Edman Tsang

List of Publications by Year
in descending order

166 papers	10,698 citations	30047 54 h-index	36008 97 g-index
178 all docs	178 docs citations	178 times ranked	13334 citing authors

#	Article	IF	Citations
1	Hydrogen production from formic acid decomposition at room temperature using a Agâ€“Pd coreâ€“shell nanocatalyst. Nature Nanotechnology, 2011, 6, 302-307.	15.6	1,028
2	Recent Advances in CO₂ Capture and Utilization. ChemSusChem, 2008, 1, 893-899.	3.6	728
3	MoS2 monolayer catalyst doped with isolated Co atoms for the hydrodeoxygenation reaction. Nature Chemistry, 2017, 9, 810-816.	6.6	683
4	Carbon nitrides and metal nanoparticles: from controlled synthesis to design principles for improved photocatalysis. Chemical Society Reviews, 2018, 47, 7783-7817.	18.7	238
5	A graphene dispersed CdSâ€“MoS₂nanocrystal ensemble for cooperative photocatalytic hydrogen production from water. Chemical Communications, 2014, 50, 1185-1188.	2.2	212
6	Interstitial modification of palladium nanoparticles with boron atoms as a green catalyst for selective hydrogenation. Nature Communications, 2014, 5, 5787.	5.8	196
7	Rationalization of Interactions in Precious Metal/Ceria Catalysts Using the dâ€Band Center Model. Angewandte Chemie - International Edition, 2013, 52, 7737-7741.	7.2	181
8	Shapeâ€Dependent Acidity and Photocatalytic Activity of Nb₂O₅ Nanocrystals with an Active TT (001) Surface. Angewandte Chemie - International Edition, 2012, 51, 3846-3849.	7.2	173
9	Nanostructured Nb₂O₅catalysts. Nano Reviews, 2012, 3, 17631.	3.7	168
10	Transition metal atom doping of the basal plane of MoS₂ monolayer nanosheets for electrochemical hydrogen evolution. Chemical Science, 2018, 9, 4769-4776.	3.7	162
11	Enhanced CO2 hydrogenation to methanol over CuZn nanoalloy in Ga modified Cu/ZnO catalysts. Journal of Catalysis, 2016, 343, 157-167.	3.1	152
12	Photocatalytic water splitting by N-TiO2 on MgO (111) with exceptional quantum efficiencies at elevated temperatures. Nature Communications, 2019, 10, 4421.	5.8	151
13	Nanojunctionâ€Mediated Photocatalytic Enhancement in Heterostructured CdS/ZnO, CdSe/ZnO, and CdTe/ZnO Nanocrystals. Angewandte Chemie - International Edition, 2014, 53, 7838-7842.	7.2	133
14	Non-syngas direct steam reforming of methanol to hydrogen and carbon dioxide at low temperature. Nature Communications, 2012, 3, 1230.	5.8	129
15	Advances in higher alcohol synthesis from CO2 hydrogenation. CheM, 2021, 7, 849-881.	5.8	129
16	CO2 hydrogenation to methanol over Cu catalysts supported on La-modified SBA-15: The crucial role of Cuâ€“LaOx interfaces. Applied Catalysis B: Environmental, 2019, 251, 119-129.	10.8	128
17	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, 5832-5836.	7.2	126
18	Structural Studies of Bulk to Nanosize Niobium Oxides with Correlation to Their Acidity. Journal of the American Chemical Society, 2017, 139, 12670-12680.	6.6	125

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19	In SituPhase Transformation on Nickel-Based Selenides for Enhanced Hydrogen Evolution Reaction in Alkaline Medium. ACS Energy Letters, 2020, 5, 2483-2491.	8.8	124
20	¹³ C NMR Guides Rational Design of Nanocatalysts via Chemisorption Evaluation in Liquid Phase. Science, 2011, 332, 224-228.	6.0	123
21	Edge-Enriched 2D MoS₂ Thin Films Grown by Chemical Vapor Deposition for Enhanced Catalytic Performance. ACS Catalysis, 2017, 7, 877-886.	5.5	123
22	CO₂ Hydrogenation to Methanol over Catalysts Derived from Single Cationic Layer CuZnGa LDH Precursors. ACS Catalysis, 2018, 8, 4390-4401.	5.5	121
23	Transition metal-doped nickel phosphide nanoparticles as electro- and photocatalysts for hydrogen generation reactions. Applied Catalysis B: Environmental, 2019, 242, 186-193.	10.8	120
24	Prominent Electronic and Geometric Modifications of Palladium Nanoparticles by Polymer Stabilizers for Hydrogen Production under Ambient Conditions. Angewandte Chemie - International Edition, 2012, 51, 11275-11278.	7.2	110
25	From Biomassâ€Derived Furans to Aromatics with Ethanol over Zeolite. Angewandte Chemie - International Edition, 2016, 55, 13061-13066.	7.2	110
26	Hydrodeoxygenation of water-insoluble bio-oil to alkanes using a highly dispersed Pdâ€“Mo catalyst. Nature Communications, 2017, 8, 591.	5.8	110
27	Selective C₂₊ Alcohol Synthesis from Direct CO₂ Hydrogenation over a Cs-Promoted Cu-Fe-Zn Catalyst. ACS Catalysis, 2020, 10, 5250-5260.	5.5	108
28	Bimetallic catalysts for green methanol production via CO₂ and renewable hydrogen: a mini-review and prospects. Catalysis Science and Technology, 2018, 8, 3450-3464.	2.1	104
29	Facet-dependent photocatalysis of nanosize semiconductive metal oxides and progress of their characterization. Nano Today, 2018, 18, 15-34.	6.2	99
30	Characterisation of oxygen defects and nitrogen impurities in TiO2 photocatalysts using variable-temperature X-ray powder diffraction. Nature Communications, 2021, 12, 661.	5.8	97
31	High Loading of Transition Metal Single Atoms on Chalcogenide Catalysts. Journal of the American Chemical Society, 2021, 143, 7979-7990.	6.6	93
32	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.	15.6	92
33	Niobium oxides: Correlation of acidity with structure and catalytic performance in sucrose conversion to 5-hydroxymethylfurfural. Journal of Catalysis, 2016, 338, 329-339.	3.1	92
34	Engineering Monolayer 1T-MoS₂ into a Bifunctional Electrocatalyst via Sonochemical Doping of Isolated Transition Metal Atoms. ACS Catalysis, 2019, 9, 7527-7534.	5.5	92
35	Reaction: â€œGreenâ€•Ammonia Production. CheM, 2017, 3, 712-714.	5.8	91
36	Recent Developments in Palladiumâ€Based Bimetallic Catalysts. ChemCatChem, 2015, 7, 1998-2014.	1.8	90

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37	Dramatic Effects of Gallium Promotion on Methanol Steam Reforming Cuâ€“ZnO Catalyst for Hydrogen Production: Formation of 5 Ã… Copper Clusters from Cuâ€“ZnGaO_x. ACS Catalysis, 2013, 3, 1231-1244.	5.5	89
38	Achieving Ultrahighâ€Rate Planar and Dendriteâ€Free Zinc Electroplating for Aqueous Zinc Battery Anodes. Advanced Materials, 2022, 34, e2202552.	11.1	88
39	Self- regeneration of Au/CeO2 based catalysts with enhanced activity and ultra-stability for acetylene hydrochlorination. Nature Communications, 2019, 10, 914.	5.8	86
40	Effect of Cr doping in CeO2 nanostructures on photocatalysis and H2O2 assisted methylene blue dye degradation. Catalysis Today, 2021, 375, 506-513.	2.2	85
41	Trimethylphosphine-Assisted Surface Fingerprinting of Metal Oxide Nanoparticle by ³¹P Solid-State NMR: A Zinc Oxide Case Study. Journal of the American Chemical Society, 2016, 138, 2225-2234.	6.6	83
42	A promising low pressure methanol synthesis route from CO₂ hydrogenation over Pd@Zn coreâ€“shell catalysts. Green Chemistry, 2017, 19, 270-280.	4.6	82
43	Comparative Study of Catalytic Hydrogenation of 9-Ethylcarbazole for Hydrogen Storage over Noble Metal Surfaces. Journal of Physical Chemistry C, 2012, 116, 7421-7429.	1.5	81
44	Efficient Nonâ€dissociative Activation of Dinitrogen to Ammonia over Lithiumâ€Promoted Ruthenium Nanoparticles at Low Pressure. Angewandte Chemie - International Edition, 2019, 58, 17335-17341.	7.2	76
45	Shape Effect of Pd-Promoted Ga₂O₃ Nanocatalysts for Methanol Synthesis by CO₂ Hydrogenation. Journal of Physical Chemistry C, 2014, 118, 24452-24466.	1.5	73
46	Tailored transition metal-doped nickel phosphide nanoparticles for the electrochemical oxygen evolution reaction (OER). Chemical Communications, 2018, 54, 8630-8633.	2.2	73
47	Entrapped Single Tungstate Site in Zeolite for Cooperative Catalysis of Olefin Metathesis with BrÃ¸nsted Acid Site. Journal of the American Chemical Society, 2018, 140, 6661-6667.	6.6	71
48	Shape selective plate-form Ga2O3 with strong metalâ€“support interaction to overlying Pd for hydrogenation of CO2 to CH3OH. Chemical Communications, 2013, 49, 1747.	2.2	70
49	Materials for electrochemical ammonia synthesis. Dalton Transactions, 2019, 48, 1562-1568.	1.6	63
50	Molecular nitrogen promotes catalytic hydrodeoxygenation. Nature Catalysis, 2019, 2, 1078-1087.	16.1	63
51	Mapping surface-modified titania nanoparticles with implications for activity and facet control. Nature Communications, 2017, 8, 675.	5.8	62
52	Differentiating Surface Ce Species among CeO₂ Facets by Solid-State NMR for Catalytic Correlation. ACS Catalysis, 2020, 10, 4003-4011.	5.5	59
53	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.	5.5	59
54	Morphology-Controlled Synthesis of Au/Cu₂FeSnS₄ Coreâ€“Shell Nanostructures for Plasmon-Enhanced Photocatalytic Hydrogen Generation. ACS Applied Materials & Interfaces, 2015, 7, 9072-9077.	4.0	54

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55	Structural dynamics of a metalâ€“organic framework induced by CO2 migration in its non-uniform porous structure. Nature Communications, 2019, 10, 999.	5.8	54
56	Methanol Synthesis at a Wide Range of H₂/CO₂ Ratios over a Rhâ€In Bimetallic Catalyst. Angewandte Chemie - International Edition, 2020, 59, 16039-16046.	7.2	54
57	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.	5.2	53
58	Cu2ZnSnS4/MoS2-Reduced Graphene Oxide Heterostructure: Nanoscale Interfacial Contact and Enhanced Photocatalytic Hydrogen Generation. Scientific Reports, 2017, 7, 39411.	1.6	53
59	Hydrazineâ€Assisted Liquid Exfoliation of MoS₂ for Catalytic Hydrodeoxygenation of 4â€Methylphenol. Chemistry - A European Journal, 2016, 22, 2910-2914.	1.7	52
60	Atomic Imaging of Carbon-Supported Pt, Pt/Co, and Ir@Pt Nanocatalysts by Atom-Probe Tomography. ACS Catalysis, 2014, 4, 695-702.	5.5	50
61	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.	5.2	50
62	Enhanced chemoselective hydrogenation of dimethyl oxalate to methyl glycolate over bimetallic Agâ€“Ni/SBA-15 catalysts. Applied Catalysis A: General, 2015, 505, 344-353.	2.2	47
63	Responses of Defect-Rich Zr-Based Metalâ€“Organic Frameworks toward NH₃ Adsorption. Journal of the American Chemical Society, 2021, 143, 3205-3218.	6.6	47
64	Molecular Understanding of the Catalytic Consequence of Ketene Intermediates under Confinement. Journal of the American Chemical Society, 2021, 143, 15440-15452.	6.6	45
65	Energy Decarbonization via Green H₂ or NH₃?. ACS Energy Letters, 2022, 7, 1021-1033.	8.8	45
66	The remarkable activity and stability of a dye-sensitized single molecular layer MoS₂ensemble for photocatalytic hydrogen production. Chemical Communications, 2015, 51, 13496-13499.	2.2	43
67	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.	6.6	43
68	Tandem Catalysis of Direct CO₂ Hydrogenation to Higher Alcohols. ACS Catalysis, 2021, 11, 8978-8984.	5.5	42
69	Direct Catalytic Conversion of Biomass-Derived Furan and Ethanol to Ethylbenzene. ACS Catalysis, 2018, 8, 1843-1850.	5.5	41
70	The Contribution of Synchrotron X-Ray Powder Diffraction to Modern Zeolite Applications: A Mini-review and Prospects. CheM, 2018, 4, 1778-1808.	5.8	41
71	Electron Promotion by Surface Functional Groups of Single Wall Carbon Nanotubes to Overlying Metal Particles in a Fuelâ€Cell Catalyst. Angewandte Chemie - International Edition, 2012, 51, 6998-7001.	7.2	39
72	Surfactant-free nickelâ€“silver core@shell nanoparticles in mesoporous SBA-15 for chemoselective hydrogenation of dimethyl oxalate. Chemical Communications, 2016, 52, 2569-2572.	2.2	39

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73	Interstitial and substitutional light elements in transition metals for heterogeneous catalysis. Chemical Science, 2021, 12, 517-532.	3.7	39
74	Ceria Nanocrystals Supporting Pd for Formic Acid Electrocatalytic Oxidation: Prominent Polar Surface Metal Support Interactions. ACS Catalysis, 2019, 9, 5171-5177.	5.5	38
75	Morphology-Dependent Catalytic Activity of Ru/CeO2 in Dry Reforming of Methane. Molecules, 2019, 24, 526.	1.7	38
76	Tuning Metalâ€“Support Interactions on Ni/Al2O3 Catalysts to Improve Catalytic Activity and Stability for Dry Reforming of Methane. Processes, 2021, 9, 706.	1.3	38
77	Enhanced photocatalytic hydrogen evolution from water by niobate single molecular sheets and ensembles. Chemical Communications, 2014, 50, 13702-13705.	2.2	37
78	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.	6.6	37
79	Local magnetic spin mismatch promoting photocatalytic overall water splitting with exceptional solar-to-hydrogen efficiency. Energy and Environmental Science, 2022, 15, 265-277.	15.6	37
80	A tunable metalâ€“polyaniline interface for efficient carbon dioxide electro-reduction to formic acid and methanol in aqueous solution. Chemical Communications, 2016, 52, 13901-13904.	2.2	36
81	2D photocatalysts with tuneable supports for enhanced photocatalytic water splitting. Materials Today, 2020, 41, 34-43.	8.3	36
82	Recent progress and strategies for enhancing photocatalytic water splitting. Materials Today Sustainability, 2020, 9, 100032.	1.9	35
83	Graphitic carbon nitride catalysed photoacetalization of aldehydes/ketones under ambient conditions. Chemical Communications, 2016, 52, 2772-2775.	2.2	34
84	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.	5.5	34
85	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.	3.2	34
86	Unravelling the key role of surface features behind facet-dependent photocatalysis of anatase TiO₂. Chemical Communications, 2019, 55, 4415-4418.	2.2	34
87	Elucidation of Adsorbate Structures and Interactions on BrÃ¸nsted Acid Sites in Hâ€ZSMâ€5 by Synchrotron Xâ€ray Powder Diffraction. Angewandte Chemie - International Edition, 2016, 55, 5981-5984.	7.2	33
88	Decarboxylation of Lactones over Zn/ZSMâ€5: Elucidation of the Structure of the Active Site and Molecular Interactions. Angewandte Chemie - International Edition, 2017, 56, 10711-10716.	7.2	33
89	Hydrogen-Catalyzed Acid Transformation for the Hydration of Alkenes and Epoxy Alkanes over Coâ€“N Frustrated Lewis Pair Surfaces. Journal of the American Chemical Society, 2021, 143, 21294-21301.	6.6	33
90	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.	2.9	32

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91	From Biomassâ€Derived Furans to Aromatics with Ethanol over Zeolite. Angewandte Chemie, 2016, 128, 13255-13260.	1.6	31
92	Lithium and boron as interstitial palladium dopants for catalytic partial hydrogenation of acetylene. Chemical Communications, 2017, 53, 601-604.	2.2	31
93	Differentiating surface titanium chemical states of anatase TiO₂ functionalized with various groups. Chemical Science, 2018, 9, 2493-2500.	3.7	31
94	Direct methanol steam reforming to hydrogen over CuZnGaOx catalysts without CO post-treatment: mechanistic considerations. Physical Chemistry Chemical Physics, 2013, 15, 7240.	1.3	30
95	Probing atomic positions of adsorbed ammonia molecules in zeolite. Chemical Communications, 2016, 52, 3422-3425.	2.2	30
96	Superior Performance of Ag over Pt for Hydrogen Evolution Reaction in Water Electrolysis under High Overpotentials. ACS Applied Energy Materials, 2019, 2, 1221-1228.	2.5	27
97	Effect of BrÃ¸nsted/Lewis Acid Ratio on Conversion of Sugars to 5â€Hydroxymethylfurfural over Mesoporous Nb and Nbâ€W Oxides. Chinese Journal of Chemistry, 2017, 35, 1529-1539.	2.6	26
98	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.	10.8	26
99	Design of niobate nanosheet-graphene oxide composite nanofiltration membranes with improved permeability. Journal of Membrane Science, 2020, 595, 117598.	4.1	25
100	PdFe nanoparticles as selective catalysts for Câ€“C cleavage in hydrogenolysis of vicinal diol units in biomass-derived chemicals. Catalysis Science and Technology, 2015, 5, 887-896.	2.1	24
101	Blue ordered/disordered Janus-type TiO₂ nanoparticles for enhanced photocatalytic hydrogen generation. Journal of Materials Chemistry A, 2020, 8, 22828-22839.	5.2	24
102	Spatial differentiation of BrÃ¸nsted acid sites by probe molecule in zeolite USY using synchrotron X-ray powder diffraction. Chemical Communications, 2017, 53, 9725-9728.	2.2	22
103	Probeâ€Moleculeâ€Assisted NMR Spectroscopy: A Comparison with Photoluminescence and Electron Paramagnetic Resonance Spectroscopy as a Characterization Tool in Facetâ€Specific Photocatalysis. ChemCatChem, 2017, 9, 155-160.	1.8	22
104	Structureâ€“Activity Correlations for BrÃ¸nsted Acid, Lewis Acid, and Photocatalyzed Reactions of Exfoliated Crystalline Niobium Oxides. ChemCatChem, 2017, 9, 144-154.	1.8	22
105	HNb3O8/g-C3N4 nanosheet composite membranes with two-dimensional heterostructured nanochannels achieve enhanced water permeance and photocatalytic activity. Chemical Engineering Journal, 2022, 442, 136254.	6.6	22
106	Atomicâ€Precision Tailoring of Auâ€“Ag Coreâ€“Shell Composite Nanoparticles for Direct Electrochemicalâ€Plasmonic Hydrogen Evolution in Water Splitting. Advanced Functional Materials, 2021, 31, 2102517.	7.8	21
107	Importance of the structural integrity of a carbon conjugated mediator for photocatalytic hydrogen generation from water over a CdSâ€“carbon nanotubeâ€“MoS₂ composite. Chemical Communications, 2016, 52, 13596-13599.	2.2	20
108	Mononuclear gold species anchored on TS-1 framework as catalyst precursor for selective epoxidation of propylene. Journal of Catalysis, 2018, 367, 229-233.	3.1	20

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109	Transition metal atomâ€“doped monolayer MoS2 in a proton-exchange membrane electrolyzer. Materials Today Advances, 2020, 6, 100020.	2.5	20
110	Structural insight into [Feâ€“S₂â€“Mo] motif in electrochemical reduction of N₂ over Fe₁-supported molecular MoS₂. Chemical Science, 2021, 12, 688-695.	3.7	20
111	Pd@Zn coreâ€“shell nanoparticles of controllable shell thickness for catalytic methanol production. Catalysis Science and Technology, 2016, 6, 7698-7702.	2.1	19
112	The Position of Ammonia in Decarbonising Maritime Industry: An Overview and Perspectives: Part I. Johnson Matthey Technology Review, 2021, 65, 275-290.	0.5	19
113	Induced Active Sites by Adsorbate in Zeotype Materials. Journal of the American Chemical Society, 2021, 143, 8761-8771.	6.6	19
114	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.	1.6	18
115	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.	1.8	18
116	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.	10.8	18
117	The Feasibility of Electrochemical Ammonia Synthesis in Molten LiClâ€“KCl Eutectics. Angewandte Chemie - International Edition, 2019, 58, 17433-17441.	7.2	18
118	Methanol Synthesis at a Wide Range of H₂/CO₂ Ratios over a Rhâ€In Bimetallic Catalyst. Angewandte Chemie, 2020, 132, 16173-16180.	1.6	17
119	Tunability of catalytic properties of Pd-based catalysts by rational control of strong metal and support interaction (SMSI) for selective hydrogenolyic Câ€“C and Câ€“O bond cleavage of ethylene glycol units in biomass molecules. Catalysis Science and Technology, 2015, 5, 3491-3495.	2.1	15
120	Probing the Size and Shape Effects of Cubicâ€•and Sphericalâ€Shaped Palladium Nanoparticles in the Electrooxidation of Formic Acid. ChemCatChem, 2015, 7, 3826-3831.	1.8	15
121	A New Class of Tunable Heterojunction by using Two Support Materials for the Synthesis of Supported Bimetallic Catalysts. ChemCatChem, 2015, 7, 230-235.	1.8	15
122	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.	10.8	15
123	Cooperative catalytically active sites for methanol activation by single metal ion-doped H-ZSM-5. Chemical Science, 2021, 12, 210-219.	3.7	15
124	Unusual Catalytic Properties of High-Energetic-Facet Polar Metal Oxides. Accounts of Chemical Research, 2021, 54, 366-378.	7.6	15
125	Elucidation of Adsorbate Structures and Interactions on BrÃ¸nsted Acid Sites in Hâ€ZSMâ€5 by Synchrotron Xâ€•ray Powder Diffraction. Angewandte Chemie, 2016, 128, 6085-6088.	1.6	14
126	Niobate nanosheet membranes with enhanced stability for nanofiltration. Chemical Communications, 2017, 53, 7929-7932.	2.2	14

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127	2D molybdenum disulphide nanosheets incorporated with single heteroatoms for the electrochemical hydrogen evolution reaction. Nanoscale, 2020, 12, 10447-10455.	2.8	14
128	Structural heterogeneity and dynamics in flexible metal-organic frameworks. Cell Reports Physical Science, 2021, 2, 100544.	2.8	14
129	Two-dimensional niobate nanosheet membranes for water treatment: Effect of nanosheet preparation method on membrane performance. Separation and Purification Technology, 2019, 219, 222-229.	3.9	13
130	A rational study on the geometric and electronic properties of single-atom catalysts for enhanced catalytic performance. Nanoscale, 2020, 12, 23206-23212.	2.8	13
131	Gain Spectroscopy of Solutionâ€Based Semiconductor Nanocrystals in Tunable Optical Microcavities. Advanced Optical Materials, 2016, 4, 285-290.	3.6	12
132	The Applications of Nanoâ€Heteroâ€Junction in Optical and Thermal ÂCatalysis. European Journal of Inorganic Chemistry, 2016, 2016, 1924-1938.	1.0	12
133	Monitoring the methanol conversion process in H-ZSM-5 using synchrotron X-ray powder diffraction-mass spectrometry. Journal of Catalysis, 2018, 365, 145-152.	3.1	12
134	Gas phase selective propylene epoxidation over La₂O₃-supported cubic silver nanoparticles. Catalysis Science and Technology, 2019, 9, 3435-3444.	2.1	12
135	Differential Adsorption of <scp>l</scp>â€•and <scp>d</scp>â€Lysine on Achiral MFI Zeolites as Determined by Synchrotron Xâ€Ray Powder Diffraction and Thermogravimetric Analysis. Angewandte Chemie - International Edition, 2020, 59, 1093-1097.	7.2	12
136	Intercalating lithium into the lattice of silver nanoparticles boosts catalytic hydrogenation of carbonâ€“oxygen bonds. Chemical Science, 2021, 12, 8791-8802.	3.7	12
137	HNb3O8 Nanosheetâ€“Graphene Oxide Composite Membranes for Molecular Separation. ACS Applied Nano Materials, 2021, 4, 3455-3466.	2.4	11
138	Zincâ€Incorporated Microporous Molecular Sieve for Mild Catalytic Hydrolysis of Î³â€Valerolactone: A New Selective Route for Biomass Conversion. ChemSusChem, 2018, 11, 4214-4218.	3.6	10
139	Renewable N-cycle catalysis. Trends in Chemistry, 2021, 3, 660-673.	4.4	10
140	Modification of Pd for formic acid decomposition by support grafted functional groups. Journal of Lithic Studies, 2015, 1, 19-24.	0.1	9
141	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.	5.5	9
142	A nonpolar solvent effect by CH/Î€ interaction inside zeolites: characterization, mechanism and concept. Chemical Communications, 2018, 54, 13435-13438.	2.2	8
143	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.	2.4	7
144	Efficient Nonâ€dissociative Activation of Dinitrogen to Ammonia over Lithiumâ€Promoted Ruthenium Nanoparticles at Low Pressure. Angewandte Chemie, 2019, 131, 17496-17502.	1.6	7

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145	Photo and electronic excitation for low temperature catalysis over metal nanoparticles using an organic semiconductor. RSC Advances, 2014, 4, 47488-47496.	1.7	6
146	Differential Adsorption oflâ€•anddâ€Lysine on Achiral MFI Zeolites as Determined by Synchrotron Xâ€Ray Powder Diffraction and Thermogravimetric Analysis. Angewandte Chemie, 2020, 132, 1109-1113.	1.6	6
147	Nanocomposite materials for rapid-response interior air humidity buffering in closed environments. Journal of Building Performance Simulation, 2013, 6, 354-366.	1.0	5
148	Decarboxylation of Lactones over Zn/ZSMâ€5: Elucidation of the Structure of the Active Site and Molecular Interactions. Angewandte Chemie, 2017, 129, 10851-10856.	1.6	5
149	Engineered coreâ€“shell magnetic nanoparticle for MR dual-modal tracking and safe magnetic manipulation of ependymal cells in live rodents. Nanotechnology, 2018, 29, 015102.	1.3	5
150	The Feasibility of Electrochemical Ammonia Synthesis in Molten LiClâ€“KCl Eutectics. Angewandte Chemie, 2019, 131, 17594-17602.	1.6	5
151	Evaluation of BrÃ¸nsted 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.	2.2	5
152	Controlled synthesis of Bi- and tri-nuclear Cu-oxo nanoclusters on metalâ€“organic frameworks and the structureâ€“reactivity correlations. Chemical Science, 2021, 13, 50-58.	3.7	5
153	Atomically precise bimetallic metal ensembles with tailorable synergistic effects. Cell Reports Physical Science, 2022, , 100850.	2.8	5
154	Transformation of ethylene to higher hydrocarbons on silica-supported Ir catalysts: the nature of carbonaceous deposits. Applied Petrochemical Research, 2012, 2, 85-91.	1.3	4
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