

# Stephan Bartling

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/431545/publications.pdf>

Version: 2024-02-01

43  
papers

887  
citations

516710

16  
h-index

501196

28  
g-index

43  
all docs

43  
docs citations

43  
times ranked

1087  
citing authors

#	ARTICLE	IF	CITATIONS
1	The 3D-architecture of individual free silver nanoparticles captured by X-ray scattering. <i>Nature Communications</i> , 2015, 6, 6187.	12.8	82
2	Alumina-supported sub-nanometer Pt <sub>10</sub> clusters: amorphization and role of the support material in a highly active CO oxidation catalyst. <i>Journal of Materials Chemistry A</i> , 2017, 5, 4923-4931.	10.3	72
3	Elucidating the Nature of Active Sites and Fundamentals for their Creation in Zn-Containing ZrO <sub>2</sub> -Based Catalysts for Nonoxidative Propane Dehydrogenation. <i>ACS Catalysis</i> , 2020, 10, 8933-8949.	11.2	62
4	General and Chemoselective Copper Oxide Catalysts for Hydrogenation Reactions. <i>ACS Catalysis</i> , 2019, 9, 4302-4307.	11.2	56
5	Scalable and selective deuteration of (hetero)arenes. <i>Nature Chemistry</i> , 2022, 14, 334-341.	13.6	56
6	Structure-Activity-Selectivity Relationships in Propane Dehydrogenation over Rh/ZrO <sub>2</sub> Catalysts. <i>ACS Catalysis</i> , 2020, 10, 6377-6388.	11.2	47
7	Tiny Species with Big Impact: High Activity of Cu Single Atoms on CeO <sub>2</sub> -TiO <sub>2</sub> Deciphered by <i>in Operando</i> Spectroscopy. <i>ACS Catalysis</i> , 2021, 11, 10933-10949.	11.2	39
8	Supported Cobalt Nanoparticles for Hydroformylation Reactions. <i>Chemistry - A European Journal</i> , 2019, 25, 5534-5538.	3.3	34
9	Revisiting Activity- and Selectivity-Enhancing Effects of Water in the Oxidative Coupling of Methane over MnO <sub>x</sub> -Na <sub>2</sub> WO <sub>4</sub> /SiO <sub>2</sub> and Proving for Other Materials. <i>ACS Catalysis</i> , 2020, 10, 8751-8764.	11.2	33
10	Effect of Cerium Promoters on an MCM-41-Supported Nickel Catalyst in Dry Reforming of Methane. <i>Industrial &amp; Engineering Chemistry Research</i> , 2022, 61, 164-174.	3.7	33
11	Effect of Chemical Solvents on the Wetting Behavior Over Time of Femtosecond Laser Structured Ti6Al4V Surfaces. <i>Nanomaterials</i> , 2020, 10, 1241.	4.1	30
12	The effect of supported Rh, Ru, Pt or Ir nanoparticles on activity and selectivity of ZrO <sub>2</sub> -based catalysts in non-oxidative dehydrogenation of propane. <i>Applied Catalysis A: General</i> , 2020, 602, 117731.	4.3	27
13	Synergistic effect of VO <sub>x</sub> and MnO <sub>x</sub> surface species for improved performance of V <sub>2</sub> O <sub>5</sub> /Ce <sub>0.5</sub> Ti <sub>0.5</sub> xMnxO <sub>2</sub> catalysts in low-temperature NH <sub>3</sub> -SCR of NO. <i>Catalysis Science and Technology</i> , 2018, 8, 6360-6374.	4.1	24
14	Effects of N <sub>2</sub> O and Water on Activity and Selectivity in the Oxidative Coupling of Methane over MnO <sub>2</sub> -Na <sub>2</sub> WO <sub>4</sub> /SiO <sub>2</sub> : Role of Oxygen Species. <i>ACS Catalysis</i> , 2022, 12, 1298-1309.	11.2	20
15	Structural Reconstruction in Lead-Free Two-Dimensional Tin Iodide Perovskites Leading to High Quantum Yield Emission. <i>ACS Energy Letters</i> , 2022, 7, 975-983.	17.4	19
16	Cobalt-catalysed CH-alkylation of indoles with alcohols by borrowing hydrogen methodology. <i>Green Chemistry</i> , 2022, 24, 4566-4572.	9.0	19
17	Pronounced Size Dependence in Structure and Morphology of Gas-Phase Produced, Partially Oxidized Cobalt Nanoparticles under Catalytic Reaction Conditions. <i>ACS Nano</i> , 2015, 9, 5984-5998.	14.6	17
18	Esterification of sugarcane bagasse by citric acid for Pb <sup>2+</sup> adsorption: effect of different chemical pretreatment methods. <i>Environmental Science and Pollution Research</i> , 2021, 28, 11869-11881.	5.3	17

#	ARTICLE	IF	CITATIONS
19	Color Tuning of Electrochromic TiO <sub>2</sub> Nanofibrous Layers Loaded with Metal and Metal Oxide Nanoparticles for Smart Colored Windows. ACS Applied Nano Materials, 2021, 4, 8600-8610.	5.0	17
20	Heat accumulation during femtosecond laser treatment at high repetition rate – A morphological, chemical and crystallographic characterization of self-organized structures on Ti6Al4V. Applied Surface Science, 2021, 570, 151115.	6.1	17
21	Influence of MoS <sub>2</sub> on Activity and Stability of Carbon Nitride in Photocatalytic Hydrogen Production. Catalysts, 2019, 9, 695.	3.5	15
22	Operando detection of single nanoparticle activity dynamics inside a model pore catalyst material. Science Advances, 2020, 6, eaba7678.	10.3	14
23	Efficient Base Nickel-Catalyzed Hydrogenolysis of Furfural-Derived Tetrahydrofurfuryl Alcohol to 1,5-Pentanediol. ACS Sustainable Chemistry and Engineering, 2022, 10, 4954-4968.	6.7	14
24	Additive-Free Nickel-Catalyzed Debenzylation Reactions via Hydrogenative C=O and C=N Bond Cleavage. ACS Sustainable Chemistry and Engineering, 2019, 7, 17107-17113.	6.7	12
25	Iron/N-doped graphene nano-structured catalysts for general cyclopropanation of olefins. Chemical Science, 2020, 11, 6217-6221.	7.4	12
26	Biomolecule-derived supported cobalt nanoparticles for hydrogenation of industrial olefins, natural oils and more in water. Green Chemistry, 2019, 21, 5104-5112.	9.0	11
27	TiO <sub>2</sub> -Supported catalysts with ZnO and ZrO <sub>2</sub> for non-oxidative dehydrogenation of propane: mechanistic analysis and application potential. Catalysis Science and Technology, 2020, 10, 7046-7055.	4.1	11
28	Towards a practical perfluoroalkylation of (hetero)arenes with perfluoroalkyl bromides using cobalt nanocatalysts. Catalysis Science and Technology, 2020, 10, 1731-1738.	4.1	10
29	Copper-catalysed low-temperature water-gas shift reaction for selective deuteration of aryl halides. Chemical Science, 2021, 12, 14033-14038.	7.4	10
30	Oxygen vacancies in Ru/TiO <sub>2</sub> - drivers of low-temperature CO <sub>2</sub> methanation assessed by multimodal operando spectroscopy. IScience, 2022, 25, 103886.	4.1	10
31	Manganese-Catalysed Deuterium Labelling of Anilines and Electron-Rich (Hetero)Arenes. Angewandte Chemie - International Edition, 2022, 61, .	13.8	9
32	Effects of modifier (Gd, Sc, La) addition on the stability of low Ni content catalyst for dry reforming of model biogas. Fuel, 2022, 312, 122823.	6.4	8
33	Elucidating the effects of individual components in K <sub>x</sub> MnO <sub>y</sub> /SiO <sub>2</sub> and water on selectivity enhancement in the oxidative coupling of methane. Catalysis Science and Technology, 2021, 11, 5827-5838.	4.1	6
34	Diastereoselective hydrogenation of arenes and pyridines using supported ruthenium nanoparticles under mild conditions. Chemical Communications, 2022, 58, 8842-8845.	4.1	6
35	Enhanced photocatalytic performance of polymeric carbon nitride through combination of iron loading and hydrogen peroxide treatment. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2020, 589, 124383.	4.7	5
36	Morphological impact on the reaction kinetics of size-selected cobalt oxide nanoparticles. Journal of Chemical Physics, 2015, 143, 114301.	3.0	3

#	ARTICLE	IF	CITATIONS
37	Bimetallic Ag-Pt Subnanometer Supported Clusters as Highly Efficient and Robust Oxidation Catalysts. <i>Angewandte Chemie</i> , 2018, 130, 1223-1227.	2.0	3
38	Shedding Light on CO Oxidation Surface Chemistry on Single Pt Catalyst Nanoparticles Inside a Nanofluidic Model Pore. <i>ACS Catalysis</i> , 2021, 11, 2021-2033.	11.2	3
39	Generation of Cobalt-Containing Nanoparticles on Carbon via Pyrolysis of a Cobalt Corrole and Its Application in the Hydrogenation of Nitroarenes. <i>Catalysts</i> , 2022, 12, 11.	3.5	3
40	Heterogeneously Catalysed Oxidative Dehydrogenation of Menthol in a Fixed-Bed Reactor in the Gas Phase. <i>ChemistryOpen</i> , 2019, 8, 1066-1075.	1.9	1
41	Ex situ investigations of MOCVD-grown gallium nitride nanowires using reflection high energy electron diffraction. <i>IOP Conference Series: Materials Science and Engineering</i> , 2011, 23, 012038.	0.6	0
42	The solvent determines the product in the hydrogenation of aromatic ketones using unligated $\text{RhCl}_3$ as catalyst precursor. <i>Catalysis Science and Technology</i> , 2021, 11, 7608-7616.	4.1	0
43	Manganese-Catalysed Deuterium Labelling of Anilines and Electron-Rich (Hetero)Arenes. <i>Angewandte Chemie</i> , 0, , .	2.0	0