

Curriculum Vitae

PERSONAL DATA

Name: **Bartholomäus Pieber**
 Citizenship: Austria
 Date of Birth: February, 5th 1988
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EXPERIENCE

Starting June 2023 **Assistant Professor** at the Institute of Science and Technology Austria (ISTA), Klosterneuburg, Austria
 Jan. 2018 – present **Group Leader** at the Max Planck Institute of Colloids and Interfaces (MPICI), Potsdam, Germany
 April 2020 – present **Lecturer (Dozent)** at the University of Potsdam, Germany
 Sept. 2022 – Oct. 2022 **Visiting Associate** at the California Institute of Technology (Caltech), Pasadena, CA, US
 Jan. 2016 – Dez. 2017 **Postdoctoral researcher** with Prof. P. H. Seeberger at the Max Planck Institute of Colloids and Interfaces, Potsdam, Germany
 Aug. 2015 – Dez. 2015 **Postdoctoral researcher** with Prof. C. O. Kappe at the Institute of Chemistry, University of Graz, Austria

HIGHER EDUCATION

August, 20th 2015 **PhD in Natural Science** (with distinction)
 Nov. 2011 – Aug. 2015 **Doctoral thesis:** "Organic Chemistry in Single- and Multiphase Continuous Flow Regimes" under the supervision of Prof. C. Oliver Kappe at the Institute of Chemistry, University of Graz, Austria
 November, 24th 2011 **Master's degree in chemistry** (with distinction)
 Mar. 2011 – Nov. 2011 **Master thesis:** "Process Intensification in C-H Activation - Direct Arylation of Unactivated Benzene with Aryl Halides" under the supervision of Prof. C. Oliver Kappe at the Institute of Chemistry, University of Graz, Austria
 2009-2011 Master studies of Chemistry at the University of Graz and Graz University of Technology, Austria
 August, 31st 2009 **Bachelor's Degree in Chemistry**
 Mar. 2009-Sep. 2009 **Bachelor thesis:** "Synthesis and analysis of sterol glycosides" under the supervision of Prof. Martin Mittelbach at the Institute of Chemistry, University of Graz, Austria
 2006-2009 Bachelor studies of Chemistry at the University of Graz and Graz University of Technology, Austria

FURTHER EDUCATION

- 2019 Seminar "Leadership in a Junior Research Group", April 1, **2019**, Frankfurt, Germany
- 2014 Summer School "NAWI Graz DocDays & Summer School 2014" June 5-6, **2013**, Graz, Austria
- 2011 Summer School "Homogeneous Catalysis and Fine Chemicals", September 12-14, **2011**, Antwerp, Belgium

RESEARCH GRANTS

Total third-party funding granted: ~1 900 000 €

- 2023 Project grant, Cluster of Excellence, Unifying Systems in Catalysis (UniSysCat) - German Science Foundation - German Excellence Initiative (DFG)
- 2022 Plus 3 Perspectives Programme - Boehringer Ingelheim Foundation 2021 Research Grant - German Science Foundation
- 2019 Project grant, Cluster of Excellence, Unifying Systems in Catalysis (UniSysCat) - German Science Foundation - German Excellence Initiative (DFG)
- 2018 Project grant, International Max Planck Research School (MPI)
- 2018 Liebig Fellowship - German chemical Industry Funds (VCI)

AWARDS

- 2022 JSP Fellowship - Bürgenstock Conference (*Swiss Chemical Society, SCS*)
- 2020 Thieme Chemistry Journals Award (*Thieme*)
- 2018 Brandenburg Post-Doc Award (*Ministry of Science, Research & Cultural Affairs*)
- 2018 Science Award (*Austrian Chemical Society GÖCH*)
- 2017 Inventor Award (*University of Graz*)
- 2016 Doctoral Thesis Award (*Austrian Chemical Society GÖCH*)
- 2015 Merit Scholarship (*University of Graz*)
- 2013 IUPAC Poster Prize (*Bi-Annual Meeting of the Austrian Chemical Society*)
- 2013 Presentation Award (*DocDays, University of Graz*)
- 2012 Award of the Doctoral School (*University of Graz*)
- 2011 Merit Scholarship (*University of Graz*)

SCIENTIFIC AFFILIATIONS

- Since 2020 GeCatS (German Catalysis Society)
- Since 2018 GDCh (German Chemical Society)
- Since 2018 Verein zur Förderung der Forschung an Biomolekularen Systemen e.V.
- Since 2011 GÖCH (Austrian Chemical Society)

BOARD MEMBERSHIPS & SERVICE IN SCIENTIFIC SOCIETIES

- Since 2021 Member of the executive Board of the Cluster of Excellence Unifying Systems in Catalysis (UniSysCat)
- Since 2020 Vice-chairman of the local GDCh section in Potsdam

TEACHING & SUPERVISION

- Since 2018 Supervisor of 9 PhD students (1 x visiting), 3 Master students, 2 Bachelor students, 2 interns
- Since 2020 Teaching at the University of Potsdam:
- Organic Chemistry I (lecture, 3 SWS, WS 2020/2021)
 - Organic Chemistry II (lecture, 2 SWS, WS 2020/2021)
 - Flow chemistry (lecture, 2 SWS, WS 2020/2021)
 - Advanced Organic Chemistry (lecture, 3 SWS; SS 2020)
 - Advanced Organic Chemistry (seminar, 2 SWS; SS 2020)
- 2011 - 2017 Co-supervision of several postdocs, PhD and MSc students in research projects on single- and multiphase continuous flow processing techniques and photocatalysis
- 2009 - 2015 Tutoring and teaching at the University of Graz.
- General Chemistry Laboratory (lab course)
 - Organic Chemistry Laboratory for Bachelor students (lab course)
 - Organic Chemistry Laboratory for Master students (lab course)
 - Chemical Informatics (lecture)

ALUMNI

<u>Name</u>	<u>Role</u>	<u>Position after PieberLab</u>
Moriz Bachmann	Intern (2022)	Student, University of Potsdam
Colm Maye	Intern (2022)	Student, University College Cork
Tommaso Bertolin	MSc Student (2021 – 2022)	Student, University of Padua
Susanne Reischauer	PhD Student (2019 – 2022)	Postdoc, Northwestern Univ. - Weiss Lab
Sebastian Gisbertz	PhD Student (2018 – 2021)	Advanced Scientist, Momentive
Cristian Cavedon	PhD Student (2018 – 2021)	Postdoc, MIT - Jamison Group
Noah Richter	BSc Student (2020)	MSc Student, LMU Munich

ORGANIZATION OF SCIENTIFIC EVENTS

- 2022 Organization of the workshop "Photocatalysis: Enlightening Organic Chemistry", October 17-21, **2022**, Leiden, Netherlands
- 2019 Organization of the "Ringberg Conference 2019", September 2-6, **2019**, Kreuth, Germany
- 2018 Organization of the "7th Biomolecular Systems Day", December 13, **2018**, Potsdam, Germany
- 2014 Organization of the "DocDays & Summer School 2014" June 5-6, **2013**, Graz, Austria

REFeree FOR SCIENTIFIC JOURNALS

Nature Catalysis, Journal of the American Chemical Society, Angewandte Chemie International Edition, Science Advances, Nature Communications, JACS Au, ACS Sustainable Chemistry & Engineering, ACS Organic & Inorganic Au, Synthesis, Chemistry a European Journal, iScience, ACS Applied Materials & Interfaces, Advanced Synthesis & Catalysis, Journal of Organic Chemistry, European Journal of Organic Chemistry, ChemCatChem, ChemSusChem, Organic Process and Research Development, Advanced Energy Materials, Photochemical & Photobiological Sciences, Beilstein Journal of Organic Chemistry, Catalysis Letters, Journal of Flow Chemistry, Monatshefte für Chemie – Chemistry Monthly

EDITORIAL WORK

- 2022 Guest editor *ChemCatChem*
- 2020 Guest editor *Frontiers in Chemical Engineering*

INVITED LECTURES AT UNIVERSITIES & RESEARCH INSTITUTIONS

Upcoming

22 *University of Innsbruck*, December 15, **2022**, Innsbruck, Austria

21 *University of Göttingen*, December 5, **2022**, Göttingen, Germany

Past

20 *California Institute of Technology (Caltech)*, September 28, **2022**, Pasadena, CA, USA

19 *University of Chicago*, September 23, **2022**, Chicago, IL, USA

18 *Purdue University*, September 22, **2022**, West Lafayette, IN, USA

17 *Northwestern University*, September 21, **2022**, Evanston, IL, USA

16 *University of Illinois Urbana-Champaign*, September 20, **2022**, Champaign, IL, USA

15 **GÖCH lecture**, *Graz University of Technology*, June 8, **2022**, Graz, Austria

14 *Johannes Gutenberg University Mainz*, May 17, **2022**, Mainz, Germany

13 **John van Geuns Lecture**, *University of Amsterdam*, May 12, **2022**, Amsterdam, Netherlands

12 *University of Bern*, February 15, **2022**, Bern, Switzerland

11 *IST Austria*, January 27, **2022**, Klosterneuburg, Austria

10 *University of Geneva*, December 14, **2021**, Geneva, Switzerland

9 *RWTH Aachen*, November 12, **2021**, Aachen, Germany

8 *University of Potsdam*, May 21, **2021**, Potsdam, Germany

7 *University of Padua & University of Trieste*, December 3, **2020**, Virtual Seminar

6 *WWU Münster*, November 26, **2020**, Virtual Seminar

5 *Free University of Berlin*, June 18, **2020**, Virtual Seminar

4 *University of Graz*, October 2, **2019**, Graz, Austria

3 *University of Potsdam*, June 26, **2019**, Potsdam, Germany

2 *Technical University of Berlin*, October 18, **2017**, Berlin, Germany

1 *Max Planck Institute for Colloids and Interfaces*, July 28, **2015**, Potsdam, Germany

LECTURES AT CONFERENCES, SYMPOSIA & WORKSHOPS

Upcoming

16 **Invited lecture:** *KAUST Research Conference 2023: Advances in Sustainable Catalysis*, February 13-16, **2023**, Thuwal, Saudi Arabia

Past

15 **Invited lecture:** *Japanese-American-German Frontiers of Science Symposium*, September 15-18, **2022**, Irvine, CA, USA

14 *29. Nachwuchswissenschaftler-Symposium (Bio)Organische Chemie*, August 3-5, **2022**, Karlsruhe, Germany

13 *Chemiedozententagung*, March 21-23, **2022**, Saarbrücken, Germany

- 12 *The Florida Heterocyclic and Synthetic Chemistry Conference*, March 6-9, **2022**, Gainesville, FL, USA
- 11 **Invited lecture:** *Symposium of the Chemistry, Physics and Technology Section - Max Planck Society*, November 3, **2021**, Virtual Event
- 10 *Chemiedozententagung*, March 15-17, **2021**, Rostock, Germany (virtual event)
- 9 **Invited lecture:** *Austrian Chemistry Days*, September 24, **2019**, Linz, Austria
- 8 *Ringberg Conference*, September 2-6, **2019**, Kreuth, Germany
- 7 *Chemiedozententagung*, March 18-20, **2019**, Koblenz, Germany
- 6 *IMPRS Autumn Workshop*, October 11, **2018**, Potsdam, Germany
- 5 *7th Biomolecular Systems Day*, December 13, **2018**, Potsdam, Germany
- 4 *Ringberg Conference*, September 25-29, **2017**, Kreuth, Germany
- 3 *16th Brazilian Meeting on Organic Synthesis*, November 15-18, **2015**, Búzios, Brazil
- 2 *248th ACS National Meeting & Exposition*, August 10-14, **2014**, San Francisco, CA, USA
- 1 *Doc Days*, June 5-6, **2013**, Graz, Austria

Publications

FIVE MOST IMPORTANT PUBLICATIONS - ALL PUBLISHED AS AN INDEPENDENT PI

- 1) C. Cavedon, S. Gisbertz, S. Reischauer, S. Vogl, E. Sperlich, J. H. Burke, R. F. Wallick, S. Schrottke, W.-Hs. Hsu, L. Anghileri, Y. Pfeifer, N. Richter, C. Teutloff, H. Müller-Werkmeister, D. Cambié, P. H. Seeberger, J. Vura-Weis, R. M. van der Veen,* A. Thomas, **B. Pieber,*** Intraligand Charge Transfer Enables Visible-Light-Mediated Nickel-Catalyzed Cross-Coupling Reactions. *Angewandte Chemie International Edition* **2022**, 61, e202211433.
→ *We demonstrate visible-light mediated carbon-heteroatom cross-couplings can be carried out using the photoactive precatalyst Ni(czbpy)Cl₂. Theoretic and spectroscopic investigations revealed that irradiation of Ni(czbpy)Cl₂ with visible-light causes an initial intra-ligand charge transfer event that triggers productive catalysis. Ligand polymerization affords a porous, recyclable organic polymer for heterogeneous nickel catalysis. The heterogeneous catalyst shows stable performance in a packed-bed flow reactor during a week of continuous operation.*
- 2) S. Gisbertz, S. Reischauer, **B. Pieber,*** Overcoming Limitations in Dual Photoredox/Nickel-catalysed C–N Cross-Couplings due to Catalyst Deactivation. *Nature Catalysis* **2020**, 3, 611–620.
→ *From a mechanistic perspective, the well-known limitation of metallaphotocatalytic C–N cross-couplings to electron-poor aryl bromides is not understood. We discovered that the origin of this limitation is catalyst deactivation. Using a mechanistically-driven approach, we overcame this problem and significantly expanded the scope of this important widely used transformation.*
- 3) S. Reischauer, V. Strauss, **B. Pieber,*** Modular, Self-assembling Metallaphotocatalyst for Cross Couplings using the full Visible-light Spectrum. *ACS Catalysis*, **2020**, 10, 13269–13274.
→ *Inspired by work on solar cells, I hypothesized that depositing a dye and a nickel complex on TiO₂ would enable the use of dyes with short excited state lifetimes for light-mediated cross-couplings. We showed that this is indeed possible for C–O, C–S, C–N, and C–C cross-couplings. This approach also enabled us to use dyes that absorb at long wavelengths, which was key to avoid selectivity issues for some substrates.*
- 5) L. Schmermund, S. Reischauer, S. Bierbaumer, C. K. Winkler, A. Diaz-Rodriguez, L. J. Edwards, S. Kara, T. Mielke, J. Cartwright, G. Grogan, **B. Pieber,*** W. Kroutil,* Chromoselective Photocatalysis Enables Stereocomplementary Biocatalytic Pathways. *Angewandte Chemie International Edition*, **2021**, 60, 6965–6969.
→ *I assumed the oxidation potential of a photocatalyst can be controlled via the irradiation wavelength and anticipated that this would allow the powerful combination of photo- and biocatalysis. I initiated a collaboration with the group of Prof. Kroutil to demonstrate this. Together, we developed photo-/biocatalytic cascades that, depending on the wavelength and enzyme, produce different enantiomers.*
- 5) C. Cavedon, E. Sletten, A. Madani, O. Niemeyer, P. H. Seeberger,* **B. Pieber,*** Visible-Light-Mediated Oxidative Debenzylation Enables the Use of Benzyl Ethers as Temporary Protecting Groups. *Organic Letters*, **2021**, 23, 514–518.
→ *The carbohydrate chemists at MPICI looked for a debenzylation method with a high functional group compatibility to enable new strategies for glycan synthesis. I was keen to solve this challenge and led a collaboration with the carbohydrate group of Prof. Seeberger that resulted in a mild photocatalytic method that meets all requirements.*

PUBLICATION RECORD SUMMARY

- Co-author of **40 scientific publications (+ 4 submitted)** :
 - 30 research articles (+ 4 submitted)** - 10 x first author, 18 x corresponding author
 - 7 reviews** - 3 x first author, 4 x corresponding author
 - 1 perspective** - 1 x first author
 - 1 essay**
 - 1 book chapter**
- Inventor on **2 patents**.

The impact of my work is well reflected by typical bibliographic indicators: Overall, my publications have received **2569 citations**, an **average of ~69 citations per article**, giving me a **Hirsch index of 24** (Web of Science, September 10, 2022).

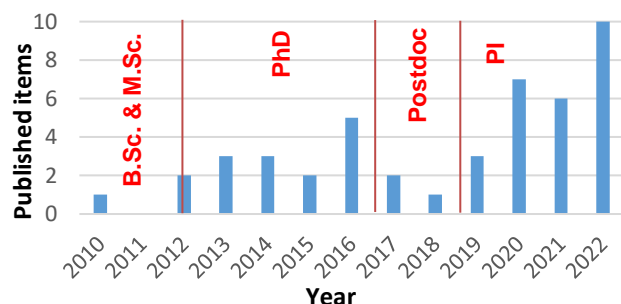


Figure 1. Published items per year (incl. submitted, 10.9.2022)

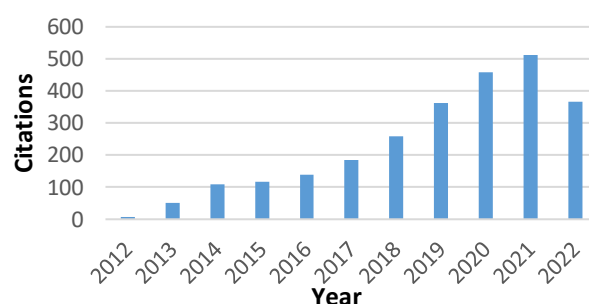


Figure 2. Citations per year (Web of Science; 20.5.2022)

RESEARCH ARTICLES

- 30 C. Cavedon, S. Gisbertz, S. Reischauer, S. Vogl, E. Sperlich, J. H. Burke, R. F. Wallick, S. Schrottke, W.-Hs. Hsu, L. Anghileri, Y. Pfeifer, N. Richter, C. Teutloff, H. Müller-Werkmeister, D. Cambié, P. H. Seeberger, J. Vura-Weis, R. M. van der Veen,* A. Thomas, **B. Pieber,*** Intraligand Charge Transfer Enables Visible-Light-Mediated Nickel-Catalyzed Cross-Coupling Reactions. *Angewandte Chemie International Edition* **2022**, *61*, e202211433.
- 29 W.-H. Su, S. Reischauer, P. H. Seeberger, **B. Pieber,*** D. Cambie,* Heterogeneous metallaphotoredox catalysis in a continuous-flow packed bed reactor. *Beilstein Journal of Organic Chemistry* **2022**, *18*, 1123-1130.
- 28 A. Madani, L. Anghileri, M. Heydenreich, H. M. Möller, **B. Pieber,*** Benzylic Fluorination Induced by a Charge-Transfer Complex with a Solvent-Dependent Selectivity Switch. *Organic Letters* **2022**, *24*, 5376-5380.
- 27 M. Traxler, S. Gisbertz, P. Pachfule, J. Schmidt, J. Roeser, S. Reischauer, J. Rabeah, **B. Pieber,*** A. Thomas,* Acridine Functionalized Covalent Organic Frameworks (COFs) as Photocatalysts for Metallaphotocatalytic C-N cross-coupling. *Angewandte Chemie International Edition* **2022**, *61*, e202117738
- 26 Z. Zhao, S. Reischauer **B. Pieber,*** M. Delbianco,* Carbon dot/TiO₂ nanocomposites as photocatalysts for metallaphotocatalytic carbon-heteroatom cross-couplings. *Green Chemistry* **2021**, *23*, 4524-4530
- 25 S. Reischauer, **B. Pieber,*** Recyclable, bifunctional metallaphotocatalysts for C-S cross-couplings. *ChemPhotoChem*, **2021**, *5*, 716-720.
- 24 L. Schmermund, S. Reischauer, S. Bierbaumer, C. K. Winkler, A. Diaz-Rodriguez, L. J. Edwards, S. Kara, T. Mielke, J. Cartwright, G. Grogan, **B. Pieber,*** W. Kroutil,* Chromoselective Photocatalysis Enables Stereocomplementary Biocatalytic Pathways. *Angewandte Chemie International Edition*, **2021**, *60*, 6965-6969 (preprint available via ChemRxiv. <https://doi.org/10.26434/chemrxiv.13521527.v1>)

- 23 C. Cavedon, E. Sletten, A. Madani, O. Niemeyer, P. H. Seeberger,* **B. Pieber,*** Visible-Light-Mediated Oxidative Debenzylation Enables the Use of Benzyl Ethers as Temporary Protecting Groups. *Organic Letters*, **2021**, *23*, 514-518 (preprint available via *ChemRxiv*. <https://doi.org/10.26434/chemrxiv.13135814.v1>)
- 22 S. Reischauer, V. Strauss, **B. Pieber,*** Modular, self-assembling metallaphotocatalyst for cross couplings using the full visible-light spectrum. *ACS Catalysis*, **2020**, *10*, 13269-13274. (preprint available via *ChemRxiv*. <https://doi.org/10.26434/chemrxiv.13135814.v1>)
- 21 S. Gisbertz, S. Reischauer, **B. Pieber,*** Overcoming Limitations in Dual Photoredox/Nickel-catalysed C–N Cross-Couplings due to Catalyst Deactivation. *Nature Catalysis* **2020**, *3*, 611-620. (preprint available via *ChemRxiv*. <https://doi.org/10.26434/chemrxiv.10298735.v1>)
- 20 J. A. Malik, A. Madani, **B. Pieber,*** P. H. Seeberger,* Evidence for Photocatalyst Involvement in Oxidative Additions of Nickel-Catalyzed Carboxylate *O*-Arylations. *Journal of the American Chemical Society* **2020**, *142*, 11042-11049 (preprint available via *ChemRxiv*. <https://doi.org/10.26434/chemrxiv.11973141.v1>)
- 19 C. Rosso, S. Gisbertz, J.D. Williams, H.P.L. Gemoets, W. Debrouwer, **B. Pieber,*** C. O. Kappe,* An oscillatory plug flow photoreactor facilitates semi-heterogeneous dual nickel/carbon nitride photocatalytic C-N couplings. *Reaction Chemistry & Engineering* **2020**, *5*, 597-604.
- 18 S. Mazzanti, B. Kurpil, **B. Pieber**, M. Antonietti, A. Savateev,* Dichloromethylation of Enones by Carbon Nitride Photocatalysis. *Nature Communications*, **2020**, *11*, 1387.
- 17 M. Guberman, **B. Pieber**, P. H. Seeberger* Safe and Scalable Continuous Flow Azidophenylselenylation of Galactal to Prepare Galactosamine Building Blocks. *Organic Process and Research Development* **2019**, *23*, 2764-2770.
- 16 C. Cavedon, A. Madani, P. H. Seeberger, **B. Pieber,*** Semi-Heterogeneous Dual Nickel/Photocatalytic (Thio)Etherification using Carbon Nitrides. *Organic Letters* **2019**, *21*, 5331-5334. (preprint available via *ChemRxiv*. <https://doi.org/10.26434/chemrxiv.8231144.v1>)
- 15 **B. Pieber,*** J. A. Malik, C. Cavedon, S. Gisbertz, A. Savateev, D. Cruz, T. Heil, G. Zhang, P. H. Seeberger, Semi-Heterogeneous Dual Nickel/Photo-catalysis using Carbon Nitrides: Esterification of Carboxylic Acids with Aryl Halides. *Angewandte Chemie International Edition* **2019**, *58*, 9575-9580
- 14 **B. Pieber**, M. Shalom, M. Antonietti, P. H. Seeberger,* K. Gilmore,* Continuous Heterogeneous Photoredox Catalysis in Serial Micro-Batch reactors. *Angewandte Chemie International Edition* **2018**, *57*, 9976-9979.
- 13 **B. Pieber,*** C. O. Kappe,* Generation and Synthetic Application of Trifluoromethyl Diazomethane Utilizing Continuous Flow Technologies. *Organic Letters* **2016**, *18*, 1076-1079.
- 12 **B. Pieber**, P. D. Cox, C. O. Kappe,* Selective Olefin Reduction of Thebaine Using Hydrazine Hydrate and O₂ under Intensified Continuous Flow Conditions. *Organic Process Research & Development* **2016**, *20*, 376-385.
- 11 J. L. Monteiro, **B. Pieber**, A. G. Corrêa, C. O. Kappe,* Continuous Synthesis of Hydantoins: Intensifying the Bucherer-Bergs Reaction. *Synlett* **2016**, *27*, 83-87.
- 10 C. E. M. Salvador, **B. Pieber**, P. M. Neu, A. Torvisco, C. K. Z. Andrade, C. O. Kappe,* A Sequential Ugi Multicomponent/Cu-Catalyzed Azide-Alkyne Cycloaddition Approach for the Continuous Flow Generation of Cyclic Peptoids. *Journal of Organic Chemistry* **2015**, *80*, 4590-4602.

- 9 **B. Pieber**, T. Glasnov, C. O. Kappe,* Continuous Flow Reduction of Artemisinin Acid Utilizing Multi-Injection Strategies – Closing the Gap Toward a Fully Continuous Synthesis of Antimalaria Drugs. *Chemistry a European Journal* **2015**, *21*, 4368-4376.
- 8 M. M. Moghaddam, **B. Pieber**, T. Glasnov, C. O. Kappe,* Immobilized Iron Oxide Nanoparticles as Stable and Reusable Catalysts for Hydrazine-mediated Nitro Reductions in Continuous Flow. *ChemSusChem* **2014**, *7*, 3122-3131.
- 7 F. F. Hofbauer, F. H. Schopf, H. Schleifer, O. L. Knittelfelder, **B. Pieber**, G. N. Rechberger, H. Wolinski, M. L. Gaspar, C. O. Kappe, J. Stadlmann, K. Mechtler, A. Zenz, K. Lohner, O. Tehlivets, S. A. Henry, S. D. Kohlwein,* Regulation of Gene Expression through a Transcriptional Repressor that Senses Acyl-Chain length in Membrane Phospholipids. *Developmental Cell* **2014**, *29*, 729-739.
- 6 **B. Pieber**, T. N. Glasnov, C. O. Kappe,* Flash Carboxylation: Fast Lithiation – Carboxylation Sequence at Room Temperature in Continuous Flow. *RSC Advances* **2014**, *4*, 13430-13433.
- 5 **B. Pieber**, S. Teixeira Martinez, D. Cantillo C. O. Kappe,* *In situ* Generation of Diimide from Hydrazine and Oxygen – Transfer Hydrogenation of Olefins in Continuous Flow. *Angewandte Chemie International Edition* **2013**, *52*, 10241-10244.
- 4 **B. Pieber**, C. O. Kappe,* Direct aerobic oxidation of 2-benzylpyridines in a gas-liquid continuous-flow regime using propylene carbonate as solvent. *Green Chemistry* **2013**, *15*, 320-324.
- 3 G. S. Kumar, **B. Pieber**, K. R. Reddy,* C. O. Kappe,* Copper-Catalyzed Formation of C-O Bonds by Direct α -C-H Bond Activation of Ethers Using Stoichiometric Amounts of Peroxide in Batch and Continuous-Flow Formats. *Chemistry a European Journal* **2012**, *18*, 6124-6128.
- 2 **B. Pieber**, D. Cantillo, C. O. Kappe,* Direct Arylation of Benzene with Aryl Bromides using High-Temperature/High-Pressure Process Windows: Expanding the Scope of C-H Activation Chemistry. *Chemistry a European Journal* **2012**, *18*, 5047-5055.
- 1 **B. Pieber**, S. Schober, C. Göbl, M. Mittelbach,* Rapid and sensitive determination of steryl glycosides in biodiesel by gas chromatography-mass spectroscopy. *Journal of Chromatography A* **2010**, *1217*, 6555-6561

SUBMITTED RESEARCH ARTICLES

- 4 E. T. Sletten, C. Cavedon, P. H. Seeberger,* **B. Pieber**,* Visible-light-mediated oxidative debenzoylation of 3-O-benzyl-1,2:5,6-di-O-isopropylidene- α -D-glucopyranose, *under revision*.
- 3 Z. Zhao, **B. Pieber**,* M. Delbianco,* Modulating the surface and photophysical properties of carbon dots to access colloidal photocatalysts for cross-couplings, *under revision*.
- 2 M. Traxler, S. Reischauer, S. Vogl, J. Roeser, J. Rabeah, C. Penschke, P. Saalfrank, **B. Pieber**,* A. Thomas,* Programmable Photocatalytic Activity of Multivariate Covalent Organic Frameworks (COFs) used as Metallaphotocatalysts, *under revision*.
- 1 E. Lepre, S. Rat, C. Cavedon, P.H. Seeberger, **B. Pieber**, M. Antonietti, N. López-Salas,* Catalytic properties of high nitrogen content carbonaceous materials, *under revision*.

REVIEWS

- 7 E. T. Sletten, P. H. Seeberger, **B. Pieber**,* tert-Butyl Nitrite (First Update). *Encyclopedia of Reagents for Organic Synthesis*, **2022**, <https://doi.org/10.1002/047084289X.rn01922.pub2>
- 6 S. Reischauer, **B. Pieber**,* Emerging Concepts in Photocatalytic Organic Synthesis. *iScience*, **2021**, *24*, 102209.

- 5 S. Gisbertz, **B. Pieber,*** Heterogeneous photocatalysis in organic synthesis. *ChemPhotoChem* **2020**, *4*, 456-475.
- 4 C. Cavedon, Peter. H. Seeberger, **B. Pieber,*** Photochemical Strategies for Carbon-Heteroatom Bond Formation. *European Journal of Organic Chemistry* **2020**, 1379-1392.
- 3 M. B. Plutschak^a, **B. Pieber^a**, K. Gilmore,* P. H. Seeberger,* The Hitchhikers Guide to Flow Chemistry. *Chemical Reviews* **2017**, *117*, 11796-11893. [^acontributed equally]
- 2 **B. Pieber**, C. O. Kappe,* Taming "Forbidden" Olefin Reductions Using Hydrazine and Oxygen by Continuous Flow Technology. *Chimica Oggi/Chemistry Today* **2016**, *34*, 38-42.
- 1 **B. Pieber**, C. O. Kappe, Aerobic Oxidations in Continuous Flow. *Topics in Organometallic Chemistry* **2016**, *57*, 97-136

ESSAYS, COMMENTARIES, PERSPECTIVES, ETC.

- 2 **B. Pieber**, K. Gilmore,* P. H. Seeberger,* Integrated Flow Processing – Challenges in Continuous Multistep Synthesis. *Journal of Flow Chemistry* **2017**, *7*, 129-136
- 1 C. O. Kappe,* **B. Pieber**, D. Dallinger, Microwave Effects in Organic Synthesis – Myth or Reality. *Angewandte Chemie International Edition* **2013**, *52*, 1088-1094.

BOOK CHAPTERS

- 1 **B. Pieber**, Photocatalytic Continuous-Flow Methods for C-H Functionalization. *Handbook of C-H Functionalization*, **2022**, in press

PATENTS

- 2 K. Gilmore, P. H. Seeberger, S. Chatterjee, **B. Pieber**, Modular Continuous Flow Device. WO 2017/148874.
- 1 P. D. Cox, C. O. Kappe, **B. Pieber**, Selective reduction of morphinan alkaloids. US 2017/0137432 A1.

MISCELLANEOUS

- 3 **Cover Profile:** S. Gisbertz, **B. Pieber**, Heterogeneous Photocatalysis in Organic Synthesis. *ChemPhotoChem*, **2020**, *4*, 452.
- 2 **Journal Cover:** S. Gisbertz, **B. Pieber**, Heterogeneous Photocatalysis in Organic Synthesis. *ChemPhotoChem*, **2020**, *4*, 451.
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