

List of publications: Prof. Dr. Walter Leitner

2020

- Rengshausen, S., Van Stappen, C., Levin, N., Tricard, S., Luska, K.L., DeBeer, S., Chaudret, B., Bordet, A., **Leitner, W.** (2020). Organometallic Synthesis of Bimetallic Cobalt-Rhodium Nanoparticles in Supported Ionic Liquid Phases ($\text{Co}_x\text{Rh}_{100-x}\text{@SILP}$) as Catalysts for the Selective Hydrogenation of Multifunctional Aromatic Substrates *Small* <https://doi.org/10.1002/smll.202006683>
- Weidener, D, **Leitner, W.**, Domínguez de María, P., Klose, H., Grande, P.M. (2020). Lignocellulose fractionation using recyclable phosphoric acid: Lignin, cellulose and furfural production. *ChemSusChem* <https://doi.org/10.1002/cssc.202002383>
- Kaithal, A., Hölscher, M., **Leitner, W.** (2020). Carbon monoxide and hydrogen (syngas) as a C1-building block for selective catalytic methylation *Chemical Science* <https://doi.org/10.1039/D0SC05404F>
- Kaithal, A., Kalsi, D., Krishnakumar, V., Pattanaik, S., Bordet, A., **Leitner, W.**, Gunanathan, C. (2020). Ruthenium-Catalyzed Selective Hydroboronolysis of Ethers *ACS Catalysis* 10(24), 14390-14397. <https://doi.org/10.1021/acscatal.0c04269>
- Voit, G., Jenthra, S., Hölscher, M., Weyhermüller, T., **Leitner, W.** (2020). Reversible Insertion of Carbon Dioxide at Phosphine Sulfonamido Pd^{II} -Aryl Complexes *Organometallics* 39(24), 4465-4473. <https://doi.org/10.1021/acs.organomet.0c00560>
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- Strohmam, M., Vossen, J.T., Vorholt, A.J., **Leitner, W.** (2020). Recycling of two molecular catalysts in the hydroformylation/aldol condensation tandem reaction using one multiphase system *Green Chemistry* 22(23), 8444-8451. <https://doi.org/10.1039/D0GC03392H>
- Kacem, S., Emondts, M., Bordet, A., **Leitner, W.** (2020). Selective hydrogenation of fluorinated arenes using rhodium nanoparticles on molecularly modified silica *Catalysis Science & Technology* 10(23), 8120-8126. <https://doi.org/10.1039/D0CY01716G>
- Pandey, P., Daw, P., Din Reshi, N.U., Ehmann, K.R., Hölscher, M., **Leitner, W.**, Bera, J.K. (2020). A Proton-Responsive Annulated Mesoionic Carbene (MIC) Scaffold on Ir Complex for Proton/Hydride Shuttle: An Experimental and Computational Investigation on Reductive Amination of Aldehyde *Organometallics* 39(21), 3849-3863. <https://doi.org/10.1021/acs.organomet.0c00568>
- Weidener, D., Dama, M., Dietrich, S.K., Ohrem, B., Pauly, M., **Leitner, W.**, Domínguez de Maria, P., Grande, P.M., Klose, H. (2020). Multiscale analysis of lignocellulose recalcitrance towards OrganoCat pretreatment and fractionation *Biotechnology for Biofuels* 13, 155. <https://doi.org/10.1186/s13068-020-01796-8>
- Hussong, C., Langanke, J., **Leitner, W.** (2020). A green route to polyurethanes: oxidative carbonylation of industrially relevant aromatic diamines by CO_2 -based methyl formate *Green Chemistry* 22(23), 8260-8270. <https://doi.org/10.1039/D0GC02412K>
- Hussong, C., Langanke, J., **Leitner, W.** (2020). Carbon2Polymer: A CO_2 -based Route to Polyurethanes via Oxidative Carbonylation of TDA with Methyl Formate *Chemie Ingenieur Technik* 92(10), 1482-1488. <https://doi.org/10.1002/cite.202000031>

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- Chatterjee, B., Kalsi, D., Kaithal, A., Bordet, A., **Leitner, W.**, Gunanathan, C. (2020). One-pot dual catalysis for the hydrogenation of heteroarenes and arenes *Catalysis Science & Technology* <https://doi.org/10.1039/D0CY00928H>
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- Esteban, J., Vorholt, A.J., **Leitner, W.** (2020). An overview of the biphasic dehydration of sugars to 5-hydroxymethylfurfural and furfural: a rational selection of solvents using COSMO-RS and selection guides *Green Chemistry* 22(7), 2097-2128. <https://doi.org/10.1039/C9GC04208C>
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- Kaithal, A., Schmitz, M., Hölscher, M., **Leitner, W.** (2020). On the mechanism of the Ruthenium-catalyzed β -methylation of alcohols with methanol *ChemCatChem* 12(3), 781-787. <https://doi.org/10.1002/cctc.201901871>

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