Johannes Hendrik Bitter

List of Publications by Year
in descending order

117 papers	11,133 citations	44069 48 h-index	29157 104 g-index
122 all docs	122 docs citations	122 times ranked	10878 citing authors

#	Article	IF	Citations
1	Napins and cruciferins in rapeseed protein extracts have complementary roles in structuring emulsion-filled gels. Food Hydrocolloids, 2022, 125, 107400.	10.7	11
2	Concentration-dependent effects of nickel doping on activated carbon biocathodes. Catalysis Science and Technology, 2022, 12, 2500-2518.	4.1	5
3	Carbohydrate structureâ€“activity relations of Au-catalysed base-free oxidations: gold displaying a platinum lustre. RSC Advances, 2022, 12, 8918-8923.	3.6	1
4	The Use of Virtual Reality in A Chemistry Lab and Its Impact on Studentsâ€™ Self-Efficacy, Interest, Self-Concept and Laboratory Anxiety. Eurasia Journal of Mathematics, Science and Technology Education, 2022, 18, em2090.	1.3	3
5	Environmental Impact Evaluation for Heterogeneously Catalysed Starch Oxidation. ChemistryOpen, 2022, 11, e202200029.	1.9	5
6	Starch controls brittleness in emulsion-gels stabilized by pea flour. Food Hydrocolloids, 2022, 131, 107708.	10.7	9
7	Recent Advances in Polybenzimidazole Membranes for Hydrogen Purification. Industrial & Engineering Chemistry Research, 2022, 61, 6125-6134.	3.7	20
8	A sustainable and efficient recycling strategy of feather waste into keratin peptides with antimicrobial activity. Waste Management, 2022, 144, 421-430.	7.4	13
9	Hollow protein microparticles formed through cross-linking by an Au³⁺ initiated redox reaction. Journal of Materials Chemistry B, 2022, 10, 6287-6295.	5.8	3
10	Adsorption of rapeseed proteins at oil/water interfaces. Janus-like napins dominate the interface. Journal of Colloid and Interface Science, 2021, 583, 459-469.	9.4	31
11	Catalytic Cooperation between a Copper Oxide Electrocatalyst and a Microbial Community for Microbial Electrosynthesis. ChemPlusChem, 2021, 86, 763-777.	2.8	5
12	The influence of Î±-1,4-glucan substrates on 4,6-Î±-d-glucanotransferase reaction dynamics during isomalto/malto-polysaccharide synthesis. International Journal of Biological Macromolecules, 2021, 181, 762-768.	7.5	8
13	Jammed Emulsions with Adhesive Pea Protein Particles for Elastoplastic Edible 3D Printed Materials. Advanced Functional Materials, 2021, 31, 2101749.	14.9	23
14	Digestibility of resistant starch type 3 is affected by crystal type, molecular weight and molecular weight distribution. Carbohydrate Polymers, 2021, 265, 118069.	10.2	21
15	Effect of Support Surface Properties on CO₂ Capture from Air by Carbon-Supported Potassium Carbonate. Industrial & Engineering Chemistry Research, 2021, 60, 13749-13755.	3.7	10
16	Cyclic Voltammetry is Invasive on Microbial Electrosynthesis. ChemElectroChem, 2021, 8, 3384-3396.	3.4	9
17	Phosphorus Induced Electron Localization of Single Iron Sites for Boosted CO₂ Electroreduction Reaction. Angewandte Chemie, 2021, 133, 23806-23810.	2.0	22
18	Phosphorus Induced Electron Localization of Single Iron Sites for Boosted CO₂ Electroreduction Reaction. Angewandte Chemie - International Edition, 2021, 60, 23614-23618.	13.8	197

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19	Au³⁺-Induced gel network formation of proteins. Soft Matter, 2021, 17, 9682-9688.	2.7	3
20	Jammed Emulsions with Adhesive Pea Protein Particles for Elastoplastic Edible 3D Printed Materials (Adv. Funct. Mater. 45/2021). Advanced Functional Materials, 2021, 31, 2170336.	14.9	0
21	Not sequentially but simultaneously: Facile extraction of proteins and oleosomes from oilseeds. Food Hydrocolloids, 2020, 102, 105598.	10.7	54
22	Pea flour as stabilizer of oil-in-water emulsions: Protein purification unnecessary. Food Hydrocolloids, 2020, 101, 105533.	10.7	51
23	On the Emulsifying Properties of Self-Assembled Pea Protein Particles. Langmuir, 2020, 36, 12221-12229.	3.5	45
24	Molybdenum and tungsten carbides can shine too. Catalysis Science and Technology, 2020, 10, 6089-6097.	4.1	20
25	Reaction Stages of Feather Hydrolysis: Factors That Influence Availability for Enzymatic Hydrolysis and Cystine Conservation during Thermal Pressure Hydrolysis. Biotechnology and Bioprocess Engineering, 2020, 25, 749-757.	2.6	4
26	CO₂ Conversion by Combining a Copper Electrocatalyst and Wildâ€type Microorganisms. ChemCatChem, 2020, 12, 3900-3912.	3.7	8
27	Synthesis and characterization of a supported Pd complex on carbon nanofibers for the selective decarbonylation of stearic acid to 1-heptadecene: the importance of subnanometric Pd dispersion. Catalysis Science and Technology, 2020, 10, 2970-2985.	4.1	6
28	Exploring the Treasure of Plant Molecules With Integrated Biorefineries. Frontiers in Plant Science, 2019, 10, 478.	3.6	7
29	Activated Carbon, Carbon Nanofibers and Carbon-Covered Alumina as Support for W2C in Stearic Acid Hydrodeoxygenation. ChemEngineering, 2019, 3, 24.	2.4	6
30	Influence of synthesis method on molybdenum carbide crystal structure and catalytic performance in stearic acid hydrodeoxygenation. Applied Catalysis B: Environmental, 2019, 241, 81-88.	20.2	57
31	Enzymatic fingerprinting of isomalto/malto-polysaccharides. Carbohydrate Polymers, 2019, 205, 279-286.	10.2	19
32	Isomalto/malto-polysaccharide structure in relation to the structural properties of starch substrates. Carbohydrate Polymers, 2018, 185, 179-186.	10.2	21
33	High Rate Biomethanation of Carbon Monoxide-Rich Gases via a Thermophilic Synthetic Coculture. ACS Sustainable Chemistry and Engineering, 2018, 6, 2169-2176.	6.7	31
34	The effect of meâ€substituents of 1,4â€butanediol analogues on the thermal properties of biobased polyesters. Journal of Polymer Science Part A, 2018, 56, 1903-1906.	2.3	9
35	From batch to continuous: Au-catalysed oxidation of <scp>d</scp>-galacturonic acid in a packed bed plug flow reactor under alkaline conditions. Reaction Chemistry and Engineering, 2018, 3, 540-549.	3.7	4
36	Synthesis of Furandicarboxylic Acid Esters From Nonfood Feedstocks Without Concomitant Levulinic Acid Formation. ChemSusChem, 2017, 10, 1460-1468.	6.8	28

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37	Unusual differences in the reactivity of glutamic and aspartic acid in oxidative decarboxylation reactions. Green Chemistry, 2017, 19, 5178-5186.	9.0	5
38	The Future of Ethenolysis in Biobased Chemistry. ChemSusChem, 2017, 10, 470-482.	6.8	54
39	Conversion of polyhydroxyalkanoates to methyl crotonate using whole cells. Bioresource Technology, 2016, 211, 267-272.	9.6	13
40	Mechanochemical Immobilisation of Metathesis Catalysts in a Metalâ€“Organic Framework. Chemistry - A European Journal, 2016, 22, 15437-15443.	3.3	21
41	Effect of initial nickel particle size on stability of nickel catalysts for aqueous phase reforming. Journal of Energy Chemistry, 2016, 25, 289-296.	12.9	27
42	Stability of Transitionâ€metal Carbides in Liquid Phase Reactions Relevant for Biomassâ€Based Conversion. ChemCatChem, 2015, 7, 2816-2823.	3.7	23
43	Selective terminal Câ€“C scission of C5-carbohydrates. Green Chemistry, 2015, 17, 3900-3909.	9.0	13
44	Deoxygenation of biobased molecules by decarboxylation and decarbonylation â€“ a review on the role of heterogeneous, homogeneous and bio-catalysis. Green Chemistry, 2015, 17, 3231-3250.	9.0	167
45	Analysis of sustainability metrics and application to the catalytic production of higher alcohols from ethanol. Catalysis Today, 2015, 239, 56-79.	4.4	45
46	Structureâ€“performance relations of molybdenum- and tungsten carbide catalysts for deoxygenation. Green Chemistry, 2015, 17, 582-593.	9.0	121
47	Kinetics and mechanism of 5-hydroxymethylfurfural oxidation and their implications for catalyst development. Journal of Molecular Catalysis A, 2014, 388-389, 123-132.	4.8	89
48	Transformations of polyols to organic acids and hydrogen in aqueous alkaline media. Catalysis Science and Technology, 2014, 4, 2353-2366.	4.1	41
49	Cobalt particle size effects on catalytic performance for ethanol steam reforming â€“ Smaller is better. Journal of Catalysis, 2014, 318, 67-74.	6.2	134
50	Toward stable nickel catalysts for aqueous phase reforming of biomass-derived feedstock under reducing and alkaline conditions. Journal of Catalysis, 2014, 319, 27-35.	6.2	53
51	Effects of loading and synthesis method of titania-supported cobalt catalysts for Fischerâ€“Tropsch synthesis. Catalysis Today, 2014, 228, 89-95.	4.4	61
52	Reaction Pathways for the Deoxygenation of Vegetable Oils and Related Model Compounds. ChemSusChem, 2013, 6, 1576-1594.	6.8	267
53	Calcium Oxide Supported on Monoclinic Zirconia as a Highly Active Solid Base Catalyst. ChemCatChem, 2013, 5, 3621-3628.	3.7	12
54	Comparison of Tungsten and Molybdenum Carbide Catalysts for the Hydrodeoxygenation of Oleic Acid. ACS Catalysis, 2013, 3, 2837-2844.	11.2	163

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55	Functionalized Carbon Nanofibers as Solidâ€Acid Catalysts for Transesterification. ChemSusChem, 2013, 6, 1668-1672.	6.8	49
56	Enhancing the Activity of Pd on Carbon Nanofibers for Deoxygenation of Amphiphilic Fatty Acid Molecules through Support Polarity. ACS Catalysis, 2013, 3, 2397-2402.	11.2	34
57	Carbon Nanofiber Supported Transitionâ€Metal Carbide Catalysts for the Hydrodeoxygenation of Guaiacol. ChemCatChem, 2013, 5, 2964-2972.	3.7	180
58	Effects of sodium and sulfur on catalytic performance of supported iron catalysts for the Fischerâ€"Tropsch synthesis of lower olefins. Journal of Catalysis, 2013, 303, 22-30.	6.2	217
59	Effect of precursor on the catalytic performance of supported iron catalysts for the Fischerâ€"Tropsch synthesis of lower olefins. Catalysis Today, 2013, 215, 95-102.	4.4	76
60	Tungstenâ€Based Catalysts for Selective Deoxygenation. Angewandte Chemie - International Edition, 2013, 52, 5089-5092.	13.8	115
61	Carbon Nanofiber-Supported K₂CO₃ as an Efficient Low-Temperature Regenerable CO₂ Sorbent for Post-Combustion Capture. Industrial & Engineering Chemistry Research, 2013, 52, 12812-12818.	3.7	18
62	Supported La₂O₃ and MgO Nanoparticles as Solid Base Catalysts for Aldol Reactions While Suppressing Dehydration at Room Temperature. ChemCatChem, 2013, 5, 594-600.	3.7	20
63	The World of Catalysisâ€"A Perspective from The Netherlands. ChemCatChem, 2013, 5, 359-360.	3.7	0
64	Ligand control in thiol stabilized Au38 clusters. RSC Advances, 2012, 2, 2276.	3.6	50
65	Selective deoxygenation of stearic acid via an anhydride pathway. RSC Advances, 2012, 2, 9387.	3.6	35
66	Iron Particle Size Effects for Direct Production of Lower Olefins from Synthesis Gas. Journal of the American Chemical Society, 2012, 134, 16207-16215.	13.7	390
67	Supported Iron Nanoparticles as Catalysts for Sustainable Production of Lower Olefins. Science, 2012, 335, 835-838.	12.6	1,001
68	The role of Ni in increasing the reversibility of the hydrogen release from nanoconfined LiBH4. Faraday Discussions, 2011, 151, 47.	3.2	61
69	How NO Affects Nickel and Cobalt Nitrates at Low Temperatures To Arrive at Highly Dispersed Silica-Supported Nickel and Cobalt Catalysts. Journal of Physical Chemistry C, 2011, 115, 3332-3339.	3.1	48
70	Copper Nitrate Redispersion To Arrive at Highly Active Silica-Supported Copper Catalysts. Journal of Physical Chemistry C, 2011, 115, 14698-14706.	3.1	112
71	Lanthanum Oxide Supported on Carbon Nanofibers as Solid Base Catalysts. ChemCatChem, 2011, 3, 1193-1199.	3.7	16
72	A Highly Active and Selective Manganese Oxide Promoted Cobalt-on-Silica Fischerâ€"Tropsch Catalyst. Topics in Catalysis, 2011, 54, 768-777.	2.8	57

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73	Oxidation of methane to methanol and formaldehyde over Coâ€"ZSM-5 molecular sieves: Tuning the reactivity and selectivity by alkaline and acid treatments of the zeolite ZSM-5 agglomerates. Microporous and Mesoporous Materials, 2011, 138, 176-183.	4.4	96
74	Oxidative steam reforming of ethanol over carbon nanofiber supported Co catalysts. Catalysis Today, 2011, 164, 262-267.	4.4	37
75	Partial Oxidation of Methane Over Co-ZSM-5: Tuning the Oxygenate Selectivity by Altering the Preparation Route. Catalysis Letters, 2010, 136, 52-56.	2.6	88
76	Cu-ZSM-5 Zeolites for the Formation of Methanol from Methane and Oxygen: Probing the Active Sites and Spectator Species. Catalysis Letters, 2010, 138, 14-22.	2.6	152
77	Design of supported cobalt catalysts with maximum activity for the Fischerâ€"Tropsch synthesis. Journal of Catalysis, 2010, 270, 146-152.	6.2	170
78	Thin layer of carbon-nano-fibers (CNFs) as catalyst support for fast mass transfer in hydrogenation of nitrite. Applied Catalysis A: General, 2010, 383, 24-32.	4.3	53
79	On the Influence and Role of Alkali Metals on Supported and Unsupported Activated Hydrotalcites for CO₂ Sorption. Industrial & Engineering Chemistry Research, 2010, 49, 8086-8093.	3.7	54
80	Support and Size Effects of Activated Hydrotalcites for Precombustion CO₂Capture. Industrial & Engineering Chemistry Research, 2010, 49, 1229-1235.	3.7	98
81	DRIFTS/MS/Isotopic Labeling Study on the NO-Moderated Decomposition of a Silica-Supported Nickel Nitrate Catalyst Precursor. Journal of Physical Chemistry C, 2010, 114, 7839-7845.	3.1	17
82	Nanostructured carbons in catalysis a Janus materialâ€"industrial applicability and fundamental insights. Journal of Materials Chemistry, 2010, 20, 7312.	6.7	102
83	Lactose oxidation over palladium catalysts supported on active carbons and on carbon nanofibres. Research on Chemical Intermediates, 2009, 35, 155-174.	2.7	14
84	Reducibility of Platinum Supported on Nanostructured Carbons. Topics in Catalysis, 2009, 52, 424-430.	2.8	14
85	Activity of Nitrogen Containing Carbon Nanotubes in Base Catalyzed Knoevenagel Condensation. Topics in Catalysis, 2009, 52, 1575-1583.	2.8	42
86	On the Origin of the Cobalt Particle Size Effects in Fischerâ^'Tropsch Catalysis. Journal of the American Chemical Society, 2009, 131, 7197-7203.	13.7	699
87	Electrocatalytic Activity and Stability of Nitrogen-Containing Carbon Nanotubes in the Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2009, 113, 14302-14310.	3.1	530
88	On the Nature of Oxygen-Containing Surface Groups on Carbon Nanofibers and Their Role for Platinum Depositionâ€"An XPS and Titration Study. Journal of Physical Chemistry C, 2009, 113, 9865-9869.	3.1	104
89	Iron impregnation on the amorphous shell of vapor grown carbon fibers and the catalytic growth of secondary nanofibers. Diamond and Related Materials, 2009, 18, 13-19.	3.9	6
90	Influence of Reaction Parameters on the Hydrogenolysis of Hydroxymatairesinol Over Carbon Nanofibre Supported Palladium Catalysts. Catalysis Letters, 2008, 125, 8-13.	2.6	13

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91	Catalytic Hydrogenâ€Chlorine Exchange between Chlorinated Hydrocarbons under Oxygenâ€Free Conditions. Angewandte Chemie - International Edition, 2008, 47, 5002-5004.	13.8	21
92	Particle size effects for carbon nanofiber supported platinum and ruthenium catalysts for the selective hydrogenation of cinnamaldehyde. Applied Catalysis A: General, 2008, 351, 9-15.	4.3	159
93	Sodium Alanate Nanoparticles â^' Linking Size to Hydrogen Storage Properties. Journal of the American Chemical Society, 2008, 130, 6761-6765.	13.7	220
94	XAFS Study of the Al K-Edge in NaAlH4. Journal of Physical Chemistry C, 2007, 111, 11721-11725.	3.1	10
95	Active Ti Species in TiCl3-Doped NaAlH4. Mechanism for Catalyst Deactivation. Journal of Physical Chemistry C, 2007, 111, 2797-2802.	3.1	86
96	Dehydrogenation of hydroxymatairesinol to oxomatairesinol over carbon nanofibre-supported palladium catalysts. Journal of Molecular Catalysis A, 2007, 274, 42-49.	4.8	31
97	The influence of acidity of carbon nanofibre-supported palladium catalysts in the hydrogenolysis of hydroxymatairesinol. Catalysis Letters, 2007, 113, 141-146.	2.6	22
98	On the Nature and Accessibility of the BrÃ¸nsted-Base Sites in Activated Hydrotalcite Catalysts. Journal of Physical Chemistry B, 2006, 110, 9211-9218.	2.6	88
99	Cobalt Particle Size Effects in the Fischerâ^'Tropsch Reaction Studied with Carbon Nanofiber Supported Catalysts. Journal of the American Chemical Society, 2006, 128, 3956-3964.	13.7	1,318
100	Support effects in hydrogenation of cinnamaldehyde over carbon nanofiber-supported platinum catalysts: Kinetic modeling. Chemical Engineering Science, 2005, 60, 5682-5695.	3.8	105
101	Deposition Precipitation for the Preparation of Carbon Nanofiber Supported Nickel Catalysts. Journal of the American Chemical Society, 2005, 127, 13573-13582.	13.7	196
102	The influence of oxidation on the texture and the number of oxygen-containing surface groups of carbon nanofibers. Carbon, 2004, 42, 307-315.	10.3	288
103	Preparation of Carbon Nanofiber Supported Platinum and Ruthenium Catalysts:â€‰ Comparison of Ion Adsorption and Homogeneous Deposition Precipitation. Journal of Physical Chemistry B, 2004, 108, 11611-11619.	2.6	109
104	Pd L3edge XANES investigation of the electronic and geometric structure of Pd/Agâ€"H membranes. Physical Chemistry Chemical Physics, 2004, 6, 3903-3906.	2.8	20
105	Monitoring the Location, Amount, and Nature of Carbonaceous Deposits on Aged Zeolite Ferrierite Crystals by Using STEM-EELS. Chemistry - A European Journal, 2003, 9, 3106-3111.	3.3	12
106	Generation, Characterization, and Impact of Mesopores in Zeolite Catalysts. Catalysis Reviews - Science and Engineering, 2003, 45, 297-319.	12.9	743
107	Cu K-Edge EXAFS Characterisation of Copper(I) Arenethiolate Complexes in both the Solid and Liquid State: Detection of Cuï£¿Cu Coordination. Chemistry - A European Journal, 2002, 8, 5667-5678.	3.3	31
108	Impact of the structure and reactivity of nickel particles on the catalytic growth of carbon nanofibers. Catalysis Today, 2002, 76, 33-42.	4.4	337

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109	Butene skeletal isomerization over H-ferrierite: a TEOM and in situ IR study on the role of carbonaceous deposits and the location of BrÃ¸nsted acid sites. Applied Catalysis A: General, 2002, 237, 149-159.	4.3	37
110	Investigation of vapor-phase silica deposition on MCM-41, using tetraalkoxysilanes. Microporous and Mesoporous Materials, 2002, 56, 101-109.	4.4	12
111	Probing the Accessible Sites for n-Butene Skeletal Isomerization over Aged and Selective H-Ferrierite with d3-Acetonitrile. Journal of Catalysis, 2002, 212, 86-93.	6.2	25
112	Understanding of Enhanced Oxygen Storage Capacity in Ce0.5Zr0.5O2:Â The Presence of an Anharmonic Pair Distribution Function in the Zrâ˘'O2Subshell as Analyzed by XAFS Spectroscopy. Journal of Physical Chemistry B, 2001, 105, 4810-4815.	2.6	82
113	The Nature of the Ptâ˘'H Bonding for Strongly and Weakly Bonded Hydrogen on Platinum. A XAFS Spectroscopy Study of the Ptâ˘'H Antibonding Shaperesonance and Ptâ˘'H EXAFS. Journal of Physical Chemistry B, 2001, 105, 4616-4622.	2.6	77
114	Deactivation of solid acid catalysts for butene skeletal isomerisation: on the beneficial and harmful effects of carbonaceous deposits. Applied Catalysis A: General, 2001, 212, 97-116.	4.3	116
115	Title is missing!. Topics in Catalysis, 2001, 16/17, 363-368.	2.8	30
116	The structural role of the copper-coordinating and surface-exposed histidine residue in the blue copper protein azurin 1 1Edited by R. Huber. Journal of Molecular Biology, 2000, 299, 737-755.	4.2	37
117	The assembling of a catalytic active copper site, in solution, followed by EXAFS. Journal of Synchrotron Radiation, 1999, 6, 423-424.	2.4	1