

# Edman Tsang

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Energy Decarbonization via Green H <sub>2</sub> or NH <sub>3</sub> ?. <i>ACS Energy Letters</i> , <b>2022</b> , 7, 1021-1033	20.1	2
170	Atomically precise bimetallic metal ensembles with tailorable synergistic effects. <i>Cell Reports Physical Science</i> , <b>2022</b> , 100850	6.1	1
169	HNb <sub>3</sub> O <sub>8</sub> /g-C <sub>3</sub> N <sub>4</sub> nanosheet composite membranes with two-dimensional heterostructured nanochannels achieve enhanced water permeance and photocatalytic activity. <i>Chemical Engineering Journal</i> , <b>2022</b> , 136254	14.7	1
168	Achieving Ultra-High Rate Planar and Dendrite-Free Zinc Electroplating for Aqueous Zinc Battery Anodes.. <i>Advanced Materials</i> , <b>2022</b> , e2202552	24	8
167	Controlled synthesis of Bi- and tri-nuclear Cu-oxo nanoclusters on metal-organic frameworks and the structure-reactivity correlations.. <i>Chemical Science</i> , <b>2021</b> , 13, 50-58	9.4	0
166	Importance of Hydrogen Migration in Catalytic Ammonia Synthesis over Yttrium-Doped Barium Zirconate-Supported Ruthenium Nanoparticles: Visualization of Proton Trap Sites. <i>Journal of Physical Chemistry C</i> , <b>2021</b> , 125, 23058-23070	3.8	1
165	Unusual Catalytic Properties of High-Energetic-Facet Polar Metal Oxides. <i>Accounts of Chemical Research</i> , <b>2021</b> , 54, 366-378	24.3	6
164	HNb <sub>3</sub> O <sub>8</sub> Nanosheet/Graphene Oxide Composite Membranes for Molecular Separation. <i>ACS Applied Nano Materials</i> , <b>2021</b> , 4, 3455-3466	5.6	8
163	Rational Design of Synergistic Active Sites for Catalytic Ethene/2-Butene Cross-Metathesis in a Rhenium-Doped Y Zeolite Catalyst. <i>ACS Catalysis</i> , <b>2021</b> , 11, 3530-3540	13.1	3
162	Tuning Metal/Support Interactions on Ni/Al <sub>2</sub> O <sub>3</sub> Catalysts to Improve Catalytic Activity and Stability for Dry Reforming of Methane. <i>Processes</i> , <b>2021</b> , 9, 706	2.9	14
161	The Position of Ammonia in Decarbonising Maritime Industry: An Overview and Perspectives: Part I : Technological advantages and the momentum towards ammonia-propelled shipping. <i>Johnson Matthey Technology Review</i> , <b>2021</b> , 65, 275-290	2.5	9
160	High Loading of Transition Metal Single Atoms on Chalcogenide Catalysts. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 7979-7990	16.4	26
159	Rapid Interchangeable Hydrogen, Hydride, and Proton Species at the Interface of Transition Metal Atom on Oxide Surface. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 9105-9112	16.4	7
158	Atomic-Precision Tailoring of Au/Ag Core/Shell Composite Nanoparticles for Direct Electrochemical-Plasmonic Hydrogen Evolution in Water Splitting. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2102517	15.6	7
157	Fe on molecular-layer MoS <sub>2</sub> as inorganic Fe-S <sub>2</sub> -Mo motifs for light-driven nitrogen fixation to ammonia at elevated temperatures. <i>Chem Catalysis</i> , <b>2021</b> , 1, 162-182		11
156	Induced Active Sites by Adsorbate in Zeotype Materials. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 8761-8771	16.4	5
155	Effect of Cr doping in CeO <sub>2</sub> nanostructures on photocatalysis and H <sub>2</sub> O <sub>2</sub> assisted methylene blue dye degradation. <i>Catalysis Today</i> , <b>2021</b> , 375, 506-513	5.3	32

154	Advances in higher alcohol synthesis from CO <sub>2</sub> hydrogenation. <i>Chem</i> , <b>2021</b> , 7, 849-881	16.2	34
153	Intercalating lithium into the lattice of silver nanoparticles boosts catalytic hydrogenation of carbon-oxygen bonds. <i>Chemical Science</i> , <b>2021</b> , 12, 8791-8802	9.4	0
152	Responses of Defect-Rich Zr-Based Metal-Organic Frameworks toward NH Adsorption. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 3205-3218	16.4	16
151	Direct Visualization of Substitutional Li Doping in Supported Pt Nanoparticles and Their Ultra-selective Catalytic Hydrogenation Performance. <i>Chemistry - A European Journal</i> , <b>2021</b> , 27, 12041-12046	14.8	16
150	Tandem Catalysis of Direct CO <sub>2</sub> Hydrogenation to Higher Alcohols. <i>ACS Catalysis</i> , <b>2021</b> , 11, 8978-8984	13.1	4
149	Renewable N-cycle catalysis. <i>Trends in Chemistry</i> , <b>2021</b> , 3, 660-673	14.8	3
148	Structural heterogeneity and dynamics in flexible metal-organic frameworks. <i>Cell Reports Physical Science</i> , <b>2021</b> , 2, 100544	6.1	3
147	Molecular Understanding of the Catalytic Consequence of Ketene Intermediates under Confinement. <i>Journal of the American Chemical Society</i> , <b>2021</b> , 143, 15440-15452	16.4	6
146	Laminar HNb <sub>3</sub> O <sub>8</sub> -based membranes supported on anodic aluminum oxide with enhanced anti-swelling property for organic solvent nanofiltration. <i>Journal of Membrane Science</i> , <b>2021</b> , 640, 119799	9.6	1
145	Characterisation of oxygen defects and nitrogen impurities in TiO photocatalysts using variable-temperature X-ray powder diffraction. <i>Nature Communications</i> , <b>2021</b> , 12, 661	17.4	34
144	Hydrogen-Catalyzed Acid Transformation for the Hydration of Alkenes and Epoxy Alkanes over Co-N Frustrated Lewis Pair Surfaces. <i>Journal of the American Chemical Society</i> , <b>2021</b> ,	16.4	5
143	Methanol Synthesis at a Wide Range of H <sub>2</sub> /CO Ratios over a Rh-In Bimetallic Catalyst. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 16039-16046	16.4	27
142	Methanol Synthesis at a Wide Range of H <sub>2</sub> /CO <sub>2</sub> Ratios over a Rh-In Bimetallic Catalyst. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 16173-16180	3.6	3
141	Evaluation of Brønsted and Lewis acid sites in H-ZSM-5 and H-USY with or without metal modification using probe molecule-synchrotron X-ray powder diffraction. <i>Applied Catalysis A: General</i> , <b>2020</b> , 596, 117528	5.1	2
140	Transition metal atom-doped monolayer MoS <sub>2</sub> in a proton-exchange membrane electrolyzer. <i>Materials Today Advances</i> , <b>2020</b> , 6, 100020	7.4	14
139	Differentiating Surface Ce Species among CeO <sub>2</sub> Facets by Solid-State NMR for Catalytic Correlation. <i>ACS Catalysis</i> , <b>2020</b> , 10, 4003-4011	13.1	33
138	Beyond surface redox and oxygen mobility at Pd-polar ceria (100) interface: Underlying principle for strong metal-support interactions in green catalysis. <i>Applied Catalysis B: Environmental</i> , <b>2020</b> , 270, 118843	21.8	9
137	In Situ Phase Transformation on Nickel-Based Selenides for Enhanced Hydrogen Evolution Reaction in Alkaline Medium. <i>ACS Energy Letters</i> , <b>2020</b> , 5, 2483-2491	20.1	47

136	Recent progress and strategies for enhancing photocatalytic water splitting. <i>Materials Today Sustainability</i> , <b>2020</b> , 9, 100032	5	18
135	Selective C2+ Alcohol Synthesis from Direct CO2 Hydrogenation over a Cs-Promoted Cu-Fe-Zn Catalyst. <i>ACS Catalysis</i> , <b>2020</b> , 10, 5250-5260	13.1	44
134	Removal of Hydrogen Poisoning by Electrostatically Polar MgO Support for Low-Pressure NH3 Synthesis at a High Rate over the Ru Catalyst. <i>ACS Catalysis</i> , <b>2020</b> , 10, 5614-5622	13.1	29
133	Differential Adsorption of l- and d-Lysine on Achiral MFI Zeolites as Determined by Synchrotron X-Ray Powder Diffraction and Thermogravimetric Analysis. <i>Angewandte Chemie</i> , <b>2020</b> , 132, 1109-1113	3.6	4
132	Differential Adsorption of l- and d-Lysine on Achiral MFI Zeolites as Determined by Synchrotron X-Ray Powder Diffraction and Thermogravimetric Analysis. <i>Angewandte Chemie - International Edition</i> , <b>2020</b> , 59, 1093-1097	16.4	6
131	A rational study on the geometric and electronic properties of single-atom catalysts for enhanced catalytic performance. <i>Nanoscale</i> , <b>2020</b> , 12, 23206-23212	7.7	6
130	2D photocatalysts with tuneable supports for enhanced photocatalytic water splitting. <i>Materials Today</i> , <b>2020</b> , 41, 34-43	21.8	16
129	Blue ordered/disordered Janus-type TiO2 nanoparticles for enhanced photocatalytic hydrogen generation. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 22828-22839	13	10
128	Design of niobate nanosheet-graphene oxide composite nanofiltration membranes with improved permeability. <i>Journal of Membrane Science</i> , <b>2020</b> , 595, 117598	9.6	20
127	2D molybdenum disulphide nanosheets incorporated with single heteroatoms for the electrochemical hydrogen evolution reaction. <i>Nanoscale</i> , <b>2020</b> , 12, 10447-10455	7.7	8
126	Structural insight into [Fe-S-Mo] motif in electrochemical reduction of N over Fe-supported molecular MoS. <i>Chemical Science</i> , <b>2020</b> , 12, 688-695	9.4	12
125	Cooperative catalytically active sites for methanol activation by single metal ion-doped H-ZSM-5. <i>Chemical Science</i> , <b>2020</b> , 12, 210-219	9.4	4
124	Interstitial and substitutional light elements in transition metals for heterogeneous catalysis. <i>Chemical Science</i> , <b>2020</b> , 12, 517-532	9.4	13
123	The Feasibility of Electrochemical Ammonia Synthesis in Molten LiCl/Cl Eutectics. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 17594-17602	3.6	3
122	Photocatalytic water splitting by N-TiO on MgO (111) with exceptional quantum efficiencies at elevated temperatures. <i>Nature Communications</i> , <b>2019</b> , 10, 4421	17.4	76
121	Materials for electrochemical ammonia synthesis. <i>Dalton Transactions</i> , <b>2019</b> , 48, 1562-1568	4.3	44
120	Superior Performance of Ag over Pt for Hydrogen Evolution Reaction in Water Electrolysis under High Overpotentials. <i>ACS Applied Energy Materials</i> , <b>2019</b> , 2, 1221-1228	6.1	16
119	Confinement of subnanometric PdZn at a defect enriched ZnO/ZIF-8 interface for efficient and selective CO2 hydrogenation to methanol. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 23878-23885	13	29

118	Gas phase selective propylene epoxidation over La <sub>2</sub> O <sub>3</sub> -supported cubic silver nanoparticles. <i>Catalysis Science and Technology</i> , <b>2019</b> , 9, 3435-3444	5.5	6
117	Ceria Nanocrystals Supporting Pd for Formic Acid Electrocatalytic Oxidation: Prominent Polar Surface Metal Support Interactions. <i>ACS Catalysis</i> , <b>2019</b> , 9, 5171-5177	13.1	25
116	Unravelling the key role of surface features behind facet-dependent photocatalysis of anatase TiO <sub>2</sub> . <i>Chemical Communications</i> , <b>2019</b> , 55, 4415-4418	5.8	22
115	CO <sub>2</sub> hydrogenation to methanol over Cu catalysts supported on La-modified SBA-15: The crucial role of Cu/LaOx interfaces. <i>Applied Catalysis B: Environmental</i> , <b>2019</b> , 251, 119-129	21.8	68
114	Two-dimensional niobate nanosheet membranes for water treatment: Effect of nanosheet preparation method on membrane performance. <i>Separation and Purification Technology</i> , <b>2019</b> , 219, 222-229	8.3	11
113	Self-regeneration of Au/CeO <sub>2</sub> based catalysts with enhanced activity and ultra-stability for acetylene hydrochlorination. <i>Nature Communications</i> , <b>2019</b> , 10, 914	17.4	53
112	Morphology-Dependent Catalytic Activity of Ru/CeO <sub>2</sub> in Dry Reforming of Methane. <i>Molecules</i> , <b>2019</b> , 24,	4.8	14
111	Engineering Monolayer 1T-MoS <sub>2</sub> into a Bifunctional Electrocatalyst via Sonochemical Doping of Isolated Transition Metal Atoms. <i>ACS Catalysis</i> , <b>2019</b> , 9, 7527-7534	13.1	56
110	Efficient Non-dissociative Activation of Dinitrogen to Ammonia over Lithium-Promoted Ruthenium Nanoparticles at Low Pressure. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 17335-17341	16.4	38
109	The Feasibility of Electrochemical Ammonia Synthesis in Molten LiCl-KCl Eutectics. <i>Angewandte Chemie - International Edition</i> , <b>2019</b> , 58, 17433-17441	16.4	14
108	Efficient Non-dissociative Activation of Dinitrogen to Ammonia over Lithium-Promoted Ruthenium Nanoparticles at Low Pressure. <i>Angewandte Chemie</i> , <b>2019</b> , 131, 17496-17502	3.6	6
107	Structural dynamics of a metal-organic framework induced by CO migration in its non-uniform porous structure. <i>Nature Communications</i> , <b>2019</b> , 10, 999	17.4	36
106	Interstitial Boron Atoms in the Palladium Lattice of an Industrial Type of Nanocatalyst: Properties and Structural Modifications. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 19616-19624	16.4	26
105	Molecular nitrogen promotes catalytic hydrodeoxygenation. <i>Nature Catalysis</i> , <b>2019</b> , 2, 1078-1087	36.5	33
104	Enhanced propylene oxide selectivity for gas phase direct propylene epoxidation by lattice expansion of silver atoms on nickel nanoparticles. <i>Applied Catalysis B: Environmental</i> , <b>2019</b> , 243, 304-312	21.8	21
103	Transition metal-doped nickel phosphide nanoparticles as electro- and photocatalysts for hydrogen generation reactions. <i>Applied Catalysis B: Environmental</i> , <b>2019</b> , 242, 186-193	21.8	84
102	Entrapped Single Tungstate Site in Zeolite for Cooperative Catalysis of Olefin Metathesis with Brønsted Acid Site. <i>Journal of the American Chemical Society</i> , <b>2018</b> , 140, 6661-6667	16.4	50
101	CO <sub>2</sub> Hydrogenation to Methanol over Catalysts Derived from Single Cationic Layer CuZnGa LDH Precursors. <i>ACS Catalysis</i> , <b>2018</b> , 8, 4390-4401	13.1	67

100	Differentiating surface titanium chemical states of anatase TiO functionalized with various groups. <i>Chemical Science</i> , <b>2018</b> , 9, 2493-2500	9.4	20
99	Facet-dependent photocatalysis of nanosize semiconductive metal oxides and progress of their characterization. <i>Nano Today</i> , <b>2018</b> , 18, 15-34	17.9	66
98	Direct Catalytic Conversion of Biomass-Derived Furan and Ethanol to Ethylbenzene. <i>ACS Catalysis</i> , <b>2018</b> , 8, 1843-1850	13.1	27
97	Transition metal atom doping of the basal plane of MoS monolayer nanosheets for electrochemical hydrogen evolution. <i>Chemical Science</i> , <b>2018</b> , 9, 4769-4776	9.4	124
96	Engineered core-shell magnetic nanoparticle for MR dual-modal tracking and safe magnetic manipulation of ependymal cells in live rodents. <i>Nanotechnology</i> , <b>2018</b> , 29, 015102	3.4	4
95	Monitoring the methanol conversion process in H-ZSM-5 using synchrotron X-ray powder diffraction-mass spectrometry. <i>Journal of Catalysis</i> , <b>2018</b> , 365, 145-152	7.3	6
94	Tailored transition metal-doped nickel phosphide nanoparticles for the electrochemical oxygen evolution reaction (OER). <i>Chemical Communications</i> , <b>2018</b> , 54, 8630-8633	5.8	52
93	The Contribution of Synchrotron X-Ray Powder Diffraction to Modern Zeolite Applications: A Mini-review and Prospects. <i>CheM</i> , <b>2018</b> , 4, 1778-1808	16.2	21
92	A nonpolar solvent effect by CH/π interaction inside zeolites: characterization, mechanism and concept. <i>Chemical Communications</i> , <b>2018</b> , 54, 13435-13438	5.8	5
91	Synthesis and Characterization of Platinum Nanoparticle Catalysts Capped with Isolated Zinc Species in SBA-15 cChannels: The Wall Effect. <i>ACS Applied Nano Materials</i> , <b>2018</b> , 1, 6603-6612	5.6	5
90	Zinc-Incorporated Microporous Molecular Sieve for Mild Catalytic Hydrolysis of γ-Valerolactone: A New Selective Route for Biomass Conversion. <i>ChemSusChem</i> , <b>2018</b> , 11, 4214-4218	8.3	6
89	Mononuclear gold species anchored on TS-1 framework as catalyst precursor for selective epoxidation of propylene. <i>Journal of Catalysis</i> , <b>2018</b> , 367, 229-233	7.3	16
88	Carbon nitrides and metal nanoparticles: from controlled synthesis to design principles for improved photocatalysis. <i>Chemical Society Reviews</i> , <b>2018</b> , 47, 7783-7817	58.5	167
87	Evaluation of the molecular poisoning phenomenon of W sites in ZSM-5 via synchrotron X-ray powder diffraction. <i>Chemical Communications</i> , <b>2018</b> , 54, 7014-7017	5.8	2
86	Dynamic modification of pore opening of SAPO-34 by adsorbed surface methoxy species during induction of catalytic methanol-to-olefins reactions. <i>Applied Catalysis B: Environmental</i> , <b>2018</b> , 237, 245-250	21.8	15
85	Bimetallic catalysts for green methanol production via CO <sub>2</sub> and renewable hydrogen: a mini-review and prospects. <i>Catalysis Science and Technology</i> , <b>2018</b> , 8, 3450-3464	5.5	61
84	CuZnSnS/MoS-Reduced Graphene Oxide Heterostructure: Nanoscale Interfacial Contact and Enhanced Photocatalytic Hydrogen Generation. <i>Scientific Reports</i> , <b>2017</b> , 7, 39411	4.9	40
83	MoS monolayer catalyst doped with isolated Co atoms for the hydrodeoxygenation reaction. <i>Nature Chemistry</i> , <b>2017</b> , 9, 810-816	17.6	489



82	Decarboxylation of Lactones over Zn/ZSM-5: Elucidation of the Structure of the Active Site and Molecular Interactions. <i>Angewandte Chemie</i> , <b>2017</b> , 129, 10851-10856	3.6	5
81	Niobate nanosheet membranes with enhanced stability for nanofiltration. <i>Chemical Communications</i> , <b>2017</b> , 53, 7929-7932	5.8	13
80	Decarboxylation of Lactones over Zn/ZSM-5: Elucidation of the Structure of the Active Site and Molecular Interactions. <i>Angewandte Chemie - International Edition</i> , <b>2017</b> , 56, 10711-10716	16.4	25
79	Electroreduction of Carbon Dioxide to Formic Acid and Methanol over a Palladium/Polyaniline Catalyst in Acidic Solution: A Study of the Palladium Size Effect. <i>Energy Technology</i> , <b>2017</b> , 5, 937-944	3.5	16
78	Lithium and boron as interstitial palladium dopants for catalytic partial hydrogenation of acetylene. <i>Chemical Communications</i> , <b>2017</b> , 53, 601-604	5.8	23
77	Edge-Enriched 2D MoS <sub>2</sub> Thin Films Grown by Chemical Vapor Deposition for Enhanced Catalytic Performance. <i>ACS Catalysis</i> , <b>2017</b> , 7, 877-886	13.1	86
76	Quantitative Differences in Sulfur Poisoning Phenomena over Ruthenium and Palladium: An Attempt To Deconvolute Geometric and Electronic Poisoning Effects Using Model Catalysts. <i>ACS Catalysis</i> , <b>2017</b> , 7, 592-605	13.1	21
75	Mapping surface-modified titania nanoparticles with implications for activity and facet control. <i>Nature Communications</i> , <b>2017</b> , 8, 675	17.4	48
74	Hydrodeoxygenation of water-insoluble bio-oil to alkanes using a highly dispersed Pd-Mo catalyst. <i>Nature Communications</i> , <b>2017</b> , 8, 591	17.4	69
73	Effect of Brønsted/Lewis Acid Ratio on Conversion of Sugars to 5-Hydroxymethylfurfural over Mesoporous Nb and Nb-W Oxides. <i>Chinese Journal of Chemistry</i> , <b>2017</b> , 35, 1529-1539	4.9	17
72	Spatial differentiation of Brønsted acid sites by probe molecule in zeolite USY using synchrotron X-ray powder diffraction. <i>Chemical Communications</i> , <b>2017</b> , 53, 9725-9728	5.8	14
71	Structural Studies of Bulk to Nanosize Niobium Oxides with Correlation to Their Acidity. <i>Journal of the American Chemical Society</i> , <b>2017</b> , 139, 12670-12680	16.4	79
70	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). <i>Chinese Journal of Chemistry</i> , <b>2017</b> , 35, 1480-1480	4.9	
69	Engineering of Single Magnetic Particle Carrier for Living Brain Cell Imaging: A Tunable T1-/T2-/Dual-Modal Contrast Agent for Magnetic Resonance Imaging Application. <i>Chemistry of Materials</i> , <b>2017</b> , 29, 4411-4417	9.6	27
68	Intermix of metal nanoparticles-single wall carbon nanotubes. <i>Chemical Communications</i> , <b>2017</b> , 53, 7653-7656	5.8	3
67	A promising low pressure methanol synthesis route from CO <sub>2</sub> hydrogenation over Pd@Zn core-shell catalysts. <i>Green Chemistry</i> , <b>2017</b> , 19, 270-280	10	56
66	Probe-Molecule-Assisted NMR Spectroscopy: A Comparison with Photoluminescence and Electron Paramagnetic Resonance Spectroscopy as a Characterization Tool in Facet-Specific Photocatalysis. <i>ChemCatChem</i> , <b>2017</b> , 9, 155-160	5.2	17
65	Structure-Activity Correlations for Brønsted Acid, Lewis Acid, and Photocatalyzed Reactions of Exfoliated Crystalline Niobium Oxides. <i>ChemCatChem</i> , <b>2017</b> , 9, 144-154	5.2	14

64	Reaction: Green Ammonia Production. <i>CheM</i> , <b>2017</b> , 3, 712-714	16.2	54
63	Importance of the structural integrity of a carbon conjugated mediator for photocatalytic hydrogen generation from water over a CdS-carbon nanotube-MoS composite. <i>Chemical Communications</i> , <b>2016</b> , 52, 13596-13599	5.8	16
62	A tunable metal-polyaniline interface for efficient carbon dioxide electro-reduction to formic acid and methanol in aqueous solution. <i>Chemical Communications</i> , <b>2016</b> , 52, 13901-13904	5.8	26
61	Elucidation of Adsorbate Structures and Interactions on Brønsted Acid Sites in H-ZSM-5 by Synchrotron X-ray Powder Diffraction. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 5981-4	16.4	24
60	The Applications of Nano-Hetero-Junction in Optical and Thermal Catalysis. <i>European Journal of Inorganic Chemistry</i> , <b>2016</b> , 2016, 1924-1938	2.3	9
59	Elucidation of Adsorbate Structures and Interactions on Brønsted Acid Sites in H-ZSM-5 by Synchrotron X-ray Powder Diffraction. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 6085-6088	3.6	12
58	Trimethylphosphine-Assisted Surface Fingerprinting of Metal Oxide Nanoparticle by <sup>31</sup> P Solid-State NMR: A Zinc Oxide Case Study. <i>Journal of the American Chemical Society</i> , <b>2016</b> , 138, 2225-34	16.4	64
57	Probing atomic positions of adsorbed ammonia molecules in zeolite. <i>Chemical Communications</i> , <b>2016</b> , 52, 3422-5	5.8	23
56	Surfactant-free nickel-silver core@shell nanoparticles in mesoporous SBA-15 for chemoselective hydrogenation of dimethyl oxalate. <i>Chemical Communications</i> , <b>2016</b> , 52, 2569-72	5.8	25
55	Graphitic carbon nitride catalysed photoacetalization of aldehydes/ketones under ambient conditions. <i>Chemical Communications</i> , <b>2016</b> , 52, 2772-5	5.8	27
54	Reaktitelbild: Elucidation of Adsorbate Structures and Interactions on Brønsted Acid Sites in H-ZSM-5 by Synchrotron X-ray Powder Diffraction (Angew. Chem. 20/2016). <i>Angewandte Chemie</i> , <b>2016</b> , 128, 6214-6214	3.6	
53	Hydrazine-Assisted Liquid Exfoliation of MoS <sub>2</sub> for Catalytic Hydrodeoxygenation of 4-Methylphenol. <i>Chemistry - A European Journal</i> , <b>2016</b> , 22, 2910-4	4.8	44
52	Gain Spectroscopy of Solution-Based Semiconductor Nanocrystals in Tunable Optical Microcavities. <i>Advanced Optical Materials</i> , <b>2016</b> , 4, 285-290	8.1	10
51	The remarkable activity and stability of a highly dispersive beta-brass Cu-Zn catalyst for the production of ethylene glycol. <i>Scientific Reports</i> , <b>2016</b> , 6, 20527	4.9	14
50	Enhanced CO <sub>2</sub> hydrogenation to methanol over CuZn nanoalloy in Ga modified Cu/ZnO catalysts. <i>Journal of Catalysis</i> , <b>2016</b> , 343, 157-167	7.3	113
49	Niobium oxides: Correlation of acidity with structure and catalytic performance in sucrose conversion to 5-hydroxymethylfurfural. <i>Journal of Catalysis</i> , <b>2016</b> , 338, 329-339	7.3	74
48	Innenreaktittelbild: From Biomass-Derived Furans to Aromatics with Ethanol over Zeolite (Angew. Chem. 42/2016). <i>Angewandte Chemie</i> , <b>2016</b> , 128, 13545-13545	3.6	
47	Pd@Zn core-shell nanoparticles of controllable shell thickness for catalytic methanol production. <i>Catalysis Science and Technology</i> , <b>2016</b> , 6, 7698-7702	5.5	15



46	From Biomass-Derived Furans to Aromatics with Ethanol over Zeolite. <i>Angewandte Chemie - International Edition</i> , <b>2016</b> , 55, 13061-13066	16.4	73
45	From Biomass-Derived Furans to Aromatics with Ethanol over Zeolite. <i>Angewandte Chemie</i> , <b>2016</b> , 128, 13255-13260	3.6	26
44	A New Class of Tunable Heterojunction by using Two Support Materials for the Synthesis of Supported Bimetallic Catalysts. <i>ChemCatChem</i> , <b>2015</b> , 7, 173-173	5.2	
43	The remarkable activity and stability of a dye-sensitized single molecular layer MoS <sub>2</sub> ensemble for photocatalytic hydrogen production. <i>Chemical Communications</i> , <b>2015</b> , 51, 13496-9	5.8	37
42	Modification of Pd for formic acid decomposition by support grafted functional groups <b>2015</b> , 1, 19-24		6
41	Morphology-Controlled Synthesis of Au/CuBeSnSi <sub>3</sub> Core-Shell Nanostructures for Plasmon-Enhanced Photocatalytic Hydrogen Generation. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 9072-7	9.5	47
40	Tunability of catalytic properties of Pd-based catalysts by rational control of strong metal and support interaction (SMSI) for selective hydrogenolytic C-C and C-O bond cleavage of ethylene glycol units in biomass molecules. <i>Catalysis Science and Technology</i> , <b>2015</b> , 5, 3491-3495	5.5	14
39	Probing the Size and Shape Effects of Cubic- and Spherical-Shaped Palladium Nanoparticles in the Electrooxidation of Formic Acid. <i>ChemCatChem</i> , <b>2015</b> , 7, 3826-3831	5.2	10
38	Enhanced chemoselective hydrogenation of dimethyl oxalate to methyl glycolate over bimetallic AgNi/SBA-15 catalysts. <i>Applied Catalysis A: General</i> , <b>2015</b> , 505, 344-353	5.1	32
37	A New Class of Tunable Heterojunction by using Two Support Materials for the Synthesis of Supported Bimetallic Catalysts. <i>ChemCatChem</i> , <b>2015</b> , 7, 230-235	5.2	13
36	PdFe nanoparticles as selective catalysts for C-C cleavage in hydrogenolysis of vicinal diol units in biomass-derived chemicals. <i>Catalysis Science and Technology</i> , <b>2015</b> , 5, 887-896	5.5	21
35	Recent Developments in Palladium-Based Bimetallic Catalysts. <i>ChemCatChem</i> , <b>2015</b> , 7, 1998-2014	5.2	73
34	High-quality functionalized few-layer graphene: facile fabrication and doping with nitrogen as a metal-free catalyst for the oxygen reduction reaction. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 15444-15450	13.4	48
33	Atomic Imaging of Carbon-Supported Pt, Pt/Co, and [email protected] Nanocatalysts by Atom-Probe Tomography. <i>ACS Catalysis</i> , <b>2014</b> , 4, 695-702	13.1	43
32	A graphene dispersed CdS-MoS <sub>2</sub> nanocrystal ensemble for cooperative photocatalytic hydrogen production from water. <i>Chemical Communications</i> , <b>2014</b> , 50, 1185-8	5.8	201
31	Enhanced photocatalytic hydrogen evolution from water by niobate single molecular sheets and ensembles. <i>Chemical Communications</i> , <b>2014</b> , 50, 13702-5	5.8	33
30	Shape Effect of Pd-Promoted Ga <sub>2</sub> O <sub>3</sub> Nanocatalysts for Methanol Synthesis by CO <sub>2</sub> Hydrogenation. <i>Journal of Physical Chemistry C</i> , <b>2014</b> , 118, 24452-24466	3.8	59
29	Photo and electronic excitation for low temperature catalysis over metal nanoparticles using an organic semiconductor. <i>RSC Advances</i> , <b>2014</b> , 4, 47488-47496	3.7	5

28	Nanojunction-mediated photocatalytic enhancement in heterostructured CdS/ZnO, CdSe/ZnO, and CdTe/ZnO nanocrystals. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 7838-42	16.4	125
27	Interstitial modification of palladium nanoparticles with boron atoms as a green catalyst for selective hydrogenation. <i>Nature Communications</i> , <b>2014</b> , 5, 5787	17.4	138
26	Nanojunction-Mediated Photocatalytic Enhancement in Heterostructured CdS/ZnO, CdSe/ZnO, and CdTe/ZnO Nanocrystals. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 7972-7976	3.6	5
25	Rationalization of interactions in precious metal/ceria catalysts using the d-band center model. <i>Angewandte Chemie - International Edition</i> , <b>2013</b> , 52, 7737-41	16.4	122
24	Direct methanol steam reforming to hydrogen over CuZnGaOx catalysts without CO post-treatment: mechanistic considerations. <i>Physical Chemistry Chemical Physics</i> , <b>2013</b> , 15, 7240-8	3.6	24
23	Dramatic Effects of Gallium Promotion on Methanol Steam Reforming CuZnO Catalyst for Hydrogen Production: Formation of 5 [Copper Clusters from CuZnGaOx. <i>ACS Catalysis</i> , <b>2013</b> , 3, 1231-1244	13.1	69
22	Shape selective plate-form Ga <sub>2</sub> O <sub>3</sub> with strong metal-support interaction to overlying Pd for hydrogenation of CO(2) to CH(3)OH. <i>Chemical Communications</i> , <b>2013</b> , 49, 1747-9	5.8	60
21	Nanocomposite materials for rapid-response interior air humidity buffering in closed environments. <i>Journal of Building Performance Simulation</i> , <b>2013</b> , 6, 354-366	2.8	4
20	Neural Stem Cells Harvested from Live Brains by Antibody-Conjugated Magnetic Nanoparticles. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 12524-12528	3.6	1
19	Rationalization of Interactions in Precious Metal/Ceria Catalysts Using the d-Band Center Model. <i>Angewandte Chemie</i> , <b>2013</b> , 125, 7891-7895	3.6	20
18	Transformation of ethylene to higher hydrocarbons on silica-supported Ir catalysts: the nature of carbonaceous deposits. <i>Applied Petrochemical Research</i> , <b>2012</b> , 2, 85-91	1.9	3
17	Comparison of catalytic performance of supported ruthenium and rhodium for hydrogenation of 9-ethylcarbazole for hydrogen storage applications. <i>Energy and Environmental Science</i> , <b>2012</b> , 5, 8621	35.4	68
16	Comparative Study of Catalytic Hydrogenation of 9-Ethylcarbazole for Hydrogen Storage over Noble Metal Surfaces. <i>Journal of Physical Chemistry C</i> , <b>2012</b> , 116, 7421-7429	3.8	59
15	Prominent Electronic and Geometric Modifications of Palladium Nanoparticles by Polymer Stabilizers for Hydrogen Production under Ambient Conditions. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 11437-11440	3.6	21
14	Prominent electronic and geometric modifications of palladium nanoparticles by polymer stabilizers for hydrogen production under ambient conditions. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 11275-8	16.4	99
13	Non-syngas direct steam reforming of methanol to hydrogen and carbon dioxide at low temperature. <i>Nature Communications</i> , <b>2012</b> , 3, 1230	17.4	100
12	Shape-Dependent Acidity and Photocatalytic Activity of Nb <sub>2</sub> O <sub>5</sub> Nanocrystals with an Active TT (001) Surface. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 3912-3915	3.6	12
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10	Electron Promotion by Surface Functional Groups of Single Wall Carbon Nanotubes to Overlying Metal Particles in a Fuel-Cell Catalyst. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 7104-7107	3.6	3
9	Shape-dependent acidity and photocatalytic activity of Nb <sub>2</sub> O <sub>5</sub> nanocrystals with an active TT (001) surface. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 3846-9	16.4	153
8	Electronic modulation of a copper/zinc oxide catalyst by a heterojunction for selective hydrogenation of carbon dioxide to methanol. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 5832-6	16.4	113
7	Electron promotion by surface functional groups of single wall carbon nanotubes to overlying metal particles in a fuel-cell catalyst. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 6998-7001	16.4	37
6	Nanostructured Nb <sub>2</sub> O <sub>5</sub> catalysts. <i>Nano Reviews</i> , <b>2012</b> , 3, 17631		129
5	Hydrogen production from formic acid decomposition at room temperature using a Ag-Pd core-shell nanocatalyst. <i>Nature Nanotechnology</i> , <b>2011</b> , 6, 302-7	28.7	897
4	<sup>13</sup> C NMR guides rational design of nanocatalysts via chemisorption evaluation in liquid phase. <i>Science</i> , <b>2011</b> , 332, 224-8	33.3	106
3	Recent advances in CO <sub>2</sub> capture and utilization. <i>ChemSusChem</i> , <b>2008</b> , 1, 893-9	8.3	615
2	Local magnetic spin mismatch promoting photocatalytic overall water splitting with exceptional solar-to-hydrogen efficiency. <i>Energy and Environmental Science</i> ,	35.4	4
1	Improving Catalytic Stability and Coke Resistance of Ni/Al <sub>2</sub> O <sub>3</sub> Catalysts with Ce Promoter for Relatively Low Temperature Dry Reforming of Methane Reaction. <i>Chemical Research in Chinese Universities</i> , <sup>1</sup>	2.2	1