxides, Sulfones, and Sulfoximines without Supporting Electrolytes," *The Journal of organic chemistry,* 2021.

[743] J. Baker, C. Russell, J. Gilbert, A. McCluskey and J. Sakoff, "Amino alcohol acrylonitriles as broad spectrum and tumour selective cytotoxic agents," *RSC Medicinal Chemistry,* 2021.

[742] Z. Bao, J. Luo, Y. Wang, T. Hu, S. Tsai, Y. Tsai, H. Wang, F. Chen, Y. Lee, T. Tsai, R. Chung and R. Liu, "Microfluidic synthesis of CsPbBr3/Cs4PbBr6 nanocrystals for inkjet printing of mini-LEDs," *Chemical Engineering Journal,* vol. 426, p. 130849, 2021.

[741] M. Baumann, C. Bracken and A. Batsanov, "Development of a Continuous Photochemical Benzyne-Forming Process," *SynOpen,* vol. 05, no. 01, pp. 29-35, 2021.

[740] M. Baumann, T. Moody, M. Smyth and S. Wharry, "Interrupted Curtius Rearrangements of Quaternary Proline Derivatives: A Flow Route to Acyclic Ketones and Unsaturated Pyrrolidines," *The Journal of organic chemistry,* 2021.

[739] A. Benítez-Mateos, M. Contente, D. Roura Padrosa and F. Paradisi, "Flow biocatalysis 101: design, development and applications," *Reaction Chemistry & Engineering,* 2021.

[738] F. Dedè, O. Piccolo and D. Vigo, "Dimethyl Fumarate: Heterogeneous Catalysis for the Development of an Innovative Flow Synthesis," *Organic Process Research & Development,* vol. 25, no. 2, pp. 292-299, 2021.

[737] L. Dell'Amico, T. Duhail, T. Bortolato, J. Mateos, E. Anselmi, B. Jelier, A. Togni, E. Magnier and G. Dagousset, "Radical alpha-Trifluoromethoxylation of Ketones by Means of Organic Photoredox Catalysis," *ChemRxiv,* 2021.

[736] K. Donnelly and M. Baumann, "A continuous flow synthesis of [1.1.1]propellane and bicyclo[1.1.1]pentane derivatives," *Chemical communications (Cambridge, England),* vol. 57, no. 23, pp. 2871-2874, 2021.

[735] K. Donnelly and M. Baumann, "Scalability of photochemical reactions in continuous flow mode," *Journal of Flow Chemistry,* 2021.

[734] J. Duan, G. Xu, B. Rong, H. Yan, S. Zhang, Q. Wu, N. Zhu and K. Guo, "Iron-catalyzed [4 + 2] annulation of α,β-unsaturated ketoxime acetates with enaminones toward functionalized pyridines," *Green Synthesis and Catalysis,* 2021.

[733] J. García-Lacuna, T. Fleiß, R. Munday, K. Leslie, A. O'Kearney-McMullan, C. Hone and C. Kappe, "Synthesis of the Lipophilic Amine Tail of Abediterol Enabled by Multiphase Flow Transformations," *Organic Process Research & Development,* 2021.

[732] M. González-Esguevillas, D. Fernández, J. Rincón, M. Barberis, O. de Frutos, C. Mateos, S. García-Cerrada, J. Agejas and D. MacMillan, "Rapid Optimization of Photoredox Reactions for Continuous-Flow Systems Using Microscale Batch Technology," *ACS Central Science,* 2021.

[731] K. Grollier, A. De Zordo-Banliat, F. Bourdreux, B. Pegot, G. Dagousset, E. Magnier and T. Billard, "(Trifluoromethylselenyl)methylchalcogenyl as Emerging Fluorinated Groups:

Synthesis under Photoredox Catalysis and Determination of the Lipophilicity," *Chemistry (Weinheim an der Bergstrasse, Germany),* vol. 27, no. 19, pp. 6028-6033, 2021.

[730] M. Guidi, "An automated platform for multistep synthesis based on a new paradigm for combining flow modules," *Thesis,* 2021.

[729] M. Guidi, S. Moon, L. Anghileri, D. Cambié, P. Seeberger and K. Gilmore, "Combining radial and continuous flow synthesis to optimize and scale-up the production of medicines," *Reaction Chemistry & Engineering,* vol. 6, pp. 220-224, 2021.

[728] Q. Han, X. Zhou, X. He and H. Ji, "Mechanism and kinetics of the aerobic oxidation of benzyl alcohol to benzaldehyde catalyzed by cobalt porphyrin in a membrane microchannel reactor," *Chemical Engineering Science,* vol. 245, p. 116847, 2021.

[727] W. He, C. Zhang, W. Zhang, Y. Zhu, Z. Fang, L. Zhao and K. Guo, "The integration of catalyst design and process intensification in the efficient synthesis of 5-hydroxymethyl-2-furancarboxylic acid from fructose," *Chemical Engineering Science,* vol. 245, p. 116858, 2021.

[726] M. Hosoya, G. Shiino and N. Tsuno, "A Practical Transferring Method from Batch to Flow Synthesis of Dipeptides via Acid Chloride Assisted by Simulation of the Reaction Rate," *Chemistry Letters,* 2021.

[725] G. Ignacz and G. Szekely, "6 Continuous microflow processes," *Sustainable Process Engineering,* pp. 95-116, 2021.

[724] J. Kestemont, J. Frost, J. Jacq, P. Pasau, F. Perl, J. Brown and M. Tissot, "Scale-Up and Optimization of a Continuous Flow Carboxylation of N-Boc-4,4-difluoropiperidine Using s-BuLi in THF," *Organic Process Research & Development,* 2021.

[723] A. Leslie, T. Moody, M. Smyth, S. Wharry and M. Baumann, "Coupling biocatalysis with high-energy flow reactions for the synthesis of carbamates and β-amino acid derivatives," *Beilstein Journal of Organic Chemistry,* vol. 17, pp. 379-384, 2021.

[722] J. Li, H. Šimek, D. Ilioae, N. Jung, S. Bräse, H. Zappe, R. Dittmeyer and B. Ladewig, "In situ sensors for flow reactors – a review," *Reaction Chemistry & Engineering,* 2021.

[721] H. Lin, C. Chen, T. Lin, L. Yeh, W. Hsieh, S. Gao, P. Burnouf, B. Chen, T. Hsieh, P. Dashnyam, Y. Kuo, Z. Tu, S. Roffler and C. Lin, "Entropy-driven binding of gut bacterial β-glucuronidase inhibitors ameliorates irinotecan-induced toxicity," *Communications biology,* p. 280, 2021.

[720] S. Miao and X. Li, "Enzymatic esterification of lauric acid to give monolaurin in a microreactor," *Journal of Chemical Research,* 2021.

[719] S. Nabil, A. Hammad, H. El-Bery, E. Shalaby and A. El-Shazly, "The CO2 photoconversion over reduced graphene oxide based on Ag/TiO2 photocatalyst in an advanced meso-scale continuous-flow photochemical reactor," *Environmental science and pollution research international,* 2021.

[718] N. Neyt and D. Riley, "Application of reactor engineering concepts in continuous flow chemistry: a review," *Reaction Chemistry & Engineering,* 2021.

[717] P. Nichols, “Automated and enabling technologies for medicinal chemistry,” *Progress in medicinal chemistry,* vol. 60, pp. 191-272, 2021.

[716] A. Petti, C. Fagnan, C. van Melis, N. Tanbouza, A. Garcia, A. Mastrodonato, M. Leech, I. Goodall, A. Dobbs, T. Ollevier and K. Lam, “Supporting-Electrolyte-Free Anodic Oxidation of Oxamic Acids into Isocyanates: An Expedient Way to Access Ureas, Carbamates, and Thiocarbamates,” *Organic Process Research & Development,* 2021.

[715] R. Radjagobalou, V. Freitas, J. Blanco, F. Gros, J. Dauchet, J. Cornet and K. Loubiere, “A revised 1D equivalent model for the determination of incident photon flux density in a continuous-flow LED-driven spiral-shaped microreactor using the actinometry method with Reinecke’s salt,” *Journal of Flow Chemistry,* 2021.

[714] D. Roura Padrosa, Z. Nisar and F. Paradisi, “Efficient Amino Donor Recycling in Amination Reactions: Development of a New Alanine Dehydrogenase in Continuous Flow and Dialysis Membrane Reactors,” *Catalysts,* vol. 11, no. 4, p. 520, 2021.

[713] S. Sade, “Methods, Photocatalytic N-Arylation of 3-Substituted Pyrrolidines and Comparison with Traditional,” *Thesis,* 2021.

[712] E. Seurat, A. Verdin, F. Cazier, D. Courcot, R. Fitoussi, K. Vié, V. Desauziers, I. Momas, N. Seta and S. Achard, “Influence of the environmental relative humidity on the inflammatory response of skin model after exposure to various environmental pollutants,” *Environmental research,* vol. 196, p. 110350, 2021.

[711] T. Shi, S. Wang, Z. Yang, Y. Wang, C. Liu, W. He, Z. Fang and K. Guo, “Enzyme-electrochemical continuous flow cascades synthesis of substituted benzimidazoles,” *Reaction Chemistry & Engineering,* 2021.

[710] E. Skrotzki, J. Vandavasi and S. Newman, “Ozone-Mediated Amine Oxidation and Beyond: A Solvent Free, Flow-Chemistry Approach,” *ChemRxiv,* 2021.

[709] T. Faraggi, C. Rouget-Virbel, J. Rincón, M. Barberis, C. Mateos, S. García-Cerrada, J. Agejas, O. de Frutos and D. MacMillan, "Synthesis of Enantiopure Unnatural Amino Acids by Metallaphotoredox Catalysis," *Organic Process Research & Development,* 2021.

[708] F. Tentori, E. Brenna, C. Ferrari, F. Gatti, M. Ghezzi and F. Parmeggiani, “Chemo-enzymatic oxidative cleavage of isosafrole for the synthesis of piperonal,” *Reaction Chemistry & Engineering,* 2021.

[707] M. Van De Walle, “Continuous photoflow for macromolecular design,” *Queensland University of Technology,* 2021.

[706] T. Wan, L. Capaldo, G. Laudadio, A. Nyuchev, J. Rincon, P. Garcia-Losada, C. Mateos Gutierrez, M. O Frederick, M. Nuno and T. Noel, “Decatungstate-mediated C(sp3)-H Heteroarylation via Radical-Polar Crossover in Batch and Flow,” *Angewandte Chemie (International ed. in English),* 2021.

[705] M. Waterford, S. Saubern and C. Hornung, “Evaluation of a Continuous-Flow Photo-Bromination Using N-Bromosuccinimide for Use in Chemical Manufacture,” *Australian Journal of Chemistry,* 2021.

[704] A. Zhakeyev, M. Jones, C. Thomson, J. Tobin, H. Wang, F. Vilela and J. Xuan, "Additive manufacturing of intricate and inherently photocatalytic flow reactor components," *Additive Manufacturing,* vol. 38, 2021.

[703] I. Östergren, A. Pourrahimi, I. Darmadi, R. da Silva, A. Stolaś, S. Lerch, B. Berke, M. Guizar-Sicairos, M. Liebi, G. Foli, V. Palermo, M. Minelli, K. Moth-Poulsen, C. Langhammer and C. Müller, "Highly Permeable Fluorinated Polymer Nanocomposites for Plasmonic Hydrogen Sensing," *ACS applied materials & interfaces,* vol. 13, no. 18, pp. 21724-21732, 2021.

[702] E. Skrotzki, J. Vandavasi and S. Newman, "Ozone-Mediated Amine Oxidation and Beyond: A Solvent-Free, Flow-Chemistry Approach," *The Journal of organic chemistry,* 2021.

2020

Year total: 106

[701] C. O'Beirne, M. E. Piatek, J. Fossen, H. Muller-Bunz, D. R. Andes, K. Kavanaugh, S. A. Patil, M. Baumann, M. Tackle, "Continuous flow synthesis and antimicrobial evaluation of NHC* silver carboxylate derivatives of SBC3 in vitro and in vivo," *Metallomics,* vol. 13, no. 2, 2020.

[700] S. Bonciolini, M. Filippo, M. Baumann, "A scalable continuous photochemical process for the generation of aminopropylsulfones," *Organic and Biomolecular Chemistry,* no. 46, 2020.

[699] M. I. Jeraal, S. Sung, A. A. Lapkin, "A machine learning-enabled autonomous flow chemistry platform for process optimization of multiple reaction metrics," *Chemistry-Methods,* vol. 1, no. 1, pp. 71-77, 2020.

[698] J. Hert, D. Hunziker, C. Kuratli, R. E. Martin, P. Mattei, A. L. Satz, "Bicyclic quinazolinone derivatives," 20200317624, 2020.

[697] C. J. Spedaliere, "Antibody conjugation method," 20200254112, 2020.

[696] M. Di Filippo, M. Baumann, "Continuous flow synthesis of quinolones via a scalable tandem photoisomerization cyclization process," *European Journal of Organic chemistry,* vol. 2020, no. 39, pp. 6199-6211, 2020.

[695] J. M. Bartolome-Nebreda, A. A. Trabanco-Suarez, A. I. D. Olivares, S. A. A. De Diego, "Pyrrolidine and bicycloheteroaryl containing oga inhibitor compoundsm," WO2021094312A1, 2020.

[694] S. Chatterjee, M. Guidi, P. Seeberger and K. Gilmore, "Automated radial synthesis of organic molecules," Nature, vol. 579, pp. 379-384, 2020.

[693] D. Heard and A. Lennox, "Minimal manual input," Nat Chem, vol. 12, no. 2, pp. 113-114, 2020.

[692] S. Han, M. A. Kashfipour, M. Ramezani, M. Abolhasani "Accelerating gas-liquid chemical reactions in flow," *Chemical Communications,* no. 73, 2020.

[691] E. Farrant, “Automation of synthesis in medicinal chemistry: progress and challenges,” *ACS Medicinal Chemistry Letters,* vol. 11, no. 8, pp. 1506-1513, 2020.

[690] S. Ötvös and C. Kappe, "Continuous-Flow Amide and Ester Reductions Using Neat Borane Dimethylsulfide Complex," ChemSusChem, 2020.

[689] M. Shea, U. Mansoor and B. Hopkins, "A Metallaphotoredox Method for the Expansion of Benzyl SAR on Electron-Deficient Amines," Org. Lett., vol. 22, no. 3, pp. 1052-1055, 2020.

[688] M. Chaudhari, K. Jayan and B. Gnanaprakasam, "Sn-Catalyzed Criegee-Type Rearrangement of Peroxyoxindoles Enabled by Catalytic Dual Activation of Esters and Peroxides," J. Org. Chem., vol. 85, no. 5, pp. 3374-3382, 2020.

[687] C. Bracken and M. Baumann, "Development of a Continuous Flow Photoisomerization Reaction Converting Isoxazoles into Diverse Oxazole Products," J. Org. Chem., vol. 85, no. 4, pp. 2607-2617, 2020.

[686] B. Park, M. Pirnot and S. Buchwald, "Visible Light-Mediated (Hetero)aryl Amination Using Ni(II) Salts and Photoredox Catalysis in Flow: A Synthesis of Tetracaine," J. Org. Chem., vol. 85, no. 5, pp. 3234-3244, 2020.

[685] A. Folgueiras-Amador, A. Teuten, D. Pletcher and R. Brown, "A design of flow electrolysis cell for ‘Home’ fabrication," React. Chem. Eng., vol. 5, no. 4, pp. 712-718, 2020.

[684] D. Fitzpatrick, M. O'Brien and S. Ley, "A tutored discourse on microcontrollers, single board computers and their applications to monitor and control chemical reactions," React. Chem. Eng., vol. 5, no. 2, pp. 201-220, 2020.

[683] N. Weeranoppanant and A. Adamo, "In-Line Purification: A Key Component to Facilitate Drug Synthesis and Process Development in Medicinal Chemistry," ACS Med Chem Lett, vol. 11, no. 1, pp. 9-15, 2020.

[682] F. Tentori, E. Brenna, M. Crotti, G. Pedrocchi-Fantoni, M. Ghezzi and D. Tessaro, "Continuous-Flow Biocatalytic Process for the Synthesis of the Best Stereoisomers of the Commercial Fragrances Leather Cyclohexanol (4-Isopropylcyclohexanol) and Woody Acetate (4-(Tert-Butyl)Cyclohexyl Acetate)," Catalysts, vol. 10, no. 1, p. 102, 2020.

[681] M. Hosoya, S. Nishijima and N. Kurose, "Investigation into an Unexpected Impurity: A Practical Approach to Process Development for the Addition of Grignard Reagents to Aldehydes Using Continuous Flow Synthesis," Org. Process Res. Dev., vol. 24, no. 3, pp. 405-414, 2020.

[680] L. Tamborini, C. Previtali, F. Annunziata, T. Bavaro, M. Terreni, E. Calleri, F. Rinaldi, A. Pinto, G. Speranza, D. Ubiali and P. Conti, "An Enzymatic Flow-Based Preparative Route to Vidarabine," Molecules, vol. 25, no. 5, 2020.

[679] P. Luque Navarro and D. Lanari, "Flow Synthesis of Biologically-Relevant Compound Libraries," Molecules, vol. 25, no. 4, 2020.

[678] M. Di Filippo, C. Bracken and M. Baumann, "Continuous Flow Photochemistry for the Preparation of Bioactive Molecules," Molecules, vol. 25, no. 2, 2020.

[677] J. Baker, C. Russell, J. Gilbert, J. Sakoff and A. McCluskey, "Amino Alcohol Acrylonitriles as Activators of the Aryl Hydrocarbon Receptor Pathway: An Unexpected MTT Phenotypic Screening Outcome," ChemMedChem, vol. 15, no. 6, pp. 490-505, 2020.

[676] K. Omoregbee, K. Luc, A. Dinh and T. Nguyen, "Tropylium-promoted prenylation reactions of phenols in continuous flow," J Flow Chem, vol. 10, no. 1, pp. 161-166, 2020.

[675] S. Govaerts, A. Nyuchev and T. Noel, "Pushing the boundaries of C–H bond functionalization chemistry using flow technology," J Flow Chem, vol. 10, no. 1, pp. 13-71, 2020.

[674] C. Thomson, C. Jones, G. Rosair, D. Ellis, J. Marques-Hueso, A. Lee and F. Vilela, "Continuous-flow synthesis and application of polymer-supported BODIPY Photosensitisers for the generation of singlet oxygen; process optimised by in-line NMR spectroscopy," J Flow Chem, vol. 10, no. 1, pp. 327-345, 2020.

[673] M. Ramezani, M. Kashfipour and M. Abolhasani, "Minireview: Flow chemistry studies of high-pressure gas-liquid reactions with carbon monoxide and hydrogen," J Flow Chem, vol. 10, no. 1, pp. 93-101, 2020.

[672] S. Maljuric, W. Jud, C. Kappe and D. Cantillo, "Translating batch electrochemistry to single-pass continuous flow conditions: an organic chemist’s guide," J Flow Chem, vol. 10, no. 1, pp. 181-190, 2020.

[671] B. Li, S. Bader, S. Guinness, S. Ruggeri, C. Hayward, S. Hoagland, J. Lucas, R. Li, D. Limburg, J. McWilliams, J. Raggon and J. Van Alsten, "Continuous flow aminolysis under high temperature and pressure," J Flow Chem, vol. 10, no. 1, pp. 145-156, 2020.

[670] G. Meir, M. Leblebici, S. Kuhn and T. Van Gerven, "Principles of co-axial illumination for photochemical reactors: Part 2. Model Validation," Jnl Adv Manuf & Process, 2020.

[669] C. Allais, E. Hansen, N. Ide, R. Perkins and E. Swift, "Selected Free Radical Reactions," Practical Synthetic Organic Chemistry, pp. 563-589, 2020.

[668] M. Guberman, "Development of Synthetic Strategies to Address Bottlenecks in Glycan Synthesis," Thesis, 2020.

[667] A. Ryder, W. Cunningham, G. Ballantyne, T. Mules, A. Kinsella, J. Turner-Dore, C. Alder, L. Edwards, B. McKay, M. Grayson and A. Cresswell, "Unmasked Primary Amines as C-Nucleophiles for Catalytic C–C Bond-Formation," ChemRxiv, 2020.

[666] W. He, Y. Gao, G. Zhu, H. Wu, Z. Fang and K. Guo, "Microfluidic synthesis of fatty acid esters: Integration of dynamic combinatorial chemistry and scale effect," *Chemical Engineering Journal,* 2020.

[665] H. Qin, C. Liu, N. Lv, W. He, J. Meng, Z. Fang and K. Guo, "Continuous and green microflow synthesis of azobenzene compounds catalyzed by consecutively prepared tetrahedron CuBr," *Dyes and Pigments,* vol. 174, p. 108071, 2020.

[664] A. Ryder, W. Cunningham, G. Ballantyne, T. Mules, A. Kinsella, J. Turner-Dore, C. Alder, L. Edwards, B. McKay, M. Grayson and A. Cresswell, "Photocatalytic α-Tertiary Amine Synthesis via C-H Alkylation of Unmasked Primary Amines," *Angew. Chem. Int. Ed. Engl.,* 2020.

[663] M. Van De Walle, K. De Bruycker, J. Blinco and C. Barner-Kowollik, "Two Colour Photoflow Chemistry for Macromolecular Design," *Angew. Chem. Int. Ed. Engl.,* 2020.

[662] E. Corcoran, J. McMullen, F. Lévesque, M. Wismer and J. Naber, "Photon Equivalents as a Parameter for Scaling Photoredox Reactions in Flow: Translation of Photocatalytic C-N Cross-Coupling from Lab Scale to Multikilogram Scale," *Angew. Chem. Int. Ed. Engl.,* 2020.

[661] C. Schotten, T. Nicholls, R. Bourne, N. Kapur, B. Nguyen and C. Willans, "Making electrochemistry easily accessible to the synthetic chemist," *Green Chem.,* vol. 22, no. 11, pp. 3358-3375, 2020.

[660] E. Sletten, J. Danglad-Flores, M. Nuño, D. Guthrie and P. Seeberger, "Automated Glycan Assembly in a Variable-Bed Flow Reactor Provides Insights into Oligosaccharide-Resin Interactions," *Org. Lett.,* vol. 22, no. 11, pp. 4213-4216, 2020.

[659] S. Anand, S. Mardhekar, R. Raigawali, N. Mohanta, P. Jain, C. D Shanthamurthy, B. Gnanaprakasam and R. Kikkeri, "Continuous-Flow Accelerated Sulfation of Heparan Sulfate Intermediates," *Org. Lett.,* vol. 22, no. 9, pp. 3402-3406, 2020.

[658] M. Levenstein, L. Wayment, C. Scott, R. Lunt, P. Flandrin, S. Day, C. Tang, C. Wilson, F. Meldrum, N. Kapur and K. Robertson, "Dynamic Crystallization Pathways of Polymorphic Pharmaceuticals Revealed in Segmented Flow with Inline Powder X-ray Diffraction," *Anal. Chem.,* vol. 92, no. 11, pp. 7754-7761, 2020.

[657] C. Hunter, M. Boyd, G. May and R. Fimognari, "Visible-Light-Mediated N-Desulfonylation of N-Heterocycles Using a Heteroleptic Copper(I) Complex as a Photocatalyst," *J. Org. Chem.,* 2020.

[656] M. Ruggeri, A. Dombrowski, S. Djuric and I. Baxendale, "Rearrangement of 3-Hydroxyazetidines into 2-Oxazolines," *J. Org. Chem.,* vol. 85, no. 11, pp. 7276-7286, 2020.

[655] N. Mohanta, K. Nair, D. Sutar and B. Gnanaprakasam, "Continuous-Flow Approach for the Multi-Gram Scale Synthesis of C2-Alkyl- or β-Amino Functionalized 1,3-Dicarbonyl Derivatives and Ondansetron Drug Using 1,3-Dicarbonyls," *React. Chem. Eng.,* 2020.

[654] W. He, P. Kang, Z. Fang, J. Hao, H. Wu, Y. Zhu and K. Guo, "Flow Reactor Synthesis of Bio-Based Polyol from Soybean Oil for the Production of Rigid Polyurethane Foam," *Ind. Eng. Chem. Res.,* 2020.

[653] T. Vieira, A. Stevens, A. Chtchemelinine, D. Gao, P. Badalov and L. Heumann, "Development of a Large-Scale Cyanation Process Using Continuous Flow Chemistry En Route to the Synthesis of Remdesivir," *Org. Process Res. Dev.,* 2020.

[652] T. Phung Hai, L. De Backer, N. Cosford and M. Burkart, "Preparation of Mono- and Diisocyanates in Flow from Renewable Carboxylic Acids," *Org. Process Res. Dev.,* 2020.

[651] N. Uhlig, A. Martins and D. Gao, "Selective DIBAL-H Monoreduction of a Diester Using Continuous Flow Chemistry: From Benchtop to Kilo Lab," *Org. Process Res. Dev.,* 2020.

[650] W. Debrouwer, W. Kimpe, R. Dangreau, K. Huvaere, H. Gemoets, M. Mottaghi, S. Kuhn and K. Van Aken, "Ir/Ni Photoredox Dual Catalysis with Heterogeneous Base Enabled by an Oscillatory Plug Flow Photoreactor," *Org. Process Res. Dev.,* 2020.

[649] J. de Souza, M. Berton, D. Snead and D. McQuade, "A Continuous Flow Sulfuryl Chloride-Based Reaction—Synthesis of a Key Intermediate in a New Route toward Emtricitabine and Lamivudine," *Org. Process Res. Dev.,* 2020.

[648] B. Li, G. Weisenburger and J. McWilliams, "Practical Considerations and Examples in Adapting Amidations to Continuous Flow Processing in Early Development," *Org. Process Res. Dev.,* 2020.

[647] M. Hosoya, S. Nishijima and N. Kurose, "Management of the Heat of Reaction under Continuous Flow Conditions Using In-Line Monitoring Technologies," *Org. Process Res. Dev.,* vol. 24, no. 6, pp. 1095-1103, 2020.

[646] O. Dennehy, D. Lynch, S. Collins, A. Maguire and H. Moynihan, "Scale-up and Optimization of a Continuous Flow Synthesis of an α-Thio-β-chloroacrylamide," *Org. Process Res. Dev.,* 2020.

[645] M. Berton, K. Sheehan, A. Adamo and D. McQuade, "Disposable cartridge concept for the on-demand synthesis of turbo Grignards, Knochel-Hauser amides, and magnesium alkoxides," *Beilstein J Org Chem,* vol. 16, pp. 1343-1356, 2020.

[644] T. Wirth and N. Amri, "Accelerating Electrochemical Synthesis through Automated Flow: Efficient Synthesis of Chalcogenophosphites," *Synlett,* 2020.

[643] T. Jamison, T. Monos, J. Jaworski and J. Stephens, "Continuous-Flow Synthesis of Tramadol from Cyclohexanone," *Synlett,* 2020.

[642] W. Hung, Y. Chen, C. Chen, Y. Lee, J. Fang and W. Yang, "Flow Chemistry System for Carbohydrate Analysis by Rapid Labeling of Saccharides after Glycan Hydrolysis," *SLAS Technol,* 2020.

[641] P. Kocienski, "Flow Synthesis of Anilines through Photoredox/Ni(II)-Catalyzed C–N Cross-Coupling: Tetracaine," *Synfacts,* vol. 16, no. 6, p. 0745, 2020.

[640] C. Huang, P. Chen, X. Liu and F. Li, "Metal–Organic Nanomaterials for Drug Delivery," *Polymers in Therapeutic Delivery,* pp. 79-95, 2020.

[639] T. Nicholls, C. Schotten and C. Willans, "Electrochemistry in continuous systems," *Current Opinion in Green and Sustainable Chemistry,* 2020.

[638] A. Caron, "I: Synthèse de carbazole en débit continu. II: Transfert de proton couplé à l\'électron photocatalysé au cuivre," *Thesis,* 2020.

[637] R. Sullivan, "Improving Efficiency by Using Continuous Flow to Enable Cycles: Pseudo-Catalysis, Catalysis and Kinetics," *Thesis,* 2020.

[636] G. Laudadio, "Cahpter 3 - C(sp3)–H Functionalizations of Light Hydrocarbons using Decatungstate Photocatalysis," in *New synthetic methods enabled by photochemistry and electrochemistry in flow.*, Technische Universiteit Eindhoven., 2020, pp. 45-78.

[635] G. D. Y. v. d. W. K. R. D. N. M. F. M. N. T. Laudadio, "C(sp3)–H functionalizations of light hydrocarbons using decatungstate photocatalysis in flow," *Science,* vol. 369, no. 6499, pp. 92-96, 2020.

[634] S. Khillari, "Flow Chemistry Market Analysis| Recent Industry Trends Report, 2026," *Thesis,* 2020.

[632] M. Oelgemoeller and D. Guthrie, "Continuous-flow photochemistry made easy with Vapourtec\'s photoreactor series," *EPA Newsletters,* vol. 97, pp. 38-42, 2020.

[631] P. Sharanyakanth and M. Radhakrishnan, "Synthesis of metal-organic frameworks (MOFs) and its application in food packaging: A critical review," *Trends in Food Science & Technology,* vol. 104, pp. 102-116, 2020.

[630] Z. Li, T. Bavaro, S. Tengattini, R. Bernardini, M. Mattei, F. Annunziata, R. Cole, C. Zheng, M. Sollogoub, L. Tamborini, M. Terreni and Y. Zhang, "Chemoenzymatic synthesis of arabinomannan (AM) glycoconjugates as potential vaccines for tuberculosis," *Eur J Med Chem,* vol. 204, p. 112578, 2020.

[629] K. Behm, E. Fazekas, M. Paterson, F. Vilela and R. McIntosh, "Discrete Ti-O-Ti Complexes: Visible-Light-Activated, Homogeneous Alternative to TiO2 Photosensitisers," *Chemistry (Weinheim an der Bergstrasse, Germany),* vol. 26, no. 43, pp. 9486-9494, 2020.

[628] J. Wilson, M. Boyd, S. Giroux and U. Bandarage, "Application of a Dual Catalytic Nickel/Iridium-Based Photoredox Reaction to Synthesize 2-Alkyl-N-Arylindoles in a Continuous Flow," *J. Org. Chem.,* 2020.

[627] A. Ubale, M. Chaudhari, M. Shaikh and B. Gnanaprakasam, "Manganese-Catalyzed Synthesis of Quaternary Peroxides: Application in Catalytic Deperoxidation and Rearrangement Reactions," *J. Org. Chem.,* vol. 85, no. 16, pp. 10488-10503, 2020.

[626] S. Lee, Y. Malpani and I. Kim, "Development of a packed-bed flow process for the production scale hydrogenation of 7-oxo-lithocholic acid to ursodeoxycholic acid," *J Flow Chem,* 2020.

[625] E. López, M. Linares and J. Alcázar, "Flow chemistry as a tool to access novel chemical space for drug discovery," *Future Med Chem,* vol. 12, no. 17, pp. 1547-1563, 2020.

[624] F. Annunziata, M. Letizia Contente, D. Betti, C. Pinna, F. Molinari, L. Tamborini and A. Pinto, "Efficient Chemo-Enzymatic Flow Synthesis of High Value Amides and Esters," *Catalysts,* vol. 10, no. 8, p. 939, 2020.

[623] M. Carrera, L. De Coen, M. Coppens, W. Dermaut and C. Stevens, "A Vilsmeier Chloroformylation by Continuous Flow Chemistry," *Org. Process Res. Dev.,* 2020.

[622] G. Mathieu, H. Patel and H. Lebel, "Convenient Continuous Flow Synthesis of N-Methyl Secondary Amines from Alkyl Mesylates and Epoxides," *Org. Process Res. Dev.,* 2020.

[621] M. Sezen-Edmonds, J. Tabora, B. Cohen, S. Zaretsky, E. Simmons, T. Sherwood and A. Ramirez, "Predicting Performance of Photochemical Transformations for Scaling Up in Different Platforms by Combining High-Throughput Experimentation with Computational Modeling," *Org. Process Res. Dev.,* 2020.

[620] P. Knochel, R. Nishimura and N. Weidmann, "Preparation of Diorganomagnesium Reagents by Halogen–Lithium Exchange of Functionalized Heteroaryl Halides and Subsequent in situ Trapping with MgCl2·LiCl in Continuous Flow," *Synthesis,* 2020.

[619] T. Maschmeyer, P. Prieto, S. Grunert and J. Hein, "Exploration of continuous-flow benchtop NMR acquisition parameters and considerations for reaction monitoring," *Magn Reson Chem,* 2020.

[618] I. Baxendale, O. Griffiths and M. Ruggeri, "Photochemical Flow Oximation of Alkanes," *Synlett,* 2020.

[617] F. Pfrengle, "Automated Glycan Assembly of Plant Cell Wall Oligosaccharides," *Methods Mol. Biol.,* pp. 503-512, 2020.

[616] D. Paymode, F. Cardoso, J. Sieber, J. Tomlin, D. Cook, J. Burns, R. Stringham, B. Gupton, D. Snead and T. Agrawal, "Toward Secure Supply of Remdesivir via a 2-Pot Triazine Synthesis: Supply Centered Synthesis," *ChemRxiv,* 2020.

[615] M. Catalán, V. Castro-Castillo, J. Gajardo-de la Fuente, J. Aguilera, J. Ferreira, R. Ramires-Fernandez, I. Olmedo, A. Molina-Berríos, C. Palominos, M. Valencia, M. Domínguez, J. Souto and J. Jara, "Continuous flow synthesis of lipophilic cations derived from benzoic acid as new cytotoxic chemical entities in human head and neck carcinoma cell lines," *RSC Med. Chem.,* 2020.

[614] M. Santi, "Novel applications of α-Diazocarbonyl compounds and enabling technologies in stereoselective synthesis," *Thesis,* 2020.

[613] R. Zadravec and I. Vujasinović, "SUZUKI COUPLING IN CONTINUOUS FLOW: EFFICIENT APPLICATION IN LIBRARY SYNTHESIS," *Thesis,* 2020.

[612] J. Wang, X. Hu, N. Zhu and K. Guo, "Continuous Flow Photo-RAFT and Light-PISA," *Chemical Engineering Journal,* 2020.

[611] T. Goodine and M. Oelgemöller, "Corymbia citriodora : A Valuable Resource from Australian Flora for the Production of Fragrances, Repellents, and Bioactive Compounds," *ChemBioEng Reviews,* vol. 7, no. 6, pp. 170-192, 2020.

[610] P. Zardi, M. Maggini and T. Carofiglio, "Achieving selectivity in porphyrin bromination through a DoE-driven optimization under continuous flow conditions," *Journal of Flow Chemistry,* 2020.

[609] A. Price, A. Capel, R. Lee, P. Pradel and S. Christie, "An open source toolkit for 3D printed fluidics," *Journal of Flow Chemistry,* 2020.

[608] N. Sugisawa, H. Nakamura and S. Fuse, "Recent Advances in Continuous-Flow Reactions Using Metal-Free Homogeneous Catalysts," *Catalysts,* vol. 10, no. 11, p. 1321, 2020.

[607] P. De Santis, L. Meyer and S. Kara, "The rise of continuous flow biocatalysis – fundamentals, very recent developments and future perspectives," *Reaction Chemistry & Engineering,* vol. 5, no. 12, pp. 2155-2184, 2020.

[606] A. Ładosz, C. Kuhnle and K. Jensen, "Characterization of reaction enthalpy and kinetics in a microscale flow platform," *Reaction Chemistry & Engineering,* vol. 5, no. 11, pp. 2115-2122, 2020.

[605] R. Ma, J. Feng, K. Zhang, B. Zhang and D. Du, "Photoredox β-thiol-α-carbonylation of enones accompanied by unexpected Csp2-C(CO) bond cleavage," *Organic & biomolecular chemistry,* vol. 18, no. 38, pp. 7549-7553, 2020.

[604] M. Graham, G. Noonan, J. Cherryman, J. Douglas, M. Gonzalez, L. Jackson, K. Leslie, Z. Liu, D. McKinney, R. Munday, C. Parsons, D. Whittaker, E. Zhang and J. Zhang, "Development and Proof of Concept for a Large-Scale Photoredox Additive-Free Minisci Reaction," *Organic Process Research & Development,* 2020.

[603] M. Baumann, A. Leslie, T. Moody, M. Smyth and S. Wharry, "Tandem Continuous Flow Curtius Rearrangement and Subsequent Enzyme-Mediated Impurity Tagging," *Organic Process Research & Development,* 2020.

[602] J. Grayson and A. Cresswell, "γ-Amino phosphonates via the photocatalytic α-C–H alkylation of primary amines," *Tetrahedron,* 2020.

[601] P. Sagmeister, R. Lebl, I. Castillo, J. Rehrl, M. Horn, J. Kruisz, M. Sipek, S. Sacher, D. Cantillo, J. Williams and C. Kappe, "Advanced Real-Time Process Analytics for Multistep Synthesis in Continuous Flow," *ChemRxiv,* 2020.

[600] S. Das, K. Murugesan, G. RODRIGUEZ, J. Kaur, J. Barham, A. Savateev, M. Antonietti and B. Koenig, "Photocatalytic (Hetero)Arylation of C(sp3)–H Bonds with Carbon Nitride," *Photocatalytic (Hetero)Arylation,* 2020.

[599] P. Cranwell, "Recent Advances Towards the Inclusion of Flow Chemistry within the Undergraduate Practical Class Curriculum," *SynOpen,* vol. 04, no. 04, pp. 96-98, 2020.

[598] M. Ruggeri, "Exploring Flow Chemistry for the Synthesis and Scale-up of Small Organic Molecules," *Thesis,* 2020.

[597] Y. Du, "Synthesis and application of organoboron compounds for catalytic amide formation and bifunctional catalysis," *Thesis,* 2020.

[596] N. Weidmann, "Preparation of lithium, sodium and potassium organometallics by metalation and halogen/metal exchange in continuous flow," *Thesis,* 2020.

2019

Year total: 95

[595] M. Elsherbini and T. Wirth, "Electroorganic Synthesis under Flow Conditions," *Acc. Chem. Res.,* vol. 52, no. 12, pp. 3287-3296, 2019.

[594] D. Caputo, M. Casiello, A. Laurenza, F. Fracassi, C. Fusco, A. Nacci and L. D'Accolti, "Preparation of Biowax Esters in Continuous Flow Conditions," *ACS Omega,* vol. 4, no. 7, pp. 12286-12292, 2019.

[593] R. Lebl, T. Murray, A. Adamo, D. Cantillo and C. Kappe, "Continuous Flow Synthesis of Methyl Oximino Acetoacetate: Accessing Greener Purification Methods with Inline Liquid–Liquid Extraction and Membrane Separation Technology," *ACS Sustainable Chem. Eng.,* vol. 7, no. 24, pp. 20088-20096, 2019.

[592] C. Bottecchia, R. Martín, I. Abdiaj, E. Crovini, J. Alcazar, J. Orduna, M. Blesa, J. Carrillo, P. Prieto and T. Noël, "De novo Design of Organic Photocatalysts: Bithiophene Derivatives for the Visible-light Induced C−H Functionalization of Heteroarenes," *Adv. Synth. Catal.,* vol. 361, no. 5, pp. 945-950, 2019.

[591] H. Seo, L. Nguyen and T. Jamison, "Using Carbon Dioxide as a Building Block in Continuous Flow Synthesis," *Adv. Synth. Catal.,* vol. 361, no. 2, pp. 247-264, 2019.

[590] M. Elsherbini, B. Winterson, H. Alharbi, A. Folgueiras-Amador, C. Génot and T. Wirth, "Elektrochemischer Durchlaufgenerator für hypervalente Iodreagenzien: Synthetische Anwendungen," *Angew. Chem.,* pp. 9916-9920, 2019.

[589] W. Konrad, C. Fengler, S. Putwa and C. Barner-Kowollik, "Protection Group Free Synthesis of Sequence-Defined Macromolecules via Precision λ-Orthogonal Photochemistry," *Angew. Chem. Int. Ed. Engl.,* 2019.

[588] M. Elsherbini, B. Winterson, H. Alharbi, A. Folgueiras-Amador, C. Génot and T. Wirth, "Continuous-Flow Electrochemical Generator of Hypervalent Iodine Reagents: Synthetic Applications," *Angew. Chem. Int. Ed. Engl.,* 2019.

[587] X. Wei, I. Abdiaj, C. Sambiagio, C. Li, E. Zysman-Colman, J. Alcázar and T. Noël, "Visible-Light-Promoted Iron-Catalyzed C(sp2)-C(sp3) Kumada Cross-Coupling in Flow," *Angew. Chem. Int. Ed. Engl.,* vol. 58, no. 37, pp. 13030-13034, 2019.

[586] S. Kim, J. Lee, N. Kim and B. Park, "Visible-Light-Mediated Cross-Couplings and C−H Activation via Dual Photoredox/Transition-Metal Catalysis in Continuous-Flow Processes," *Asian J. Org. Chem.,* vol. 8, no. 9, pp. 1578-1587, 2019.

[585] M. York, K. Jarvis, J. Freemont, J. Ryan, G. Savage, S. Logan and L. Bright, "A Scalable, Combined-Batch, and Continuous-Flow Synthesis of a Bio-Inspired UV-B Absorber," *Aust. J. Chem.,* 2019.

[584] A. Parihar and S. Bhattacharya, "Cellulose fast pyrolysis for platform chemicals: assessment of potential targets and suitable reactor technology," *Biofuels, Bioprod. Bioref.,* 2019.

[583] M. Gojun, A. Šalić, A. Tušek, D. Valinger and M. Tišma, "The Smaller, The Better–Microtechnology for a Macroresults," in *Engineering Power: Bulletin of the Croatian Academy of Engineering*, 2019, pp. 2-7.

[582] A. Macchi, P. Plouffe, G. Patience and D. Roberge, "Experimental Methods in Chemical Engineering: Micro-Reactors," *Can. J. Chem. Eng.,* 2019.

[581] D. Roura Padrosa, V. De Vitis, M. Contente, F. Molinari and F. Paradisi, "Overcoming Water Insolubility in Flow: Enantioselective Hydrolysis of Naproxen Ester," *Catalysts,* vol. 9, no. 3, p. 232, 2019.

[580] V. De Vitis, F. Dall’Oglio, F. Tentori, M. Contente, D. Romano, E. Brenna, L. Tamborini and F. Molinari, "Bioprocess Intensification Using Flow Reactors: Stereoselective Oxidation of Achiral 1,3-diols with Immobilized Acetobacter Aceti," *Catalysts,* vol. 9, no. 3, p. 208, 2019.

[579] Y. Du, T. Barber, S. Lim, H. Rzepa, I. Baxendale and A. Whiting, "A solid-supported arylboronic acid catalyst for direct amidation," *Chem. Commun. (Camb.),* vol. 55, no. 20, pp. 2916-2919, 2019.

[578] C. Lau, T. Lu, S. Sun, X. Chen, M. Carta and D. Dawson, "Continuous flow knitting of a triptycene hypercrosslinked polymer," *Chem. Commun. (Camb.),* vol. 55, no. 59, pp. 8571-8574, 2019.

[577] E. Sletten, M. Nuño, D. Guthrie and P. Seeberger, "Real-time monitoring of solid-phase peptide synthesis using a variable bed flow reactor," *Chem. Commun. (Camb.),* vol. 55, no. 97, pp. 14598-14601, 2019.

[576] M. Contente and F. Paradisi, "Transaminase-catalyzed continuous synthesis of biogenic aldehydes," *Chembiochem,* 2019.

[575] R. Semproli, G. Vaccaro, E. Ferrandi, M. Vanoni, T. Bavaro, G. Marrubini, F. Annunziata, P. Conti, G. Speranza, D. Monti, L. Tamborini and D. Ubiali, "Use of Immobilized Amine Transaminase from Vibrio fluvialis under Flow Conditions for the Synthesis of (S)-1-(5-Fluoropyrimidin-2-yl)-ethanamine," *ChemCatChem,* 2019.

[574] A. Shallan and C. Priest, "Microfluidic Process Intensification for Synthesis and Formulation in the Pharmaceutical Industry," *Chemical Engineering and Processing - Process Intensification,* 2019.

[573] P. Neumann, L. Cao, D. Russo, V. Vassiliadis and A. Lapkin, "A new formulation for symbolic regression to identify physico-chemical laws from experimental data," *Chemical Engineering Journal,* 2019.

[572] J. Wong, J. Tobin, F. Vilela and G. Barker, "Batch Versus Flow Lithiation-Substitution of 1,3,4-Oxadiazoles: Exploitation of Unstable Intermediates Using Flow Chemistry," *Chemistry,* vol. 25, no. 53, pp. 12439-12445, 2019.

[571] M. Santi, J. Seitz, R. Cicala, T. Hardwick, N. Ahmed and T. Wirth, "Memory of Chirality in Flow Electrochemistry: Fast Optimisation with DoE and Online 2D-HPLC," *Chemistry,* vol. 25, no. 71, pp. 16230-16235, 2019.

[570] J. Williams, Y. Otake, G. Coussanes, I. Saridakis, N. Maulide and C. Kappe, "Towards a Scalable Synthesis of 2-Oxabicyclo[2.2.0]hex-5-en-3-one Using Flow Photochemistry," *ChemPhotoChem,* vol. 3, no. 5, pp. 229-232, 2019.

[569] M. Ruggeri, A. Dombrowski, S. Djuric and I. Baxendale, "Photochemical Flow Synthesis of 3-Hydroxyazetidines," *ChemPhotoChem,* 2019.

[568] M. Reis, T. Varner and F. Leibfarth, "The Influence of Residence Time Distribution on Continuous Flow Polymerization," *ChemRrivx,* 2019.

[567] B. Cerra, M. Gabriele, M. Ricci, A. Schoubben and A. Gioiello, "In-flow flash nanoprecipitation of size-controlled D-leucine nanoparticles for spray-drying formulations," *ChemRxiv,* 2019.

[566] L. Cao, D. Russo, V. Vassiliadis and A. Lapkin, "Identifying physico-chemical laws from the robotically collected data," *ChemRxiv,* 2019.

[565] C. Mateos, "Lilly Research Award Program (LRAP): A Successful Academia-Industry Partnership Model in the Context of Flow Chemistry for Drug Discovery," *Chimia (Aarau),* vol. 73, no. 10, pp. 803-808, 2019.

[564] S. Ley, Y. Chen, D. Fitzpatrick and O. May, "A New World for Chemical Synthesis?," *Chimia (Aarau),* vol. 73, no. 10, pp. 792-802, 2019.

[563] S. Lai, X. Liao, H. Zhang, Y. Jiang, Y. Liu, S. Wang and X. Xiong, "Application of 3D Printing Technology in Organic Synthetic Chemistry," *Chin. J. Org. Chem.,* vol. 39, no. 7, p. 1858, 2019.

[562] A. Zhakeyev, J. Tobin, H. Wang, F. Vilela and J. Xuan, "Additive manufacturing of photoactive polymers for visible light harvesting," *Energy Procedia,* vol. 158, pp. 5608-5614, 2019.

[561] Y. Chen, D. Cantillo and C. Kappe, "Visible Light-Promoted Beckmann Rearrangements: Separating Sequential Photochemical and Thermal Phenomena in a Continuous Flow Reactor," *Eur. J. Org. Chem.,* pp. 2163-2171, 2019.

[560] N. Luise, E. Wyatt, G. Tarver and P. Wyatt, "A Continuous Flow Strategy for the Facile Synthesis and Elaboration of Semi-Saturated Heterobicyclic Fragments," *Eur. J. Org. Chem.,* pp. 1341-1349, 2019.

[559] F. Mortzfeld, J. Pietruszka and I. Baxendale, "A Simple and Efficient Flow Preparation of Pyocyanin a Virulence Factor of Pseudomonas aeruginosa," *Eur. J. Org. Chem.,* 2019.

[558] A. Barthelemy, G. Dagousset and E. Magnier, "Metal-Free Visible-Light-Mediated Hydrotrifluoromethylation of Unactivated Alkenes and Alkynes in Continuous Flow," *Eur. J. Org. Chem.,* 2019.

[557] L. Rogers and K. Jensen, "Continuous manufacturing – the Green Chemistry promise?," *Green Chem.,* vol. 21, no. 13, pp. 3481-3498, 2019.

[556] D. Bošković, "Reaktoren für spezielle technisch-chemische Prozesse: Mikrostrukturreaktoren," *Handbuch Chemische Reaktoren,* 2019.

[555] L. Amini-Rentsch, E. Vanoli, S. Richard-Bildstein, R. Marti and G. Vilé, "A Novel and Efficient Continuous-Flow Route To Prepare Trifluoromethylated N-Fused Heterocycles for Drug Discovery and Pharmaceutical Manufacturing," *Ind. Eng. Chem. Res.,* vol. 58, no. 24, pp. 10164-10171, 2019.

[554] T. von Keutz, D. Cantillo and C. Kappe, "Enhanced mixing of biphasic liquid-liquid systems for the synthesis of gem-dihalocyclopropanes using packed bed reactors," *J Flow Chem,* vol. 9, no. 1, pp. 27-34, 2019.

[553] A. Bouchard, V. Kairouz, M. Manneveau, H. Xiong, T. Besset, X. Pannecoucke and H. Lebel, "Continuous flow palladium-catalyzed trifluoromethylthiolation of C-H bonds," *J Flow Chem,* vol. 9, no. 1, 2019.

[552] G. Vilé, G. Schmidt, S. Richard-Bildstein and S. Abele, "Enantiospecific cyclization of methyl N-(tert-butoxycarbonyl)-N-(3-chloropropyl)-D-alaninate to 2-methylproline derivative via 'memory of chirality' in flow," *J Flow Chem,* vol. 9, no. 1, 2019.

[551] S. De Angelis, P. Celestini, R. Purgatorio, L. Degennaro, G. Rebuzzini, R. Luisi and C. Carlucci, "Development of a continuous flow synthesis of propranolol: tackling a competitive side reaction," *J Flow Chem,* 2019.

[550] A. Bogdan and A. Dombrowski, "Emerging Trends in Flow Chemistry and Applications to the Pharmaceutical Industry," *J. Med. Chem.,* 2019.

[549] W. Zhan, H. Hsu, T. Morgan, T. Ouellette, K. Burns-Huang, R. Hara, A. Wright, T. Imaeda, R. Okamoto, K. Sato, M. Michino, M. Ramjee, K. Aso, P. Meinke, M. Foley, C. Nathan, H. Li and G. Lin, "Selective Phenylimidazole-based Inhibitors of the Mycobacterium tuberculosis Proteasome," *J. Med. Chem.,* 2019.

[548] T. Sherwood, H. Xiao, R. Bhaskar, E. Simmons, S. Zaretsky, M. Rauch, R. Knowles and T. Dhar, "Decarboxylative Intramolecular Arene Alkylation Using N-(Acyloxy)phthalimides, an Organic Photocatalyst, and Visible Light," *J. Org. Chem.,* 2019.

[547] A. O'Brien, Y. Liu, M. Hughes, J. Lim, N. Hodnett and N. Falco, "Investigation of a Weak Temperature-Rate Relationship in the Carbamoylation of a Barbituric Acid Pharmaceutical Intermediate," *J. Org. Chem.,* 2019.

[546] B. Li, R. Li, P. Dorff, J. McWilliams, R. Guinn, S. Guinness, L. Han, K. Wang and S. Yu, "Deprotection of N-Boc Groups Under Continuous Flow High Temperature Conditions," *J. Org. Chem.,* 2019.

[545] N. Tosso, B. Desai, E. De Oliveira, J. Wen, J. Tomlin and B. Gupton, "A Consolidated and Continuous Synthesis of Ciprofloxacin from a Vinylogous Cyclopropyl Amide," *J. Org. Chem.,* vol. 84, no. 6, pp. 3370-3376, 2019.

[544] C. Crifar, F. Dücker, S. Nguyen Thanh, V. Kairouz and W. Lubell, "Heumann Indole Flow Chemistry Process," *J. Org. Chem.,* vol. 84, no. 17, pp. 10929-10937, 2019.

[543] S. Pollington, "10th International Symposium on Continuous Flow Reactor Technology for Industrial Applications," *Johnson Matthey Technology Review,* 2019.

[542] A. Pallipurath, P. Flandrin, L. Wayment, C. Wilson and K. Robertson, "In situ non-invasive Raman spectroscopic characterisation of succinic acid polymorphism during segmented flow crystallisation," *Mol. Syst. Des. Eng.,* 2019.

[541] R. Van Kerrebroeck, P. Naert, T. Heugebaert, M. D'hooghe and C. Stevens, "Electrophilic Bromination in Flow: A Safe and Sustainable Alternative to the Use of Molecular Bromine in Batch," *Molecules,* vol. 24, no. 11, 2019.

[540] S. Mostarda, T. Gür Maz, A. Piccinno, B. Cerra and E. Banoglu, "Optimisation by Design of Experiment of Benzimidazol-2-One Synthesis under Flow Conditions," *Molecules,* vol. 24, no. 13, 2019.

[539] S. Mumtaz, M. Robertson and M. Oelgemöller, "Continuous Flow Photochemical and Thermal Multi-Step Synthesis of Bioactive 3-Arylmethylene-2,3-Dihydro-1H-Isoindolin-1-Ones," *Molecules,* vol. 24, no. 24, 2019.

[538] K. Donnelly, H. Zhang and M. Baumann, "Development of a Telescoped Flow Process for the Safe and Effective Generation of Propargylic Amines," *Molecules,* vol. 24, no. 20, 2019.

[537] N. Parvathalu, S. Agalave, N. Mohanta and B. Gnanaprakasam, "Reversible chemoselective transetherification of vinylogous esters using Fe-catalyst under additive free conditions," *Org. Biomol. Chem.,* vol. 17, no. 12, pp. 3258-3266, 2019.

[536] Y. Chen, O. May, D. Blakemore and S. Ley, "A Photoredox Coupling Reaction of Benzylboronic Esters and Carbonyl Compounds in Batch and Flow," *Org. Lett.,* vol. 21, no. 15, pp. 6140-6144, 2019.

[535] Z. Brill, C. Ritts, U. Mansoor and N. Sciammetta, "Continuous Flow Enables Metallaphotoredox Catalysis in a Medicinal Chemistry Setting: Accelerated Optimization and Library Execution of a Reductive Coupling between Benzylic Chlorides and Aryl Bromides," *Org. Lett.,* 2019.

[534] N. Mohanta, M. Chaudhari, N. Digrawal and B. Gnanaprakasam, "Rapid and Multigram Synthesis of Vinylogous Esters under Continuous Flow: An Access to Transetherification and Reverse Reaction of Vinylogous Esters," *Org. Process Res. Dev.,* 2019.

[533] Morin, J. Sosoe, M. Raymond, B. Amorelli, R. Boden and S. Collins, "Synthesis of a Renewable Macrocyclic Musk: Evaluation of Batch, Microwave, and Continuous Flow Strategies," *Org. Process Res. Dev.,* vol. 23, no. 2, pp. 283-287, 2019.

[532] Y. Nakahara, B. Metten, O. Tonomura, A. Nagaki, S. Hasebe and J. Yoshida, "Modeling and Design of a Flow-Microreactor-Based Process for Synthesizing Ionic Liquids," *Org. Process Res. Dev.,* 2019.

[531] A. Szelwicka, P. Zawadzki, M. Sitko, S. Boncel, W. Czardybon and A. Chrobok, "Continuous Flow Chemo-Enzymatic Baeyer–Villiger Oxidation with Superactive and Extra-Stable Enzyme/Carbon Nanotube Catalyst: An Efficient Upgrade from Batch to Flow," *Org. Process Res. Dev.,* 2019.

[530] M. Littleson, A. Campbell, A. Clarke, M. Dow, G. Ensor, M. Evans, A. Herring, B. Jackson, L. Jackson, S. Karlsson, D. Klauber, D. Legg, K. Leslie, Moravčík, C. Parsons, T. Ronson and R. Meadows, "Synthetic Route Design of AZD4635, an A2AR Antagonist," *Org. Process Res. Dev.,* vol. 23, no. 7, pp. 1407-1419, 2019.

[529] J. Lim, K. Arrington, A. Dunn, D. Leitch, I. Andrews, N. Curtis, M. Hughes, D. Tray, C. Wade, M. Whiting, C. Goss, Y. Liu and B. Roesch, "A Flow Process Built Upon a Batch Foundation – Preparation of a Key Amino-Alcohol Intermediate via Multi-Stage Continuous Synthesis," *Org. Process Res. Dev.,* 2019.

[528] M. Guberman, B. Pieber and P. Seeberger, "Safe and Scalable Continuous Flow Azidophenylselenylation of Galactal to Prepare Galactosamine Building Blocks," *Org. Process Res. Dev.,* vol. 23, no. 12, pp. 2764-2770, 2019.

[527] B. Gleede, M. Selt, C. Gütz, A. Stenglein and S. Waldvogel, "Large, Highly Modular Narrow-Gap Electrolytic Flow Cell and Application in Dehydrogenative Cross-Coupling of Phenols," *Org. Process Res. Dev.,* 2019.

[526] M. Tissot, J. Jacq and P. Pasau, "Stereospecific Amination of Mesylated Cyclobutanol in Continuous Flow," *Org. Process Res. Dev.,* 2019.

[525] C. Hone, A. Boyd, A. O'Kearney-McMullan, R. Bourne and F. Muller, "Definitive screening designs for multistep kinetic models in flow," *React. Chem. Eng.,* 2019.

[524] B. Cerra, G. Mosca, M. Ricci, A. Schoubben and A. Gioiello, "Flow nanoprecipitation of size-controlled d-leucine nanoparticles for spray-drying formulations," *React. Chem. Eng.,* vol. 4, no. 10, pp. 1861-1868, 2019.

[523] M. Chaudhari, N. Mohanta, A. Pandey, M. Vandana, K. Karmodiya and B. Gnanaprakasam, "Peroxidation of 2-oxindole and barbituric acid derivatives under batch and continuous flow using an eco-friendly ethyl acetate solvent," *React. Chem. Eng.,* vol. 4, no. 7, pp. 1277-1283, 2019.

[522] N. Weeranoppanant, "Enabling tools for continuous-flow biphasic liquid–liquid reaction," *Reaction Chemistry & Engineering,* 2019.

[521] M. Baumann, "Integrating reactive distillation with continuous flow processing," *Reaction Chemistry & Engineering,* 2019.

[520] M. Pagliaro, "The Role of Single-Atom Catalysis in Potentially Disruptive Technologies," *Single-Atom Catalysis,* pp. 21-46.

[519] N. Amri, R. Skilton, D. Guthrie and T. Wirth, "Efficient Flow Electrochemical Alkoxylation of Pyrrolidine-1-carbaldehyde," *Synlett,* 2019.

[518] N. Ahmed and A. Vgenopoulou, "Flow Electrochemical Cyclizations via Amidyl Radicals: Easy Access to Cyclic Ureas," *SynOpen,* vol. 3, no. 1, pp. 46-48, 2019.

[517] H. Lebel, A. Charette, G. Evano, A. Nitelet and V. Kairouz, "Continuous Flow Chlorination of Alkenyl Iodides Promoted by Copper Tubing," *Synthesis,* vol. 51, no. 1, pp. 251-257, 2019.

[516] Z. Rao, "The application of 3D-printing in batch and flow chemistry for the synthesis of heterocycles," *Thesis,* 2019.

[515] A. Bouchard, "Trifluorométhylthiolation par CH activation et synthèse d'amines primaires en chimie en flux continu," *Thesis,* 2019.

[514] C. Audubert, "Méthylénation et diazotisation en chimie en flux continu," *Thesis,* 2019.

[513] H. Wang, "Cobalt (III)-and Manganese (I)-Catalyzed C– H and C– C Activations," *Thesis,* 2019.

[512] R. Galaverna, "Explorando os benefícios da química em fluxo contínuo na síntese de compostos oriundos de biomassa e na química de cetenos," *Thesis,* 2019.

[511] D. Thomas III, "Design and implementation of an automated reconfigurable modular flow chemistry synthesis platform," *Thesis,* 2019.

[510] P. Flandrin, "Developing metastable switchable materials towards scale-up production in continuous flow environment," *Thesis,* 2019.

[505] R. Hicklin, A. Strom, E. Styduhar and T. Jamison, "6 Hazardous Reagents in Continuous-Flow Chemistry," *Thesis,* 2019.

[504] C. Scholtz, "The automated flow synthesis of fluorine containing organic compounds," *Thesis,* 2019.

[503] T. Britten, "4-π Photocyclisation: a new route to functionalised four-membered rings," *Thesis,* 2019.

[502] M. Jo, "N-Heterocyclic Carbene Copper Complexes: Catalysis and Coordination Chemistry," *Thesis,* 2019.

[501] A. ROIBU, "Characterization of Microstructured Reactors for Photochemical Transformations," *Thesis,* 2019.

2018

Year total: 78

[500] A. Benítez-Mateos, M. Contente, S. Velasco-Lozano, F. Paradisi and F. López-Gallego, "Self-Sufficient Flow-Biocatalysis by Coimmobilization of Pyridoxal 5′-Phosphate and ω-Transaminases onto Porous Carriers," *ACS Sustainable Chem. Eng.,* vol. 6, no. 10, pp. 13151-13159, 2018.

[499] S. Agalave, M. Chaudhari, G. Bisht and B. Gnanaprakasam, "Additive Free Fe-Catalyzed Conversion of Nitro to Aldehyde under Continuous Flow Module," *ACS Sustainable Chem. Eng.,* vol. 6, no. 10, pp. 12845-12854, 2018.

[498] E. Campbell, J. Grant, Y. Wang, M. Sandhu, R. Williams, D. Nisbet, A. Perriman, D. Lupton and C. Jackson, "Hydrogel-Immobilized Supercharged Proteins," *Adv. Biosys.,* vol. 2, no. 7, p. 1700240, 2018.

[497] K. Kunihiro, L. Dumais, G. Lafitte, E. Varvier, L. Tomas and C. Harris, "An Efficient Benzoxaborole One-Pot Synthesis by SiliaCat DPP-Pd Heterogeneous Catalysis using Diboronic Acid," *Adv. Synth. Catal.,* vol. 360, no. 14, pp. 2757-2761, 2018.

[496] C. Bottecchia, R. Martin, I. Abdiaj, E. Crovini, J. Alcazar, J. Jorduna, M. Blesa, J. Carrillo, P. Prieto and T. Noel, "De novo design of organic photocatalysts: bithiophene derivatives for the visible-light induced C-H functionalization of heteroarenes," *Adv. Synth. Catal.,* 2018.

[495] H. Seo, L. Nguyen and T. Jamison, "Using Carbon Dioxide as a Building Block in Continuous Flow Synthesis," *Adv. Synth. Catal.,* 2018.

[494] I. Abdiaj, L. Huck, J. Mateo, A. de la Hoz, M. Gomez, A. Díaz-Ortiz and J. Alcázar, "Photoinduced Palladium-Catalyzed Negishi Cross-Couplings Enabled by the Visible-Light

Absorption of Palladium-Zinc Complexes," *Angew. Chem. Int. Ed. Engl.,* vol. 57, no. 40, pp. 13231-13236, 2018.

[493] M. Ganiek, M. Ivanova, B. Martin and P. Knochel, "Mild Homologation of Esters through Continuous Flow Chloroacetate Claisen Reactions," *Angew. Chem. Int. Ed. Engl.,* vol. 57, no. 52, pp. 17249-17253, 2018.

[492] C. Burcham, A. Florence and M. Johnson, "Continuous Manufacturing in Pharmaceutical Process Development and Manufacturing," *Annu Rev Chem Biomol Eng,* vol. 9, pp. 253-281, 2018.

[491] S. Mumtaz, M. Robertson and M. Oelgemöller, "Recent Advances in Photodecarboxylations Involving Phthalimides," *Aust. J. Chem.,* vol. 71, no. 9, p. 634, 2018.

[490] E. Yu, H. Mangunuru, N. Telang, C. Kong, J. Verghese, S. Gilliland Iii, S. Ahmad, R. Dominey and B. Gupton, "High-yielding continuous-flow synthesis of antimalarial drug hydroxychloroquine," *Beilstein J Org Chem,* vol. 14, pp. 583-592, 2018.

[489] S. De Angelis, C. Carlucci, M. de Candia, G. Rebuzzini, P. Celestini, M. Riscazzi, R. Luisi and L. Degennaro, "Targeting a Mirabegron precursor by BH 3 -mediated continuous flow reduction process," *Catalysis Today,* vol. 308, pp. 81-85, 2018.

[488] V. Liautard, M. Birepinte, C. Bettoli and M. Pucheault, "Mg-Catalyzed OPPenauer Oxidation—Application to the Flow Synthesis of a Natural Pheromone," *Catalysts,* vol. 8, no. 11, p. 529, 2018.

[487] J. Britton, S. Majumdar and G. Weiss, "Continuous flow biocatalysis," *Chem Soc Rev,* vol. 47, no. 15, pp. 5891-5918, 2018.

[486] F. Lima, L. Grunenberg, H. Rahman, R. Labes, J. Sedelmeier and S. Ley, "Organic photocatalysis for the radical couplings of boronic acid derivatives in batch and flow," *Chem. Commun. (Camb.),* vol. 54, no. 44, pp. 5606-5609, 2018.

[485] P. Dingwall, A. Greb, L. Crespin, R. Labes, B. Musio, J. Poh, P. Pasau, D. Blakemore and S. Ley, "C-H functionalisation of aldehydes using light generated, non-stabilised diazo compounds in flow," *Chem. Commun. (Camb.),* 2018.

[484] F. Akwi and P. Watts, "Continuous flow chemistry: where are we now? Recent applications, challenges and limitations," *Chem. Commun. (Camb.),* vol. 54, no. 99, pp. 13894-13928, 2018.

[483] S. Mileghem, W. Borggraeve and I. Baxendale, "A Robust and Scalable Continuous Flow Process for Glycerol Carbonate," *Chem. Eng. Technol.,* 2018.

[482] R. Radjagobalou, J. Blanco, O. Dechy-Cabaret, M. Oelgemöller and K. Loubière, "Photooxygenation in an advanced led-driven flow reactor module: Experimental investigations and modelling," *Chemical Engineering and Processing - Process Intensification,* vol. 130, pp. 214-228, 2018.

[481] W. He, Z. Fang, K. Zhang, T. Tu, N. Lv and C. Qiu, "A novel micro-flow system under microwave irradiation for continuous synthesis of 1, 4-dihydropyridines in the absence of solvents via Hantzsch reaction," *Chemical Engineering Journal,* vol. 331, p. 161, 2018.

[480] Z. Fang, W. He, T. Tu, N. Lv, C. Qiu, X. Li, N. Zhu, L. Wan and K. Guo, "An efficient and green pathway for continuous Friedel-Crafts acylation over α-Fe 2 O 3 and CaCO 3 nanoparticles prepared in the microreactors," *Chemical Engineering Journal,* vol. 331, pp. 443-449, 2018.

[479] K. Hock and R. Koenigs, "The Generation of Diazo Compounds in Continuous-Flow," *Chemistry,* 2018.

[478] H. Qi, X. Li, Z. Liu, S. Miao, Z. Fang, L. Chen, Z. Fang and K. Guo, "Regioselective Chlorination of Quinoline Derivatives via Fluorine Mediation in a Microfluidic Reactor," *ChemistrySelect,* vol. 3, no. 38, pp. 10689-10693, 2018.

[477] J. Baker, J. Gilbert, S. Paula, X. Zhu, J. Sakoff and A. McCluskey, "Dichlorophenylacrylonitriles as AhR Ligands That Display Selective Breast Cancer Cytotoxicity in vitro," *ChemMedChem,* 2018.

[476] Y. Chen, O. de Frutos, C. Mateos, J. Rincon, D. Cantillo and C. Kappe, "Continuous Flow Photochemical Benzylic Bromination of a Key Intermediate in the Synthesis of a 2-Oxazolidinone," *ChemPhotoChem,* 2018.

[475] E. Corcoran, F. Lévesque, J. McMullen and J. Naber, "Studies Toward the Scaling of Gas-Liquid Photocycloadditions," *ChemPhotoChem,* 2018.

[474] S. Mostarda, D. Passeri, A. Carotti, B. Cerra, C. Colliva, T. Benicchi, A. Macchiarulo, R. Pellicciari and A. Gioiello, "Synthesis, physicochemical properties, and biological activity of bile acids 3-glucuronides: Novel insights into bile acid signalling and detoxification," *Eur J Med Chem,* vol. 144, pp. 349-358, 2018.

[473] F. Silva, A. Baker, J. Stansall, W. Michalska, M. Yusubov, M. Graz, R. Saunders, G. Evans and T. Wirth, "Selective Oxidation of Sulfides in Flow Chemistry," *Eur. J. Org. Chem.,* pp. 2134-2137, 2018.

[472] N. Luise, E. Wyatt, G. Tarver and P. Wyatt, "A Continuous Flow Strategy for the Facile Synthesis and Elaboration of Semi-Saturated Heterobicyclic Fragments," *Eur. J. Org. Chem.,* 2018.

[471] M. Giroud, B. Kuhn, S. Saint-Auret, C. Kuratli, R. Martin, F. Schuler, F. Diederich, M. Kaiser, R. Brun, T. Schirmeister and W. Haap, "2 H-1,2,3-Triazole-Based Dipeptidyl Nitriles: Potent, Selective, and Trypanocidal Rhodesain Inhibitors by Structure-Based Design," *J. Med. Chem.,* vol. 61, no. 8, pp. 3370-3388, 2018.

[470] D. Crowley, D. Lynch and A. Maguire, "Copper-Mediated, Heterogeneous, Enantioselective Intramolecular Buchner Reactions of α-Diazoketones Using Continuous Flow Processing," *J. Org. Chem.,* vol. 83, no. 7, pp. 3794-3805, 2018.

[469] K. Raynor, G. May, U. Bandarage and M. Boyd, "Generation of Diversity Sets with High sp3 Fraction Using the Photoredox Coupling of Organotrifluoroborates and Organosilicates with

Heteroaryl/Aryl Bromides in Continuous Flow," *J. Org. Chem.,* vol. 83, no. 3, pp. 1551-1557, 2018.

[468] M. Chaudhari, S. Moorthy, S. Patil, G. Bisht, H. Mohamed, S. Basu and B. Gnanaprakasam, "Iron-Catalyzed Batch/Continuous Flow C-H Functionalization Module for the Synthesis of Anticancer Peroxides," *J. Org. Chem.,* vol. 83, no. 3, pp. 1358-1368, 2018.

[467] Y. Chen, M. Leonardi, P. Dingwall, R. Labes, P. Pasau, D. Blakemore and S. Ley, "Photochemical Homologation for the Preparation of Aliphatic Aldehydes in Flow," *J. Org. Chem.,* 2018.

[466] C. Audubert, A. Bouchard, G. Mathieu and H. Lebel, "Chemoselective Synthesis of Amines from Ammonium Hydroxide and Hydroxylamine in Continuous Flow," *J. Org. Chem.,* vol. 83, no. 22, pp. 14203-14209, 2018.

[465] I. Abdiaj, C. Horn and J. Alcazar, "Scalability of Visible-Light-Induced Nickel Negishi Reactions: A Combination of Flow Photochemistry, Use of Solid Reagents, and In-Line NMR Monitoring," *J. Org. Chem.,* 2018.

[464] C. Genet, X. Nguyen, B. Bayatsarmadi and M. Horne, "Reductive aminations using a 3D printed supported metal (0) catalyst system," *Journal of Flow Chemistry,* 2018.

[463] A. Bouchard, V. Kairouz, M. Manneveau and H. Xiong, "Continuous flow palladium-catalyzed trifluoromethylthiolation of CH bonds," *Journal of Flow Chemistry,* 2018.

[462] G. Vile, G. Schmidt and S. Richard-Bildstein, "Enantiospecific cyclization of methyl N-(tert-butoxycarbonyl)-N-(3-chloropropyl)-D-alaninate to 2-methylproline derivative via 'memory of chirality' in flow," *Journal of Flow Chemistry,* 2018.

[461] X. Li, Z. Liu, H. Qi, Z. Fang, S. Huang and S. Miao, "Continuous preparation for rifampicin," *Journal of Flow Chemistry,* 2018.

[460] M. Contente and F. Paradisi, "Self-sustaining closed-loop multienzyme-mediated conversion of amines into alcohols in continuous reactions," *Nat Catal,* vol. 1, no. 6, pp. 452-459, 2018.

[459] M. Hatit, L. Reichenbach, J. Tobin, F. Vilela, G. Burley and A. Watson, "A flow platform for degradation-free CuAAC bioconjugation," *Nat Commun,* vol. 9, no. 1, p. 4021, 2018.

[458] M. Berton, L. Huck and J. Alcázar, "On-demand synthesis of organozinc halides under continuous flow conditions," *Nat Protoc,* vol. 13, no. 1, pp. 324-334, 2018.

[457] P. McCaw, U. Khandavilli, S. Lawrence, A. Maguire and S. Collins, "Synthesis of 1,2,5-oxathiazole-S-oxides by 1,3-dipolar cycloadditions of nitrile oxides to α-oxo sulfines," *Org. Biomol. Chem.,* 2018.

[456] Y. Chen, D. Blakemore, P. Pasau and S. Ley, "Three-Component Assembly of Multiply Substituted Homoallylic Alcohols and Amines Using a Flow Chemistry Photoreactor," *Org. Lett.,* vol. 20, no. 20, pp. 6569-6572, 2018.

[455] F. Politano and G. Oksdath-Mansilla, "Light on the horizon: Current research and future perspectives in flow photochemistry," *Org. Process Res. Dev.,* 2018.

[454] H. Hsieh, C. Coley, L. Baumgartner, K. Jensen and R. Robinson, "Photoredox Iridium–Nickel Dual-Catalyzed Decarboxylative Arylation Cross-Coupling: From Batch to Continuous Flow via Self-Optimizing Segmented Flow Reactor," *Org. Process Res. Dev.,* vol. 22, no. 4, pp. 542-550, 2018.

[453] J. Gardiner, X. Nguyen, C. Genet, M. Horne, C. Hornung and J. Tsanaktsidis, "Catalytic Static Mixers for the Continuous Flow Hydrogenation of a Key Intermediate of Linezolid (Zyvox)," *Org. Process Res. Dev.,* 2018.

[452] E. Godineau, C. Battilocchio, M. Lehmann, S. Ley, R. Labes, L. Birnoschi, S. Subramanian, C. Prasanna, A. Gorde, M. Kalbagh, V. Khade, A. Scherrer and A. O'Sullivan, "A Convergent Continuous Multistep Process for the Preparation of C4-Oxime-Substituted Thiazoles," *Org. Process Res. Dev.,* vol. 22, no. 8, pp. 955-962, 2018.

[451] A. O'Brien, E. Ricci and M. Journet, "Dehydration of an Insoluble Urea Byproduct Enables the Condensation of DCC and Malonic Acid in Flow," *Org. Process Res. Dev.,* vol. 22, no. 3, pp. 399-402, 2018.

[450] K. Harper, E. Moschetta, S. Bordawekar and S. Wittenberger, "A Laser Driven Flow Chemistry Platform for Scaling Photochemical Reactions with Visible Light," *ACS Central Science,* pp. 109-115, 2018.

[449] T. Bavaro, A. Pinto, F. Dall'Oglio, M. Hernáiz, C. Morelli, P. Zambelli, C. De Micheli, P. Conti, L. Tamborini and M. Terreni, "Flow-based biocatalysis: Application to peracetylated arabinofuranosyl-1,5-arabinofuranose synthesis," *Process Biochemistry,* vol. 72, pp. 112-118, 2018.

[448] P. Cossar, J. Baker, N. Cain and A. McCluskey, "In situ epoxide generation by dimethyldioxirane oxidation and the use of epichlorohydrin in the flow synthesis of a library of β-amino alcohols," *R Soc Open Sci,* 2018.

[447] L. Smith and I. Baxendale, "Flow synthesis of coumalic acid and its derivatization," *React. Chem. Eng.,* 2018.

[446] D. Perera, J. Tucker, S. Brahmbhatt, C. Helal, A. Chong, W. Farrell, P. Richardson and N. Sach, "A platform for automated nanomole-scale reaction screening and micromole-scale synthesis in flow," *Science,* pp. 429-434, 2018.

[445] H. Wang, Z. Bao and R. Liu, "P-121: Successive and Scalable Synthesis of Highly Stable Cs4PbBr6 Perovskite Microcrystal by Microfluidic System and Their Application in Backlight Display," *SID Symposium Digest of Technical Papers,* vol. 49, no. 1, pp. 1664-1666, 2018.

[444] A. Kumar and S. Gopinathan, "Conjugated Polymers: New Insights via Continuous Flow Syntheses," *SMC Bulletin,* pp. 28-36, 2018.

[443] J. Babra, A. Russell, C. Smith and Y. Zhang, "Combining C-H functionalisation and flow photochemical heterocyclic metamorphosis (FP-HM) for the synthesis of benzo[1,3]oxazepines," *Tetrahedron,* 2018.

[442] R. Dhanya, A. Herath, D. Sheffler and N. Cosford, "A combination of flow and batch mode processes for the efficient preparation of mGlu 2/3 receptor negative allosteric modulators (NAMs)," *Tetrahedron,* vol. 74, no. 25, pp. 3165-3170, 2018.

[441] H. Seo, A. Bédard, W. Chen, R. Hicklin, A. Alabugin and T. Jamison, "Selective N - monomethylation of primary anilines with dimethyl carbonate in continuous flow," *Tetrahedron,* vol. 74, no. 25, pp. 3124-3128, 2018.

[440] T. von Keutz, F. Strauss, D. Cantillo and C. Kappe, "Continuous flow multistep synthesis of α-functionalized esters via lithium enolate intermediates," *Tetrahedron,* vol. 74, no. 25, pp. 3113-3117, 2018.

[439] G. Benoit, "Synthèse et fonctionnalisation de borocyclopropanes et développement d'un procédé de synthèse de diazoalcanes non-stabilisés en utilisant la technologie en débit continu," *Thesis,* 2018.

[438] F. Lima, "Photoredox C–C Cross-Coupling Reactions using Boronic Acid Derivatives," *Thesis,* 2018.

[437] L. SMITH, "Synthesis of Value-Added Intermediates by Continuous Flow Technology," *Thesis,* 2018.

[436] S. Lau, "Organic Synthesis: Taming Chemistry using Enabling Technologies," *Thesis,* 2018.

[435] H. Gemoets, "Enabling and accelerating CH functionalization through continuous-flow chemistry," *Thesis,* 2018.

[434] I. Abdiaj, "Application of photocatalysis in flow as a new tool for drug-discovery," *Thesis,* 2018.

[433] D. Senf, "Synthesis of Arabinoxylan Oligo-and Polysaccharides from the Plant Cell Wall," *Thesis,* 2018.

[432] C. Minozzi, "Synthèse, caractérisation et application de photocatalyseurs à base de cuivre," *Thesis,* 2018.

[431] A. Bechtoldt, "Aerobic Ruthenium-Catalyzed C–H Activations," *Thesis,* 2018.

[430] M. Bartetzko, "Development of Synthetic Glycan Tools for Investigating Plant Cell Wall Pectins," *Thesis,* 2018.

[429] A. Kononov, "Oligosaccharides Prepared by Automated Glycan Assembly as Basis for Structural Investigations of Carbohydrates," *Thesis,* 2018.

[478] A. Bogdan and M. Organ, "Flow Chemistry as a Drug Discovery Tool: A Medicinal Chemistry Perspective," *Topics in Heterocyclic Chemistry,* pp. 319-341, 2018.

[427] J. Demaerel, V. Bieliūnas and W. De Borggraeve, "Functionalization of Heteroarenes Under Continuous Flow," *Topics in Heterocyclic Chemistry,* pp. 237-317, 2018.

[426] R. Gérardy and J. Monbaliu, "Multistep Continuous-Flow Processes for the Preparation of Heterocyclic Active Pharmaceutical Ingredients," *Topics in Heterocyclic Chemistry,* 2018.

[425] T. Glasnov, "Photochemical Synthesis of Heterocycles: Merging Flow Processing and Metal-Catalyzed Visible Light Photoredox Transformations," *Topics in Heterocyclic Chemistry,* pp. 103-132, 2018.

[424] M. Rahman and T. Wirth, "Safe Use of Hazardous Chemicals in Flow," *Topics in Heterocyclic Chemistry,* pp. 343-373, 2018.

[423] M. Baumann and I. Baxendale, "Flow Chemistry Approaches Applied to the Synthesis of Saturated Heterocycles," *Topics in Heterocyclic Chemistry,* pp. 187-236, 2018.

2017

Year total: 74

[422] J. Tobin, T. McCabe, A. Prentice, A. Prentice, G. Lloyd, M. Paterson, V. Arrighi, P. Cormack and F. Vilela, "Polymer-supported photosensitizers for oxidative organic transformations in flow and under visible light irradiation," *ACS Catal.,* no. 7, p. 4602, 2017.

[421] K. Jensen, "Flow chemistry—Microreaction technology comes of age," *AIChE Journal,* no. 63, p. 585, 2017.

[420] A. Greb, J. Poh, S. Greed, C. Battilocchio, P. Pasau, D. Blakemore and S. Ley, "A New Versatile Route to Unstable Diazo Compounds via Oxadiazolines and Use In Aryl-Alkyl Cross-Coupling Reactions," *Angew. Chem. Int. Ed. Engl.,* 2017.

[419] M. Ketels, M. Ganiek, N. Weidmann and P. Knochel, "Synthese von Diorganomagnesium- und Diorganozinkverbindungen durch In-Situ-Abfang-Halogen-Lithium-Austausch an hochfunktionalisierten (Hetero)Arylhalogeniden im kontinuierlichen Durchfluss," *Angewandte Chemie,* p. 12944, 2017.

[418] L. Urge, J. Alcazar, L. Huck and G. Dorman, "Recent Advances of Microfluidics Technologies in the Field of Medicinal Chemistry," *Annual Reports in Medicinal Chemistry,* 2017.

[417] B. Bizet, C. Hornung, T. Kohl and J. Tsanaktsidis, "Synthesis of Imines and Amines from Furfurals Using Continuous Flow Processing," *Australian Journal of Chemistry,* no. 10, p. 1069, 2017.

[416] C. Shukla and A. Kulkarni, "Automating multistep flow synthesis: approach and challenges in integrating chemistry, machines and logic," *Beilstein J Org Chem,* no. 13, pp. 960-987, 2017.

[415] A. Herath and N. Cosford, "Continuous-flow synthesis of highly functionalized imidazo-oxadiazoles facilitated by microfluidic extraction," *Beilstein J Org Chem,* no. 13, pp. 239-246, 2017.

[414] C. Hornung, M. Álvarez-Diéguez, T. Kohl and J. Tsanaktsidis, "Diels-Alder reactions of myrcene using intensified continuous-flow reactors," *Beilstein J Org Chem,* no. 13, pp. 120-126, 2017.

[413] A. Echtermeyer, Y. Amar, J. Zakrzewski and A. Lapkin, "Self-optimisation and model-based design of experiments for developing a C-H activation flow process," *Beilstein J Org Chem,* no. 13, pp. 150-163, 2017.

[412] M. Ketels, M. Ganiek, N. Weidmann and P. Knochel, "Synthesis of Polyfunctional Diorganomagnesium and Diorganozinc Reagents through In Situ Trapping Halogen-Lithium Exchange of Highly Functionalized (Hetero)aryl Halides in Continuous Flow," *Angew. Chem. Int. Ed. Engl.,* vol. 56, no. 41, pp. 12770-12773, 2017.

[411] J. Poh, S. Makai, T. von Keutz, D. Tran, C. Battilocchio, P. Basau and S. Ley, "Rapid asymmetric disubstituted allene synthesis via coupling of flow-generated diazo compounds and propargylated amines," *Angew. Chem. Int. Ed. Engl.,* vol. 56, no. 7, p. 1864–1868, 2017.

[410] M. Baumann and I. Baxendale, "A continuous flow synthesis and derivatization of 1,2,4-thiadiazoles," *Bioorg. Med. Chem.,* 2017.

[409] C. Kong, D. Fisher, B. Desai, Y. Yang, S. Ahmad, K. Belecki and B. Gupton, "High throughput photo-oxidations in a packed bed reactor system," *Bioorg. Med. Chem.,* 2017.

[408] S. De Angelis, C. Carlucci, M. Candia, G. Rebuzzini, P. Celestini, M. Luisi and L. Degennaro, "Targeting a Mirabegron precursor by BH3-mediated continuous flow reduction process," *Catalysis Today,* 2017.

[407] J. Forni, L. Novaes, R. Galaverna and J. Pastre, "Novel polystyrene-immobilized chiral amino alcohols as heterogeneous ligands for the enantioselective arylation of aldehydes in batch and continuous flow regime," *Catalysis Today,* 2017.

[406] M. Briggs and A. Cooper, "A Perspective on the Synthesis, Purification, and Characterization of Porous Organic Cages," *Chem Mater,* vol. 29, no. 1, pp. 149-157, 2017.

[405] J. Lummiss, P. Morse, R. Beingessner and T. Jamison, "Towards More Efficient, Greener Syntheses through Flow Chemistry," *Chem Rec,* vol. 17, no. 7, pp. 667-680, 2017.

[404] C. Hone, A. -McMullan, R. Munday and C. Kappe, "Development of a Continuous-Flow Process for a Pd-Catalyzed Olefin Cleavage using Oxygen within the Explosive Regime," *ChemCatChem,* 2017.

[403] M. Contente, F. Dall'Oglio, L. Tamborini, F. Molinari and F. Paradisi, "Highly Efficient Oxidation of Amines to Aldehydes with Flow-based Biocatalysis," *ChemCatChem,* vol. 9, no. 20, pp. 3843-3848, 2017.

[402] A. Tanimu, S. Jaenicke and K. Alhooshani, "Heterogeneous catalysis in continuous flow microreactors: A review of methods and applications," *Chemical Engineering Journal,* vol. 327, no. 1, p. 792, 2017.

[401] H. Wu, T. Huang, F. Cao, Q. Zou, Q. Zou and P. Ouyang, "Co-production of HMF and gluconic acid from sucrose by chemo-enzymatic method," *Chemical Engineering Journal,* vol. 327, no. 1, p. 228, 2017.

[400] J. Britton and C. Raston, "Multi-step continuous-flow synthesis," *Chemical Society Reviews,* vol. 46, p. 1250, 2017.

[399] P. Dallabernardina, F. Schuhmacher, P. Seeberger and F. Pfrengle, "Mixed-Linkage Glucan Oligosaccharides Produced by Automated Glycan Assembly Serve as Tools To Determine the Substrate Specificity of Lichenase," *Chemistry,* vol. 23, no. 13, pp. 3191-3196, 2017.

[398] M. Ganiek, M. Becker, G. Berionni, H. Zipse and P. Knochel, "Barbier Continuous Flow Preparation and Reactions of Carbamoyllithiums for Nucleophilic Amidation," *Chemistry,* vol. 23, no. 43, pp. 10280-10284, 2017.

[397] D. Senf, C. Ruprecht, G. de Kruijff, S. Simonetti, F. Schuhmacher, P. Seeberger and F. Pfrengle, "Active Site Mapping of Xylan-Deconstructing Enzymes with Arabinoxylan Oligosaccharides Produced by Automated Glycan Assembly," *Chemistry,* vol. 23, no. 13, pp. 3197-3205, 2017.

[396] C. Lamb, B. Nderitu, G. McMurdo, J. Tobin, F. Vilela and A. Lee, "Auto-Tandem Catalysis: Pd(II)-Catalysed Dehydrogenation/Oxidative Heck of Cyclopentane-1,3-diones," *Chemistry,* 2017.

[395] V. De Vitis, F. Dall'Oglio, A. Pinto, C. De Micheli, F. Molinari, P. Conti, D. Romano and L. Tamborini, "Chemoenzymatic Synthesis in Flow Reactors: A Rapid and Convenient Preparation of Captopril," *ChemistryOpen,* vol. 6, no. 5, pp. 668-673, 2017.

[394] Y. Auberson, C. Brocklehurst, M. Furegati, T. Fessard, G. Koch, A. Decker, L. La Vecchia and E. Briard, "Improving Nonspecific Binding and Solubility: Bicycloalkyl Groups and Cubanes as para-Phenyl Bioisosteres," *ChemMedChem,* vol. 12, no. 8, pp. 590-598, 2017.

[393] J. Ren, X. Dyosiba, N. Musyoka, N. Musyoka, M. Mathea and S. Liaoc, "Review on the current practices and efforts towards pilot-scale production of metal-organic frameworks (MOFs)," *Coordination Chemistry Reviews,* vol. 352, p. 187, 2017.

[392] M. Baumann and I. Baxendale, "A Continuous Flow Method for the Desulfurization of Substituted Thioimidazoles Applied to the Synthesis of New Etomidate Derivatives," *European Journal of Organic Chemistry,* 2017.

[391] L. Degennaro, [. Tota, [. De Angelis, [. Andresini, [. Cardellicchio, [. Capozzi, [. Romanazzi and [. Luisi, "A convenient, mild and green synthesis of NH-sulfoximines in flow reactors," *European Journal of Organic Chemistry,* 2017.

[390] B. Gutmann, D. Cantillo and U. Weigl, "Design and Development of Pd-Catalyzed Aerobic N-Demethylation Strategies for the Synthesis of Noroxymorphone in Continuous Flow Mode," *European Journal of Organic Chemistry,* p. 914, 2017.

[389] J. Liu, J. Xu, Z. Li, Y. Huang, H. Wang, Y. Gao, P. Ouyang and K. Guo, "Carbocation organocatalysis in interrupted Povarov reactions to cis-fused pyrano-and furanobenzodihydropyrans," *European Journal of Organic Chemistry,* 2017.

[388] M. Kitching, O. Dixon, M. Baumann and I. Baxendale, "Flow Assisted Synthesis: A key Fragment of SR 142948A," *European Journal of Organic Chemistry,* 2017.

[387] V. Pantone, A. Laurenza, C. Annese, C. Annese, C. Fusco, A. Nacci, A. Russo and L. Accolti, "Methanolysis of epoxidized soybean oil in continuous flow conditions," *Industrial Crops and Products,* 2017.

[386] Y. Qin, L. Chen, W. He, M. Su, Q. Jin, Z. Fang, P. Ouyang and K. Guo, "Continuous synthesis and anti-myocardial injury of tanshinone IIA derivatives," *J Asian Nat Prod Res,* pp. 1-9, 2017.

[385] D. Plaza, V. Strobel, P. Heer, A. Sellars, S. Hoong, A. Clark and A. Lapkin, "Direct valorisation of waste cocoa butter triglycerides via catalytic epoxidation, ring-opening and polymerisation," *J Chem Technol Biotechnol,* vol. 92, no. 9, pp. 2254-2266, 2017.

[384] L. Büter, L. Frensemeier, M. Vogel and U. Karst, "Dual reductive/oxidative electrochemistry/liquid chromatography/mass spectrometry: Towards peptide and protein modification, separation and identification," *J Chromatogr A,* pp. 153-160, 2017.

[383] É. Godin, A. Bédard, M. Raymond and S. Collins, "Phase Separation Macrocyclization in a Complex Pharmaceutical Setting: Application toward the Synthesis of Vaniprevir," *J. Org. Chem.,* vol. 82, no. 14, pp. 7576-7582, 2017.

[382] T. Noel, "A personal perspective on the future of flow photochemistry," *Journal of Flow Chemistry,* 2017.

[381] R. Xiao, J. Tobin, M. Zha, Y. Hou, Y. Hou, F. Vilela and Z. Xu, "A nanoporous graphene analog for superfast heavy metal removal and continuous-flow visible-light photoredox catalysis," *Journal of Materials Chemistry A,* vol. 38, 2017.

[380] N. Gobalasingham, J. Carlé, F. Krebs, B. Thompson, E. Bundgaard and M. Helgesen, "Conjugated Polymers Via Direct Arylation Polymerization in Continuous Flow: Minimizing the Cost and Batch-to-Batch Variations for High-Throughput Energy Conversion," *Macromol Rapid Commun,* 2017.

[379] S. Saubern, X. Nguyen, Van Nguyen, J. Gardiner, J. Tsanaktsidis and J. Chiefari, "Preparation of Forced Gradient Copolymers Using Tube-in-Tube Continuous Flow Reactors," *Macromolecular Reaction Engineering,* vol. 11, no. 5, 2017.

[378] K. Farley, U. Reilly, D. Anderson, B. Boscoe, M. Bundesmann, D. Foley, M. Lall, C. Li, M. Reese and J. Yan, "Utilizing on- and off-line monitoring tools to follow a kinetic resolution step during flow synthesis," *Magn Reson Chem,* vol. 55, no. 4, pp. 348-354, 2017.

[377] W. Zhang and J. Ready, "Total synthesis of the dictyodendrins as an arena to highlight emerging synthetic technologies," *Nat Prod Rep,* vol. 34, no. 8, pp. 1010-1034, 2017.

[376] C. Russell, J. Baker, P. Cossar and A. McCluskey, "Recent Developments in the Use of Flow Hydrogenation in the Field of Medicinal Chemistry," *New Advances in Hydrogenation Processes - Fundamentals and Applications,* 2017.

[375] M. Baumann, I. Baxendale, P. Filipponi and T. Hu, "Sustainable Flow Synthesis of a Versatile Cyclopentenone Building Block," *Org. Process Res. Dev.,* vol. 21, no. 12, pp. 2052-2059, 2017.

[374] P. Amal Joseph and S. Priyadarshini, "Copper-Mediated C–X Functionalization of Aryl Halides," *Org. Process Res. Dev.,* vol. 21, no. 12, pp. 1889-1924, 2017.

[373] S. Karlsson, C. Cook, H. Emtenäs, K. Fan, P. Gillespie and M. Mohamed, "Development of a Safe Continuous Manufacturing Route to 2-(4-Isopropyl-1H-1,2,3-triazol-1-yl)acetic Acid," *Org. Process Res. Dev.,* vol. 21, no. 10, pp. 1668-1674, 2017.

[372] A. Adeyemi, J. Bergman, J. Brånalt, J. Sävmarker and M. Larhed, "Continuous Flow Synthesis under High Temperature/High Pressure Conditions using a Resistively Heated Flow Reactor," *Organic Process Research & Development,* vol. 21, no. 7, pp. 947-955, 2017.

[371] C. Battilocchio, S. Lau, J. Hawkins and S. Ley, "Continuous flow hydration of pyrazine-2-carbonitrile in a manganese dioxide column reactor," *Organic Syntheses,* vol. 94, pp. 34-45, 2017.

[370] C. Battilocchio, F. Bosica, S. Rowe, B. Abreu, E. Godineau, M. Lehmann and S. Ley, "Continuous preparation and use of dibromoformaldoxime as a reactive intermediate for the synthesis of 3-bromoisoxazolines," *Original Process Research & Development,* vol. 21, no. 10, p. 1588, 2017.

[369] T. logo, B. Bizet, P. Kevan, C. Sellwood, J. Tsanaktsidis and C. Hornung, "Efficient synthesis of 5-(chloromethyl) furfural (CMF) from high fructose corn syrup (HFCS) using continuous flow processing," *React. Chem. Eng.,* vol. 2, p. 541, 2017.

[368] M. Damião, R. Galaverna, A. Kozikowski, J. Eubanks and J. Pastre, "Telescoped continuous flow generation of a library of highly substituted 3-thio-1,2,4-triazoles," *React. Chem. Eng.,* vol. 2, no. 6, pp. 896-907, 2017.

[367] A. Kouridaki and K. Huvaere, "Singlet oxygen oxidations in homogeneous continuous flow using a gas–liquid membrane reactor," *Reaction Chemistry & Engineering,* vol. 2, p. 590, 2017.

[366] D. Cantillo and C. Kappe, "Halogenation of organic compounds using continuous flow and microreactor technology," *Reaction Chemistry & Engineering,* 2017.

[365] E. Mielke, P. Plouffe, N. Koushik, N. Koushik, M. Gottsponer, N. logo, A. logo and D. Roberge, "Local and overall heat transfer of exothermic reactions in microreactor systems," *Reaction Chemistry & Engineering,* vol. 2, p. 763, 2017.

[364] D. Walsh, P. Patureau, P. Patureau, S. Reekstingb, A. Lubbenb, S. logo and M. Weller, "Exploring effects of intermittent light upon visible light promoted water oxidations," *Sustainable Energy Fuels,* 2017.

[363] C. Brocklehurst, G. Koch, G. Koch and L. Vecchia, "In Situ Preparation and Consumption of O-Mesitylsulfonylhydroxylamine (MSH) in Continuous Flow for the Amination of Pyridines," *Synlett,* vol. 28, no. 13, pp. 1636-1640, 2017.

[362] I. Abdiaj, C. Bottecchia, J. Alcazar and T. Noë, "Visible-Light-Induced Trifluoromethylation of Highly Functionalized Arenes and Heteroarenes in Continuous Flow," *Synthesis,* vol. 49, no. 22, p. 4978, 2017.

[361] W. Sun, D. Wilson and D. Harrowven, "Steric Buttressing Changes Torquospecificity in Thermal Cyclobutenone Rearrangements, Providing New Opportunities for 5H-Furanone Synthesis," *Synthesis,* vol. 39, no. 14, pp. 3091-3106, 2017.

[360] S. Mohapatra, Z. Wilson, S. Roy and S. Ley, "Utilization of flow chemistry in catalysis: New avenues for the selective synthesis of Bis (indolyl) methanes," *Tetrahedron,* vol. 73, no. 14, p. 1218, 2017.

[359] M. O'Brien, L. Konings, M. Martin and J. Heap, "Harnessing open-source technology for low-cost automation in synthesis: Flow chemical deprotection of silyl ethers using a homemade autosampling system," *Tetrahedron Letters,* vol. 58, no. 25, pp. 2409-2413, 2017.

[358] E. Verhelst, "ONTWIKKELING EN ANALYSE VAN CONTINUE PROCESSEN IN MESOREACTOREN VOOR MOEILIJK OPSCHAALBARE BATCH REACTIES," *Thesis,* 2017.

[357] M. Scala, "Design and synthesis of peptides involved in the inhibition of influenza virus infection," *Thesis,* 2017.

[356] J. Bartholomeus, "Réactions d'amination de liens CH: synthèse d'amines propargyliques à partir de N-mésyloxycarbamates et études mécanistiques," *Thesis,* 2017.

[355] M. Raymond, "Synthèse de macrocycles par réaction de métathèse et application en débit continu," *Thesis,* 2017.

[354] E. Mielke, "Study on the Transport Phenomena in Complex Micro-Reactors," *Thesis,* 2017.

[353] A. Alnomsy, "Synthesis and properties of pyridine containing drugs and heterocycles," *Thesis,* 2017.

[352] S. Vukelić, "Synthesis of Fluorinated Amino Acids and Their Derivatives in Flow," *Thesis,* 2017.

[351] J. Poh, "Coupling reactions using flow-generated diazo compounds," *Thesis,* 2017.

[350] P. Bharate, "Automated Glycan Assembly of Oligomannose Glycans for Sensing Applications," *Thesis,* 2017.

[349] L. Tamborini, P. Fernandes, F. Paradisi and F. Molinari, "Flow Bioreactors as Complementary Tools for Biocatalytic Process Intensification," *Trends Biotechnol.,* 2017.

2016

Year total: 69

[348] J. Suberu, P. Yamin, R. Cornell, A. Sam and A. Lapkin, "Feasibility of Using 2, 3, 3, 3-Tetrafluoropropene (R1234yf) as a Solvent for Solid–Liquid Extraction of Biopharmaceuticals," *ACS Sustainable Chem. Eng.,* vol. 4, no. 5, p. 2559, 2016.

[347] J. Zakrzewski, A. Smalley, M. Kabeshov, M. Gaunt and A. Lapkin, "Continuous-Flow Synthesis and Derivatization of Aziridines through Palladium-Catalyzed C(sp(3))-H Activation.," *Angew. Chem. Int. Ed. Engl.,* vol. 55, no. 31, pp. 8878-83, 2016.

[346] M. Bower, J. Shen, R. Steinbach, J. Tobin, J. Tobin, McCoustra, H. Bridle, V. Arrighi and F. Vilela, "Photoactive and metal-free polyamide-based polymers for water and wastewater treatment under visible light irradiation," *Applied Catalysis B: Environmental,* vol. 193, p. 226, 2016.

[345] C. Mallia, G. Walter and I. Baxendale, "Flow carbonylation of sterically hindered ortho-substituted iodoarenes," *Beilstein J Org Chem,* vol. 12, pp. 1503-11, 2016.

[344] C. Mallia, P. Burton, A. Smith, G. Walter and I. Baxendale, "Catalytic Chan-Lam coupling using a 'tube-in-tube' reactor to deliver molecular oxygen as an oxidant," *Beilstein J Org Chem,* vol. 12, pp. 1598-607, 2016.

[343] I. Abdiaj and J. Alcázar, "Improving the throughput of batch photochemical reactions using flow: Dual photoredox and nickel catalysis in flow for C(sp(2))C(sp(3)) cross-coupling," *Bioorg. Med. Chem.,* 2016.

[342] T. Glasnov, "Organic Synthesis in Dedicated Continuous Flow Systems," in *Continuous-Flow Chemistry in the Research Laboratory*, 2016, pp. 93-112.

[341] T. Glasnov, "Equipment Overview," in *Continuous-Flow Chemistry in the Research Laboratory*, 2016, pp. 7-20.

[340] J. Guerra, D. Cantillo and C. Kappe, "Visible-light photoredox catalysis using a macromolecular ruthenium complex: reactivity and recovery by size-exclusion nanofiltration in continuous flow," *Catalysis Science & Technology,* vol. 6, pp. 4695-4699, 2016.

[339] R. Ciriminna, V. Pandarus, F. Béland and M. Pagliaro, "Fine chemical syntheses under flow using Silia Cat catalysts," *Catalysis Science & Techology,* vol. 6, pp. 4678-4685, 2016.

[338] V. Sans and L. Cronin, "Towards dial-a-molecule by integrating continuous flow, analytics and self-optimisation," *Chem Soc Rev,* vol. 45, no. 8, pp. 2032-43, 2016.

[337] H. Gemoets, Y. Su, M. Shang, V. Hessel, R. Luque and T. Noël, "Liquid phase oxidation chemistry in continuous-flow microreactors," *Chem Soc Rev,* vol. 45, no. 1, pp. 83-117, 2016.

[336] N. Kockmann, "Modular Equipment for Chemical Process Development and Small-Scale Production in Multipurpose Plants," *ChemBioEng Reviews,* vol. 3, no. 1, pp. 5-15, 2016.

[335] S. Josland, S. Mumtaz and M. Oelgemöller, "Photodecarboxylations in an Advanced Meso-Scale Continuous-Flow Photoreactor," *Chemical Engineering & Technology,* 2016.

[334] K. Loubière, M. Oelgemöller, T. Aillet, O. Dechy-Cabaret and L. Prat, "Continuous-flow photochemistry: A need for chemical engineering," *Chemical Engineering and Processing: Process Intensification,* pp. 120-132, 2016.

[333] K. Chen, S. Zhang, P. He and P. Li, "Efficient metal-free photochemical borylation of aryl halides under batch and continuous-flow conditions," *Chemical Science,* vol. 7, pp. 3676-3680, 2016.

[332] J. Poh, S. Lau, I. Dykes, D. Tran, C. Battilocchio and S. Ley, "A multicomponent approach for the preparation of homoallylic alcohols," *Chemical Science,* vol. 7, pp. 6803-6807, 2016.

[331] D. Lücke, T. Dalton, S. Ley and Z. Wilson, "Synthesis of Natural and Unnatural Cyclooligomeric Depsipeptides Enabled by Flow Chemistry," *Chemistry,* vol. 22, no. 12, pp. 4206-17, 2016.

[330] F. Politano, E. Bujan and N. Leadbeater, "Preparation of benzimidazole N-oxides by a two-step continuous flow process," *Chemistry of Heterocyclic Compounds,* vol. 52, no. 11, pp. 952-957, 2016.

[329] N. Elizarov, M. Pucheault and S. Antoniotti, "Highly Efficient Hosomi-Sakurai Reaction of Aromatic Aldehydes Catalyzed by Montmorillonite Doped with Simple Bismuth(III) Salts. Batch and Continuous Flow Studies.," *ChemistrySelect,* vol. 1, no. 12, pp. 3219-3222, 2016.

[328] Y. Qin, W. He, M. Su, Z. Fang, Z. Fang and K. Guo, "An efficient etherification of Ginkgol biloba extracts with fewer side effects in a micro-flow system," *Chinese Chemical Letters,* vol. 27, no. 10, p. 1644, 2016.

[327] M. Giménez-Marqués, T. Hidalgo, C. Serre and P. Horcajada, "Nanostructured metal–organic frameworks and their bio-related applications," *Coordination Chemistry Reviews,* pp. 342-360, 2016.

[326] P. Filipponi and I. Baxendale, "The Generation of a Library of Bromodomain-Containing Protein Modulators Expedited by Continuous Flow Synthesis," *European Journal of Organic Chemistry,* pp. 2000-2012, 2016.

[325] J. Gardiner, C. Hornung, J. Tsanaktsidis and D. Guthrie, "Continuous flow photo-initiated RAFT polymerisation using a tubular photochemical reactor," *European Polymer Journal,* pp. 200-207, 2016.

[324] P. Zambelli, L. Tamborini, S. Cazzamalli, A. Pinto, S. Arioli, S. Balzaretti, F. Plou, L. Fernandez-Arrojo, F. Molinari, P. Conti and D. Romano, "An efficient continuous flow process for the synthesis of a non-conventional mixture of fructooligosaccharides," *Food Chem,* pp. 607-613, 2016.

[323] A. Nagendiran, H. Sörensen, M. Johansson, C. Taid and J. Bäckvall, "Nanopalladium-catalyzed conjugate reduction of Michael acceptors–application in flow," *Green Chemistry,* vol. 18, no. 9, 2016.

[322] M. de Léséleuc, É. Godin, S. Parisien-Collette, A. Lévesque and S. Collins, "Catalytic Macrocyclization Strategies Using Continuous Flow: Formal Total Synthesis of Ivorenolide A," *J. Org. Chem.,* vol. 81, no. 15, pp. 6750-6, 2016.

[321] A. Joshi-Pangu, F. Lévesque, H. Roth, S. Oliver, L. Campeau, D. Nicewicz and D. DiRocco, "Acridinium-Based Photocatalysts: A Sustainable Option in Photoredox Catalysis," *J. Org. Chem.,* vol. 81, no. 16, pp. 7244-9, 2016.

[320] T. DeLano, U. Bandarage, N. Palaychuk, J. Green and M. Boyd, "Application of the Photoredox Coupling of Trifluoroborates and Aryl Bromides to Analog Generation Using Continuous Flow," *J. Org. Chem.,* vol. 81, no. 24, pp. 12525-12531, 2016.

[319] P. McCaw, B. Deadman, A. Maguire and S. Collins, "Delivering enhanced efficiency in the synthesis of α-diazosulfoxides by exploiting the process control enabled in flow," *Journal of Flow Chemistry,* vol. 6, no. 3, 2016.

[318] Y. Wong, J. Tobin, Z. Xu and F. Vilela, "Conjugated porous polymers for photocatalytic applications," *Journal of Materials Chemistry A,* no. 4, 2016.

[317] K. Alexander, E. Paulhus, G. Lazarus and N. Leadbeater, "Exploring the reactivity of a ruthenium complex in the metathesis of biorenewable feedstocks to generate value-added chemicals," *Journal of Organometallic Chemistry,* pp. 74-80, 2016.

[316] B. Cerra, S. Mostarda, C. Custodi and A. Macchiarulo, "Integrating multicomponent flow synthesis and computational approaches for the generation of a tetrahydroquinoline compound based library," *Med. Chem. Commun.,* p. 439, 2016.

[315] Y. Fang and G. Tranmer, "Continuous flow photochemistry as an enabling synthetic technology: synthesis of substituted-6(5H)-phenanthridinones for use as poly(ADP-ribose) polymerase inhibitors," *MedChemComm,* 2016.

[314] T. Hu, I. Baxendale and M. Baumann, "Exploring Flow Procedures for Diazonium Formation," *Molecules,* 2016.

[313] D. Svatunek, C. Denk, V. Rosecker, B. Sohr, C. Hametner, G. Allmaier, J. Fröhlich and H. Mikula, "Efficient low-cost preparation of trans-cyclooctenes using a simplified flow setup for photoisomerization," *Monatsh. Chem.,* pp. 579-585, 2016.

[312] A. Lin, C. Russell, J. Baker, S. Frailey, J. Sakoff and A. McCluskey, "A facile hybrid 'flow and batch' access to substituted 3,4-dihydro-2H-benzo[b][1,4]oxazinones.," *Org. Biomol. Chem.,* vol. 14, no. 37, pp. 8732-8742, 2016.

[311] Y. Fang and G. Tranmer, "Expedited access to thieno[3,2-c]quinolin-4(5H)-ones and benzo[h]-1,6-naphthyridin-5(6H)-ones via a continuous flow photocyclization method," *Org. Biomol. Chem.,* vol. 14, no. 46, pp. 10799-10803, 2016.

[310] P. Dallabernardina, F. Schuhmacher, P. Seeberger and F. Pfrengle, "Automated glycan assembly of xyloglucan oligosaccharides," *Org. Biomol. Chem.,* vol. 14, no. 1, pp. 309-13, 2016.

[309] M. Oelgemöller and N. Hoffmann, "Studies in organic and physical photochemistry - an interdisciplinary approach," *Org. Biomol. Chem.,* vol. 14, no. 31, pp. 7392-442, 2016.

[308] P. Rullière, P. Cyr and A. Charette, "Difluorocarbene Addition to Alkenes and Alkynes in Continuous Flow," *Org. Lett.,* vol. 18, no. 9, pp. 1988-91, 2016.

[307] N. Palaychuk, T. DeLano, M. Boyd, J. Green and U. Bandarage, "Synthesis of Cycloalkyl Substituted 7-Azaindoles via Photoredox Nickel Dual Catalytic Cross-Coupling in Batch and Continuous Flow," *Org. Lett.,* vol. 18, no. 23, pp. 6180-6183, 2016.

[306] M. Ganiek, M. Becker, M. Ketels and P. Knochel, "Continuous Flow Magnesiation or Zincation of Acrylonitriles, Acrylates, and Nitroolefins. Application to the Synthesis of Butenolides," *Org. Lett.,* vol. 18, no. 4, pp. 828-31, 2016.

[305] K. Chen, M. Cheung, Z. Lin and P. Li, "Metal-free borylation of electron-rich aryl (pseudo) halides under continuous-flow photolytic conditions," *Organic Chemistry Frontiers,* pp. 875-879, 2016.

[304] B. Ahmed-Omer, E. Sliwinski, J. Cerroti and S. Ley, "Continuous processing and efficient in situ reaction monitoring of a hypervalent iodine (III) mediated cyclopropanation using benchtop NMR spectroscopy," *Organic Process Research & Development,* pp. 1603-1614, 2016.

[303] L. Elliott, M. Berry, B. Harji, D. Klauber, J. Leonard and K. Booker-Milburn, "A small-footprint, high-capacity flow reactor for uv photochemical synthesis on the kilogram scale," *Organic Process Research & Development,* pp. 1806-1811, 2016.

[302] J. Tobin, J. Liu, H. Hayes, M. Demleitner and D. Ellis, "BODIPY-based conjugated microporous polymers as reusable heterogeneous photosensitisers in a photochemical flow reactor," *Polymer Chemistry,* no. 7, p. 6662, 2016.

[301] T. a, C. a, D. a, D. a, S. a, X. b and R. Whitby, "Thermolysis of 1, 3-dioxin-4-ones: fast generation of kinetic data using in-line analysis under flow," *React. Chem. Eng.,* 2016.

[300] P. Yaseneva, P. Hodgson, J. Zakrzewski, S. Falß, R. Meadows and A. Lapkin, "Continuous flow Buchwald–Hartwig amination of a pharmaceutical intermediate," *React. Chem. Eng.,* p. 229, 2016.

[299] F. Strauss, D. Cantillo, D. Cantillo and C. Kappe, "A laboratory-scale continuous flow chlorine generator for organic synthesis," *React. Chem. Eng.,* p. 472, 2016.

[298] D. Fitzpatrick and S. Ley, "Engineering chemistry: integrating batch and flow reactions on a single, automated reactor platform," *Reaction Chemistry & Engineering,* pp. 629-635, 2016.

[297] Hansen, S. Wilson, Z. Ulven, T. Ley and S. V, "Controlled generation and use of CO in flow," *Reaction Chemistry & Engineering,* p. 280, 2016.

[296] M. Baumann and I. Baxendale, "Continuous photochemistry: the flow synthesis of ibuprofen via a photo-Favorskii rearrangement," *Reaction Chemistry & Engineering,* pp. 147-150, 2016.

[295] C. Archambault and N. Leadbeater, "A benchtop NMR spectrometer as a tool for monitoring mesoscale continuous-flow organic synthesis: equipment interface and assessment in four organic transformations," *RSC Advances,* 2016.

[294] M. Balti, S. Miller, M. Efrit and N. Leadbeater, "An approach to the synthesis of 4-aryl and 5-aryl substituted thiazole-2 (3 H)-thiones employing flow processing," *RSC Advances,* pp. 72165-72169, 2016.

[293] 龚磊, 袁振文, 代立, 王苏 and 廖本仁, "微通道反应器内合成羟基新戊醛," *Shanghai Chemical Industry,* no. 6, p. 19, 2016.

[292] M. Baumann and I. Baxendale, "Continuous-Flow Synthesis of 2H-Azirines and Their Diastereoselective Transformation to Aziridines," *Synlett,* vol. 27, no. 1, pp. 159-163, 2016.

[291] B. Leforestier and M. Vogtle, "Safe Generation and Direct Use of Chlorine Azide in Flow Chemistry: 1, 2-Azidochlorination of Olefins and Access to Triazoles," *Synlett,* vol. 27, no. 13, pp. 1957-1962, 2016.

[290] M. Hutchings and T. Wirth, "A Simple Setup for Transfer Hydrogenations in Flow Chemistry," *Synlett ,* vol. 27, no. 12, pp. 1832-1835, 2016.

[289] L. Tamborini, V. Nicosia, P. Conti, F. Dall'Oglio, C. Micheli, B. Nielsen, A. Jensen, D. SPickering and A. Pinto, "γ-Glutamyl-dipeptides: Easy tools to rapidly probe the stereoelectronic

properties of the ionotropic glutamate receptor binding pocket," *Tetrahedron,* vol. 72, no. 51, pp. 8486-8492, 2016.

[288] M. Asadi, J. Hooper and D. Lupton, "Biodiesel synthesis using integrated acid and base catalysis in continuous flow," *Tetrahedron,* vol. 72, no. 26, pp. 3729-3733, 2016.

[287] J. Bao and G. Tranmer, "The solid copper-mediated C–N cross-coupling of phenylboronic acids under continuous flow conditions," *Tetrahedron Letters,* vol. 57, no. 6, pp. 654-657, 2016.

[286] A. Lombardia, "Application of solid-supported [Pd (NHC)] complexes in Suzuki-Miyaura, Heck and Sonogashira couplings. Studies under batch and continuous flow conditions.," *Thesis,* 2016.

[285] M. Becker, "Continuous flow metalations of arenes, heteroarenes and formamides using lithium and zinc reagents," *Thesis,* 2016.

[284] Y. Fang, "The application of flow chemistry techniques in medicinal chemistry programs: the development of flow-photocyclization methods for the synthesis of phenanthridinone-type compounds.," *Thesis,* 2016.

[283] I. Alonso, "Nova abordagem para a síntese total do espilantol e avaliação da atividade antinociceptiva," *Thesis,* 2016.

[282] H. Piras, "Synthèse de sulfilimines et de sulfoximines catalysée par les métaux de transition," *Thesis,* 2016.

[281] J. Sonck, "Ontwikkeling van een continue syntheseroute voor gelithieerd methoxyalleen," *Thesis,* 2016.

[280] M. Hutchings, "Novel Process Windows: Reactions Using Tricky Reagents," *Thesis,* 2016.

2015

Year total: 72

[279] S. Ley, D. Fitzpatrick, R. Myers, C. Battilocchio and R. Ingham, "Maschinengestützte organische Synthese," *Angewandte Chemie,* vol. 127, no. 35, p. 10260, 2015.

[278] M. Brzozowski, M. O'Brien, S. Ley and A. Polyzos, "Flow chemistry: intelligent processing of gas-liquid transformations using a tube-in-tube reactor," *Acc. Chem. Res.,* vol. 48, no. 2, pp. 349-62, 2015.

[277] C. Correia, K. Gilmore, D. McQuade and P. Seeberger, "A concise flow synthesis of efavirenz," *Angew. Chem. Int. Ed. Engl.,* vol. 54, no. 16, pp. 4945-8, 2015.

[276] C. Correia, K. Gilmore, D. McQuade and P. Seeberge, "Eine kurze Durchflusssynthese von Efavirenz," *Angewandte Chemie,* vol. 127, no. 16, p. 5028, 2015.

[275] M. Helgesen, J. Carlé, G. Benatto, R. d, M. Jørgensen, E. Bundgaard and F. Krebs, "Making Ends Meet: Flow Synthesis as the Answer to Reproducible High-Performance Conjugated Polymers on the Scale that Roll-to-Roll Processing Demands," *Adv. Energy Mater.,* 2015.

[274] S. Ley, D. Fitzpatrick, R. Myers, C. Battilocchio and R. Ingham, "Machine-Assisted Organic Synthesis," *Angew. Chem. Int. Ed. Engl.,* vol. 54, no. 35, pp. 10122-36, 2015.

[273] S. Ley, D. Fitzpatrick, R. Ingham and R. Myers, "Organic synthesis: march of the machines.," *Angew. Chem. Int. Ed. Engl.,* vol. 54, no. 11, pp. 3449-64, 2015.

[272] S. Ley, D. Fitzpatrick, R. Ingham and R. Myers, "Organische Synthese: Vormarsch der Maschinen," *Angewandte Chemie,* vol. 127, no. 11, p. 3514, 2015.

[271] A. Pitts, F. O'Hara, R. Snell and M. Gaunt, "A concise and scalable strategy for the total synthesis of dictyodendrin B based on sequential C-H functionalization.," *Angew. Chem. Int. Ed. Engl.,* vol. 54, no. 18, pp. 5451-5, 2015.

[270] H. Pordanjani, C. Faderl, J. Wang, C. Motti, P. Junk and M. Oelgemöller, "Photodecarboxylative Benzylations of N-Methoxyphthalimide under batch and continuous-flow conditions," *Australian Journal of Chemistry,* vol. 68, no. 11, pp. 1662-1667, 2015.

[269] A. Martínez, J. Krinsky, I. Peñafiel, S. Castillón, K. Loponov, A. Lapkin, C. Godard and C. Claver, "Heterogenization of Pd–NHC complexes onto a silica support and their application in Suzuki–Miyaura coupling under batch and continuous flow conditions," *Catalysis Science & Technology,* pp. 310-319, 2015.

[268] M. Briggs, A. Slater, N. Lunt, S. Jiang, M. Little, R. Greenaway, T. Hasell, C. Battilocchio, S. Ley and A. Cooper, "Dynamic flow synthesis of porous organic cages," *Chem Commun (Camb).,* vol. 51, no. 98, pp. 17390-3, 2015.

[267] M. Brzozowski, J. Forni, G. Paul Savage and A. Polyzos, "The direct α-C(sp(3))-H functionalisation of N-aryl tetrahydroisoquinolines via an iron-catalysed aerobic nitro-Mannich reaction and continuous flow processing," *Chem. Commun. (Camb.),* vol. 51, no. 2, pp. 334-7, 2015.

[266] J. Bao and G. Tranmer, "The utilization of copper flow reactors in organic synthesis," *Chem. Commun. (Camb.),* vol. 51, no. 15, pp. 3037-44, 2015.

[265] T. Nobuta, G. Xiao, D. Ghislieri, K. Gilmore and P. Seeberger, "Continuous and convergent access to vicinyl amino alcohols.," *Chem. Commun. (Camb.),* vol. 51, no. 82, pp. 15133-6, 2015.

[264] I. Baxendale, "A Short Multistep Flow Synthesis of a Potential Spirocyclic Fragrance Component," *Chemical Engineering & Technology,* vol. 38, no. 10, pp. 1713-1716, 2015.

[263] P. Witt, S. Somasi, I. Khan, D. Blaylock, J. Newby and S. Ley, "Modeling mesoscale reactors for the production of fine chemicals," *Chemical Engineering Journal,* p. 353, 2015.

[262] B. Deadman, D. Browne, I. Baxendale and S. Ley, "Back Pressure Regulation of Slurry-Forming Reactions in Continuous Flow," *Chemical Engineering Technology,* vol. 38, no. 2, p. 259, 2015.

[261] D. Cantillo, C. Mateos, J. Rincon, O. de Frutos and C. Kappe, "Light-Induced C-H Arylation of (Hetero)arenes by In Situ Generated Diazo Anhydrides.," *Chemistry,* vol. 21, no. 37, pp. 12894-8, 2015.

[260] D. Ushakov, M. Plutschack, K. Gilmore and P. Seeberger, "Factors influencing the regioselectivity of the oxidation of asymmetric secondary amines with singlet oxygen," *Chemistry,* vol. 21, no. 17, pp. 6528-34, 2015.

[259] F. Grenier,̧ . Aïch, Y. Lai, M. Guerette, A. Holmes, Y. Tao, W. Wong and M. Leclerc, "Electroactive and photoactive poly [isoindigo-alt-EDOT] synthesized using direct (hetero) arylation polymerization in batch and in continuous flow," *Chemistry of Materials,* vol. 27, no. 6, p. 2137–2143, 2015.

[258] Y. Wu, W. Chen, Y. Zhao and H. Piao, "Efficient synthesis of panaxadiol derivatives using continuous-flow microreactor and evaluation of anti-tumor activity," *Chinese Chemical Letters,* vol. 26, no. 3, pp. 334-338, 2015.

[257] N. Ranasinghe and G. Jones, "Flow and Microwave Assisted Synthesis of Medicinally Relevant Indoles," *Current Green Chemistry,* vol. 2, p. 66, 2015.

[256] C. Henry, D. Bolien, B. Ibanescu, S. Bloodworth, D. Harrowven, X. Zhang, A. Craven, H. Sneddon and R. Whitby, "Generation and Trapping of Ketenes in Flow," *European J Org Chem,* pp. 1491-1499, 2015.

[255] C. Stanetty and I. Baxendale, "Large-Scale Synthesis of Crystalline 1,2,3,4,6,7-Hexa-O-acetyl-l-glycero-α-d-manno-heptopyranose," *European J Org Chem,* pp. 2718-2726, 2015.

[254] T. Hamlin and N. Leadbeater, "Real-time Monitoring of Reactions Performed Using Continuous-flow Processing: The Preparation of 3-Acetylcoumarin as an Example," *J Vis Exp,* 2015.

[253] M. Brodney, E. Beck, C. Butler, G. Barreiro, E. Johnson, D. Riddell, K. Parris, C. Nolan, Y. Fan, K. Atchison, C. Gonzales, A. Robshaw, S. Doran, M. Bundesmann, L. Buzon, J. Dutra, K. Henegar, E. LaChapelle, X. Hou, B. Rogers, J. Pandit, R. Lira, L. Martinez-Alsina and Mi, "Utilizing structures of CYP2D6 and BACE1 complexes to reduce risk of drug-drug interactions with a novel series of centrally efficacious BACE1 inhibitors," *J. Med. Chem.,* vol. 58, no. 7, pp. 3223-52, 2015.

[252] M. Baumann and I. Baxendale, "Batch and Flow Synthesis of Pyrrolo[1,2-a]-quinolines via an Allene-Based Reaction Cascade," *J. Org. Chem.,* vol. 80, no. 21, pp. 10806-16, 2015.

[251] X. Li, A. Chen, Y. Zhou, L. Huang, Z. Fang and H. Guo, "Two-Stage Flow Synthesis of Coumarin via O-Acetylation of Salicylaldehyde," *Journal of Flow Chemistry,* vol. 5, no. 2, 2015.

[250] A. Bedard, J. Santandrea and S. Collins, "Efficient continuous-flow synthesis of macrocyclic triazoles," *Journal of Flow Chemistry,* vol. 5, no. 3, 2015.

[249] M. Negus and A. Leadbeate, "The preparation of ethyl levulinate facilitated by flow processing: The catalyzed and uncatalyzed esterification of levulinic acid," *Journal of Flow Chemistry,* vol. 5, no. 3, 2015.

[248] A. Baker, M. Graz, R. Saunders, G. Evans, I. Pitotti and T. Wirth, "Flow alkylation of thiols, phenols, and amines using a heterogenous base in a packed-bed reactor," *Journal of Flow Chemistry,* vol. 5, no. 2, 2015.

[247] M. Nieves-Remacha and K. Jensen, "Mass transfer characteristics of ozonolysis in microreactors and advanced-flow reactors," *Journal of Flow Chemistry,* vol. 5, no. 3, 2015.

[246] A. Martin, A. Siamaki, K. Belecki and B. Gupton, "A flow-based synthesis of telmisartan," *Journal of Flow Chemistry,* vol. 5, no. 3.

[245] V. Arima, P. Watts and G. Pascali, "Microfluidics in planar microchannels: synthesis of chemical compounds on-chip," *Lab-on-a-Chip Devices and Micro-Total Analysis Systems,* pp. 197-239, 2015.

[244] L. Tamborini, F. Mastronardi, F. Dall'Oglio, C. De Micheli, B. Nielsen, L. Presti, P. Conti and A. Pinto, "Synthesis of unusual isoxazoline containing β and γ-dipeptides as potential glutamate receptor ligands," *Med. Chem. Commun.,* pp. 1260-1266, 2015.

[243] C. Manansala and G. Tranmer, "Flow Synthesis of 2-Methylpyridines via α-Methylation," *Molecules,* vol. 20, no. 9, pp. 15797-806, 2015.

[242] T. Kohl, C. Hornung and J. Tsanaktsidis, "Amination of Aryl Halides and Esters Using Intensified Continuous Flow Processing," *Molecules,* vol. 20, no. 10, pp. 17860-71, 2015.

[241] J. Beatty, J. Douglas, K. Cole and C. Stephenson, "A scalable and operationally simple radical trifluoromethylation," *Nature Communication,* 2015.

[240] C. Gourdon, S. Elgue and L. Prat, "What are the needs for Process Intensification?," *Oil & Gas Science and Technology – Rev. IFP Energies nouvelles,* vol. 70, no. 3, pp. 463-473, 2015.

[239] S. Lau, S. Bourne, B. Martin, B. Schenkel, G. Penn and S. Ley, "Synthesis of a Precursor to Sacubitril Using Enabling Technologies," *Org Lett.,* vol. 17, no. 21, p. 5436–5439, 2015.

[238] P. Cossar, L. Hizartzidis, M. Simone, A. McCluskey and C. Gordon, "The expanding utility of continuous flow hydrogenation," *Org. Biomol. Chem.,* vol. 13, no. 26, pp. 7119-30, 2015.

[237] Z. Yousuf, A. Richards, A. Dwyer, B. Linclau and D. Harrowven, "The development of a short route to the API ropinirole hydrochloride," *Org. Biomol. Chem.,* vol. 13, no. 42, pp. 10532-9, 2015.

[236] L. C. Alves, A. Desiderá, K. de Oliveira, S. Newton, S. Ley and T. Brocksom, "A practical deca-gram scale ring expansion of (R)-(-)-carvone to (R)-(+)-3-methyl-6-isopropenyl-cyclohept-3-enone-1," *Org. Biomol. Chem.,* vol. 13, no. 28, pp. 7633-42, 2015.

[235] M. Baumann, A. Rodriguez Garcia and I. Baxendale, "Flow synthesis of ethyl isocyanoacetate enabling the telescoped synthesis of 1,2,4-triazoles and pyrrolo-[1,2-c]pyrimidines," *Org. Biomol. Chem.,* vol. 13, no. 14, pp. 4231-9, 2015.

[234] S. Glöckner, D. Tran, R. Ingham, S. Fenner, Z. Wilson, C. Battilocchio and S. Ley, "The rapid synthesis of oxazolines and their heterogeneous oxidation to oxazoles under flow conditions," *Org. Biomol. Chem.,* vol. 13, no. 1, pp. 207-14, 2015.

[233] J. Souto, R. Stockman and S. Ley, "Development of a flow method for the hydroboration/oxidation of olefins," *Org. Biomol. Chem.,* vol. 13, no. 13, pp. 3871-7, 2015.

[232] M. Rojo, L. Guetzoyan and I. Baxendale, "A monolith immobilised iridium Cp* catalyst for hydrogen transfer reactions under flow conditions," *Org. Biomol. Chem.,* vol. 13, no. 6, pp. 1768-77, 2015.

[231] S. Matthies, D. McQuade and P. Seeberger, "Homogeneous Gold-Catalyzed Glycosylations in Continuous Flow.," *Org. Lett.,* no. 15, pp. 3670-3, 2015.

[230] N. Oger, E. Grognec and F. Felpin, "Handling diazonium salts in flow for organic and material chemistry," *Organic Chemistry Frontiers,* no. 2, p. 590, 2015.

[229] B. Gutmann, P. Elsner, A. O'Kearney-McMullan, W. Goundry, D. Roberge and C. Kappe, "Development of a continuous flow sulfoxide imidation protocol using azide sources under superacidic conditions," *Organic Process Research & Development,* vol. 19, no. 8, pp. 1062-1067, 2015.

[228] R. Ciriminna, V. Pandarus, A. Fidalgo, L. Ilharco, F. Béland and M. Pagliaro, "Silia Cat: A Versatile Catalyst Series for Synthetic Organic Chemistry," *Organic Process Research & Development,* vol. 19, no. 7, pp. 755-768, 2015.

[227] S. Karlsson, R. Bergman, C. Löfberg, P. Moore, F. Pontén, J. Tholander and H. Sörensen, "Development of a Large-Scale Route to an MCH1 Receptor Antagonist: Investigation of a Staudinger Ketene–Imine Cycloaddition in Batch and Flow Mode," *Organic Process Research & Development,* vol. 19, no. 12, pp. 2067-2074, 2015.

[226] S. Müller, A. Murat, P. Hellier and T. Wirth, "Toward a Large-Scale Approach to Milnacipran Analogues Using Diazo Compounds in Flow Chemistry," *Organic Process Research & Development,* vol. 20, no. 2, pp. 495-502, 2015.

[225] P. Filipponi, A. Gioiello and I. Baxendale, "Controlled flow precipitation as a valuable tool for synthesis," *Organic Process Research and Development,* vol. 20, no. 2, pp. 371-375, 2015.

[224] D. Fitzpatrick, C. Battilocchio and S. Ley, "A novel internet-based reaction monitoring, control and autonomous self-optimization platform for chemical synthesis," *Organic Process Research & Development,* vol. 20, no. 2, p. 386–394, 2015.

[223] A. Constantinou, G. Wu, A. Corredera, P. Ellis, D. Bethell, G. Hutchings, S. Kuhn and A. Gavriilidis, "Continuous Heterogeneously Catalyzed Oxidation of Benzyl Alcohol in a Ceramic Membrane Packed-Bed Reactor," *Organic Process Research & Development,* vol. 19, no. 12, p. 1973–1979, 2015.

[222] P. Watts, "Organometallic-Catalysed Gas–Liquid Reactions in Continuous Flow Reactors," *Organometallic Flow Chemistry,* pp. 77-95, 2015.

[221] J. Poh, D. Browne and S. Ley, "A multistep continuous flow synthesis machine for the preparation of pyrazoles via a metal-free amine-redox process," *Reaction Chemistry & Engineering,* pp. 101-105, 2015.

[220] K. Barlow, V. Bernabeu, X. Hao, T. Hughes, O. EHutt, A. Polyzos, K. Turner and G. Moad, "Triphenylphosphine-grafted, RAFT-synthesised, porous monoliths as catalysts for Michael addition in flow synthesis," *Reactive and Functional Polymers,* pp. 89-96, 2015.

[219] C. Russell, A. Lin, P. Hains, M. Simone and P. Robinson, "An integrated flow and microwave approach to a broad spectrum protein kinase inhibitor," *RSC Advances,* vol. 5, pp. 93433-93437, 2015.

[218] A. Hafner and S. Ley, "Generation of reactive ketenes under flow conditions through zinc-mediated dehalogenation," *Synlett,* vol. 26, no. 10, pp. 1470-1474, 2015.

[217] C. Wendell and M. Boyd, "Reevaluation of the 2-nitrobenzyl protecting group for nitrogen containing compounds: an application of flow photochemistry," *Tetrahedron Letters,* vol. 56, no. 17, pp. 897-899, 2015.

[216] P. Cyr, "Hydroxylation d'halogénures d'aryle utilisant la chimie en flux continu et développement d'une nouvelle méthodologie de synthèse de 3-aminoindazoles," *Thesis,* 2015.

[215] L. Miller, "Application of Flow-Based Methods to Inorganic Materials Synthesis," *Thesis,* 2015.

[214] F. Mastronardi, "SYNTHESIS AND STRUCTURE-ACTIVITY RELATIONSHIP OF NEW SUBTYPE SELECTIVE KAINATE RECEPTOR LIGANDS," *Thesis,* 2015.

[213] A. Longstreet, "Access to polysubstituted heterocycles and fluorescent indicators from a single enamine class," *Thesis,* 2015.

[212] A. Vlassova, "Visible-light-mediated synthesis of helicenes in batch and continuous flow systems," *Thesis,* 2015.

[211] A. Hernandez-Perez, "Réaction de photocyclodéshydrogénation par catalyse photorédox," *Thesis,* 2015.

[210] P. Plouffe, "Micro-Reactor Design for Fast Liquid-Liquid Reactions," *Thesis,* 2015.

[209] A. Falk, E. Bengtsson, S. Juhlin, D. Le and L. Niklasson, "Utveckling av flödesreaktor: Ett sammarbetesprojekt mellan fakulteten för teknik och naturvetenskap vid Uppsala Universitet och Fagrell produktutveckling AB," *Thesis,* 2015.

[208] S. Clinton, "A Continuous Process Towards the Synthesis of Quinolones," *Thesis,* 2015.

2014

Year total: 46

[207] N. Alonso, L. Miller, J. de M Muñoz, J. Alcázar and D. McQuade, "Continuous synthesis of organozinc halides coupled to Negishi reactions," *Advanced Synthesis & Catalysis,* p. 3737–3741, 2014.

[206] M. Werner, C. Kuratli, R. Martin, R. Hochstrasser, D. Wechsler, T. Enderle, A. Alanine and H. Vog, "Nahtlose Integration von Dosis-Wirkungs-basiertem Screening und Flusschemie:

effiziente Erzeugung von Struktur-Aktivitäts-Beziehungen von β-Sekretase(BACE1)-Hemmern," *Angew. Chem.,* pp. 1730-1735, 2014.

[205] T. Rodrigues, P. Schneider and G. Schneider, "Accessing new chemical entities through microfluidic systems," *Angew. Chem. Int. Ed. Engl.,* vol. 53, no. 23, pp. 5750-8, 2014.

[204] M. Werner, C. Kuratli, R. Martin, R. Hochstrasser, D. Wechsler, T. Enderle, A. Alanine and H. Vogel, "Seamless integration of dose-response screening and flow chemistry: efficient generation of structure-activity relationship data of β-secretase (BACE1) inhibitors," *Angew. Chem. Int. Ed. Engl.,* vol. 53, no. 6, pp. 1704-8, 2014.

[203] T. Petersen, M. Becker and P. Knochel, "Magnesierung funktionalisierter Heterocyclen und Acrylate unter Verwendung von TMPMgCl· LiCl in kontinuierlichem Fluss," *Angewandte Chemie,* vol. 126, no. 30, pp. 8067-8071, 2014.

[202] T. Rodrigues, P. Schneider and G. Schneider, "Neue chemische Strukturen durch Mikrofluidiksysteme," *Angewandte Chemie,* vol. 126, no. 23, p. 5858, 2014.

[201] A. Manvar and A. Shah, "Continuous Flow and Microwave-Assisted Vorbrüggen Glycosylations: Historical Perspective to High-Throughput Strategies," *Asian Journal of Organic Chemistry,* vol. 3, no. 11, pp. 1134-1149, 2014.

[200] R. Ingham, C. Battilocchio, J. Hawkins and S. Ley, "Integration of enabling methods for the automated flow preparation of piperazine-2-carboxamide.," *Beilstein J Org Chem,* pp. 641-52, 2014.

[199] W. Reynolds, P. Plucinski and C. Frost, "Robust and reusable supported palladium catalysts for cross-coupling reactions in flow," *Catalysis Science & Technology,* p. 948, 2014.

[198] D. Ushakov, K. Gilmore and P. Seeberger, "Consecutive oxygen-based oxidations convert amines to α-cyanoepoxides.," *Chem. Commun. (Camb.),* vol. 50, no. 84, pp. 12649-51, 2014.

[197] K. Gilmore, D. Kopetzki, J. Lee, Z. Horváth, D. McQuade, A. Seidel-Morgenstern and P. Seeberger, "Continuous synthesis of artemisinin-derived medicines.," *Chem. Commun. (Camb.),* vol. 50, no. 84, pp. 12652-5, 2014.

[196] R. Myers, D. Fitzpatrick, R. Turner and S. Ley, "Flow chemistry meets advanced functional materials," *Chemistry,* vol. 20, no. 39, pp. 12348-66, 2014.

[195] J. Jacq and P. Pasau, "Multistep flow synthesis of 5-amino-2-aryl-2H-[1,2,3]-triazole-4-carbonitriles.," *Chemistry,* vol. 20, no. 38, pp. 12223-33, 2014.

[194] U. Gross, P. Koos, M. O'Brien, A. Polyzos and S. Ley, "A General Continuous Flow Method for Palladium Catalysed Carbonylation Reactions Using Single and Multiple Tube-in-Tube Gas-Liquid Microreactors," *European Journal of Organic Chemistry,* p. 6418, 2014.

[193] C. Battilocchio, B. Bhawal, B. Bhawal, B. Deadman, J. Hawkins and S. Ley, "Flow-Based, Cerium Oxide Enhanced, Low-Level Palladium Sonogashira and Heck Coupling Reactions by Perovskite Catalysts," *Israel Journal of Chemistry,* vol. 54, no. 4, p. 371, 2014.

[192] A. Butler, M. Thompson, P. Maydom, J. Newby, K. Guo, H. Adams and B. Chen, "Regioselective synthesis of 3-aminoimidazo[1,2-a]-pyrimidines under continuous flow conditions," *J. Org. Chem.,* vol. 79, no. 21, pp. 10196-202, 2014.

[191] M. Hamon, N. Dickinson, A. Devineau, D. Bolien, M. Tranchant, C. Taillier, I. Jabin, D. Harrowven, R. Whitby, A. Ganesan and V. Dalla, "Intra- and intermolecular alkylation of N,O-acetals and π-activated alcohols catalyzed by in situ generated acid," *J. Org. Chem.,* vol. 79, no. 5, pp. 1900-12, 2014.

[190] N. Alonso, M. de, B. Egle, J. Vrijdag, W. De Borggraeve, A. Hoz, A. Díaz-Ortiz and J. Alcázar, "First Example of a Continuous-Flow Carbonylation Reaction Using Aryl Formates as CO Precursors," *Journal of Flow Chemistry,* vol. 4, no. 3, 2014.

[189] A. Pagnoux-Ozherelyeva, D. Bolien, S. Gaillard, F. Peudru, J. Lohier, R. Whitby and J. Renaud, "Microwave irradiation and flow chemistry for a straightforward synthesis of piano-stool iron complexes," *Journal of Organometallic Chemistry,* pp. 35-42, 2014.

[188] K. Jensen, B. Reizman and S. Newman, "Tools for chemical synthesis in microsystems," *Lab Chip,* vol. 14, no. 17, pp. 3206-12, 2014.

[187] C. Hornung, K. von Känel, I. Martinez-Botella, M. Espiritu, X. Nguyen, A. Postma, S. Saubern, J. Chiefari and S. Thang, "Continuous flow aminolysis of RAFT polymers using multistep processing and inline analysis," *Macromolecules,* vol. 47, no. 23, pp. 8203-8213, 2014.

[186] L. Mleczko and D. Zhao, "Technology for Continuous Production of Fine Chemicals: A Case Study for Low Temperature Lithiation Reactions," *Managing Hazardous Reactions and Compounds in Process Chemistry,* pp. 403-440, 2014.

[185] B. Li and S. Guinness, "Development of Flow Processes for the Syntheses of N-Aryl Pyrazoles and Diethyl Cyclopropane-cis-1, 2-dicarboxylate," *Managing Hazardous Reactions and Compounds in Process Chemistry,* vol. 14, p. 383, 2014.

[184] J. NÉMETHNÉ-SÓVÁGÓ and M. BENKE, "Microreactors: a new concept for chemical synthesis and technological feasibility," *Materials Science and Engineering,* vol. 39, no. 2, pp. 89-101, 2014.

[183] A. Manvar and A. Shah, "Subtle Mitsunobu couplings under super-heating: the role of high-throughput continuous flow and microwave strategies," *Org. Biomol. Chem.,* vol. 12, no. 41, pp. 8112-24, 2014.

[182] S. Mostarda, P. Filipponi, R. Sardella, F. Venturoni, B. Natalini, R. Pellicciari and A. Gioiello, "Glucuronidation of bile acids under flow conditions: design of experiments and Koenigs-Knorr reaction optimization," *Org. Biomol. Chem.,* vol. 12, no. 47, pp. 9592-600, 2014.

[181] A. Xolin, A. Stévenin, M. Pucheault, S. Norsikian, F. Boyer and J. Beau, "Glycosylation with N-acetyl glycosamine donors using catalytic iron (III) triflate: from microwave batch chemistry to a scalable continuous-flow process," *Org. Chem. Front.,* 2014.

[180] A. Caron, A. Hernandez-Perez and S. Collins, "Synthesis of a Carprofen Analogue Using a Continuous Flow UV-Reactor," *Organic Process Research & Development,* vol. 18, no. 11, pp. 1571-1574, 2014.

[179] T. Hamlin, G. Lazarus, C. Kelly and N. Leadbeater, "A Continuous-Flow Approach to 3, 3, 3-Trifluoromethylpropenes: Bringing Together Grignard Addition, Peterson Elimination, Inline Extraction, and Solvent Switching," *Organic Process Research & Development,* vol. 18, no. 10, pp. 1253-1258, 2014.

[178] P. Filipponi, C. Ostacolo, E. Novellino, R. Pellicciari and A. Gioiello, "Continuous Flow Synthesis of Thieno [2, 3-c] isoquinolin-5 (4 H)-one Scaffold: A Valuable Source of PARP-1 Inhibitors," *Organic Process Research & Development,* vol. 18, pp. 1345-1353, 2014.

[177] K. Gilmore, S. Vukelić, D. McQuade, B. Koksch and P. Seeberger, "Continuous Reductions and Reductive Aminations Using Solid NaBH4," *Organic Process Research & Development,* vol. 18, no. 12, pp. 1771-1776, 2014.

[176] F. Odille, A. Stenemyr and F. Pontén, "Development of a Grignard-Type Reaction for Manufacturing in a Continuous-Flow Reactor," *Organic Process Research & Development,* vol. 18, no. 11, p. 1545, 2014.

[175] B. Tomaszewski, A. Schmid and K. Buehler, "Biocatalytic production of catechols using a high pressure tube-in-tube segmented flow microreactor," *Organic Process Research & Development,* vol. 18, no. 11, p. 1516–1526, 2014.

[174] K. Tan), X. Hao, T. Hughes, O. Hutt, A. Polyzos, K. Turner and G. Moad, "Porous, functional, poly (styrene-co-divinylbenzene) monoliths by RAFT polymerization," *Polym. Chem.,* vol. 5, p. 722, 2014.

[173] C. Hornung, A. Postma, S. Saubern and J. Chiefari, "Sequential flow process for the controlled polymerisation and thermolysis of RAFT-synthesised polymers," *Polymer,* vol. 55, no. 6, pp. 1427-1435, 2014.

[172] D. Berckmans, "Precision livestock farming technologies for welfare management in intensive livestock systems," *Rev. Sci. Tech.,* vol. 33, no. 1, pp. 189-96, 2014.

[171] M. Rubio-Martinez, M. Batten, A. Polyzos, K. Carey, J. Mardel, K. Lim and M. Hill, "Versatile, high quality and scalable continuous flow production of metal-organic frameworks," *Sci Rep,* p. 5443, 2014.

[170] P. Cyr and A. Charette, "Continuous-Flow Hydroxylation of Aryl Iodides Promoted by Copper Tubing," *Synlett,* vol. 25, no. 10, pp. 1409-1412, 2014.

[169] B. Egle, "Design and Synthesis of Alpha-helix Minimalist Peptidomimetics," *Thesis,* 2014.

[168] P. Zambelli, "Development of new biocatalytic processes for fructooligosaccharides (FOS) preparation," *Thesis,* 2014.

[167] B. Ondrusek, "Selective additions to unsaturated carbon-carbon bonds by the use of N-heterocyclic carbene-copper (I) catalysts," *Thesis,* 2014.

[166] A. Sobolewska, "New Generic Synthetic Protocols for Pharmaceutical Intermediates Based on Continuous Flow Multifunctional Platforms," *Thesis,* 2014.

[165] D. Plaza, "Continuous flow processes for catalytic upgrading of biofeedstocks," *Thesis,* 2014.

[164] A. Voros, "Szerves kémiai reakciók megvalósíthatóságának vizsgálata folyamatos reaktorokban," *Thesis,* 2014.

[163] T. Jong, "Continuous flow synthesis of chemical building blocks for biological application," *Thesis,* 2014.

[162] R. Ingham, "Control tools for flow chemistry processing and their application to the synthesis of bromodomain inhibitors," *Thesis,* 2014.

2013

Year total: 44

[161] A. Longstreet and D. McQuade, "Organic reaction systems: using microcapsules and microreactors to perform chemical synthesis," *Acc. Chem. Res.,* vol. 46, no. 2, pp. 327-38, 2013.

[160] W. Czechtizky, J. Dedio, B. Desai, K. Dixon, E. Farrant, Q. Feng, T. Morgan, D. Parry, M. Ramjee, C. Selway, T. Schmidt, G. Tarver and A. Wright, "Integrated Synthesis and Testing of Substituted Xanthine Based DPP4 Inhibitors: Application to Drug Discovery," *ACS Med Chem Lett,* vol. 4, no. 8, pp. 768-72, 2013.

[159] A. Chen, X. Li, Y. Zhou, L. Huang, Z. Fang, H. Gan and K. Guo, "Continuous Flow Synthesis of Coumarin," *Advanced Materials Research,* vol. 7, pp. 936-941, 2013.

[158] M. York and A. Edenharter, "A two-stage continuous-flow synthesis of spirooxazine photochromic dyes," *Australian Journal of Chemistry,* vol. 66, no. 2, pp. 172-177, 2013.

[157] J. Eschelbach, D. Wernick, M. Bryan and E. Doherty, "Characterization of dispersion effects on reaction optimization and scale-up for a packed bed flow hydrogenation reactor," *Australian Journal of Chemistry,* vol. 66, no. 2, pp. 165-171, 2013.

[156] Y. Nakano, G. Savage, S. Saubern, P. Scammells and A. Polyzos, "A Multi-Step Continuous Flow Process for the N-Demethylation of Alkaloids," *Australian Journal of Chemistry,* vol. 66, no. 2, pp. 178-182, 2013.

[155] C. Hornung, X. Nguyen, S. Kyi, J. Chiefari and S. Saubern, "Synthesis of RAFT block copolymers in a multi-stage continuous flow process inside a tubular reactor," *Australian Journal of Chemistry,* vol. 66, pp. 192-198, 2013.

[154] F. Bou-Hamdan, K. Krüger, K. Tauer, D. McQuade and P. Seeberger, "Visible Light-Initiated Preparation of Functionalized Polystyrene Monoliths for Flow Chemistry," *Australian Journal of Chemistry,* vol. 66, no. 2, p. 213, 2013.

[153] H. Seyler, S. Haid, T. Kwon, D. Jones, P. Bäuerle, A. Holmes and W. Wong, "Continuous flow synthesis of organic electronic materials–Case studies in methodology translation and scale-up," *Australian Journal of Chemistry,* vol. 66, no. 2, pp. 151-156, 2013.

[152] N. Ambreen, R. Kumar and T. Wirth, "Hypervalent iodine/TEMPO-mediated oxidation in flow systems: a fast and efficient protocol for alcohol oxidation," *Beilstein J Org Chem,* vol. 9, pp. 1437-42, 2013.

[151] A. Longstreet, S. Opalka, B. Campbell, B. Gupton and D. McQuade, "Investigating the continuous synthesis of a nicotinonitrile precursor to nevirapine," *Beilstein J Org Chem,* vol. 9, pp. 2570-8, 2013.

[150] T. Hamlin and N. Leadbeater, "Raman spectroscopy as a tool for monitoring mesoscale continuous-flow organic synthesis: Equipment interface and assessment in four medicinally-relevant reactions," *Beilstein J Org Chem,* vol. 9, pp. 1843-52, 2013.

[149] M. Baumann and I. Baxendale, "The rapid generation of isothiocyanates in flow," *Beilstein J Org Chem,* vol. 9, pp. 1613-9, 2013.

[148] K. Roper, M. Berry and S. Ley, "The application of a monolithic triphenylphosphine reagent for conducting Ramirez gem-dibromoolefination reactions in flow," *Beilstein J Org Chem,* vol. 9, pp. 1781-90, 2013.

[147] H. Seyler, J. Subbiah, D. Jones, A. Holmes and W. Wong, "Controlled synthesis of poly(3-hexylthiophene) in continuous flow," *Beilstein J Org Chem,* vol. 9, pp. 1492-500, 2013.

[146] D. Browne, B. Harji and S. Ley, "Continuous Cold without Cryogenic Consumables: Development of a Convenient Laboratory Tool for Low-Temperature Flow Processes," *Chemical Engineering & Technology,* 2013.

[145] D. McQuade, A. O'Brien, M. Dörr, R. Rajaratnam, U. Eisold, B. Monnanda, T. Nobuta, H. Löhmannsröben, E. Meggers and P. Seeberger, "Continuous synthesis of pyridocarbazoles and initial photophysical and bioprobe characterization," *Chemical Science,* pp. 4067-4070, 2013.

[144] F. Wojcik, A. O'Brien, S. Götze, P. Seeberger and L. Hartmann, "Synthesis of carbohydrate-functionalised sequence-defined oligo(amidoamine)s by photochemical thiol-ene coupling in a continuous flow reactor," *Chemistry,* pp. 3090-8, 2013.

[143] V. Hessel, D. Kralisch, N. Kockmann, T. Noël and Q. Wang, "Novel process windows for enabling, accelerating, and uplifting flow chemistry," *ChemSusChem,* vol. 6, no. 5, pp. 746-89, 2013.

[142] P. Liu, Y. Zhang and S. Martin, "Complex refractive indices of thin films of secondary organic materials by spectroscopic ellipsometry from 220 to 1200 nm," *Environ. Sci. Technol.,* vol. 47, no. 23, pp. 13594-601, 2013.

[141] D. Rudzinski and N. Leadbeater, "Microwave heating and conventionally-heated continuous-flow processing as tools for performing cleaner palladium-catalyzed decarboxylative couplings using oxygen as the oxidant – a proof of principle study," *Green Processing and Synthesis,* 2013.

[140] B. Desai, K. Dixon, E. Farrant, Q. Feng, K. Gibson, W. van Hoorn, J. Mills, T. Morgan, D. Parry, M. Ramjee, C. Selway, G. Tarver, G. Whitlock and A. Wright, "Rapid discovery of a novel series of Abl kinase inhibitors by application of an integrated microfluidic synthesis and screening platform," *J. Med. Chem.,* vol. 56, no. 7, pp. 3033-47, 2013.

[139] Z. Assaf, A. Larsen, R. Venskutonytė, L. Han, B. Abrahamsen, B. Nielsen, M. Gajhede, J. Kastrup, A. Jensen, D. Pickering, K. Frydenvang, T. Gefflaut and L. Bunch, "Chemoenzymatic synthesis of new 2,4-syn-functionalized (S)-glutamate analogues and structure-activity

relationship studies at ionotropic glutamate receptors and excitatory amino acid transporters," *J. Med. Chem.,* vol. 56, no. 4, pp. 1614-28, 2013.

[138] D. McQuade and P. Seeberger, "Applying flow chemistry: methods, materials, and multistep synthesis," *J. Org. Chem.,* vol. 78, no. 13, pp. 6384-9, 2013.

[137] B. Bakonyi, M. Furegati, C. Kramer, L. La Vecchia and F. Ossola, "Synthesis of all four stereoisomers of 3-(tert-butoxycarbonyl)-3-azabicyclo[3.1.0]hexane-2-carboxylic acid," *J. Org. Chem.,* vol. 78, no. 18, pp. 9328-39, 2013.

[136] B. Egle, J. Muñoz, N. Alonso, W. De Borggraeve, A. Hoz, A. Díaz-Ortiz and J. Alcázar, "First example of alkyl–aryl Negishi cross-coupling in flow: mild, efficient and clean introduction of functionalized alkyl groups," *Journal of Flow Chemistry,* vol. 4, no. 1, 2013.

[135] M. Hopkin, I. Baxendale and S. Ley, "An expeditious synthesis of imatinib and analogues utilising flow chemistry methods," *Org. Biomol. Chem.,* vol. 11, no. 11, pp. 1822-39, 2013.

[134] S. Opalka, J. Park, A. Longstreet and D. McQuade, "Continuous synthesis and use of N-heterocyclic carbene copper(I) complexes from insoluble Cu2O," *Org. Lett.,* vol. 15, no. 5, pp. 996-9, 2013.

[133] J. Lehmann, T. Alzieu, R. Martin and R. Britton, "The Kondrat'eva reaction in flow: direct access to annulated pyridines," *Org. Lett.,* vol. 15, no. 14, pp. 3550-3, 2013.

[132] R. Harris, B. Andrews, S. Clark, J. Cooke, J. Gray and S. Ng, "The Fit For Purpose Development of S1P1 Receptor Agonist GSK2263167 Using a Robinson Annulation and Saegusa Oxidation to Access an Advanced Phenol Intermediate," *Org. Process Res. Dev,* vol. 17, no. 10, p. 1239, 2013.

[131] L. Protasova, M. Bulut, D. Ormerod, A. Buekenhoudt, J. Berton and C. Stevens, "Latest highlights in liquid-phase reactions for organic synthesis in microreactors," *Organic Process Research & Development,* vol. 17, no. 9, pp. 760-791, 2013.

[130] P. Murray, D. Browne, J. Pastre, C. Butters, D. Guthrie and S. Ley, "Continuous flow-processing of organometallic reagents using an advanced peristaltic pumping system and the telescoped flow synthesis of (E/Z)-Tamoxifen," *Organic Process Research & Developement,* vol. 17, no. 9, p. 1192, 2013.

[129] C. Battilocchio, G. Iannucci, S. Wang, E. Godineau, A. Krieger, A. De Mesmaeker and S. Ley, "Flow synthesis of cyclobutanones via [2+ 2] cycloaddition of keteneiminium salts and ethylene gas," *React. Chem. Eng.,* p. 295, 2013.

[128] P. Watts and C. Wiles, "Application of Microreactor Methodology for Organic Synthesis," *Stereoselective Synthesis of Drugs and Natural Products,* 2013.

[127] B. Ondrusek, S. Opalka, O. Hietsoi, M. Shatruk and D. McQuade, "Structure and Reactivity of a Copper (I)-Fused N-Heterocyclic Carbene Complex: Reactivity toward Styrenic and Strained Alkenes," *Synlett,* vol. 24, no. 10, p. 1211, 2013.

[126] K. Nakayama, D. Browne, I. Baxendale and S. Ley, "Studies of a diastereoselective electrophilic fluorination reaction employing a cryo-flow reactor," *Synlett,* vol. 24, no. 10, pp. 1298-1302, 2013.

[125] H. Bartrum, D. Blakemore, C. Moody and C. Hayes, "Continuous-flow generation of diazoesters and their direct use in S–H and P–H insertion reactions: synthesis of α-sulfanyl, α-sulfonyl, and α-phosphono carboxylates," *Tetrahedron,* vol. 69, no. 10, p. 2276, 2013.

[124] M. Pedersen, "Design of Continuous Reactor Systems for API Production," *Thesis.*

[123] A. Cannillo, "Association de la condensation de Petasis à des réactions de cyclisation pour la synthèse de molécules d'intérêt biologique," *Thesis,* 2013.

[122] M. Viviano, "Design, synthesis and biological evaluation of new non-nucleosidic inhibitors od DNA methyltransferases," *Thesis,* 2013.

[121] D. Rudzinski, "Preparation of Organofluorine Compounds: Exploring Mono-, Di-, and Tri-fluorination," *Thesis,* 2013.

[120] J. Newby, "Synthesis and reactions of isocyanides using a flow reactor," *Thesis,* 2013.

[119] W. Reynolds, "Sequential Processes Involving Catalytic CH Functionalisation," *Thesis,* 2013.

[118] K. Watts, "Design and Fabrication of an Electrochemical Microreactor and its Use in Electroorganic Synthesis," *Thesis,* 2013.

2012

Year total: 38

[117] S. Newton, S. Ley, S. Ley and D. Grainger, "Asymmetric Homogeneous Hydrogenation in Flow using a Tube-in-Tube Reactor," *Advanced Synthesis & Catalysis,* vol. 354, p. 1805, 2012.

[116] A. Diaz-Ortiz, "Cross-Coupling in Flow using Supported Catalysts: Mild, Clean, Efficient and Sustainable Suzuki–Miyaura Coupling in a Single Pass," *Advanced Synthesis & Catalysis,* vol. 354, p. 3456, 2012.

[115] J. Wegner, S. Ceylan and A. Kirschning, "Flow chemistry–a key enabling technology for (multistep) organic synthesis," *Advanced Synthesis & Catalysis,* vol. 354, pp. 17-57, 2012.

[114] F. Lévesque and P. Seeberger, "Continuous-flow synthesis of the anti-malaria drug artemisinin," *Angew. Chem. Int. Ed. Engl.,* vol. 51, no. 7, pp. 1706-9, 2012.

[113] A. O'Brien, Z. Horváth, F. Lévesque, J. Lee, A. Seidel-Morgenstern and P. Seeberger, "Continuous synthesis and purification by direct coupling of a flow reactor with simulated moving-bed chromatography," *Angew. Chem. Int. Ed. Engl.,* vol. 51, pp. 7028-30, 2012.

[112] F. Levesque and P. Seeberger, "Kontinuierliche Synthese des Malariawirkstoffs Artemisinin," *Angewandte Chemie,* vol. 124, no. 7, p. 1738, 2012.

[111] A. O'Brien, Z. Horváth, F. Lévesque, J. Lee, A. Seidel-Morgenstern and P. Seeberger, "Kontinuierliche Synthese und Aufreinigung durch direkte Kopplung eines

Durchflussreaktors mit “Simulated-Moving-Bed”-Chromatographie," *Angewandte Chemie,* vol. 124, no. 28, pp. 7134-7137, 2012.

[110] R. Pasceri, H. Bartrum, C. Hayes and C. Moody, "Nucleophilic fluorination of β-ketoester derivatives with HBF4," *Chem. Commun. (Camb.),* pp. 12077-9, 2012.

[109] L. Despènes, S. Elgue, C. Gourdon and M. Cabassud, "Impact of the material on the thermal behaviour of heat exchangers-reactors," *Chemical Engineering and Processing: Process Intensification,* pp. 102-111, 2012.

[108] H. Seyler, D. Jones, A. Holmes and W. Wong, "Continuous flow synthesis of conjugated polymers," *Chemical Communications,* vol. 48, no. 10, pp. 1598-1600, 2012.

[107] T. Petersen, A. Polyzos, M. O'Brien, T. Ulven, I. Baxendale and S. Ley, "The oxygen-mediated synthesis of 1,3-butadiynes in continuous flow: using Teflon AF-2400 to effect gas/liquid contact," *ChemSusChem,* pp. 274-7, 2012.

[106] R. Martin, F. Morawitz, C. Kuratli, A. Alker and A. Alanine, "Synthesis of Annulated Pyridines by Intramolecular Inverse-Electron-Demand Hetero-Diels–Alder Reaction under Superheated Continuous Flow Conditions," *Eur. J. Org. Chem.,* pp. 47-52, 2012.

[105] J. Muñoz, J. Alcázar, A. Hoz and A. Díaz-Ortiz, "Application of Flow Chemistry to the Selective Reduction of Esters to Aldehydes," *European Journal of Organic Chemistry,* pp. 260-263, 2012.

[104] N. Prosa, R. Turgis, R. Piccardi and M. Scherrmann, "Soluble Polymer-Supported Flow Synthesis: A Green Process for the Preparation of Heterocycles," *European Journal of Organic Chemistry,* p. 2188, 2012.

[103] J. Muñoz, J. Alcázar, A. Hoz, Á. Díaz-Ortiz and S. de Diego, "Preparation of amides mediated by isopropylmagnesium chloride under continuous flow conditions," *Green Chemistry,* pp. 1335-1341, 2012.

[102] M. Mercadante and N. Leadbeater, "Development of methodologies for reactions involving gases as reagents: microwave heating and conventionally-heated continuous-flow processing as examples," *Green Processing and Synthesis,* 2012.

[101] P. Baraldi and V. Hessel, "Micro reactor and flow chemistry for industrial applications in drug discovery and development," *Green Processing and Synthesis,* 2012.

[100] M. Moreno, M. Gomez, C. Cebrian, P. Prieto, A. Hoz and A. Moreno, "Sustainable and efficient methodology for CLA synthesis and identification," *Green Chimestry,* vol. 24, no. 9, pp. 2584-2594, 2012.

[99] L. Malet-Sanz and F. Susanne, "Continuous flow synthesis. A pharma perspective," *J. Med. Chem.,* vol. 55, no. 9, pp. 4062-98, 2012.

[98] P. Watts and C. Wiles, "Micro reactors, flow reactors and continuous flow synthesis," *Journal of Chemical Research,* vol. 36, no. 4, pp. 181-193, 2012.

[97] C. Lee, E. Pedrick and N. Leadbeater, "Preparation of Arene Chromium Tricarbonyl Complexes Using Continuous-Flow Processing:(η6-C6H5CH3) Cr (CO) 3 as an Example," *Journal of Flow Chemistry,* vol. 2, no. 4, 2012.

[96] D. Zani and M. Colombo, "Phase-transfer catalysis under continuous flow conditions: an alternative approach to the biphasic liquid/liquid O-alkylation of phenols," *Journal of Flow Chemistry,* vol. 2, no. 1, 2012.

[95] T. Glasnov, "Highlights from the Flow Chemistry Literature 2012 (Part 2)," *Journal of Flow Chemistry,* vol. 2, no. 3, 2012.

[94] L. Tamborini, DiegoRomano, A. Pinto, AriannaBertolani, FrancescoMolinari and PaolaConti, "An efficient method for the lipase-catalysed resolution and in-line purification of racemic flurbiprofen in a continuous-flow reactor," *Journal of Molecular Catalysis B: Enzymatic,* vol. 84, pp. 78-82, 2012.

[93] C. Hornung, A. Postma, A. Postma and J. Chiefair, "A continuous flow process for the radical induced end group removal of RAFT polymers," *Macromolecular Reaction Engineering,* vol. 6, no. 6, p. 346, 2012.

[92] C. Hornung, X. Nguyen, G. Dumsday and S. Sauber, "Integrated continuous processing and flow characterization of RAFT polymerization in tubular flow reactors," *Macromolecular Reaction Engineering,* vol. 6, no. 11, pp. 458-466, 2012.

[91] F. Venturoni, A. Gioiello, R. Sardella, B. Natalini and R. Pellicciari, "Continuous flow synthesis and scale-up of glycine- and taurine-conjugated bile salts," *Org. Biomol. Chem.,* vol. 10, no. 20, pp. 4109-15, 2012.

[90] o. Hawkins, P. Dubé, M. Maloney, L. Wei, M. Ewing, S. Chesnut, J. Denette, B. Lillie and R. Vaidyanathan, "Synthesis of an H3 Antagonist via Sequential One-Pot Additions of a Magnesium Ate Complex and an Amine to a 1,4-Ketoester followed by Carbonyl-Directed Fluoride Addition," *Org. Process Res. Dev.,* vol. 16, no. 8, p. 1393, 2012.

[89] N. Anderson, "Using continuous processes to increase production," *Organic Process Research & Development,* p. 852–869, 2012.

[88] M. Mercadante, C. Kelly, C. Lee and N. Leadbeater, "Continuous flow hydrogenation using an on-demand gas delivery reactor," *Organic Process Research & Development,* vol. 16, no. 5, pp. 1064-1068, 2012.

[87] T. Gustafsson, H. Sörensen and F. Pontén, "Development of a continuous flow scale-up approach of reflux inhibitor AZD6906," *Organic Process Research & Development,* vol. 16, no. 5, pp. 925-929, 2012.

[86] D. Browne, S. Wright, B. Deadman, S. Dunnage, I. Baxendale, R. Turner and S. Ley, "Continuous flow reaction monitoring using an on-line miniature mass spectrometer," *Rapid Commun. Mass Spectrom.,* vol. 26, no. 17, pp. 1999-2010, 2012.

[84] C. Spiteri and J. Moses, "Continuous Flow Synthesis of Secondary Amides by Tandem Azidation–Amidation of Anilines," *Synlett,* vol. 23, no. 10, pp. 1546-1548, 2012.

[84] C. Battilocchio, M. Baumann, I. Baxendale, M. Biava, M. Kitching, S. Ley, R. Martin, S. Ohnmacht and N. Tappin, "Scale-Up of flow-assisted synthesis of C2-symmetric chiral PyBox ligands," *Synthesis,* p. 635, 2012.

[83] V. Ranade, "MAGIC (Modular, Agile, Intensified and Continuous) Processes and Plants for Specialty Chemicals," *Thesis,* 2012.

[82] S. Cabrera Navarrete and D. Troya Velasco, "Diseño de las líneas de vapor para el calentamiento de los tanques de almacenamiento de combustible de la central térmica Miraflores," *Thesis,* 2012.

[81] E. Rossi, "Micro/Meso-Structured Reactors for Chemical Synthesis: Applications in Materials Science and Medicinal Chemistry," *Thesis,* 2012.

[80] V. Fusillo, "New insights into scale up processing and CS bond formation reactions," *Thesis,* 2012.

2011

Year total: 40

[79] M. Baumann, I. Baxendale, C. Kuratli, S. Ley, R. Martin and J. Schneider, "Synthesis of a drug-like focused library of trisubstituted pyrrolidines using integrated flow chemistry and batch methods," *ACS Comb Sci,* vol. 13, no. 4, pp. 405-13, 2011.

[78] A. Sniady, M. Bedore and T. Jamison, "One-flow, multistep synthesis of nucleosides by Brønsted acid-catalyzed glycosylation," *Angew. Chem. Int. Ed. Engl.,* vol. 50, no. 9, pp. 2155-8, 2011.

[77] A. Polyzos, M. O'Brien, T. Petersen, I. Baxendale and S. Ley, "The continuous-flow synthesis of carboxylic acids using CO2 in a tube-in-tube gas permeable membrane reactor," *Angew. Chem. Int. Ed. Engl.,* vol. 50, no. 5, pp. 1190-3, 2011.

[76] M. Brasholz, S. Saubern and G. Savage, "Nitrile Oxide 1, 3-Dipolar Cycloaddition by Dehydration of Nitromethane Derivatives Under Continuous Flow Conditions," *Australian Journal of Chemistry,* vol. 64, p. 1397, 2011.

[75] S. Opalka, A. Longstreet and D. McQuade, "Continuous proline catalysis via leaching of solid proline," *Beilstein J Org Chem,* no. 7, pp. 1671-9, 2011.

[74] K. Roper, H. Lange, A. Polyzos, M. Berry, I. Baxendale and S. Ley, "The application of a monolithic triphenylphosphine reagent for conducting Appel reactions in flow microreactors," *Beilstein J Org Chem,* vol. 7, pp. 1648-55, 2011.

[73] F. Bou-Hamdan, F. Lévesque, A. O'Brien and P. Seeberger, "Continuous flow photolysis of aryl azides: Preparation of 3H-azepinones," *Beilstein J Org Chem,* vol. 7, pp. 1124-1129, 2011.

[72] P. Lange, L. Goossen, P. Podmore, T. Underwood and N. Sciammetta, "Decarboxylative biaryl synthesis in a continuous flow reactor," *Chem. Commun. (Camb.),* vol. 47, no. 12, pp. 3628-30, 2011.

[71] A. O'Brien, F. Lévesque and P. Seeberger, "Continuous flow thermolysis of azidoacrylates for the synthesis of heterocycles and pharmaceutical intermediates," *Chem. Commun. (Camb.),* vol. 47, no. 9, pp. 2688-90, 2011.

[70] C. Wiles and P. Watts, "Recent advances in micro reaction technology," *Chemical Communications,* pp. 6512-6535, 2011.

[69] H. Lange, C. Carter, M. Hopkin, A. Burke, J. Goode, I. Baxendale and S. Ley, "A breakthrough method for the accurate addition of reagents in multi-step segmented flow processing," *Chemical Science,* pp. 765-769, 2011.

[68] T. Noel and S. Buchwald, "Cross-coupling in flow," *Chemical Society Reviews,* vol. 40, 2011.

[67] M. Mohamed, T. Gonçalves, R. Whitby, H. Sneddon and D. Harrowven, "New insights into cyclobutenone rearrangements: a total synthesis of the natural ROS-generating anti-cancer agent cribrostatin 6," *Chemistry,* vol. 17, pp. 13698-705, 2011.

[66] T. Glasnov and C. Kappe, "The microwave-to-flow paradigm: translating high-temperature batch microwave chemistry to scalable continuous-flow processes," *Chemistry,* vol. 17, pp. 11956-68, 2011.

[65] E. Riva, A. Rencurosi, S. Gagliardi, D. Passarella and M. Martinelli, "Synthesis of (+)-dumetorine and congeners by using flow chemistry technologies," *Chemistry,* vol. 17, pp. 6221-6, 2011.

[64] C. Carter, H. Lange, D. Sakai, I. Baxendale and S. Ley, "Diastereoselective chain-elongation reactions using microreactors for applications in complex molecule assembly," *Chemistry,* vol. 17, pp. 3398-405, 2011.

[63] H. Bartrum, D. Blakemore, C. Moody and C. Hayes, "Rapid access to α-alkoxy and α-amino acid derivatives through safe continuous-flow generation of diazoesters," *Chemistry,* vol. 17, pp. 9586-9, 2011.

[62] M. Brasholz, K. von Känel, C. Hornung, S. Sauberna and J. Tsanaktsidis, "Highly efficient dehydration of carbohydrates to 5-(chloromethyl)furfural (CMF), 5-(hydroxymethyl)furfural (HMF) and levulinic acid by biphasic continuous flow processing," *Green Chemistry,* p. 1114, 2011.

[61] M. Baumann, I. Baxendale and A. Kirschning, "Synthesis of highly substituted nitropyrrolidines, nitropyrrolizines and nitropyrroles via multicomponent-multistep sequences within a flow reactor," *HETEROCYCLES,* vol. 82, no. 2, pp. 1297 - 1316, 2011.

[60] H. Seyler, W. Wong, D. Jones and A. Holmes, "Continuous flow synthesis of fullerene derivatives," *J. Org. Chem.,* vol. 76, no. 9, pp. 3551-6, 2011.

[59] R. Luisi, B. Musio and L. Degennaro, "MICROREACTOR TECHNOLOGY AS TOOL FOR THE DEVELOPMENT OF A SUSTAINABLE SYNTHETIC CHEMISTRY," *LA Chimica & Industria,* pp. 114-123, 2011.

[58] Y. Wada, T. Douke, T. Yamauchi and +Yuji, "Microwave effects in metal-catalyzed reactions," *Mini-Reviews in Organic Chemistry,* vol. 8, no. 3, p. 334, 2011.

[57] M. Baumann, I. Baxendale and S. Ley, "The flow synthesis of heterocycles for natural product and medicinal chemistry applications," *Mol. Divers.,* vol. 15, no. 3, pp. 613-30, 2011.

[56] M. Mercadante and N. Leadbeater, "Continuous-flow, palladium-catalysed alkoxycarbonylation reactions using a prototype reactor in which it is possible to load gas and heat simultaneously," *Org. Biomol. Chem.,* vol. 9, no. 19, pp. 6575-8, 2011.

[55] B. Ahmed-Omer and A. Sanderson, "Preparation of fluoxetine by multiple flow processing steps," *Org. Biomol. Chem.,* vol. 9, no. 10, pp. 3854-62, 2011.

[54] C. Smith, C. Smith, N. Nikbin, S. Ley and I. Baxendale, "Flow synthesis of organic azides and the multistep synthesis of imines and amines using a new monolithic triphenylphosphine reagent," *Org. Biomol. Chem.,* vol. 9, no. 6, 2011.

[53] P. Koos, U. Gross, A. Polyzos, M. O'Brien, I. Baxendale and S. Ley, "Teflon AF-2400 mediated gas-liquid contact in continuous flow methoxycarbonylations and in-line FTIR measurement of CO concentration," *Org. Biomol. Chem.,* vol. 9, no. 20, pp. 6903-8, 2011.

[52] L. Martin, A. Marzinzik, S. Ley and I. Baxendale, "Safe and reliable synthesis of diazoketones and quinoxalines in a continuous flow reactor," *Org. Lett.,* vol. 13, no. 2, pp. 320-3, 2011.

[51] Y. Zhang, T. Jamison, S. Patel and N. Mainolfi, "Continuous flow coupling and decarboxylation reactions promoted by copper tubing," *Org. Lett.,* vol. 13, no. 2, pp. 280-3, 2011.

[50] C. Hornung, C. Guerrero-Sanchez, M. Brasholz, S. Saubern, J. Chiefari, G. Moad, E. Rizzardo and S. Thang, "Controlled RAFT polymerization in a continuous flow microreactor," *Organic Process Research & Development,* vol. 15, no. 3, pp. 593-601, 2011.

[49] R. Wheeler, E. Baxter, I. Campbell and S. Macdonald, "A General, One-Step Synthesis of Substituted Indazoles using a Flow Reactor," *Organic Process Research & Development,* vol. 15, no. 3, pp. 565-569, 2011.

[48] M. Roydhouse, A. Ghaini, A. Constantinou, A. Cantu-Perez, W. Motherwell and A. Gavriilidis, "Ozonolysis in flow using capillary reactors," *Organic Process Research & Development,* vol. 15, no. 5, p. 989, 2011.

[47] T. Brodmann, P. Koos, A. Metzger, P. Knochel and S. Ley, "Continuous preparation of arylmagnesium reagents in flow with inline IR monitoring," *Organic Process Research & Development,* vol. 16, no. 5, p. 1102–1113, 2011.

[46] C. Brocklehurst, H. Lehmann and L. Vecchia, "Nitration chemistry in continuous flow using fuming nitric acid in a commercially available flow reactor," *Organic Process Research & Development,* vol. 15, no. 6, p. 1447, 2011.

[45] M. Baumann, I. Baxendale, M. Brasholz, J. Hayward, S. Ley and N. Nikbin, "An integrated flow and batch-based approach for the synthesis of O-methyl siphonazole," *Synlett,* pp. 1375-1380, 2011.

[44] H. Lange, M. Capener, A. Jones, C. Smith, N. Nikbin, I. Baxendale and S. Ley, "Oxidation reactions in segmented and continuous flow chemical processing using an N-(tert-Butyl) phenylsulfinimidoyl chloride monolith," *Synlett,* pp. 869-873, 2011.

[43] M. York, "A continuous-flow synthesis of annulated and polysubstituted furans from the reaction of ketones and α-haloketones," *Tetrahedron letters,* pp. 6267-6270, 2011.

[42] N. Prosa, "Synthèse supportée d'hétérocycles en milieux éco-compatibles: Etude des conditions par lots et en flux continu. Purification par ultrafiltration en phase aqueuse," *Thesis,* 2011.

[41] A. Stevenin, "Symbiose mycorhizienne: développement de nouvelles méthodes pour la synthèse de glycoconjugues bioactifs," *Thesis,* 2011.

[40] J. Poole, "Diverse Applications of Flow Technology in Discovery Chemistry," *Thesis,* 2011.

2010

Total for year: 22

[39] T. Razzaq and C. Kappe, "Continuous flow organic synthesis under high-temperature/pressure conditions," *Chem Asian J,* vol. 5, no. 6, 2010.

[38] D. Webb and T. Jamison, "Continuous flow multi-step organic synthesis," *Chemical Science,* pp. 675-680, 2010.

[37] M. Brasholz, J. Macdonald, S. Saubern, J. Ryan and A. Holmes, "A gram-scale batch and flow total synthesis of perhydrohistrionicotoxin," *Chemistry,* vol. 16, no. 37, pp. 11471-80, 2010.

[36] I. Baxendale, S. Schou, J. Sedelmeier and S. Ley, "Multi-step synthesis by using modular flow reactors: the preparation of yne--ones and their use in heterocycle synthesis," *Chemistry,* vol. 16, pp. 89-94, 2010.

[35] Z. Qian, I. Baxendale and S. Ley, "A Continuous Flow Process Using a Sequence of Microreactors with In-line IR Analysis for the Preparation of N,N-Diethyl-4-(3-fluorophenylpiperidin-4-ylidenemethyl)benzamide as a Potent and Highly Selective δ-Opioid Receptor Agonist," *Chemistry-A European Journal,* 2010.

[34] Hornung, C. Guerrero-Sanchez, C. Saubern, S. Tsanaktsidis, J. Chiefari and John, "Continuous Flow Processing in Capillary Microreactors for the Synthesis of New Materials," *Engineering at the Edge,* 2010.

[33] S. Castellano, L. Tamborini, M. Viviano, A. Pinto, G. Sbardella and P. Conti, "Synthesis of 3-aryl/benzyl-4,5,6,6a-tetrahydro-3aH-pyrrolo[3,4-d]isoxazole derivatives: a comparison between conventional, microwave-assisted and flow-based methodologies," *J. Org. Chem.,* pp. 7439-42, 2010.

[32] H. Bartrum, D. Blakemore, C. Moody and C. Hayes, "Synthesis of β-keto esters in-flow and rapid access to substituted pyrimidines," *J. Org. Chem.,* 2010.

[31] F. Venturoni, N. Nikbin, S. Ley and I. Baxendale, "The application of flow microreactors to the preparation of a family of casein kinase I inhibitors," *Org. Biomol. Chem.,* vol. 8, no. 8, pp. 1798-806, 2010.

[30] L. Malet-Sanz, J. Madrzak, S. Ley and I. Baxendale, "Preparation of arylsulfonyl chlorides by chlorosulfonylation of in situ generated diazonium salts using a continuous flow reactor," *Org. Biomol. Chem.,* vol. 8, pp. 5324-32, 2010.

[29] F. Muller and B. Whitlock, "An alternative method to isolate pharmaceutical intermediates," *Organic Process Research & Development,* pp. 84-90, 2010.

[28] C. Carter, H. Lange, S. Ley, I. Baxendale, B. Wittkamp, J. Goode and N. Gaunt, "ReactIR flow cell: a new analytical tool for continuous flow chemical processing," *Organic Process Research & Development,* vol. 14, no. 2, pp. 393-404, 2010.

[27] M. Baumann, I. Baxendale and S. Ley, "Synthesis of 3-nitropyrrolidines via dipolar cycloaddition reactions using a modular flow reactor," *Synlett,* 2010.

[26] Z. Qian, I. Baxendale and S. Ley, "A flow process using microreactors for the preparation of a quinolone derivative as a potent 5HT1B Antagonist," *Synlett,* pp. 505-508, 2010.

[25] A. Cukalovic, J. Monbaliu and C. Stevens, "Microreactor technology as an efficient tool for multicomponent reactions," *Synthesis of Heterocycles via Multicomponent Reactions,* pp. 161-198, 2010.

[24] M. Brasholz, B. Johnson, J. Macdonald, A. Polyzos, J. Tsanaktsidis, S. Saubern, A. Holmes and J. Ryan, "Flow synthesis of tricyclic spiropiperidines as building blocks for the histrionicotoxin family of alkaloids," *Tetrahedron,* vol. 66, no. 33, pp. 6445-6449, 2010.

[23] M. Riccaboni, E. La Porta, A. Martorana and R. Attanasio, "Effect of phase transfer chemistry, segmented fluid flow, and sonication on the synthesis of cinnamic esters," *Tetrahedron,* vol. 66, no. 17, pp. 4032-4039, 2010.

[22] E. Riva, S. Gagliardi, M. Martinelli, D. Passarella, D. Vigo and A. Rencurosi, "Reaction of Grignard reagents with carbonyl compounds under continuous flow conditions," *Tetrahedron,* vol. 66, no. 17, p. 3242, 2010.

[21] F. Stazi, D. Cancogni, L. Turco, P. Westerduin and S. Bacchi, "Highly efficient and safe procedure for the synthesis of aryl 1, 2, 3-triazoles from aromatic amine in a continuous flow reactor," *Tetrahedron Letters,* vol. 51, no. 41, pp. 5385-5387, 2010.

[20] M. Grafton, A. Mansfield and M. Fray, "[3+ 2] Dipolar cycloadditions of an unstabilised azomethine ylide under continuous flow conditions," *Tetrahedron Letters,* vol. 51, no. 7, pp. 1026-1029, 2010.

[19] L. Tamborini, P. Conti, A. Pinto and C. De Micheli, "A highly efficient flow reactor process for the synthesis of N-Boc-3, 4-dehydro-L-proline methyl ester," *Tetrahedron: Asymmetry,* vol. 21, no. 2, p. 222, 2010.

[18] E. Riva, "Flow chemistry applied to the preparation of small molecules potentially useful as therapeutic agents," *Thesis,* 2010.

2009

Year total: 3

[17] M. Baumann, I. Baxendale, L. Martin and S. Ley, "Development of fluorination methods using continuous-flow microreactors," *Tetrahedron,* 2009.

[16] I. Baxendale, S. Ley, A. Mansfield and C. Smith, "Multistep synthesis using modular flow reactors: Bestmann-Ohira reagent for the formation of alkynes and triazoles," *Angew. Chem. Int. Ed. Engl.,* vol. 48, no. 22, 2009.

[15] L. Malet-Sanz, J. Madrzak, R. Holvey and T. Underwood, "A safe and reliable procedure for the iododeamination of aromatic and heteroaromatic amines in a continuous flow reactor," *Tetrahedron Letters,* vol. 50, no. 52, 2009.

2008

Year total: 8

[14] T. Asahi, T. Sugiyama and H. Masuhara, "Laser fabrication and spectroscopy of organic nanoparticles," *Acc. Chem. Res.,* vol. 41, no. 12, pp. 1790-8, 2008.

[13] M. Baumann, I. Baxendale and S. Ley, "The use of diethylaminosulfur trifluoride (DAST) for fluorination in a continuous-flow microreactor," *Synlett,* pp. 2111-2114, 2008.

[12] M. Baumann, I. Baxendale, S. Ley, N. Nikbin, C. Smith and J. Tierney, "A modular flow reactor for performing Curtius rearrangements as a continuous flow process," *Org. Biomol. Chem.,* vol. 6, no. 9, pp. 1577-86, 2008.

[11] M. Baumann, I. Baxendale, S. Ley, N. Nikbin and C. Smith, "Azide monoliths as convenient flow reactors for efficient Curtius rearrangement reactions," *Org. Biomol. Chem.,* vol. 6, no. 9, pp. 1587-93, 2008.

[10] I. Baxendale, S. Ley, C. Smith, L. Tamborini and A. Voica, "A bifurcated pathway to thiazoles and imidazoles using a modular flow microreactor," *J Comb Chem,* vol. 10, no. 6, pp. 851-7, 2008.

[9] K. Geyer and P. Seeberger, "Microreactors as the Key to the Chemistry Laboratory of the Future," *Systems Chemistry,* pp. 87-108, 2008.

[8] S. Ley and I. Baxendale, "New tools for molecule makers: emerging technologies," *Systems Chemistry,* 2008.

[7] A. Vasudevan, "Microwave-assisted organic synthesis an enabling technology with disruptive potential," *Drug Discov World,* pp. 83-88, 2008.

2007

Year total: 5

[6] C. Griffiths-Jones, M. Hopkin, D. Jönsson, S. Ley, D. Tapolczay, E. Vickerstaffe and M. Ladlow, "Fully automated flow-through synthesis of secondary sulfonamides in a binary reactor system," *J Comb Chem,* vol. 9, no. 3, pp. 422-30, 2007.

[5] J. Moseley and S. Lawton, "Initial results from a commercial continuous flow microwave reactor for scale-up," *chimica oggi Chemistry Today,* vol. 25, no. 2, pp. 16-19, 2007.

[4] N. Nikbin, M. Ladlow and S. Ley, "Continuous flow ligand-free Heck reactions using monolithic Pd [0] nanoparticles," *Organic Process Research & Development,* vol. 11, no. 3, pp. 458-462, 2007.

[3] C. Smith, I. Baxendale, S. Lanners, J. Hayward, S. Smith and S. Ley, "[3 + 2] Cycloaddition of acetylenes with azides to give 1,4-disubstituted 1,2,3-triazoles in a modular flow reactor," *Org. Biomol. Chem.,* vol. 5, no. 10, pp. 1559-61, 2007.

[2] C. Wiles, P. Watts and S. Haswell, "The use of solid-supported reagents for the multi-step synthesis of analytically pure alpha,beta-unsaturated compounds in miniaturized flow reactors," *Lab Chip,* vol. 7, no. 3, pp. 322-30, 2007.

2006

[1] M. Baumann, I. Baxendale, S. Ley, C. Smith and G. Tranmer, "Fully automated continuous flow synthesis of 4,5-disubstituted oxazoles," *Org. Lett.,* vol. 8, no. 23, pp. 5231-4, 2006.