Ning Yan

List of Publications by Citations

242	13,990	62	110
papers	citations	h-index	g-index
279	16,798	9.1	7.24
ext. papers	ext. citations	avg, IF	L-index

#	Paper	IF	Citations
242	Sustainability: Don't waste seafood waste. *Nature*, **2015**, 524, 155-7	50.4	524
241	Selective degradation of wood lignin over noble-metal catalysts in a two-step process. *ChemSusChem*, **2008**, 1, 626-9	8.3	440
240	Ni-based bimetallic heterogeneous catalysts for energy and environmental applications. *Energy and Environmental Science*, **2016**, 9, 3314-3347	35.4	413
239	Thermally stable single atom Pt/m-AlO for selective hydrogenation and CO oxidation. *Nature Communications*, **2017**, 8, 16100	17.4	390
238	A Series of NiM (M = Ru, Rh, and Pd) Bimetallic Catalysts for Effective Lignin Hydrogenolysis in Water. *ACS Catalysis*, **2014**, 4, 1574-1583	13.1	351
237	Ultrathin rhodium nanosheets. *Nature Communications*, **2014**, 5, 3093	17.4	350
236	Transition metal nanoparticle catalysis in green solvents. *Coordination Chemistry Reviews*, **2010**, 254, 1179-1218	23.2	350
235	Stabilizing a Platinum1 Single-Atom Catalyst on Supported Phosphomolybdic Acid without Compromising Hydrogenation Activity. *Angewandte Chemie - International Edition*, **2016**, 55, 8319-23	16.4	294
234	Hydrodeoxygenation of lignin-derived phenols into alkanes by using nanoparticle catalysts combined with Br□sted acidic ionic liquids. *Angewandte Chemie - International Edition*, **2010**, 49, 5549-53	16.4	281
233	One-step conversion of cellobiose to C6-alcohols using a ruthenium nanocluster catalyst. *Journal of the American Chemical Society*, **2006**, 128, 8714-5	16.4	261
232	Toward understanding the growth mechanism: tracing all stable intermediate species from reduction of Au(I)-thiolate complexes to evolution of Au□nanoclusters. *Journal of the American Chemical Society*, **2014**, 136, 10577-80	16.4	255
231	Balancing the rate of cluster growth and etching for gram-scale synthesis of thiolate-protected Au(25) nanoclusters with atomic precision. *Angewandte Chemie - International Edition*, **2014**, 53, 4623-7	16.4	229
230	Recent advances in the synthesis and catalytic applications of ligand-protected, atomically precise metal nanoclusters. *Coordination Chemistry Reviews*, **2016**, 322, 1-29	23.2	229
229	Highly efficient, NiAu-catalyzed hydrogenolysis of lignin into phenolic chemicals. *Green Chemistry*, **2014**, 16, 2432-2437	10	201
228	Scalable and Precise Synthesis of Thiolated Au10□12, Au15, Au18, and Au25 Nanoclusters via pH Controlled CO Reduction. *Chemistry of Materials*, **2013**, 25, 946-952	9.6	197
227	Selective formic acid decomposition for high-pressure hydrogen generation: a mechanistic study. *Chemistry - A European Journal*, **2009**, 15, 3752-60	4.8	197
226	A novel platinum nanocatalyst for the oxidation of 5-Hydroxymethylfurfural into 2,5-Furandicarboxylic acid under mild conditions. *Journal of Catalysis*, **2014**, 315, 67-74	7.3	192

225	Production of Primary Amines by Reductive Amination of Biomass-Derived Aldehydes/Ketones. *Angewandte Chemie - International Edition*, **2017**, 56, 3050-3054	16.4	166
224	Direct conversion of chitin into a N-containing furan derivative. *Green Chemistry*, **2014**, 16, 2204-2212	10	163
223	Rational control of nano-scale metal-catalysts for biomass conversion. *Chemical Communications*, **2016**, 52, 6210-24	5.8	162
222	Aqueous-phase Fischer-Tropsch synthesis with a ruthenium nanocluster catalyst. *Angewandte Chemie - International Edition*, **2008**, 47, 746-9	16.4	154
221	Roles of thiolate ligands in the synthesis, properties and catalytic application of gold nanoclusters. *Coordination Chemistry Reviews*, **2018**, 368, 60-79	23.2	153
220	Advances in the Rational Design of Rhodium Nanoparticle Catalysts: Control via Manipulation of the Nanoparticle Core and Stabilizer. *ACS Catalysis*, **2012**, 2, 1057-1069	13.1	148
219	Cycloaddition of CO2 to epoxides catalyzed by imidazolium-based polymeric ionic liquids. *Green Chemistry*, **2013**, 15, 1584	10	147
218	Shell Biorefinery: Dream or Reality?. *Chemistry - A European Journal*, **2016**, 22, 13402-21	4.8	146
217	Progress in La-doped SrTiO3 (LST)-based anode materials for solid oxide fuel cells. *RSC Advances*, **2014**, 4, 118-131	3.7	130
216	Direct Synthesis of Hierarchically Porous Metal□Organic Frameworks with High Stability and Strong Brønsted Acidity: The Decisive Role of Hafnium in Efficient and Selective Fructose Dehydration. *Chemistry of Materials*, **2016**, 28, 2659-2667	9.6	127
215	The support effect on the size and catalytic activity of thiolated Au□nanoclusters as precatalysts. *Nanoscale*, **2015**, 7, 6325-33	7.7	122
214	Synthesis of a Sulfonated Two-Dimensional Covalent Organic Framework as an Efficient Solid Acid Catalyst for Biobased Chemical Conversion. *ChemSusChem*, **2015**, 8, 3208-12	8.3	122
213	How strong is hydrogen bonding in ionic liquids? Combined X-ray crystallographic, infrared/Raman spectroscopic, and density functional theory study. *Journal of Physical Chemistry B*, **2013**, 117, 9094-105	3.4	119
212	Downstream processing of lignin derived feedstock into end products. *Chemical Society Reviews*, **2020**, 49, 5510-5560	58.5	117
211	Transformation of Chitin and Waste Shrimp Shells into Acetic Acid and Pyrrole. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 3912-3920	8.3	117
210	Base promoted hydrogenolysis of lignin model compounds and organosolv lignin over metal catalysts in water. *Chemical Engineering Science*, **2015**, 123, 155-163	4.4	115
209	Transforming Energy with Single-Atom Catalysts. *Joule*, **2019**, 3, 2897-2929	27.8	115
208	In situ spectroscopy-guided engineering of rhodium single-atom catalysts for CO oxidation. *Nature Communications*, **2019**, 10, 1330	17.4	111

207	Graphene Oxide Catalyzed C-H Bond Activation: The Importance of Oxygen Functional Groups for Biaryl Construction. *Angewandte Chemie - International Edition*, **2016**, 55, 3124-8	16.4	108
206	Catalytic amino acid production from biomass-derived intermediates. *Proceedings of the National Academy of Sciences of the United States of America*, **2018**, 115, 5093-5098	11.5	107
205	Sustainable Routes for the Synthesis of Renewable Heteroatom-Containing Chemicals. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 5694-5707	8.3	104
204	Pd-Pb Alloy Nanocrystals with Tailored Composition for Semihydrogenation: Taking Advantage of Catalyst Poisoning. *Angewandte Chemie - International Edition*, **2015**, 54, 8271-4	16.4	103
203	Production of Terephthalic Acid from Corn Stover Lignin. *Angewandte Chemie - International Edition* , **2019**, 58, 4934-4937	16.4	95
202	Biphasic hydrogenation over PVP stabilized Rh nanoparticles in hydroxyl functionalized ionic liquids. *Inorganic Chemistry*, **2008**, 47, 7444-6	5.1	95
201	Base-catalysed, one-step mechanochemical conversion of chitin and shrimp shells into low molecular weight chitosan. *Green Chemistry*, **2017**, 19, 2783-2792	10	94
200	Atomically Dispersed Pt-Polyoxometalate Catalysts: How Does Metal-Support Interaction Affect Stability and Hydrogenation Activity?. *Journal of the American Chemical Society*, **2019**, 141, 8185-8197	16.4	90
199	Thermoresponsive polymers based on poly-vinylpyrrolidone: applications in nanoparticle catalysis. *Chemical Communications*, **2010**, 46, 1631-3	5.8	88
198	Kinetically controlled synthesis of two-dimensional Zr/Hf metal–organic framework nanosheets via a modulated hydrothermal approach. *Journal of Materials Chemistry A*, **2017**, 5, 8954-8963	13	85
197	Ionic-liquid-like copolymer stabilized nanocatalysts in ionic liquids: II. Rhodium-catalyzed hydrogenation of arenes. *Journal of Catalysis*, **2007**, 250, 33-40	7.3	83
196	Synthesis and characterization of an extractive-based bio-epoxy resin from beetle infested Pinus contorta bark. *Green Chemistry*, **2014**, 16, 3483-3493	10	81
195	Effect of Treatment Methods on Chitin Structure and Its Transformation into Nitrogen-Containing Chemicals. *ChemPlusChem*, **2015**, 80, 1565-1572	2.8	78
194	Sulfated Mesoporous Niobium Oxide Catalyzed 5-Hydroxymethylfurfural Formation from Sugars. *Industrial & Engineering Chemistry Research*, **2014**, 53, 14225-14233	3.9	77
193	Biomass valorisation over metal-based solid catalysts from nanoparticles to single atoms. *Chemical Society Reviews*, **2020**, 49, 3764-3782	58.5	76
192	Acid-Catalyzed Chitin Liquefaction in Ethylene Glycol. *ACS Sustainable Chemistry and Engineering*, **2014**, 2, 2081-2089	8.3	76
191	Highly selective hydrogenation of aromatic chloronitro compounds to aromatic chloroamines with ionic-liquid-like copolymer stabilized platinum nanocatalysts in ionic liquids. *Green Chemistry*, **2010**, 12, 228	10	75
190	Nanometallic chemistry: deciphering nanoparticle catalysis from the perspective of organometallic chemistry and homogeneous catalysis. *Dalton Transactions*, **2013**, 42, 13294-304	4.3	74

189	Conversion of chitin and N-acetyl-D-glucosamine into a N-containing furan derivative in ionic liquids. *RSC Advances*, **2015**, 5, 20073-20080	3.7	73
188	Conversion of chitin derived N-acetyl-D-glucosamine (NAG) into polyols over transition metal catalysts and hydrogen in water. *Green Chemistry*, **2015**, 17, 1024-1031	10	72
187	Development of palladium surface-enriched heteronuclear Au-Pd nanoparticle dehalogenation catalysts in an ionic liquid. *Chemistry - A European Journal*, **2013**, 19, 1227-34	4.8	70
186	Electrostatic Stabilization of Single-Atom Catalysts by Ionic Liquids. *CheM*, **2019**, 5, 3207-3219	16.2	68
185	Chitin-Derived Mesoporous, Nitrogen-Containing Carbon for Heavy-Metal Removal and Styrene Epoxidation. *ChemPlusChem*, **2015**, 80, 1556-1564	2.8	68
184	Tuning the Chemoselectivity of Rh Nanoparticle Catalysts by Site-Selective Poisoning with Phosphine Ligands: The Hydrogenation of Functionalized Aromatic Compounds. *ACS Catalysis*, **2012**, 2, 201-207	13.1	68
183	Acid-free regioselective aminocarbonylation of alkenes. *Chemical Communications*, **2014**, 50, 7848-51	5.8	66
182	Rhodium nanoparticle catalysts stabilized with a polymer that enhances stability without compromising activity. *Chemical Communications*, **2011**, 47, 2529-31	5.8	65
181	Harnessing the Wisdom in Colloidal Chemistry to Make Stable Single-Atom Catalysts. *Advanced Materials*, **2018**, 30, e1802304	24	62
180	pH-Sensitive gold nanoparticle catalysts for the aerobic oxidation of alcohols. *Inorganic Chemistry*, **2011**, 50, 11069-74	5.1	62
179	Defunctionalization of fructose and sucrose: Iron-catalyzed production of 5-hydroxymethylfurfural from fructose and sucrose. *Catalysis Today*, **2011**, 175, 524-527	5.3	62
178	Effective deoxygenation of fatty acids over Ni(OAc)2 in the absence of H2 and solvent. *Green Chemistry*, **2015**, 17, 4198-4205	10	61
177	Single-step conversion of lignin monomers to phenol: Bridging the gap between lignin and high-value chemicals. *Chinese Journal of Catalysis*, **2018**, 39, 1445-1452	11.3	60
176	Enhanced conversion of carbohydrates to the platform chemical 5-hydroxymethylfurfural using designer ionic liquids. *ChemSusChem*, **2014**, 7, 1647-54	8.3	60
175	Amide bond formation via C(sp3)-H bond functionalization and CO insertion. *Chemical Communications*, **2014**, 50, 341-3	5.8	59
174	Stabilizing a Platinum1 Single-Atom Catalyst on Supported Phosphomolybdic Acid without Compromising Hydrogenation Activity. *Angewandte Chemie*, **2016**, 128, 8459-8463	3.6	59
173	Formic acid-mediated liquefaction of chitin. *Green Chemistry*, **2016**, 18, 5050-5058	10	58
172	A remarkable anion effect on palladium nanoparticle formation and stabilization in hydroxyl-functionalized ionic liquids. *Physical Chemistry Chemical Physics*, **2012**, 14, 6026-33	3.6	57

171	Toward the Shell Biorefinery: Processing Crustacean Shell Waste Using Hot Water and Carbonic Acid. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 5532-5542	8.3	56
170	Enhanced rate of arene hydrogenation with imidazolium functionalized bipyridine stabilized rhodium nanoparticle catalysts. *Inorganic Chemistry*, **2011**, 50, 717-9	5.1	55
169	Mechanochemical Amorphization of Chitin and Conversion into Oligomers of N-Acetyl-d-glucosamine. *ACS Sustainable Chemistry and Engineering*, **2018**, 6, 1662-1669	8.3	54
168	Expanding the Boundary of Biorefinery: Organonitrogen Chemicals from Biomass. *Accounts of Chemical Research*, **2021**, 54, 1711-1722	24.3	53
167	A Metal-Free, Carbon-Based Catalytic System for the Oxidation of Lignin Model Compounds and Lignin. *ChemPlusChem*, **2014**, 79, 825-834	2.8	52
166	Producing Bark-based Polyols through Liquefaction: Effect of Liquefaction Temperature. *ACS Sustainable Chemistry and Engineering*, **2013**, 1, 534-540	8.3	52
165	Solvent-Enhanced Coupling of Sterically Hindered Reagents and Aryl Chlorides using Functionalized Ionic Liquids. *Organometallics*, **2009**, 28, 937-939	3.8	52
164	Zeolite-Encaged Pd-Mn Nanocatalysts for CO Hydrogenation and Formic Acid Dehydrogenation. *Angewandte Chemie - International Edition*, **2020**, 59, 20183-20191	16.4	52
163	Production of Glucosamine from Chitin by Co-solvent Promoted Hydrolysis and Deacetylation. *ChemCatChem*, **2017**, 9, 2790-2796	5.2	51
162	Tuning the Accessibility and Activity of Au (SR) Nanocluster Catalysts through Ligand Engineering. *Chemistry - A European Journal*, **2016**, 22, 14816-14820	4.8	51
161	Soft, Oxidative Stripping of Alkyl Thiolate Ligands from Hydroxyapatite-Supported Gold Nanoclusters for Oxidation Reactions. *Chemistry - an Asian Journal*, **2016**, 11, 532-9	4.5	51
160	Aqueous-Phase Fischer Tropsch Synthesis with a Ruthenium Nanocluster Catalyst. *Angewandte Chemie*, **2008**, 120, 758-761	3.6	51
159	Organonitrogen Chemicals from Oxygen-Containing Feedstock over Heterogeneous Catalysts. *ACS Catalysis*, **2020**, 10, 311-335	13.1	51
158	Highly Compressible and Hydrophobic Anisotropic Aerogels for Selective Oil/Organic Solvent Absorption. *ACS Sustainable Chemistry and Engineering*, **2019**, 7, 332-340	8.3	51
157	Atomically Dispersed Rhodium on Self-Assembled Phosphotungstic Acid: Structural Features and Catalytic CO Oxidation Properties. *Industrial & Engineering Chemistry Research*, **2017**, 56, 3578-3587	3.9	50
156	Production of Primary Amines by Reductive Amination of Biomass-Derived Aldehydes/Ketones. *Angewandte Chemie*, **2017**, 129, 3096-3100	3.6	50
155	Hydrodeoxygenation of Lignin-Derived Phenols into Alkanes by Using Nanoparticle Catalysts Combined with Brønsted Acidic Ionic Liquids. *Angewandte Chemie*, **2010**, 122, 5681-5685	3.6	50
154	Recent Progress in Chemoselective Hydrogenation of α,β-Unsaturated Aldehyde to Unsaturated Alcohol Over Nanomaterials. *Current Organic Chemistry*, **2013**, 17, 400-413	1.7	50

153	Towards the Circular Economy: Converting Aromatic Plastic Waste Back to Arenes over a Ru/Nb O Catalyst. *Angewandte Chemie - International Edition*, **2021**, 60, 5527-5535	16.4	49
152	Immediate hydroxylation of arenes to phenols via V-containing all-silica ZSM-22 zeolite triggered non-radical mechanism. *Nature Communications*, **2018**, 9, 2931	17.4	47
151	Balancing the Rate of Cluster Growth and Etching for Gram-Scale Synthesis of Thiolate-Protected Au25 Nanoclusters with Atomic Precision. *Angewandte Chemie*, **2014**, 126, 4711-4715	3.6	47
150	Towards the Shell Biorefinery: Sustainable Synthesis of the Anticancer Alkaloid Proximicin A from Chitin. *ChemSusChem*, **2018**, 11, 532-535	8.3	47
149	Support-dependent rate-determining step of CO2 hydrogenation to formic acid on metal oxide supported Pd catalysts. *Journal of Catalysis*, **2019**, 376, 57-67	7.3	46
148	Solubility adjustable nanoparticles stabilized by a novel PVP based family: synthesis, characterization and catalytic properties. *Chemical Communications*, **2009**, 4423-5	5.8	46
147	Self-assembled iron-containing mordenite monolith for carbon dioxide sieving. *Science*, **2021**, 373, 315-320	3.3	45
146	Popping of graphite oxide: application in preparing metal nanoparticle catalysts. *Advanced Materials*, **2015**, 27, 4688-94	24	43
145	Ag□Pd and CuO□Pd nanoparticles in a hydroxyl-group functionalized ionic liquid: synthesis, characterization and catalytic performance. *Catalysis Science and Technology*, **2015**, 5, 1683-1692	5.5	43
144	Direct Conversion of Mono- and Polysaccharides into 5-Hydroxymethylfurfural Using Ionic-Liquid Mixtures. *ChemSusChem*, **2016**, 9, 2089-96	8.3	43
143	Single-atom Pd dispersed on nanoscale anatase TiO2 for the selective hydrogenation of phenylacetylene. *Science China Materials*, **2020**, 63, 982-992	7.1	42
142	Biobased Phenol Formaldehyde Resins Derived from Beetle-Infested Pine Barks□Structure and Composition. *ACS Sustainable Chemistry and Engineering*, **2013**, 1, 91-101	8.3	42
141	Visible-light-driven amino acids production from biomass-based feedstocks over ultrathin CdS nanosheets. *Nature Communications*, **2020**, 11, 4899	17.4	42
140	Efficient cleavage of aryl ether C-O linkages by Rh-Ni and Ru-Ni nanoscale catalysts operating in water. *Chemical Science*, **2018**, 9, 5530-5535	9.4	41
139	Demethylation of Wheat Straw Alkali Lignin for Application in Phenol Formaldehyde Adhesives. *Polymers*, **2016**, 8,	4.5	41
138	Production of Terephthalic Acid from Corn Stover Lignin. *Angewandte Chemie*, **2019**, 131, 4988-4991	3.6	40
137	Identification of an Active NiCu Catalyst for Nitrile Synthesis from Alcohol. *ACS Catalysis*, **2019**, 9, 6681-6691	13.1	40
136	Polyurethane foams derived from liquefied mountain pine beetle-infested barks. *Journal of Applied Polymer Science*, **2012**, 123, 2849-2858	2.9	40

135	Ultralight, hydrophobic, anisotropic bamboo-derived cellulose nanofibrils aerogels with excellent shape recovery via freeze-casting. *Carbohydrate Polymers*, **2019**, 208, 232-240	10.3	39
134	Direct aerobic oxidative homocoupling of benzene to biphenyl over functional porous organic polymer supported atomically dispersed palladium catalyst. *Applied Catalysis B: Environmental*, **2017**, 209, 679-688	21.8	38
133	Ligands Modulate Reaction Pathway in the Hydrogenation of 4-Nitrophenol Catalyzed by Gold Nanoclusters. *ChemCatChem*, **2018**, 10, 395-402	5.2	38
132	High-temperature flame spray pyrolysis induced stabilization of Pt single-atom catalysts. *Applied Catalysis B: Environmental*, **2021**, 281, 119471	21.8	38
131	Insights into the Formation Mechanism of Rhodium Nanocubes. *Journal of Physical Chemistry C*, **2012**, 116, 15076-15086	3.8	37
130	Evaluation of ionic liquid soluble imidazolium tetrachloropalladate pre-catalysts in Suzuki coupling reactions. *Catalysis Today*, **2012**, 183, 172-177	5.3	37
129	A remarkable solvent effect on reductive amination of ketones. *Molecular Catalysis*, **2018**, 454, 87-93	3.3	37
128	Upcycling chitin-containing waste into organonitrogen chemicals via an integrated process. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 7719-7728	11.5	36
127	Promoting heterogeneous catalysis beyond catalyst design. *Chemical Science*, **2020**, 11, 1456-1468	9.4	36
126	Transformation of biomass via the selective hydrogenolysis of CO bonds by nanoscale metal catalysts. *Current Opinion in Chemical Engineering*, **2013**, 2, 178-183	5.4	36
125	One-Step Synthesis of N-Heterocyclic Compounds from Carbohydrates over Tungsten-Based Catalysts. *ACS Sustainable Chemistry and Engineering*, **2017**, 5, 11096-11104	8.3	35
124	Room temperature, near-quantitative conversion of glucose into formic acid. *Green Chemistry*, **2019**, 21, 6089-6096	10	35
123	Production of organic acids from biomass resources. *Current Opinion in Green and Sustainable Chemistry*, **2016**, 2, 54-58	7.9	35
122	Rh nanoparticles with NiOx surface decoration for selective hydrogenolysis of CO bond over arene hydrogenation. *Journal of Molecular Catalysis A*, **2016**, 422, 188-197		34
121	Novel Catalytic Systems to Convert Chitin and Lignin into Valuable Chemicals. *Catalysis Surveys From Asia*, **2014**, 18, 164-176	2.8	33
120	Biomass valorisation over polyoxometalate-based catalysts. *Green Chemistry*, **2021**, 23, 18-36	10	33
119	Sorghum biomass: a novel renewable carbon source for industrial bioproducts. *Biofuels*, **2014**, 5, 159-174	2	32
118	Toward Functionalization of Thermoresponsive Poly(N-vinyl-2-pyrrolidone). *Macromolecules*, **2010**, 43, 9972-9981	5.5	32

117	Catalytic Production of Alanine from Waste Glycerol. *Angewandte Chemie - International Edition*, **2020**, 59, 2289-2293	16.4	32
116	Biomass Liquefaction and Alkoxylation: A Review of Structural Characterization Methods for Bio-based Polyols. *Polymer Reviews*, **2017**, 57, 668-694	14	29
115	Zirconia phase effect in Pd/ZrO2 catalyzed CO2 hydrogenation into formate. *Molecular Catalysis*, **2019**, 475, 110461	3.3	29
114	Thermally responsive gold nanocatalysts based on a modified poly-vinylpyrrolidone. *Journal of Molecular Catalysis A*, **2013**, 371, 29-35		29
113	Aqueous-phase hydrogenation of alkenes and arenes: The growing role of nanoscale catalysts. *Catalysis Today*, **2015**, 247, 96-103	5.3	27
112	Haber-independent, diversity-oriented synthesis of nitrogen compounds from biorenewable chitin. *Green Chemistry*, **2020**, 22, 1978-1984	10	27
111	Simple preparation method for Mg□Al hydrotalcites as base catalysts. *Journal of Molecular Catalysis A*, **2016**, 423, 347-355		26
110	Towards Rational Design of Nanoparticle Catalysis in Ionic Liquids. *Catalysts*, **2013**, 3, 543-562	4	26
109	Facile one-pot synthesis of water-dispersible phosphate functionalized reduced graphene oxide toward high-performance energy storage devices. *Chemical Communications*, **2020**, 56, 1373-1376	5.8	26
108	Rationalization of solvation and stabilization of palladium nanoparticles in imidazolium-based ionic liquids by DFT and vibrational spectroscopy. *ChemPhysChem*, **2012**, 13, 1781-90	3.2	25
107	Integrating Biomass into the Organonitrogen Chemical Supply Chain: Production of Pyrrole and d-Proline from Furfural. *Angewandte Chemie - International Edition*, **2020**, 59, 19846-19850	16.4	25
106	Lignin-Based Polyurethane: Recent Advances and Future Perspectives. *Macromolecular Rapid Communications*, **2021**, 42, e2000492	4.8	25
105	Application of Ionic Liquids in the Downstream Processing of Lignocellulosic Biomass. *Chimia*, **2015**, 69, 592-6	1.3	24
104	Pd□Pb Alloy Nanocrystals with Tailored Composition for Semihydrogenation: Taking Advantage of Catalyst Poisoning. *Angewandte Chemie*, **2015**, 127, 8389-8392	3.6	24
103	Chitin hydrolysis in acidified molten salt hydrates. *Green Chemistry*, **2020**, 22, 5096-5104	10	23
102	Transformation of CO2 by using nanoscale metal catalysts: cases studies on the formation of formic acid and dimethylether. *Current Opinion in Chemical Engineering*, **2018**, 20, 86-92	5.4	23
101	Mesoporous Silica-Encaged Ultrafine Bimetallic Nanocatalysts for CO2 Hydrogenation to Formates. *ChemCatChem*, **2019**, 11, 5093-5097	5.2	21
100	Oxidant free conversion of alcohols to nitriles over Ni-based catalysts. *Catalysis Science and Technology*, **2019**, 9, 86-96	5.5	20

99	Catalyst: Is the Amino Acid a New Frontier for Biorefineries?. *CheM*, **2019**, 5, 739-741	16.2	20
98	Biobased Epoxy Synthesized from a Vanillin Derivative and Its Reinforcement Using Lignin-Containing Cellulose Nanofibrils. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 11215-11223	8.3	20
97	Solvolytic Liquefaction of Bark: Understanding the Role of Polyhydric Alcohols and Organic Solvents on Polyol Characteristics. *ACS Sustainable Chemistry and Engineering*, **2016**, 4, 851-861	8.3	20
96	Towards circular economy: integration of bio-waste into chemical supply chain. *Current Opinion in Chemical Engineering*, **2019**, 26, 148-156	5.4	20
95	Rapid nanoparticle-catalyzed hydrogenations in triphasic millireactors with facile catalyst recovery. *Green Chemistry*, **2014**, 16, 4654-4658	10	20
94	Oxidative Ring-Expansion of a Chitin-Derived Platform Enables Access to Unexplored 2-Amino Sugar Chemical Space. *European Journal of Organic Chemistry*, **2019**, 2019, 1355-1360	3.2	20
93	Nanocomposite of Nitrogen-Doped Graphene/Polyaniline for Enhanced Ammonia Gas Detection. *Advanced Materials Interfaces*, **2019**, 6, 1900552	4.6	19
92	Designed synthesis of MO (M = Zn, Fe, Sn, Ni, Mn, Co, Ce, Mg, Ag), Pt, and Au nanoparticles supported on hierarchical CuO hollow structures. *Nanoscale*, **2016**, 8, 19684-19695	7.7	19
91	Solvation and stabilization of palladium nanoparticles in phosphonium-based ionic liquids: a combined infrared spectroscopic and density functional theory study. *Physical Chemistry Chemical Physics*, **2014**, 16, 20672-80	3.6	19
90	One-step synthesis of 2-alkyl-dioxolanes from ethylene glycol and syngas. *ChemSusChem*, **2009**, 2, 941-3	8.3	19
89	Influence of the Anion on the Oxidation of 5-Hydroxymethylfurfural by Using Ionic-Polymer-Supported Platinum Nanoparticle Catalysts. *ChemPlusChem*, **2018**, 83, 19-23	2.8	18
88	In situ time-resolved DXAFS study of Rh nanoparticle formation mechanism in ethylene glycol at elevated temperature. *Physical Chemistry Chemical Physics*, **2012**, 14, 2983-90	3.6	18
87	Barking up the right tree: biorefinery from waste stream to cyclic carbonate with immobilization of CO2 for non-isocyanate polyurethanes. *Green Chemistry*, **2020**, 22, 6874-6888	10	18
86	Directly synthesized V-containing BEA zeolite: Acid-oxidation bifunctional catalyst enhancing C-alkylation selectivity in liquid-phase methylation of phenol. *Chemical Engineering Journal*, **2017**, 328, 1031-1042	14.7	17
85	Observing Single-Atom Catalytic Sites During Reactions with Electrospray Ionization Mass Spectrometry. *Angewandte Chemie - International Edition*, **2021**, 60, 4764-4773	16.4	17
84	NO2-catalyzed deep oxidation of methanol: Experimental and theoretical studies. *Journal of Molecular Catalysis A*, **2006**, 252, 202-211		16
83	Facile Synthesis of a Phosphorus-Containing Sustainable Biomolecular Platform from Vanillin for the Production of Mechanically Strong and Highly Flame-Retardant Resins. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 17417-17426	8.3	16
82	Zeolite-Encaged PdMn Nanocatalysts for CO2 Hydrogenation and Formic Acid Dehydrogenation. *Angewandte Chemie*, **2020**, 132, 20358-20366	3.6	16

81	Valorization of Renewable Carbon Resources for Chemicals. *Chimia*, **2015**, 69, 120-4	1.3	15
80	Electrostatic and non-covalent interactions in dicationic imidazolium-sulfonium salts with mixed anions. *Chemistry - A European Journal*, **2014**, 20, 4273-83	4.8	15
79	Rational Design of a Molecular Nanocatalyst-Stabilizer that Enhances both Catalytic Activity and Nanoparticle Stability. *ChemCatChem*, **2012**, 4, 1907-1910	5.2	15
78	Effect of the aging time of the precipitate on the activity of Cu/ZnO catalysts for alcohol-assisted low temperature methanol synthesis. *Journal of Molecular Catalysis A*, **2016**, 418-419, 168-174		15
77	A novel dihydrodifuropyridine scaffold derived from ketones and the chitin-derived heterocycle 3-acetamido-5-acetylfuran. *Monatshefte F□ Chemie*, **2018**, 149, 857-861	1.4	15
76	Zinc-doped silica/polyaniline core/shell nanoparticles towards corrosion protection epoxy nanocomposite coatings. *Composites Part B: Engineering*, **2021**, 212, 108713	10	14
75	Crystallisation of inorganic salts containing 18-crown-6 from ionic liquids. *Inorganica Chimica Acta*, **2010**, 363, 504-508	2.7	13
74	Support effects in the de-methoxylation of lignin monomer 4-propylguaiacol over molybdenum-based catalysts. *Fuel Processing Technology*, **2020**, 199, 106224	7.2	13
73	NiAg Catalysts for Selective Hydrogenolysis of the Lignin C□O Bond. *Particle and Particle Systems Characterization*, **2016**, 33, 610-619	3.1	13
72	Enhancing performance of phosphorus containing vanillin-based epoxy resins by P□N non-covalently functionalized graphene oxide nanofillers. *Composites Part B: Engineering*, **2021**, 207, 108585	10	13
71	Hydride-induced ligand dynamic and structural transformation of gold nanoclusters during a catalytic reaction. *Nanoscale*, **2018**, 10, 23113-23121	7.7	13
70	Construction of Acid□Base Synergetic Sites on Mg-bearing BEA Zeolites Triggers the Unexpected Low-Temperature Alkylation of Phenol. *ChemCatChem*, **2017**, 9, 1076-1083	5.2	12
69	Biobased Epoxidized Starch Wood Adhesives: Effect of Amylopectin and Amylose Content on Adhesion Properties. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 17997-18005	8.3	12
68	Integrating Biomass into the Organonitrogen Chemical Supply Chain: Production of Pyrrole and d-Proline from Furfural. *Angewandte Chemie*, **2020**, 132, 20018-20022	3.6	12
67	Lignin as a Key Component in Lignin-Containing Cellulose Nanofibrils for Enhancing the Performance of Polymeric Diphenylmethane Diisocyanate Wood Adhesives. *ACS Sustainable Chemistry and Engineering*, **2020**, 8, 17165-17176	8.3	11
66	The effect of calcination temperature on the electrochemical properties of La0.3Sr0.7Fe0.7Cr0.3O3□ (LSFC) perovskite oxide anode of solid oxide fuel cells (SOFCs). *Sustainable Energy Technologies and Assessments*, **2014**, 8, 92-98	4.7	11
65	From Wastes to Functions: A New Soybean Meal and Bark-Based Adhesive. *ACS Sustainable Chemistry and Engineering*, **2020**,	8.3	10
64	Designed Precursor for the Controlled Synthesis of Highly Active Atomic and Sub-nanometric Platinum Catalysts on Mesoporous Silica. *Chemistry - an Asian Journal*, **2018**, 13, 1053-1059	4.5	10

63	Two-Step Preparation of Diverse 3-Amidofurans from Chitin. *ChemistrySelect*, **2019**, 4, 10097-10099	1.8	10
62	Selective Hydrogenation of Cinnamaldehyde by Ionic Copolymer-Stabilized Pt Nanoparticles in Ionic Liquids. *Chinese Journal of Catalysis*, **2007**, 28, 389-391	11.3	10
61	Effects of Reaction Conditions on Phenol Liquefaction of Beetle-infested Lodgepole Pine Barks. *Current Organic Chemistry*, **2013**, 17, 1604-1616	1.7	10
60	Robust Conductive Hydrogel with Antibacterial Activity and UV-Shielding Performance. *Industrial & Engineering Chemistry Research*, **2020**, 59, 17867-17875	3.9	10
59	Phospho-oxynitride Layer Protected Cobalt Phosphonitride Nanowire Arrays for High-Rate and Stable Supercapacitors. *ACS Applied Energy Materials*, **2019**, 2, 616-626	6.1	10
58	Co-transesterification of waste cooking oil, algal oil and dimethyl carbonate over sustainable nanoparticle catalysts. *Chemical Engineering Journal*, **2021**, 405, 127036	14.7	10
57	Triphasic Segmented Flow Millireactors for Rapid Nanoparticle-Catalyzed Gas□liquid Reactions □ Hydrodynamic Studies and Reactor Modeling. *Journal of Flow Chemistry*, **2014**, 4, 200-205	3.3	9
56	Catalytic Production of Alanine from Waste Glycerol. *Angewandte Chemie*, **2020**, 132, 2309-2313	3.6	9
55	PO43- Coordinated Robust Single-Atom Platinum□Catalyst for Selective Polyol Oxidation.. *Angewandte Chemie - International Edition*, **2022**,	16.4	9
54	Transferring the biorenewable nitrogen present in chitin to several N-functional groups. *Sustainable Chemistry and Pharmacy*, **2019**, 13, 100143	3.9	8
53	Insight into the roles of ammonia during direct alcohol amination over supported Ru catalysts. *Journal of Catalysis*, **2021**, 399, 121-131	7.3	8
52	Discovery of a Highly Active Catalyst for Hydrogenolysis of C□O Bonds via Systematic, Multi-metallic Catalyst Screening. *ChemCatChem*, **2019**, 11, 2743-2752	5.2	7
51	Sustainable Shape-Memory Polyurethane from Abietic Acid: Superior Mechanical Properties and Shape Recovery with Tunable Transition Temperatures. *ChemSusChem*, **2020**, 13, 5749-5761	8.3	7
50	Lignin First: Confirming the Role of the Metal Catalyst in Reductive Fractionation. *Jacs Au*, **2021**, 1, 729-733		7
49	Ionic Liquid-Stabilized Single-Atom Rh Catalyst Against Leaching. *CCS Chemistry*,1814-1822	7.2	7
48	Oxidation of methane to methanol over Pd@Pt nanoparticles under mild conditions in water. *Catalysis Science and Technology*, **2021**, 11, 3493-3500	5.5	7
47	Fe□N□C single-atom catalysts with an axial structure prepared by a new design and synthesis method for ORR. *New Journal of Chemistry*, **2021**, 45, 13004-13014	3.6	7
46	When nanotechnology meets catalysis. *Nanotechnology Reviews*, **2013**, 2, 485-486	6.3	6

45	Transformation of sodium bicarbonate and CO2 into sodium formate over NiPd nanoparticle catalyst. *Frontiers in Chemistry*, **2013**, 1, 17	5	6
44	Observing Single-Atom Catalytic Sites During Reactions with Electrospray Ionization Mass Spectrometry. *Angewandte Chemie*, **2021**, 133, 4814-4823	3.6	6
43	Selectivity-Switchable Conversion of Chitin-Derived N-Acetyl-d-glucosamine into Commodity Organic Acids at Room Temperature. *Industrial & Engineering Chemistry Research*, **2021**, 60, 3239-3248	3.9	6
42	A New Wave of Research Interest in Marine Macroalgae for Chemicals and Fuels: Challenges and Potentials **2017**, 43-63		5
41	Catalytic Conversion of Chitosan to Glucosaminic Acid by Tandem Hydrolysis and Oxidation. *ACS Sustainable Chemistry and Engineering*, **2019**,	8.3	5
40	Transformation of Corn Lignin into Sun Cream Ingredients. *ChemSusChem*, **2021**, 14, 1586-1594	8.3	5
39	Recovery of Arenes from Polyethylene Terephthalate (PET) over a Co/TiO Catalyst. *ChemSusChem*, **2021**, 14, 4330-4339	8.3	5
38	Production and Conversion of Green Macroalgae (Ulva spp.) **2017**, 19-41		4
37	Unlocking the Potential of Photocatalysts in Biomass Refinery. *CheM*, **2020**, 6, 2871-2873	16.2	4
36	Advances in green synthesis and applications of graphene. *Nano Research*, **2021**, 14, 3724	10	4
35	Identifying Key Descriptors for the Single-atom Catalyzed CO Oxidation. *CCS Chemistry*,1-24	7.2	4
34	Overview of Ocean and Aquatic Sources for the Production of Chemicals and Materials **2017**, 1-17		3
33	Microalgae Bioproduction Feeds, Foods, Nutraceuticals, and Polymers **2017**, 83-112		3
32	High-performance photocatalysts for the selective oxidation of alcohols to carbonyl compounds. *Canadian Journal of Chemical Engineering*, **2020**, 98, 2259-2293	2.3	3
31	Rücktitelbild: Graphene Oxide Catalyzed CH Bond Activation: The Importance of Oxygen Functional Groups for Biaryl Construction (Angew. Chem. 9/2016). *Angewandte Chemie*, **2016**, 128, 3290-3290	3.6	3
30	Chemical Breakthrough Converts Cellulose into Ethanol. *Trends in Chemistry*, **2019**, 1, 457-458	14.8	3
29	Excellent Low-Temperature Formaldehyde Decomposition Performance over Pt Nanoparticles Directly Loaded on Cellulose Triacetate. *Industrial & Engineering Chemistry Research*, **2020**, 59, 21720-21728	3.9	3
28	Non-Faradaic Promotion of Ethylene Hydrogenation under Oscillating Potentials. *Jacs Au*, **2021**, 1, 536-542		3

27	Mesoporous silica-encaged ultrafine ceria□nickel hydroxide nanocatalysts for solar thermochemical dry methane reforming. *Applied Physics Letters*, **2022**, 120, 143905	3.4	3
26	Characterization and Utilization of Waste Streams from Mollusc Aquaculture and Fishing Industries **2017**, 189-227		2
25	One-pot production of phenazine from lignin-derived catechol. *Green Chemistry*, **2022**, 24, 1224-1230	10	2
24	Transformation of Seafood Wastes into Chemicals and Materials **2019**, 461-482		2
23	X-ray Absorption Spectroscopy: An Indispensable Tool to Study Single-Atom Catalysts. *Synchrotron Radiation News*, **2020**, 33, 18-26	0.6	2
22	An air-stable, reusable Ni@Ni(OH) nanocatalyst for CO/bicarbonate hydrogenation to formate. *Nanoscale*, **2021**, 13, 8931-8939	7.7	2
21	An Integrated Process for l-Tyrosine Production from Sugarcane Bagasse. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 11758-11768	8.3	2
20	PO 4 3□Coordinated Robust Single-Atom Platinum Catalyst for Selective Polyol Oxidation**. *Angewandte Chemie*,	3.6	2
19	Molecular Catalysis for the Chemistry of the future: a perspective. *Molecular Catalysis*, **2022**, 522, 112233	3.3	2
18	Addressing the quantitative conversion bottleneck in single-atom catalysis.. *Nature Communications*, **2022**, 13, 2807	17.4	2
17	Innovations in Crustacean Processing: Bioproduction of Chitin and Its Derivatives **2017**, 113-149		1
16	Recent Progress in the Utilization of Chitin/Chitosan for Chemicals and Materials **2017**, 151-187		1
15	Fish Processing Waste Streams as a Feedstock for Fuels **2017**, 229-276		1
14	Highly Cross-Linked and Stable Shape-Memory Polyurethanes Containing a Planar Ring Chain Extender. *ACS Applied Polymer Materials*, **2020**, 2, 5259-5268	4.3	1
13	Coverage-dependent formic acid oxidation reaction kinetics determined by oscillating potentials. *Molecular Catalysis*, **2021**, 504, 111482	3.3	1
12	Morphology and Structure Controls of Single-Atom Fe□N□ Catalysts Synthesized Using FePc Powders as the Precursor. *Processes*, **2021**, 9, 109	2.9	1
11	Recent Progress on Starch Maleate/Polylactic Acid Blends for Compostable Food Packaging Applications. *ACS Sustainable Chemistry and Engineering*, **2022**, 10, 3-15	8.3	1
10	The Nature of Metal Catalysts in Ionic Liquids: Homogeneous vs Heterogeneous Reactions. *Topics in Organometallic Chemistry*, **2013**, 1-15	0.6	0

List of Publications

9	Conversion of Chitin to Nitrogen-containing Chemicals **2020**, 569-590		0
8	Investigations on the ORR Catalytic Performance Attenuation of a 1D Fe Single-Atom Catalyst during the Discharge Process. *Journal of Physical Chemistry C*, **2022**, 126, 4826-4835	3.8	0
7	Poly(vinylidene fluoride)-Stabilized Black Phase CsPbI Perovskite for High-Performance Piezoelectric Nanogenerators.. *ACS Omega*, **2022**, 7, 10559-10567	3.9	0
6	Titanium dioxide hierarchical microspheres decorated with atomically dispersed platinum as an efficient photocatalyst for hydrogen evolution. *Journal of Colloid and Interface Science*, **2022**, 623, 799-807	9.7	0
5	Kappaphycus alvarezii: A Potential Sustainable Resource for Fertilizers and Fuels **2017**, 65-82		
4	Influence of the Anion on the Oxidation of 5-Hydroxymethylfurfural by Using Ionic-Polymer-Supported Platinum Nanoparticle Catalysts. *ChemPlusChem*, **2018**, 83, 2	2.8	
3	CO2 Hydrogenation to Oxygenated Chemicals Over Supported Nanoparticle Catalysts: Opportunities and Challenges **2021**, 239-256		
2	Tailoring Biomass Conversions using Ionic Liquid Immobilized Metal Nanoparticles **2016**, 233-247		
1	Molecular Design of 3D Porous Carbon Framework via One-Step Organic Synthesis. *ChemSusChem*, **2021**, 14, 3806-3809	8.3	