

## Publications Citing Vapourtec

---

# 2021

Total publications as of July 2021: 736

Year total as of July 2021: 44

- [736] N. Amri and T. Wirth, "Flow Electrosynthesis of Sulfoxides, Sulfones, and Sulfoximines without Supporting Electrolytes," *The Journal of organic chemistry*, 2021.
- [735] 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.
- [734] 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 CsPbBr<sub>3</sub>/Cs<sub>4</sub>PbBr<sub>6</sub> nanocrystals for inkjet printing of mini-LEDs," *Chemical Engineering Journal*, vol. 426, p. 130849, 2021.
- [732] M. Baumann, C. Bracken and A. Batsanov, "Development of a Continuous Photochemical Benzyne-Forming Process," *SynOpen*, vol. 05, no. 01, pp. 29-35, 2021.
- [731] 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.
- [730] A. Benítez-Mateos, M. Contente, D. Roura Padrosa and F. Paradisi, "Flow biocatalysis 101: design, development and applications," *Reaction Chemistry & Engineering*, 2021.
- [729] 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.
- [728] 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.
- [727] 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.
- [726] K. Donnelly and M. Baumann, "Scalability of photochemical reactions in continuous flow mode," *Journal of Flow Chemistry*, 2021.
- [725] J. Duan, G. Xu, B. Rong, H. Yan, S. Zhang, Q. Wu, N. Zhu and K. Guo, "Iron-catalyzed [4 + 2] annulation of  $\alpha,\beta$ -unsaturated ketoxime acetates with enaminones toward functionalized pyridines," *Green Synthesis and Catalysis*, 2021.
- [724] 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.

- [723] 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.
- [722] 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.
- [721] M. Guidi, "An automated platform for multistep synthesis based on a new paradigm for combining flow modules," *Thesis*, 2021.
- [720] 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.
- [719] 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.
- [718] 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.
- [717] 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.
- [716] G. Ignacz and G. Szekely, "6 Continuous microflow processes," *Sustainable Process Engineering*, pp. 95-116, 2021.
- [715] 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.
- [714] A. Leslie, T. Moody, M. Smyth, S. Wharry and M. Baumann, "Coupling biocatalysis with high-energy flow reactions for the synthesis of carbamates and  $\beta$ -amino acid derivatives," *Beilstein Journal of Organic Chemistry*, vol. 17, pp. 379-384, 2021.
- [713] J. Li, H. Šimek, D. Ilioa, N. Jung, S. Bräse, H. Zappe, R. Dittmeyer and B. Ladewig, "In situ sensors for flow reactors – a review," *Reaction Chemistry & Engineering*, 2021.
- [712] 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  $\beta$ -glucuronidase inhibitors ameliorates irinotecan-induced toxicity," *Communications biology*, p. 280, 2021.
- [711] S. Miao and X. Li, "Enzymatic esterification of lauric acid to give monolaurin in a microreactor," *Journal of Chemical Research*, 2021.
- [710] S. Nabil, A. Hammad, H. El-Bery, E. Shalaby and A. El-Shazly, "The CO<sub>2</sub> photoconversion over reduced graphene oxide based on Ag/TiO<sub>2</sub> photocatalyst in an advanced meso-scale

- continuous-flow photochemical reactor," *Environmental science and pollution research international*, 2021.
- [709] N. Neyt and D. Riley, "Application of reactor engineering concepts in continuous flow chemistry: a review," *Reaction Chemistry & Engineering*, 2021.
- [708] P. Nichols, "Automated and enabling technologies for medicinal chemistry," *Progress in medicinal chemistry*, vol. 60, pp. 191-272, 2021.
- [707] 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.
- [706] 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.
- [705] 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.
- [704] S. Sade, "Methods, Photocatalytic N-Arylation of 3-Substituted Pyrrolidines and Comparison with Traditional," *Thesis*, 2021.
- [703] 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.
- [702] 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.
- [701] E. Skrotzki, J. Vandavasi and S. Newman, "Ozone-Mediated Amine Oxidation and Beyond: A Solvent Free, Flow-Chemistry Approach," *ChemRxiv*, 2021.
- [700] 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.
- [699] 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.
- [698] M. Van De Walle, "Continuous photoflow for macromolecular design," *Queensland University of Technology*, 2021.
- [697] 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(sp<sup>3</sup>)-H Heteroarylation via

Radical-Polar Crossover in Batch and Flow," *Angewandte Chemie (International ed. in English)*, 2021.

- [696] 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.
- [695] 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.
- [694] 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.
- [693] 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: 97

- [692] S. Chatterjee, M. Guidi, P. Seeberger and K. Gilmore, "Automated radial synthesis of organic molecules," *Nature*, vol. 579, pp. 379-384, 2020.
- [691] D. Heard and A. Lennox, "Minimal manual input," *Nat Chem*, vol. 12, no. 2, pp. 113-114, 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  $\alpha$ -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  $\beta$ -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 Sulfonyl 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  $\alpha$ -Thio- $\beta$ -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, "Chapter 3 - C(sp<sup>3</sup>)–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(sp<sup>3</sup>)–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 TiO<sub>2</sub> 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 MgCl<sub>2</sub>·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. Pfrenge, "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  $\alpha$ -Diazocarbonyl compounds and enabling technologies in stereoselective synthesis," *Thesis*, 2020.
- [613] R. Zadavec 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  $\beta$ -thiol- $\alpha$ -carbonylation of enones accompanied by unexpected Csp<sup>2</sup>-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, " $\gamma$ -Amino phosphonates via the photocatalytic  $\alpha$ -C–H alkylation of primary amines," *Tetrahedron*, 2020.
- [601] P. Sagmeister, R. Lebl, I. Castillo, J. Rehr, 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(sp<sup>3</sup>)–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  $\lambda$ -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. Sambigiagio, C. Li, E. Zysman-Colman, J. Alcázar and T. Noël, "Visible-Light-Promoted Iron-Catalyzed C(sp<sup>2</sup>)-C(sp<sup>3</sup>) 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," *ChemRxiv*, 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 transesterification 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 Transesterification 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, "Méthylation 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- $\pi$  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  $\omega$ -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. Riscuzzi, R. Luisi and L. Degennaro, "Targeting a Mirabegron precursor by BH<sub>3</sub>-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. Grunenber, 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. Crespín, 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  $\alpha$ -Fe<sub>2</sub>O<sub>3</sub> and CaCO<sub>3</sub> 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  $\alpha$ -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  $sp^3$  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. Abdaj, 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  $\alpha$ -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  $\beta$ -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. Brahmhatt, 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 Cs<sub>4</sub>PbBr<sub>6</sub> 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  $\alpha$ -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. Pfengle, "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. Pfrenkle, "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. Tsanaksidis 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. Filippini 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. Iogo, 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. Iogo, A. Iogo 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. Iogo 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-mésyloxy-carbamates 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. Alnomysy, "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<sup>3</sup>)-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<sup>2</sup>)/C(sp<sup>3</sup>) 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 & Technology*, 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. Filippini 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. Balzaretto, 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  $\alpha$ -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. Pfengle, "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 Magnesium 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. Efrat 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 synthesesroute 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. Castellón, 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  $\alpha$ -C(sp<sup>3</sup>)-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, A. Aich, 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- $\alpha$ -glycero-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  $\beta$  and  $\gamma$ -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  $\alpha$ -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 decagram 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. Grogneq 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. Filippini, 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  $\beta$ -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  $\beta$ -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  $\text{TMPMgCl} \cdot \text{LiCl}$  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  $\alpha$ -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  $\pi$ -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. Kokschi and P. Seeberger, "Continuous Reductions and Reductive Aminations Using Solid NaBH<sub>4</sub>," *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 medically-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. Löhmansröben, 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 Cu<sub>2</sub>O," *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 & Development*, 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. Shatruck 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  $\alpha$ -sulfanyl,  $\alpha$ -sulfonyl, and  $\alpha$ -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 of 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  $\beta$ -ketoester derivatives with HBF<sub>4</sub>," *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 Chemistry*, 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:( $\eta^6$ -C<sub>6</sub>H<sub>5</sub>CH<sub>3</sub>) Cr (CO)<sub>3</sub> 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 H<sub>3</sub> 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 CO<sub>2</sub> 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  $\alpha$ -alkoxy and  $\alpha$ -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 alkoxyacylation 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) phenylsulfonimidoyl 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  $\alpha$ -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 glycoconjugués 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  $\delta$ -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  $\beta$ -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.