

# Curriculum Vitae

## PERSONAL DATA

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Name: **Bartholomäus Pieber**  
Citizenship: Austria  
Date of Birth: February, 5<sup>th</sup> 1988  
Research ID: M-1449-2019  
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Homepage: <http://www.pieberlab.com>; <http://www.mpikg.mpg.de/catalysis>  
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## EXPERIENCE

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Jan. 2018 – present **Group Leader** at the Max Planck Institute of Colloids and Interfaces, Potsdam, Germany  
April 2020 – present **Lecturer (Dozent)** at the University of Potsdam, Germany  
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

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August, 20<sup>th</sup> 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, 24<sup>th</sup> 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, 31<sup>st</sup> 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**

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- 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

## **FELLOWSHIPS & GRANTS**

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**Total third-party funding granted: 827 700 €**

- 2021 - 2024 Research Grant - German Science Foundation (*DFG*, 219 800 €)
- 2019 - 2022 Project leader, Cluster of Excellence, Unifying Systems in Catalysis (UniSysCat) - German Science Foundation - German Excellence Initiative (*DFG*, 201 350 €)
- 2018 - 2021 Project leader, International Max Planck Research School on Multiscale Bio-Systems (*MPI*, 132 000 €)
- 2018 - 2022 Liebig Fellowship - German chemical Industry Funds (*VCI*, 266 600 €, *tax-free*)

## **AWARDS**

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- 2020 Thieme Chemistry Journals Award (*Thieme*)
- 2018 Brandenburg Post-Doc Award (*Ministry of Science, Research & Cultural Affairs*)
- 2018 Science Award of the Austrian Chemical Society (*GÖCH & Chemistry Monthly*)
- 2017 Inventor Award (*University of Graz*)
- 2016 Doctoral Thesis Award of the 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**

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- 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**

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- 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

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- Since 2018 Supervisor of 6 PhD students, 3 Master students, 2 Bachelor student
- 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

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<u>Name</u>	<u>Role</u>	<u>Current Position</u>
Sebastian Gisbertz	PhD Student (2018 – 2021)	Advanced Scientist, Momentive
Cristian Cavedon	PhD Student (2018 – 2021)	Postdoc, MIT - Jamison Group,
Noah Richter	Bachelor Student (2020)	MSc Student, LMU Munich;

## ORGANIZATION OF SCIENTIFIC EVENTS

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- 2019 Organization of the "Ringberg Conference 2019", September 2-6. **2019**, Kreuth, Germany
- 2018 Organization of the "7<sup>th</sup> Biomolecular Systems Day", December 13<sup>th</sup>, **2018**, Potsdam, Germany
- 2014 Organization of the "DocDays & Summer School 2014" June 5-6, **2013**, Graz, Austria

## REFEREE FOR SCIENTIFIC JOURNALS

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*Nature Catalysis, Journal of the American Chemical Society, Angewandte Chemie International Edition, Nature Synthesis Science Advances, Nature Communications, JACS Au, ACS Sustainable Chemistry & Engineering, 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

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

**INVITED LECTURES AND PRESENTATIONS**

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- 15 **B. Pieber**, The Wavelength Matters. *University of Bern*, February 15, **2022**, Bern, Switzerland
- 14 **B. Pieber**, The Wavelength Matters. *IST Austria*, January 27, **2022**, Klosterneuburg, Austria
- 13 **B. Pieber**, The Wavelength Matters. *University of Geneva*, December 14, **2021**, Geneva, Switzerland
- 12 **B. Pieber**, The Wavelength Matters. *RWTH Aachen*, November 12, **2021**, Aachen, Germany
- 11 **B. Pieber**, The Wavelength Matters – Controlling the selectivity of photocatalytic reactions with light. *Symposium of the Chemistry, Physics and Technology Section - Max Planck Society*, November 3, **2021**, Virtual Event
- 10 **B. Pieber**, An Organic Chemist's View on Photocatalysis. *University of Potsdam*, May 21, **2021**, Potsdam, Germany
- 9 **B. Pieber**, The Overlooked Role of Oxidative Addition in Metallaphotocatalysis. *University of Padua & University of Trieste*, December 3, **2020**, Virtual Seminar
- 8 **B. Pieber**, The Overlooked Role of Oxidative Addition in Metallaphotocatalysis. *WWU Münster*, November 26, **2020**, Virtual Seminar
- 7 **B. Pieber**, The Overlooked Role of Oxidative Addition in Metallaphotocatalysis. *Free University of Berlin*, June 18, **2020**, Virtual Seminar
- 6 **B. Pieber**, Heterogeneous Photocatalysis using Graphitic Carbon Nitrides. *University of Graz*, October 2, **2019**, Graz, Austria
- 5 **B. Pieber**, Heterogeneous Photocatalysis using Graphitic Carbon Nitrides. *Austrian Chemistry Days*, September 24, **2019**, Linz, Austria
- 4 **B. Pieber**, Heterogeneous Photocatalysis using Graphitic Carbon Nitrides. *University of Potsdam*, June 26, **2019**, Potsdam, Germany
- 3 **B. Pieber**, Selective protein modifications using heterogeneous photoredox catalysis. *IMPRS Autumn Workshop*, October 11, **2018**, Potsdam, Germany
- 2 **B. Pieber**, Continuous Heterogeneous Photoredox Catalysis in Serial-Micro Batch Reactors. *Technical University of Berlin*, October 18, **2017**, Berlin, Germany
- 1 **B. Pieber**, Organic Reactions in Multiphase Continuous Flow Regimes. *Max Planck Institute for Colloids and Interfaces*, July 28, **2015**, Potsdam, Germany

**ORAL PRESENTATIONS AT CONFERENCES**

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- 8 **B. Pieber**, The Overlooked Role of Oxidative Addition in Metallaphotocatalysis, *Chemiedozententagung*, March 15-17, **2021**, Rostock, Germany (virtual event)
- 7 **B. Pieber**, Cross-Coupling Reactions using Heterogeneous Photocatalysis. *Ringberg Conference*, September 2-6, **2019**, Kreuth, Germany
- 6 **B. Pieber**, Heterogeneous Photoredox Catalysis using Graphitic Carbon Nitrides, *Chemiedozententagung*, March 18-20, **2019**, Koblenz, Germany
- 5 **B. Pieber**, Carbon-Heteroatom Cross-Couplings using Heterogeneous Photocatalysis, *7<sup>th</sup> Biomolecular Systems Day*, December 13, **2018**, Potsdam, Germany
- 4 **B. Pieber**, Unpacking the Bed – Heterogeneous Photocatalysis in Serial Micro-Batch Reactors. *Ringberg Conference*, September 25-29, **2017**, Kreuth, Germany

- 3 **B. Pieber**, T. Glasnov, C. O. Kappe, Continuous Olefin Reduction using Diimide for Semi-Synthetic Pharmaceuticals. *16<sup>th</sup> Brazilian Meeting on Organic Synthesis*, November 15-18, **2015**, Búzios, Brazil
- 2 **B. Pieber**, C. O. Kappe, *In Situ* Generation of Diimide from Hydrazine and Oxygen: Continuous-Flow Transfer Hydrogenation of Olefins. *248<sup>th</sup> ACS National Meeting & Exposition*, August 10-14, **2014**, San Francisco, CA, USA
- 1 **B. Pieber**, S. Teixeira Martinez, D. Cantillo, C. O. Kappe, Hydrogenation of Olefins Using *in situ* generated Diimide in Continuous Flow. *Doc Days*, June 5-6, **2013**, Graz, Austria

## Publications

### **FIVE MOST IMPORTANT PUBLICATIONS - ALL PUBLISHED AS AN INDEPENDENT PI**

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- 1) 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.*
  
- 2) 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 TiO<sub>2</sub> 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.*
  
- 3) 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.*
  
- 4) 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.*
  
- 5) **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  
→ *Our pioneering work to use heterogeneous photocatalysts for metallaphotocatalysis (the first experiments were carried out during my postdoc; hence Seeberger is an author) included studies on the scope of this reaction, recycling studies with detailed characterization of the catalyst, and a reaction monitoring study.*

## PUBLICATION RECORD SUMMARY

- Co-author of **38 scientific publications:**
  - 28 research articles** (10 x first author, 13 x corresponding author)
  - 7 reviews** (3 x first author, 3 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 **2227 citations**, an **average of ~64 citations per article**, giving me a **Hirsch index of 22** (Web of Science, February 24, 2022).

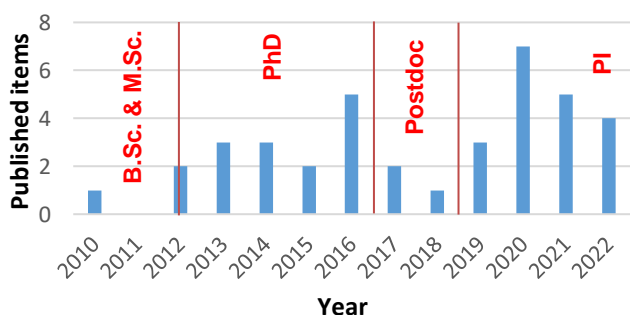


Figure 1. Published items per year

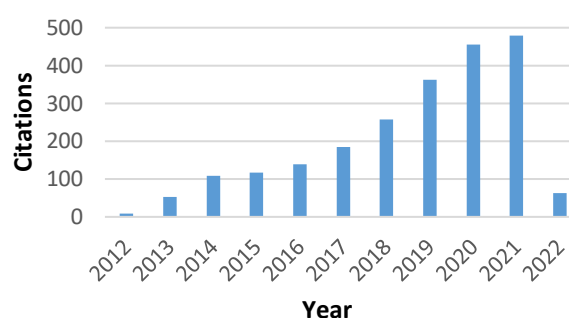


Figure 2. Citations per year (Web of Science; 24.2.2022)

## RESEARCH ARTICLES

- 28 C. Cavedon, S. Gisbertz, S. Vogl, N. Richter, S. Schrottke, C. Teutloff, P. H. Seeberger, A. Thomas,\* **B. Pieber,\*** Photocatalyst-free, visible-light-mediated nickel catalyzed carbon-heteroatom cross-couplings. *ChemRxiv*, DOI: 10.33774/chemrxiv-2021-kt2wr
- 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. *Angew. Chem. Int. Ed.* **2022**, <https://doi.org/10.1002/anie.202117738>
- 26 Z. Zhao, S. Reischauer **B. Pieber,\*** M. Delbianco,\* Carbon dot/TiO<sub>2</sub> 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 in Thebaine Using Hydrazine Hydrate and O<sub>2</sub> 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  $\alpha$ -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

## REVIEWS

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- 7 E. T. Sletten, P. H. Seeberger, **B. Pieber**,\* tert-Butyl Nitrite (First Update). *Encyclopedia of Reagents for Organic Synthesis*, in press.
- 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<sup>a</sup>, **B. Pieber**<sup>a</sup>, K. Gilmore,\* P. H. Seeberger,\* The Hitchhikers Guide to Flow Chemistry. *Chemical Reviews* **2017**, *117*, 11796-11893. [<sup>a</sup>contributed 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.

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- 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

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

## PATENTS

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- 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

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- 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.
- 1 K. Gilmore,\* **B. Pieber**, P. H. Seeberger, Controlled Conditions, Controlled Chemistry. *Max Planck Society Yearbook* **2017**, www.mpg.de [in German]