Edman Tsang

List of Publications by Citations

171 papers	7,345 citations	44 h-index	81 g-index
178 ext. papers	8,956 ext. citations	10.8 avg, IF	6.35 L-index

#	Paper	IF	Citations
171	Hydrogen production from formic acid decomposition at room temperature using a Ag-Pd core-shell nanocatalyst. *Nature Nanotechnology*, **2011**, 6, 302-7	28.7	897
170	Recent advances in CO2 capture and utilization. *ChemSusChem*, **2008**, 1, 893-9	8.3	615
169	MoS monolayer catalyst doped with isolated Co atoms for the hydrodeoxygenation reaction. *Nature Chemistry*, **2017**, 9, 810-816	17.6	489
168	A graphene dispersed CdS-MoS2 nanocrystal ensemble for cooperative photocatalytic hydrogen production from water. *Chemical Communications*, **2014**, 50, 1185-8	5.8	201
167	Carbon nitrides and metal nanoparticles: from controlled synthesis to design principles for improved photocatalysis. *Chemical Society Reviews*, **2018**, 47, 7783-7817	58.5	167
166	Shape-dependent acidity and photocatalytic activity of Nb2O5 nanocrystals with an active TT (001) surface. *Angewandte Chemie - International Edition*, **2012**, 51, 3846-9	16.4	153
165	Interstitial modification of palladium nanoparticles with boron atoms as a green catalyst for selective hydrogenation. *Nature Communications*, **2014**, 5, 5787	17.4	138
164	Nanostructured Nb2O5 catalysts. *Nano Reviews*, **2012**, 3, 17631		129
163	Nanojunction-mediated photocatalytic enhancement in heterostructured CdS/ZnO, CdSe/ZnO, and CdTe/ZnO nanocrystals. *Angewandte Chemie - International Edition*, **2014**, 53, 7838-42	16.4	125
162	Transition metal atom doping of the basal plane of MoS monolayer nanosheets for electrochemical hydrogen evolution. *Chemical Science*, **2018**, 9, 4769-4776	9.4	124
161	Rationalization of interactions in precious metal/ceria catalysts using the d-band center model. *Angewandte Chemie - International Edition*, **2013**, 52, 7737-41	16.4	122
160	Electronic modulation of a copper/zinc oxide catalyst by a heterojunction for selective hydrogenation of carbon dioxide to methanol. *Angewandte Chemie - International Edition*, **2012**, 51, 5832-6	16.4	113
159	Enhanced CO2 hydrogenation to methanol over CuZn nanoalloy in Ga modified Cu/ZnO catalysts. *Journal of Catalysis*, **2016**, 343, 157-167	7.3	113
158	□□C NMR guides rational design of nanocatalysts via chemisorption evaluation in liquid phase. *Science*, **2011**, 332, 224-8	33.3	106
157	Non-syngas direct steam reforming of methanol to hydrogen and carbon dioxide at low temperature. *Nature Communications*, **2012**, 3, 1230	17.4	100
156	Prominent electronic and geometric modifications of palladium nanoparticles by polymer stabilizers for hydrogen production under ambient conditions. *Angewandte Chemie - International Edition*, **2012**, 51, 11275-8	16.4	99
155	Edge-Enriched 2D MoS2 Thin Films Grown by Chemical Vapor Deposition for Enhanced Catalytic Performance. *ACS Catalysis*, **2017**, 7, 877-886	13.1	86

154	Transition metal-doped nickel phosphide nanoparticles as electro- and photocatalysts for hydrogen generation reactions. *Applied Catalysis B: Environmental*, **2019**, 242, 186-193	21.8	84
153	Structural Studies of Bulk to Nanosize Niobium Oxides with Correlation to Their Acidity. *Journal of the American Chemical Society*, **2017**, 139, 12670-12680	16.4	79
152	Photocatalytic water splitting by N-TiO on MgO (111) with exceptional quantum efficiencies at elevated temperatures. *Nature Communications*, **2019**, 10, 4421	17.4	76
151	Niobium oxides: Correlation of acidity with structure and catalytic performance in sucrose conversion to 5-hydroxymethylfurfural. *Journal of Catalysis*, **2016**, 338, 329-339	7.3	74
150	Recent Developments in Palladium-Based Bimetallic Catalysts. *ChemCatChem*, **2015**, 7, 1998-2014	5.2	73
149	From Biomass-Derived Furans to Aromatics with Ethanol over Zeolite. *Angewandte Chemie - International Edition*, **2016**, 55, 13061-13066	16.4	73
148	Hydrodeoxygenation of water-insoluble bio-oil to alkanes using a highly dispersed Pd-Mo catalyst. *Nature Communications*, **2017**, 8, 591	17.4	69
147	Dramatic Effects of Gallium Promotion on Methanol Steam Reforming Cu□ZnO Catalyst for Hydrogen Production: Formation of 5 □Copper Clusters from Cu□ZnGaOx. *ACS Catalysis*, **2013**, 3, 1231-1244	13.1	69
146	CO2 hydrogenation to methanol over Cu catalysts supported on La-modified SBA-15: The crucial role of Cu□LaOx interfaces. *Applied Catalysis B: Environmental*, **2019**, 251, 119-129	21.8	68
145	Comparison of catalytic performance of supported ruthenium and rhodium for hydrogenation of 9-ethylcarbazole for hydrogen storage applications. *Energy and Environmental Science*, **2012**, 5, 8621	35.4	68
144	CO2 Hydrogenation to Methanol over Catalysts Derived from Single Cationic Layer CuZnGa LDH Precursors. *ACS Catalysis*, **2018**, 8, 4390-4401	13.1	67
143	Facet-dependent photocatalysis of nanosize semiconductive metal oxides and progress of their characterization. *Nano Today*, **2018**, 18, 15-34	17.9	66
142	Trimethylphosphine-Assisted Surface Fingerprinting of Metal Oxide Nanoparticle by (31)P Solid-State NMR: A Zinc Oxide Case Study. *Journal of the American Chemical Society*, **2016**, 138, 2225-34	16.4	64
141	Bimetallic catalysts for green methanol production via CO2 and renewable hydrogen: a mini-review and prospects. *Catalysis Science and Technology*, **2018**, 8, 3450-3464	5.5	61
140	Shape selective plate-form Ga(2)O(3) with strong metal-support interaction to overlying Pd for hydrogenation of CO(2) to CH(3)OH. *Chemical Communications*, **2013**, 49, 1747-9	5.8	60
139	Shape Effect of Pd-Promoted Ga2O3 Nanocatalysts for Methanol Synthesis by CO2 Hydrogenation. *Journal of Physical Chemistry C*, **2014**, 118, 24452-24466	3.8	59
138	Comparative Study of Catalytic Hydrogenation of 9-Ethylcarbazole for Hydrogen Storage over Noble Metal Surfaces. *Journal of Physical Chemistry C*, **2012**, 116, 7421-7429	3.8	59
137	Engineering Monolayer 1T-MoS2 into a Bifunctional Electrocatalyst via Sonochemical Doping of Isolated Transition Metal Atoms. *ACS Catalysis*, **2019**, 9, 7527-7534	13.1	56

136	A promising low pressure methanol synthesis route from CO2 hydrogenation over Pd@Zn core□shell catalysts. *Green Chemistry*, **2017**, 19, 270-280	10	56
135	Reaction: □Green□Ammonia Production. *CheM*, **2017**, 3, 712-714	16.2	54
134	Self- regeneration of Au/CeO based catalysts with enhanced activity and ultra-stability for acetylene hydrochlorination. *Nature Communications*, **2019**, 10, 914	17.4	53
133	Tailored transition metal-doped nickel phosphide nanoparticles for the electrochemical oxygen evolution reaction (OER). *Chemical Communications*, **2018**, 54, 8630-8633	5.8	52
132	Entrapped Single Tungstate Site in Zeolite for Cooperative Catalysis of Olefin Metathesis with Br□sted Acid Site. *Journal of the American Chemical Society*, **2018**, 140, 6661-6667	16.4	50
131	Mapping surface-modified titania nanoparticles with implications for activity and facet control. *Nature Communications*, **2017**, 8, 675	17.4	48
130	High-quality functionalized few-layer graphene: facile fabrication and doping with nitrogen as a metal-free catalyst for the oxygen reduction reaction. *Journal of Materials Chemistry A*, **2015**, 3, 15444-15450	13	48
129	Morphology-Controlled Synthesis of Au/Cu□eSnS□Core-Shell Nanostructures for Plasmon-Enhanced Photocatalytic Hydrogen Generation. *ACS Applied Materials & Interfaces*, **2015**, 7, 9072-7	9.5	47
128	In Situ Phase Transformation on Nickel-Based Selenides for Enhanced Hydrogen Evolution Reaction in Alkaline Medium. *ACS Energy Letters*, **2020**, 5, 2483-2491	20.1	47
127	Materials for electrochemical ammonia synthesis. *Dalton Transactions*, **2019**, 48, 1562-1568	4.3	44
126	Selective C2+ Alcohol Synthesis from Direct CO2 Hydrogenation over a Cs-Promoted Cu-Fe-Zn Catalyst. *ACS Catalysis*, **2020**, 10, 5250-5260	13.1	44
125	Hydrazine-Assisted Liquid Exfoliation of MoS2 for Catalytic Hydrodeoxygenation of 4-Methylphenol. *Chemistry - A European Journal*, **2016**, 22, 2910-4	4.8	44
124	Atomic Imaging of Carbon-Supported Pt, Pt/Co, and [email□protected] Nanocatalysts by Atom-Probe Tomography. *ACS Catalysis*, **2014**, 4, 695-702	13.1	43
123	CuZnSnS/MoS-Reduced Graphene Oxide Heterostructure: Nanoscale Interfacial Contact and Enhanced Photocatalytic Hydrogen Generation. *Scientific Reports*, **2017**, 7, 39411	4.9	40
122	Efficient Non-dissociative Activation of Dinitrogen to Ammonia over Lithium-Promoted Ruthenium Nanoparticles at Low Pressure. *Angewandte Chemie - International Edition*, **2019**, 58, 17335-17341	16.4	38
121	The remarkable activity and stability of a dye-sensitized single molecular layer MoS2 ensemble for photocatalytic hydrogen production. *Chemical Communications*, **2015**, 51, 13496-9	5.8	37
120	Electron promotion by surface functional groups of single wall carbon nanotubes to overlying metal particles in a fuel-cell catalyst. *Angewandte Chemie - International Edition*, **2012**, 51, 6998-7001	16.4	37
119	Structural dynamics of a metal-organic framework induced by CO migration in its non-uniform porous structure. *Nature Communications*, **2019**, 10, 999	17.4	36

118	Advances in higher alcohol synthesis from CO2 hydrogenation. *CheM*, **2021**, 7, 849-881	16.2	34
117	Characterisation of oxygen defects and nitrogen impurities in TiO photocatalysts using variable-temperature X-ray powder diffraction. *Nature Communications*, **2021**, 12, 661	17.4	34
116	Differentiating Surface Ce Species among CeO2 Facets by Solid-State NMR for Catalytic Correlation. *ACS Catalysis*, **2020**, 10, 4003-4011	13.1	33
115	Enhanced photocatalytic hydrogen evolution from water by niobate single molecular sheets and ensembles. *Chemical Communications*, **2014**, 50, 13702-5	5.8	33
114	Electronic Modulation of a Copper/Zinc Oxide Catalyst by a Heterojunction for Selective Hydrogenation of Carbon Dioxide to Methanol. *Angewandte Chemie*, **2012**, 124, 5934-5938	3.6	33
113	Molecular nitrogen promotes catalytic hydrodeoxygenation. *Nature Catalysis*, **2019**, 2, 1078-1087	36.5	33
112	Enhanced chemoselective hydrogenation of dimethyl oxalate to methyl glycolate over bimetallic AgNi/SBA-15 catalysts. *Applied Catalysis A: General*, **2015**, 505, 344-353	5.1	32
111	Effect of Cr doping in CeO2 nanostructures on photocatalysis and H2O2 assisted methylene blue dye degradation. *Catalysis Today*, **2021**, 375, 506-513	5.3	32
110	Confinement of subnanometric PdZn at a defect enriched ZnO/ZIF-8 interface for efficient and selective CO2 hydrogenation to methanol. *Journal of Materials Chemistry A*, **2019**, 7, 23878-23885	13	29
109	Removal of Hydrogen Poisoning by Electrostatically Polar MgO Support for Low-Pressure NH3 Synthesis at a High Rate over the Ru Catalyst. *ACS Catalysis*, **2020**, 10, 5614-5622	13.1	29
108	Methanol Synthesis at a Wide Range of H /CO Ratios over a Rh-In Bimetallic Catalyst. *Angewandte Chemie - International Edition*, **2020**, 59, 16039-16046	16.4	27
107	Direct Catalytic Conversion of Biomass-Derived Furan and Ethanol to Ethylbenzene. *ACS Catalysis*, **2018**, 8, 1843-1850	13.1	27
106	Graphitic carbon nitride catalysed photoacetalization of aldehydes/ketones under ambient conditions. *Chemical Communications*, **2016**, 52, 2772-5	5.8	27
105	Engineering of Single Magnetic Particle Carrier for Living Brain Cell Imaging: A Tunable T1-/T2-/Dual-Modal Contrast Agent for Magnetic Resonance Imaging Application. *Chemistry of Materials*, **2017**, 29, 4411-4417	9.6	27
104	A tunable metal-polyaniline interface for efficient carbon dioxide electro-reduction to formic acid and methanol in aqueous solution. *Chemical Communications*, **2016**, 52, 13901-13904	5.8	26
103	High Loading of Transition Metal Single Atoms on Chalcogenide Catalysts. *Journal of the American Chemical Society*, **2021**, 143, 7979-7990	16.4	26
102	From Biomass-Derived Furans to Aromatics with Ethanol over Zeolite. *Angewandte Chemie*, **2016**, 128, 13255-13260	3.6	26
101	Interstitial Boron Atoms in the Palladium Lattice of an Industrial Type of Nanocatalyst: Properties and Structural Modifications. *Journal of the American Chemical Society*, **2019**, 141, 19616-19624	16.4	26

100	Decarboxylation of Lactones over Zn/ZSM-5: Elucidation of the Structure of the Active Site and Molecular Interactions. *Angewandte Chemie - International Edition*, **2017**, 56, 10711-10716	16.4	25
99	Ceria Nanocrystals Supporting Pd for Formic Acid Electrocatalytic Oxidation: Prominent Polar Surface Metal Support Interactions. *ACS Catalysis*, **2019**, 9, 5171-5177	13.1	25
98	Surfactant-free nickel-silver core@shell nanoparticles in mesoporous SBA-15 for chemoselective hydrogenation of dimethyl oxalate. *Chemical Communications*, **2016**, 52, 2569-72	5.8	25
97	Elucidation of Adsorbate Structures and Interactions on Brønsted Acid Sites in H-ZSM-5 by Synchrotron X-ray Powder Diffraction. *Angewandte Chemie - International Edition*, **2016**, 55, 5981-4	16.4	24
96	Direct methanol steam reforming to hydrogen over CuZnGaOx catalysts without CO post-treatment: mechanistic considerations. *Physical Chemistry Chemical Physics*, **2013**, 15, 7240-8	3.6	24
95	Lithium and boron as interstitial palladium dopants for catalytic partial hydrogenation of acetylene. *Chemical Communications*, **2017**, 53, 601-604	5.8	23
94	Probing atomic positions of adsorbed ammonia molecules in zeolite. *Chemical Communications*, **2016**, 52, 3422-5	5.8	23
93	Unravelling the key role of surface features behind facet-dependent photocatalysis of anatase TiO. *Chemical Communications*, **2019**, 55, 4415-4418	5.8	22
92	Quantitative Differences in Sulfur Poisoning Phenomena over Ruthenium and Palladium: An Attempt To Deconvolute Geometric and Electronic Poisoning Effects Using Model Catalysts. *ACS Catalysis*, **2017**, 7, 592-605	13.1	21
91	PdFe nanoparticles as selective catalysts for C□ cleavage in hydrogenolysis of vicinal diol units in biomass-derived chemicals. *Catalysis Science and Technology*, **2015**, 5, 887-896	5.5	21
90	The Contribution of Synchrotron X-Ray Powder Diffraction to Modern Zeolite Applications: A Mini-review and Prospects. *CheM*, **2018**, 4, 1778-1808	16.2	21
89	Prominent Electronic and Geometric Modifications of Palladium Nanoparticles by Polymer Stabilizers for Hydrogen Production under Ambient Conditions. *Angewandte Chemie*, **2012**, 124, 11437-11440	3.6	21
88	Enhanced propylene oxide selectivity for gas phase direct propylene epoxidation by lattice expansion of silver atoms on nickel nanoparticles. *Applied Catalysis B: Environmental*, **2019**, 243, 304-312	21.8	21
87	Differentiating surface titanium chemical states of anatase TiO functionalized with various groups. *Chemical Science*, **2018**, 9, 2493-2500	9.4	20
86	Rationalization of Interactions in Precious Metal/Ceria Catalysts Using the d-Band Center Model. *Angewandte Chemie*, **2013**, 125, 7891-7895	3.6	20
85	Design of niobate nanosheet-graphene oxide composite nanofiltration membranes with improved permeability. *Journal of Membrane Science*, **2020**, 595, 117598	9.6	20
84	Recent progress and strategies for enhancing photocatalytic water splitting. *Materials Today Sustainability*, **2020**, 9, 100032	5	18
83	Effect of Brønsted/Lewis Acid Ratio on Conversion of Sugars to 5-Hydroxymethylfurfural over Mesoporous Nb and Nb-W Oxides. *Chinese Journal of Chemistry*, **2017**, 35, 1529-1539	4.9	17

82	Probe-Molecule-Assisted NMR Spectroscopy: A Comparison with Photoluminescence and Electron Paramagnetic Resonance Spectroscopy as a Characterization Tool in Facet-Specific Photocatalysis. *ChemCatChem*, **2017**, 9, 155-160	5.2	17
81	Electroreduction of Carbon Dioxide to Formic Acid and Methanol over a Palladium/Polyaniline Catalyst in Acidic Solution: A Study of the Palladium Size Effect. *Energy Technology*, **2017**, 5, 937-944	3.5	16
80	Superior Performance of Ag over Pt for Hydrogen Evolution Reaction in Water Electrolysis under High Overpotentials. *ACS Applied Energy Materials*, **2019**, 2, 1221-1228	6.1	16
79	Importance of the structural integrity of a carbon conjugated mediator for photocatalytic hydrogen generation from water over a CdS-carbon nanotube-MoS composite. *Chemical Communications*, **2016**, 52, 13596-13599	5.8	16
78	2D photocatalysts with tuneable supports for enhanced photocatalytic water splitting. *Materials Today*, **2020**, 41, 34-43	21.8	16
77	Responses of Defect-Rich Zr-Based Metal-Organic Frameworks toward NH Adsorption. *Journal of the American Chemical Society*, **2021**, 143, 3205-3218	16.4	16
76	Mononuclear gold species anchored on TS-1 framework as catalyst precursor for selective epoxidation of propylene. *Journal of Catalysis*, **2018**, 367, 229-233	7.3	16
75	Pd@Zn core–shell nanoparticles of controllable shell thickness for catalytic methanol production. *Catalysis Science and Technology*, **2016**, 6, 7698-7702	5.5	15
74	Dynamic modification of pore opening of SAPO-34 by adsorbed surface methoxy species during induction of catalytic methanol-to-olefins reactions. *Applied Catalysis B: Environmental*, **2018**, 237, 245-250	21.8	15
73	Morphology-Dependent Catalytic Activity of Ru/CeO in Dry Reforming of Methane. *Molecules*, **2019**, 24,	4.8	14
72	Tunability of catalytic properties of Pd-based catalysts by rational control of strong metal and support interaction (SMSI) for selective hydrogenolyic C and C O bond cleavage of ethylene glycol units in biomass molecules. *Catalysis Science and Technology*, **2015**, 5, 3491-3495	5.5	14
71	Transition metal atom doped monolayer MoS2 in a proton-exchange membrane electrolyzer. *Materials Today Advances*, **2020**, 6, 100020	7.4	14
70	The Feasibility of Electrochemical Ammonia Synthesis in Molten LiCl-KCl Eutectics. *Angewandte Chemie - International Edition*, **2019**, 58, 17433-17441	16.4	14
69	Spatial differentiation of Brønsted acid sites by probe molecule in zeolite USY using synchrotron X-ray powder diffraction. *Chemical Communications*, **2017**, 53, 9725-9728	5.8	14
68	Structure–Activity Correlations for Brønsted Acid, Lewis Acid, and Photocatalyzed Reactions of Exfoliated Crystalline Niobium Oxides. *ChemCatChem*, **2017**, 9, 144-154	5.2	14
67	Tuning Metal–Support Interactions on Ni/Al2O3 Catalysts to Improve Catalytic Activity and Stability for Dry Reforming of Methane. *Processes*, **2021**, 9, 706	2.9	14
66	The remarkable activity and stability of a highly dispersive beta-brass Cu-Zn catalyst for the production of ethylene glycol. *Scientific Reports*, **2016**, 6, 20527	4.9	14
65	Niobate nanosheet membranes with enhanced stability for nanofiltration. *Chemical Communications*, **2017**, 53, 7929-7932	5.8	13

64	A New Class of Tunable Heterojunction by using Two Support Materials for the Synthesis of Supported Bimetallic Catalysts. *ChemCatChem*, **2015**, 7, 230-235	5.2	13
63	Interstitial and substitutional light elements in transition metals for heterogeneous catalysis. *Chemical Science*, **2020**, 12, 517-532	9.4	13
62	Elucidation of Adsorbate Structures and Interactions on Brønsted Acid Sites in H-ZSM-5 by Synchrotron X-ray Powder Diffraction. *Angewandte Chemie*, **2016**, 128, 6085-6088	3.6	12
61	Shape-Dependent Acidity and Photocatalytic Activity of Nb2O5 Nanocrystals with an Active TT (001) Surface. *Angewandte Chemie*, **2012**, 124, 3912-3915	3.6	12
60	Structural insight into [Fe-S-Mo] motif in electrochemical reduction of N over Fe-supported molecular MoS. *Chemical Science*, **2020**, 12, 688-695	9.4	12
59	Two-dimensional niobate nanosheet membranes for water treatment: Effect of nanosheet preparation method on membrane performance. *Separation and Purification Technology*, **2019**, 219, 222-229	8.3	11
58	Fe on molecular-layer MoS2 as inorganic Fe-S2-Mo motifs for light-driven nitrogen fixation to ammonia at elevated temperatures. *Chem Catalysis*, **2021**, 1, 162-182		11
57	Probing the Size and Shape Effects of Cubic- and Spherical-Shaped Palladium Nanoparticles in the Electrooxidation of Formic Acid. *ChemCatChem*, **2015**, 7, 3826-3831	5.2	10
56	Blue ordered/disordered Janus-type TiO2 nanoparticles for enhanced photocatalytic hydrogen generation. *Journal of Materials Chemistry A*, **2020**, 8, 22828-22839	13	10
55	Gain Spectroscopy of Solution-Based Semiconductor Nanocrystals in Tunable Optical Microcavities. *Advanced Optical Materials*, **2016**, 4, 285-290	8.1	10
54	Beyond surface redox and oxygen mobility at pd-polar ceria (100) interface: Underlying principle for strong metal-support interactions in green catalysis. *Applied Catalysis B: Environmental*, **2020**, 270, 118843	21.8	9
53	The Applications of Nano-Hetero-Junction in Optical and Thermal Catalysis. *European Journal of Inorganic Chemistry*, **2016**, 2016, 1924-1938	2.3	9
52	The Position of Ammonia in Decarbonising Maritime Industry: An Overview and Perspectives: Part I : Technological advantages and the momentum towards ammonia-propelled shipping. *Johnson Matthey Technology Review*, **2021**, 65, 275-290	2.5	9
51	HNb3O8 Nanosheet Graphene Oxide Composite Membranes for Molecular Separation. *ACS Applied Nano Materials*, **2021**, 4, 3455-3466	5.6	8
50	2D molybdenum disulphide nanosheets incorporated with single heteroatoms for the electrochemical hydrogen evolution reaction. *Nanoscale*, **2020**, 12, 10447-10455	7.7	8
49	Achieving Ultra-High Rate Planar and Dendrite-Free Zinc Electroplating for Aqueous Zinc Battery Anodes.. *Advanced Materials*, **2022**, e2202552	24	8
48	Rapid Interchangeable Hydrogen, Hydride, and Proton Species at the Interface of Transition Metal Atom on Oxide Surface. *Journal of the American Chemical Society*, **2021**, 143, 9105-9112	16.4	7
47	Atomic-Precision Tailoring of Au4Ag Core Shell Composite Nanoparticles for Direct Electrochemical-Plasmonic Hydrogen Evolution in Water Splitting. *Advanced Functional Materials*, **2021**, 31, 2102517	15.6	7

46	Gas phase selective propylene epoxidation over La2O3-supported cubic silver nanoparticles. *Catalysis Science and Technology*, **2019**, 9, 3435-3444	5.5	6
45	Modification of Pd for formic acid decomposition by support grafted functional groups **2015**, 1, 19-24		6
44	Monitoring the methanol conversion process in H-ZSM-5 using synchrotron X-ray powder diffraction-mass spectrometry. *Journal of Catalysis*, **2018**, 365, 145-152	7.3	6
43	Efficient Non-dissociative Activation of Dinitrogen to Ammonia over Lithium-Promoted Ruthenium Nanoparticles at Low Pressure. *Angewandte Chemie*, **2019**, 131, 17496-17502	3.6	6
42	Unusual Catalytic Properties of High-Energetic-Facet Polar Metal Oxides. *Accounts of Chemical Research*, **2021**, 54, 366-378	24.3	6
41	Differential Adsorption of l- and d-Lysine on Achiral MFI Zeolites as Determined by Synchrotron X-Ray Powder Diffraction and Thermogravimetric Analysis. *Angewandte Chemie - International Edition*, **2020**, 59, 1093-1097	16.4	6
40	A rational study on the geometric and electronic properties of single-atom catalysts for enhanced catalytic performance. *Nanoscale*, **2020**, 12, 23206-23212	7.7	6
39	Zinc-Incorporated Microporous Molecular Sieve for Mild Catalytic Hydrolysis of □-Valerolactone: A New Selective Route for Biomass Conversion. *ChemSusChem*, **2018**, 11, 4214-4218	8.3	6
38	Molecular Understanding of the Catalytic Consequence of Ketene Intermediates under Confinement. *Journal of the American Chemical Society*, **2021**, 143, 15440-15452	16.4	6
37	Decarboxylation of Lactones over Zn/ZSM-5: Elucidation of the Structure of the Active Site and Molecular Interactions. *Angewandte Chemie*, **2017**, 129, 10851-10856	3.6	5
36	Photo and electronic excitation for low temperature catalysis over metal nanoparticles using an organic semiconductor. *RSC Advances*, **2014**, 4, 47488-47496	3.7	5
35	Nanojunction-Mediated Photocatalytic Enhancement in Heterostructured CdS/ZnO, CdSe/ZnO, and CdTe/ZnO Nanocrystals. *Angewandte Chemie*, **2014**, 126, 7972-7976	3.6	5
34	Induced Active Sites by Adsorbate in Zeotype Materials. *Journal of the American Chemical Society*, **2021**, 143, 8761-8771	16.4	5
33	A nonpolar solvent effect by CH/□nteraction inside zeolites: characterization, mechanism and concept. *Chemical Communications*, **2018**, 54, 13435-13438	5.8	5
32	Synthesis and Characterization of Platinum Nanoparticle Catalysts Capped with Isolated Zinc Species in SBA-15 cChannels: The Wall Effect. *ACS Applied Nano Materials*, **2018**, 1, 6603-6612	5.6	5
31	Hydrogen-Catalyzed Acid Transformation for the Hydration of Alkenes and Epoxy Alkanes over Co-N Frustrated Lewis Pair Surfaces. *Journal of the American Chemical Society*, **2021**,	16.4	5
30	Engineered core-shell magnetic nanoparticle for MR dual-modal tracking and safe magnetic manipulation of ependymal cells in live rodents. *Nanotechnology*, **2018**, 29, 015102	3.4	4
29	Nanocomposite materials for rapid-response interior air humidity buffering in closed environments. *Journal of Building Performance Simulation*, **2013**, 6, 354-366	2.8	4

28	Local magnetic spin mismatch promoting photocatalytic overall water splitting with exceptional solar-to-hydrogen efficiency. *Energy and Environmental Science*,	35.4	4
27	Differential Adsorption of l- and d-Lysine on Achiral MFI Zeolites as Determined by Synchrotron X-Ray Powder Diffraction and Thermogravimetric Analysis. *Angewandte Chemie*, **2020**, 132, 1109-1113	3.6	4
26	Cooperative catalytically active sites for methanol activation by single metal ion-doped H-ZSM-5. *Chemical Science*, **2020**, 12, 210-219	9.4	4
25	Tandem Catalysis of Direct CO2 Hydrogenation to Higher Alcohols. *ACS Catalysis*, **2021**, 11, 8978-8984	13.1	4
24	The Feasibility of Electrochemical Ammonia Synthesis in Molten LiCl□KCl Eutectics. *Angewandte Chemie*, **2019**, 131, 17594-17602	3.6	3
23	Methanol Synthesis at a Wide Range of H2/CO2 Ratios over a Rh-In Bimetallic Catalyst. *Angewandte Chemie*, **2020**, 132, 16173-16180	3.6	3
22	Intermix of metal nanoparticles-single wall carbon nanotubes. *Chemical Communications*, **2017**, 53, 7653-7656	5.8	3
21	Transformation of ethylene to higher hydrocarbons on silica-supported Ir catalysts: the nature of carbonaceous deposits. *Applied Petrochemical Research*, **2012**, 2, 85-91	1.9	3
20	Electron Promotion by Surface Functional Groups of Single Wall Carbon Nanotubes to Overlying Metal Particles in a Fuel-Cell Catalyst. *Angewandte Chemie*, **2012**, 124, 7104-7107	3.6	3
19	Rational Design of Synergistic Active Sites for Catalytic Ethene/2-Butene Cross-Metathesis in a Rhenium-Doped Y Zeolite Catalyst. *ACS Catalysis*, **2021**, 11, 3530-3540	13.1	3
18	Renewable N-cycle catalysis. *Trends in Chemistry*, **2021**, 3, 660-673	14.8	3
17	Structural heterogeneity and dynamics in flexible metal-organic frameworks. *Cell Reports Physical Science*, **2021**, 2, 100544	6.1	3
16	Evaluation of Br□sted and Lewis acid sites in H-ZSM-5 and H-USY with or without metal modification using probe molecule-synchrotron X-ray powder diffraction. *Applied Catalysis A: General*, **2020**, 596, 117528	5.1	2
15	Evaluation of the molecular poisoning phenomenon of W sites in ZSM-5 via synchrotron X-ray powder diffraction. *Chemical Communications*, **2018**, 54, 7014-7017	5.8	2
14	Energy Decarbonization via Green H2 or NH3?. *ACS Energy Letters*, **2022**, 7, 1021-1033	20.1	2
13	Neural Stem Cells Harvested from Live Brains by Antibody-Conjugated Magnetic Nanoparticles. *Angewandte Chemie*, **2013**, 125, 12524-12528	3.6	1
12	Importance of Hydrogen Migration in Catalytic Ammonia Synthesis over Yttrium-Doped Barium Zirconate-Supported Ruthenium Nanoparticles: Visualization of Proton Trap Sites. *Journal of Physical Chemistry C*, **2021**, 125, 23058-23070	3.8	1
11	Improving Catalytic Stability and Coke Resistance of Ni/Al2O3 Catalysts with Ce Promoter for Relatively Low Temperature Dry Reforming of Methane Reaction. *Chemical Research in Chinese Universities*,1	2.2	1

10	Laminar HNb3O8-based membranes supported on anodic aluminum oxide with enhanced anti-swelling property for organic solvent nanofiltration. *Journal of Membrane Science*, **2021**, 640, 119799	9.6	1
9	Atomically precise bimetallic metal ensembles with tailorable synergistic effects. *Cell Reports Physical Science*, **2022**, 100850	6.1	1
8	HNb3O8/g-C3N4 nanosheet composite membranes with two-dimensional heterostructured nanochannels achieve enhanced water permeance and photocatalytic activity. *Chemical Engineering Journal*, **2022**, 136254	14.7	1
7	Controlled synthesis of Bi- and tri-nuclear Cu-oxo nanoclusters on metal-organic frameworks and the structure-reactivity correlations.. *Chemical Science*, **2021**, 13, 50-58	9.4	0
6	Intercalating lithium into the lattice of silver nanoparticles boosts catalytic hydrogenation of carbon-oxygen bonds. *Chemical Science*, **2021**, 12, 8791-8802	9.4	0
5	A New Class of Tunable Heterojunction by using Two Support Materials for the Synthesis of Supported Bimetallic Catalysts. *ChemCatChem*, **2015**, 7, 173-173	5.2	
4	Inside Cover: Effect of Brønsted/Lewis Acid Ratio on Conversion of Sugars to 5-Hydroxymethylfurfural over Mesoporous Nb and Nb-W Oxides (Chin. J. Chem. 10/2017). *Chinese Journal of Chemistry*, **2017**, 35, 1480-1480	4.9	
3	Rücktitelbild: Elucidation of Adsorbate Structures and Interactions on Brønsted Acid Sites in H-ZSM-5 by Synchrotron X-ray Powder Diffraction (Angew. Chem. 20/2016). *Angewandte Chemie*, **2016**, 128, 6214-6214	3.6	
2	Innenrücktitelbild: From Biomass-Derived Furans to Aromatics with Ethanol over Zeolite (Angew. Chem. 42/2016). *Angewandte Chemie*, **2016**, 128, 13545-13545	3.6	
1	Direct Visualization of Substitutional Li Doping in Supported Pt Nanoparticles and Their Ultra-selective Catalytic Hydrogenation Performance. *Chemistry - A European Journal*, **2021**, 27, 12041-12046	4.8	