

## List of publications: Prof. Dr. Walter Leitner

### 2023

- Han, C., Zenner, J., Johny, J., Kaeffer, N., Bordet, A., **Leitner, W.** (2023). Electrocatalytic hydrogenation of alkenes with Pd/carbon nanotubes at an oil-water interface. *Nature Catalysis* [doi:10.1038/s41929-022-0088](https://doi.org/10.1038/s41929-022-0088)
- Mengers, H. G., Guntermann, N., von Westarp, W. G., Jupke, A., Klankermayer, J., Blank, L. M., **Leitner, W.**, Rother, D. (2023). Three Sides of the Same Coin: Combining Microbial, Enzymatic, and Organometallic Catalysis for Integrated Conversion of Renewable Carbon Sources. *Chemie-Ingenieur-Technik* [doi:10.1002/cite.202200169](https://doi.org/10.1002/cite.202200169).

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- Kalsi, D., Louis Anandaraj, J. L., Durai, M., Weidenthaler, C., Emondts, M., Nolan, S. P., Bordet, A., **Leitner, W.** (2022). One-Pot Multicomponent Synthesis of Allyl and Alkylamines Using a Catalytic System Composed of Ruthenium Nanoparticles on Copper *N*-Heterocyclic Carbene-Modified Silica *ACS Catalysis* <https://doi.org/10.1021/acscatal.2c04044>
- Kuss, D. A., Hölscher, M., **Leitner, W.** (2022). Combined Computational and Experimental Investigation on the Mechanism of CO<sub>2</sub> Hydrogenation to Methanol with Mn-PNP-Pincer Catalysts. *ACS Catalysis* [doi:10.1021/acscatal.2c04806](https://doi.org/10.1021/acscatal.2c04806).
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- Ehmann, K. R., Nisters, A., Vorholt, A. J., **Leitner, W.** (2022) Carbon Dioxide Hydrogenation to Formic Acid with Self-Separating Product and Recyclable Catalyst Phase *ChemCatChem* [10.1002/cctc.202200892](https://doi.org/10.1002/cctc.202200892)
- Guntermann, N., Francio, G., **Leitner, W.** (2022). Hydrogenation of CO<sub>2</sub> to formic acid in biphasic systems using aqueous solutions of amino acids as the product phase. *Green Chemistry* [doi:10.1039/d2gc02598a](https://doi.org/10.1039/d2gc02598a).
- Rösler, T., Betting, J., Püschel, S., Vorholt, A. J., **Leitner, W.** (2022) Solvent Design for the Catalyst Recycling of Rhodium/Amine Catalysts via scCO<sub>2</sub> Extraction in the Reductive Hydroformylation of Alpha Olefins *Green Chemistry* [10.1039/D2GC01252A](https://doi.org/10.1039/D2GC01252A)
- Strohmam, M., Vorholt, A. J., **Leitner, W.** (2022) Branched Tertiary Amines from  $\alpha$ -Olefins by Combined Multiphase Tandem Reactions *CHEMISTRY A EUROPEAN JOURNAL* [10.1002/chem.202202081](https://doi.org/10.1002/chem.202202081)
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- Kliemann, M. N., Teeuwen, S., Weike, C., Francio, G., **Leitner, W.** (2022). Rhodium-Catalyzed Asymmetric Hydrohydrazonemethylation of Styrenes: Access to Chiral Hydrazones, Hydrazides, Hydrazines and Amines. *Advanced Synthesis & Catalysis* [doi:10.1002/adsc.202200804](https://doi.org/10.1002/adsc.202200804)
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- Lee, M.-Y., Kahl, C., Kaeffer, N., **Leitner, W.** (2022). Electrocatalytic Semihydrogenation of Alkynes with  $[\text{Ni}(\text{bpy})_3]^{2+}$  *JACS Au* <https://pubs.acs.org/doi/10.1021/jacsau.1c00574>
- Sisodiya, S., Van Stappen, C., Rengshausen, S., Han, C., Sodreau, A., Weidenthaler, C., Tricard, S., DeBeer, S., Chaudret, B., Bordet, A., **Leitner, W.** (2022). Bimetallic  $\text{M}_x\text{Ru}_{100-x}$  Nanoparticles (M = Fe, Co) on Supported Ionic Liquid Phases ( $\text{M}_x\text{Ru}_{100-x}@\text{SILP}$ ) as Hydrogenation Catalysts: Influence of M and M:Ru ratio on Activity and Selectivity *Journal of Catalysis* <https://doi.org/10.1016/j.jcat.2022.01.030>
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- Schrimpf, M., Graefe, P. A., Kaczyna, A. E., Vorholt, A. J., **Leitner, W.** (2022) Measuring droplet sizes generated by 3D-printed stirrers in a lean gas-liquid-liquid system using borescopy *IC&E*. [10.1021/acs.iecr.1c03707](https://doi.org/10.1021/acs.iecr.1c03707)
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