

Libor Kovarik

List of Publications by Year in descending order

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190
papers

11,327
citations

34105

52
h-index

31849

101
g-index

196
all docs

196
docs citations

196
times ranked

13778
citing authors

#	ARTICLE	IF	CITATIONS
1	Activation of surface lattice oxygen in single-atom Pt/CeO ₂ for low-temperature CO oxidation. <i>Science</i> , 2017, 358, 1419-1423.	12.6	1,114
2	High capacity, reversible alloying reactions in SnSb/C nanocomposites for Na-ion battery applications. <i>Chemical Communications</i> , 2012, 48, 3321.	4.1	566
3	High-Performance LiNi _{0.5} Mn _{1.5} O ₄ Spinel Controlled by Mn ³⁺ Concentration and Site Disorder. <i>Advanced Materials</i> , 2012, 24, 2109-2116.	21.0	434
4	Carbon-supported bimetallic Pd-Fe catalysts for vapor-phase hydrodeoxygenation of guaiacol. <i>Journal of Catalysis</i> , 2013, 306, 47-57.	6.2	384
5	CO ₂ Reduction on Supported Ru/Al ₂ O ₃ Catalysts: Cluster Size Dependence of Product Selectivity. <i>ACS Catalysis</i> , 2013, 3, 2449-2455.	11.2	376
6	Heterogeneous Catalysis on Atomically Dispersed Supported Metals: CO ₂ Reduction on Multifunctional Pd Catalysts. <i>ACS Catalysis</i> , 2013, 3, 2094-2100.	11.2	310
7	Tuning Pt-CeO ₂ interactions by high-temperature vapor-phase synthesis for improved reducibility of lattice oxygen. <i>Nature Communications</i> , 2019, 10, 1358.	12.8	302
8	Toward Rational Design of Cu/SSZ-13 Selective Catalytic Reduction Catalysts: Implications from Atomic-Level Understanding of Hydrothermal Stability. <i>ACS Catalysis</i> , 2017, 7, 8214-8227.	11.2	278
9	Thermally Stable and Regenerable Platinum-Tin Clusters for Propane Dehydrogenation Prepared by Atom Trapping on Ceria. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 8986-8991.	13.8	262
10	In Situ TEM Investigation of Congruent Phase Transition and Structural Evolution of Nanostructured Silicon/Carbon Anode for Lithium Ion Batteries. <i>Nano Letters</i> , 2012, 12, 1624-1632.	9.1	256
11	Stabilizing High Metal Loadings of Thermally Stable Platinum Single Atoms on an Industrial Catalyst Support. <i>ACS Catalysis</i> , 2019, 9, 3978-3990.	11.2	233
12	Identification of the active complex for CO oxidation over single-atom Ir-on-MgAl ₂ O ₄ catalysts. <i>Nature Catalysis</i> , 2019, 2, 149-156.	34.4	222
13	Low-Temperature Pd/Zeolite Passive NO _x Adsorbers: Structure, Performance, and Adsorption Chemistry. <i>Journal of Physical Chemistry C</i> , 2017, 121, 15793-15803.	3.1	178
14	Metallurgical Characterization of a New Nickel-Titanium Wire for Rotary Endodontic Instruments. <i>Journal of Endodontics</i> , 2009, 35, 1589-1593.	3.1	173
15	Enhanced Li ⁺ ion transport in LiNi _{0.5} Mn _{1.5} O ₄ through control of site disorder. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 13515.	2.8	167
16	Stable platinum nanoparticles on specific MgAl ₂ O ₄ spinel facets at high temperatures in oxidizing atmospheres. <i>Nature Communications</i> , 2013, 4, 2481.	12.8	166
17	Reductive Sequestration of Pertechnetate (⁹⁹ TcO ₄ ⁻) by Nano Zerovalent Iron (nZVI) Transformed by Abiotic Sulfide. <i>Environmental Science & Technology</i> , 2013, 47, 5302-5310.	10.0	162
18	Revealing the Atomic Restructuring of Pt-Co Nanoparticles. <i>Nano Letters</i> , 2014, 14, 3203-3207.	9.1	162

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19	Determining the location and nearest neighbours of aluminium in zeolites with atom probe tomography. <i>Nature Communications</i> , 2015, 6, 7589.	12.8	139
20	Colloidal nanoparticle size control: experimental and kinetic modeling investigation of the ligand-metal binding role in controlling the nucleation and growth kinetics. <i>Nanoscale</i> , 2017, 9, 13772-13785.	5.6	137
21	Towards data-driven next-generation transmission electron microscopy. <i>Nature Materials</i> , 2021, 20, 274-279.	27.5	130
22	Achieving Atomic Dispersion of Highly Loaded Transition Metals in Small-Pore Zeolite SSZ-13: High-Capacity and High-Efficiency Low-Temperature CO and Passive NO _x Adsorbers. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 16672-16677.	13.8	129
23	Effect of preparation methods on the performance of Co/Al ₂ O ₃ catalysts for dry reforming of methane. <i>Green Chemistry</i> , 2014, 16, 885-896.	9.0	122
24	Structure Sensitivity of Acetylene Semi-Hydrogenation on Pt Single Atoms and Subnanometer Clusters. <i>ACS Catalysis</i> , 2019, 9, 11030-11041.	11.2	111
25	Effect of metal-support interactions in Ni/Al ₂ O ₃ catalysts with low metal loading for methane dry reforming. <i>Applied Catalysis A: General</i> , 2015, 494, 57-67.	4.3	106
26	Highly active and stable MgAl ₂ O ₄ -supported Rh and Ir catalysts for methane steam reforming: A combined experimental and theoretical study. <i>Journal of Catalysis</i> , 2014, 316, 11-23.	6.2	104
27	Reduction and immobilization of hexavalent chromium by microbially reduced Fe-bearing clay minerals. <i>Geochimica Et Cosmochimica Acta</i> , 2014, 133, 186-203.	3.9	103
28	Molecular Level Understanding of How Oxygen and Carbon Monoxide Improve NO _x Storage in Palladium/SSZ-13 Passive NO _x Adsorbers: The Role of NO ⁺ and Pd(II)(CO)(NO) Species. <i>Journal of Physical Chemistry C</i> , 2018, 122, 10820-10827.	3.1	101
29	Effect of Oxygen Defects on the Catalytic Performance of VO _x /CeO ₂ Catalysts for Oxidative Dehydrogenation of Methanol. <i>ACS Catalysis</i> , 2015, 5, 3006-3012.	11.2	96
30	Transformation of Active Sites in Fe/SSZ-13 SCR Catalysts during Hydrothermal Aging: A Spectroscopic, Microscopic, and Kinetics Study. <i>ACS Catalysis</i> , 2017, 7, 2458-2470.	11.2	89
31	Copper-zirconia interfaces in UiO-66 enable selective catalytic hydrogenation of CO ₂ to methanol. <i>Nature Communications</i> , 2020, 11, 5849.	12.8	86
32	Reduction of U(VI) Incorporated in the Structure of Hematite. <i>Environmental Science & Technology</i> , 2012, 46, 9428-9436.	10.0	82
33	Synthesis and Hydrodeoxygenation Properties of Ruthenium Phosphide Catalysts. <i>ACS Catalysis</i> , 2011, 1, 917-922.	11.2	81
34	Tomography and High-Resolution Electron Microscopy Study of Surfaces and Porosity in a Plate-like γ -Al ₂ O ₃ . <i>Journal of Physical Chemistry C</i> , 2013, 117, 179-186.	3.1	81
35	Palladium/Beta zeolite passive NO _x adsorbers (PNA): Clarification of PNA chemistry and the effects of CO and zeolite crystallite size on PNA performance. <i>Applied Catalysis A: General</i> , 2019, 569, 141-148.	4.3	81
36	XEDS STEM tomography for 3D chemical characterization of nanoscale particles. <i>Ultramicroscopy</i> , 2013, 131, 24-32.	1.9	78

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37	Structural analysis of a new precipitate phase in high-temperature TiNiPt shape memory alloys. <i>Acta Materialia</i> , 2010, 58, 4660-4673.	7.9	77
38	Size-Dependent Catalytic Performance of CuO on $\gamma\text{-Al}_2\text{O}_3$: NO Reduction versus NH_3 Oxidation. <i>ACS Catalysis</i> , 2012, 2, 1432-1440.	11.2	75
39	Oxidative Remobilization of Technetium Sequestered by Sulfide-Transformed Nano Zerovalent Iron. <i>Environmental Science & Technology</i> , 2014, 48, 7409-7417.	10.0	73
40	Structure of γ -Alumina: Toward the Atomic Level Understanding of Transition Alumina Phases. <i>Journal of Physical Chemistry C</i> , 2014, 118, 18051-18058.	3.1	72
41	Airborne soil organic particles generated by NH_3 precipitation. <i>Nature Geoscience</i> , 2016, 9, 433-437.	12.9	71
42	Effect of the SiO_2 support on the catalytic performance of Ag/ZrO ₂ /SiO ₂ catalysts for the single-bed production of butadiene from ethanol. <i>Applied Catalysis B: Environmental</i> , 2018, 236, 576-587.	20.2	70
43	Environmental Transmission Electron Microscopy Study of the Origins of Anomalous Particle Size Distributions in Supported Metal Catalysts. <i>ACS Catalysis</i> , 2012, 2, 2349-2356.	11.2	68
44	Ni ₅ Ga ₃ catalysts for CO ₂ reduction to methanol: Exploring the role of Ga surface oxidation/reduction on catalytic activity. <i>Applied Catalysis B: Environmental</i> , 2020, 267, 118369.	20.2	68
45	Stabilization of Super Electrophilic Pd ⁺² Cations in Small-Pore SSZ-13 Zeolite. <i>Journal of Physical Chemistry C</i> , 2020, 124, 309-321.	3.1	67
46	Effects of CeO ₂ support facets on VO _x /CeO ₂ catalysts in oxidative dehydrogenation of methanol. <i>Journal of Catalysis</i> , 2014, 315, 15-24.	6.2	66
47	Synthesis of methanol and dimethyl ether from syngas over Pd/ZnO/Al ₂ O ₃ catalysts. <i>Catalysis Science and Technology</i> , 2012, 2, 2116.	4.1	64
48	Synthesis of 1 nm Pd Nanoparticles in a Microfluidic Reactor: Insights from in Situ X-ray Absorption Fine Structure Spectroscopy and Small-Angle X-ray Scattering. <i>Journal of Physical Chemistry C</i> , 2015, 119, 13257-13267.	3.1	61
49	The role of nanoparticle size and ligand coverage in size focusing of colloidal metal nanoparticles. <i>Nanoscale Advances</i> , 2019, 1, 4052-4066.	4.6	61
50	High-resolution characterization of the precipitation behavior of an Al-Zn-Mg-Cu alloy. <i>Philosophical Magazine Letters</i> , 2012, 92, 166-178.	1.2	59
51	Dendrimer-Encapsulated Ruthenium Oxide Nanoparticles as Catalysts in Lithium-Oxygen Batteries. <i>Advanced Functional Materials</i> , 2014, 24, 7510-7519.	14.9	59
52	Sorption-enhanced synthetic natural gas (SNG) production from syngas: A novel process combining CO methanation, water-gas shift, and CO ₂ capture. <i>Applied Catalysis B: Environmental</i> , 2014, 144, 223-232.	20.2	59
53	The superior hydrothermal stability of Pd/SSZ-39 in low temperature passive NO _x adsorption (PNA) and methane combustion. <i>Applied Catalysis B: Environmental</i> , 2021, 280, 119449.	20.2	56
54	High temperature transition aluminas in $\gamma\text{-Al}_2\text{O}_3/\delta\text{-Al}_2\text{O}_3$ stability range: Review. <i>Journal of Catalysis</i> , 2021, 393, 357-368.	6.2	55

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55	Environment of Metal-Fe Bonds Enabling High Activity in CO ₂ Reduction on Single Metal Atoms and on Supported Nanoparticles. <i>Journal of the American Chemical Society</i> , 2021, 143, 5540-5549.	13.7	54
56	Disordered, Sub-Nanometer Ru Structures on CeO ₂ are Highly Efficient and Selective Catalysts in Polymer Upcycling by Hydrogenolysis. <i>ACS Catalysis</i> , 2022, 12, 4618-4627.	11.2	54
57	A General Mechanism for Stabilizing the Small Sizes of Precious Metal Nanoparticles on Oxide Supports. <i>Chemistry of Materials</i> , 2014, 26, 5475-5481.	6.7	53
58	Visualizing the iron atom exchange front in the Fe(II)-catalyzed recrystallization of goethite by atom probe tomography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 2866-2874.	7.1	52
59	Unraveling the Origin of Structural Disorder in High Temperature Transition Al ₂ O ₃ : Structure of γ -Al ₂ O ₃ . <i>Chemistry of Materials</i> , 2015, 27, 7042-7049.	6.7	51
60	In-situ Dispersion of Palladium on TiO ₂ During Reverse Water-Gas Shift Reaction: Formation of Atomically Dispersed Palladium. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 17657-17663.	13.8	51
61	Economizing on Precious Metals in Three-Way Catalysts: Thermally Stable and Highly Active Single-Atom Rhodium on Ceria for NO Abatement under Dry and Industrially Relevant Conditions**. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 391-398.	13.8	51
62	Thermally Stable and Regenerable Platinum-Tin Clusters for Propane Dehydrogenation Prepared by Atom Trapping on Ceria. <i>Angewandte Chemie</i> , 2017, 129, 9114-9119.	2.0	49
63	A versatile approach for quantification of surface site fractions using reaction kinetics: The case of CO oxidation on supported Ir single atoms and nanoparticles. <i>Journal of Catalysis</i> , 2019, 378, 121-130.	6.2	49
64	In Situ X-ray Absorption Fine Structure Studies on the Effect of pH on Pt Electronic Density during Aqueous Phase Reforming of Glycerol. <i>ACS Catalysis</i> , 2012, 2, 2387-2394.	11.2	47
65	Reduced Magnetism in Core-Shell Magnetite@MOF Composites. <i>Nano Letters</i> , 2017, 17, 6968-6973.	9.1	47
66	Rupturing of Biological Spores As a Source of Secondary Particles in Amazonia. <i>Environmental Science & Technology</i> , 2016, 50, 12179-12186.	10.0	46
67	Steam reforming of hydrocarbons from biomass-derived syngas over MgAl ₂ O ₄ -supported transition metals and bimetallic IrNi catalysts. <i>Applied Catalysis B: Environmental</i> , 2016, 184, 142-152.	20.2	46
68	Microbe Encapsulation for Selective Rare-Earth Recovery from Electronic Waste Leachates. <i>Environmental Science & Technology</i> , 2019, 53, 13888-13897.	10.0	45
69	Conversion of Methane into Methanol and Ethanol over Nickel Oxide on Ceria-Zirconia Catalysts in a Single Reactor. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 13876-13881.	13.8	44
70	Steam reforming of fast pyrolysis-derived aqueous phase oxygenates over Co, Ni, and Rh metals supported on MgAl ₂ O ₄ . <i>Catalysis Today</i> , 2016, 269, 166-174.	4.4	43
71	Grain boundary engineering to control the discontinuous precipitation in multicomponent U10Mo alloy. <i>Acta Materialia</i> , 2018, 151, 181-190.	7.9	43
72	Structural identification of Zn _x Zr _y O _z catalysts for Cascade aldolization and self-deoxygenation reactions. <i>Applied Catalysis B: Environmental</i> , 2018, 234, 337-346.	20.2	43

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73	Cr(III) Adsorption by Cluster Formation on Boehmite Nanoplates in Highly Alkaline Solution. Environmental Science & Technology, 2019, 53, 11043-11055.	10.0	42
74	Formation of Oxygen Radical Sites on MoVNbTeOx by Cooperative Electron Redistribution. Journal of the American Chemical Society, 2017, 139, 12342-12345.	13.7	41
75	Effects of citrate on hexavalent chromium reduction by structural Fe(II) in nontronite. Journal of Hazardous Materials, 2018, 343, 245-254.	12.4	41
76	Ab initio analysis of Guinier-Preston-Bagaryatsky zone nucleation in Al-Cu-Mg alloys. Acta Materialia, 2012, 60, 3861-3872.	7.9	40
77	Comparative Investigation of Benzene Steam Reforming over Spinel Supported Rh and Ir Catalysts. ACS Catalysis, 2013, 3, 1133-1143.	11.2	39
78	Tc(VII) and Cr(VI) Interaction with Naturally Reduced Ferruginous Smectite from a Redox Transition Zone. Environmental Science & Technology, 2017, 51, 9042-9052.	10.0	38
79	Palladium/Zeolite Low Temperature Passive NOx Adsorbers (PNA): Structure-Adsorption Property Relationships for Hydrothermally Aged PNA Materials. Emission Control Science and Technology, 2020, 6, 126-138.	1.5	38
80	Reactivity of redox cycled Fe-bearing subsurface sediments towards hexavalent chromium reduction. Geochimica Et Cosmochimica Acta, 2019, 252, 88-106.	3.9	37
81	Onset of High Methane Combustion Rates over Supported Palladium Catalysts: From Isolated Pd Cations to PdO Nanoparticles. JACS, 2021, 1, 396-408.	7.9	37
82	Competing Mechanisms in CO Hydrogenation over Co-MnO Catalysts. ACS Catalysis, 2019, 9, 5603-5612.	11.2	36
83	Single-Step Conversion of Ethanol to n-Butene over Ag-ZrO ₂ /SiO ₂ Catalysts. ACS Catalysis, 2020, 10, 10602-10613.	11.2	34
84	Single-Facet Dominant Anatase TiO ₂ (101) and (001) Model Catalysts to Elucidate the Active Sites for Alkanol Dehydration. ACS Catalysis, 2020, 10, 4268-4279.	11.2	32
85	Automotive Brake Lining Characterization. , 0, , .		31
86	Inverse iron oxide/metal catalysts from galvanic replacement. Nature Communications, 2020, 11, 3269.	12.8	31
87	Irradiation effects and hydrogen behavior in H ₂ ⁺ and He ⁺ implanted ⁶ LiAlO ₂ single crystals. Journal of Nuclear Materials, 2017, 484, 374-381.	2.7	29
88	Quantification of High-Temperature Transition Al ₂ O ₃ and Their Phase Transformations**. Angewandte Chemie - International Edition, 2020, 59, 21719-21727.	13.8	28
89	Effect of Water Vapor, Temperature, and Rapid Annealing on Formamidinium Lead Triiodide Perovskite Crystallization. ACS Energy Letters, 2016, 1, 155-161.	17.4	27
90	Kinetics and mechanisms of cadmium carbonate heteroepitaxial growth at the calcite		26

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91	Imaging the Optical Fields of Functionalized Silver Nanowires through Molecular TERS. <i>Journal of Physical Chemistry Letters</i> , 2018, 9, 7105-7109.	4.6	26
92	Precise Identification and Characterization of Catalytically Active Sites on the Surface of γ -Alumina**. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 17522-17530.	13.8	26
93	Steam Reforming of Acetic Acid over Co-Supported Catalysts: Coupling Ketonization for Greater Stability. <i>ACS Sustainable Chemistry and Engineering</i> , 2017, 5, 9136-9149.	6.7	25
94	Inorganic tin aluminophosphate nanocomposite for reductive separation of pertechnetate. <i>Environmental Science: Nano</i> , 2016, 3, 1003-1013.	4.3	24
95	Phase transformation of metastable discontinuous precipitation products to equilibrium phases in U10Mo alloys. <i>Scripta Materialia</i> , 2018, 156, 70-74.	5.2	24
96	Catalytic decomposition of methane into hydrogen and high-value carbons: combined experimental and DFT computational study. <i>Catalysis Science and Technology</i> , 2021, 11, 4911-4921.	4.1	24
97	Palladium/Ferrierite versus Palladium/SSZ-13 Passive NO _x Adsorbents: Adsorbate-Controlled Location of Atomically Dispersed Palladium(II) in Ferrierite Determines High Activity and Stability**. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	13.8	24
98	RedOx-controlled sorption of iodine anions by hydrotalcite composites. <i>RSC Advances</i> , 2016, 6, 76042-76055.	3.6	23
99	Conversion of syngas-derived C ₂ + mixed oxygenates to C ₃ -C ₅ olefins over Zn _x Zr _y O _z mixed oxide catalysts. <i>Catalysis Science and Technology</i> , 2016, 6, 2325-2336.	4.1	23
100	Electron transfer between sorbed Fe(II) and structural Fe(III) in smectites and its effect on nitrate-dependent iron oxidation by <i>Pseudogulbenkiania</i> sp. strain 2002. <i>Geochimica Et Cosmochimica Acta</i> , 2019, 265, 132-147.	3.9	23
101	Methane and Ethane Steam Reforming over MgAl ₂ O ₄ -Supported Rh and Ir Catalysts: Catalytic Implications for Natural Gas Reforming Application. <i>Catalysts</i> , 2019, 9, 801.	3.5	23
102	Probing Acid-Base Properties of Anatase TiO ₂ Nanoparticles with Dominant {001} and {101} Facets Using Methanol Chemisorption and Surface Reactions. <i>Journal of Physical Chemistry C</i> , 2021, 125, 3988-4000.	3.1	23
103	Structure sensitivity and its effect on methane turnover and carbon co-product selectivity in thermocatalytic decomposition of methane over supported Ni catalysts. <i>Applied Catalysis A: General</i> , 2021, 611, 117967.	4.3	23
104	Rate enhancement by Cu in Ni _x Cu _{1-x} /ZrO ₂ bimetallic catalysts for hydrodeoxygenation of stearic acid. <i>Catalysis Science and Technology</i> , 2019, 9, 2620-2629.	4.1	22
105	Influence of Ag metal dispersion on the thermal conversion of ethanol to butadiene over Ag-ZrO ₂ /SiO ₂ catalysts. <i>Journal of Catalysis</i> , 2020, 386, 30-38.	6.2	22
106	Coupling of Methane to Ethane, Ethylene, and Aromatics over Nickel on Ceria-Zirconia at Low Temperatures. <i>ChemCatChem</i> , 2018, 10, 2700-2708.	3.7	21
107	Nanoscale observations of Fe-induced ferrihydrite transformation. <i>Environmental Science: Nano</i> , 2020, 7, 2953-2967.	4.3	21
108	Conversion of ethanol to 1,3-butadiene over Ag-ZrO ₂ /SiO ₂ catalysts: The role of surface interfaces. <i>Journal of Energy Chemistry</i> , 2021, 54, 7-15.	12.9	21

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109	WO supported on γ -Al ₂ O ₃ with different morphologies as model catalysts for alkanol dehydration. Journal of Catalysis, 2018, 363, 1-8.	6.2	20
110	Revisiting the Growth Mechanism of Hierarchical Semiconductor Nanostructures: The Role of Secondary Nucleation in Branch Formation. Journal of Physical Chemistry Letters, 2019, 10, 6827-6834.	4.6	20
111	Catalytic activation of ethylene C-H bonds on uniform d ⁸ Ir(II) and Ni(II) cations in zeolites: toward molecular level understanding of ethylene polymerization on heterogeneous catalysts. Catalysis Science and Technology, 2019, 9, 6570-6576.	4.1	20
112	Synthesis of nanometer-sized fayalite and magnesium-iron(II) mixture olivines. Journal of Colloid and Interface Science, 2018, 515, 129-138.	9.4	19
113	Surface engineering of earth-abundant Fe catalysts for selective hydrodeoxygenation of phenolics in liquid phase. Chemical Science, 2020, 11, 5874-5880.	7.4	19
114	Coupled Lattice Polarization and Ferromagnetism in Multiferroic NiTiO ₃ Thin Films. ACS Applied Materials & Interfaces, 2017, 9, 21879-21890.	8.0	18
115	In-situ Dispersion of Palladium on TiO ₂ During Reverse Water-Gas Shift Reaction: Formation of Atomically Dispersed Palladium. Angewandte Chemie, 2020, 132, 17810-17816.	2.0	18
116	Solvent manipulation of the pre-reduction metal-ligand complex and particle-ligand binding for controlled synthesis of Pd nanoparticles. Nanoscale, 2021, 13, 206-217.	5.6	18
117	Manganese-calcium intermixing facilitates heteroepitaxial growth at the calcite-water interface. Chemical Geology, 2017, 470, 152-163.	3.3	17
118	General Method for Determination of the Surface Composition in Bimetallic Nanoparticle Catalysts from the L Edge X-ray Absorption Near-Edge Spectra. ACS Catalysis, 2012, 2, 2433-2443.	11.2	16
119	Enhancing magnesite formation at low temperature and high CO ₂ pressure: The impact of seed crystals and minor components. Chemical Geology, 2015, 395, 119-125.	3.3	16
120	Temperature-Dependent Communication between Pt/Al ₂ O ₃ Catalysts and Anatase TiO ₂ Dilutant: the Effects of Metal Migration and Carbon Transfer on the Reverse Water-Gas Shift Reaction. ACS Catalysis, 2021, 11, 12058-12067.	11.2	16
121	Precise Identification and Characterization of Catalytically Active Sites on the Surface of γ -Alumina**. Angewandte Chemie, 2021, 133, 17663-17671.	2.0	15
122	Optical Properties of Airborne Soil Organic Particles. ACS Earth and Space Chemistry, 2017, 1, 511-521.	2.7	14
123	Ligand-Mediated Nucleation and Growth of Palladium Metal Nanoparticles. Journal of Visualized Experiments, 2018, , .	0.3	14
124	Structural Intergrowth in γ -Al ₂ O ₃ . Journal of Physical Chemistry C, 2019, 123, 9454-9460.	3.1	14
125	Direct Catalytic Conversion of Ethanol to C ₅₊ Ketones: Role of Pd-Zn Alloy on Catalytic Activity and Stability. Angewandte Chemie - International Edition, 2020, 59, 14550-14557.	13.8	14
126	Calcareous organic matter coatings sequester siderophores in alkaline soils. Science of the Total Environment, 2020, 724, 138250.	8.0	14

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127	Magnesium behavior and structural defects in Mg ⁺ ion implanted silicon carbide. <i>Journal of Nuclear Materials</i> , 2015, 458, 146-155.	2.7	13
128	Direct observation and assessment of phase states of ambient and lab-generated sub-micron particles upon humidification. <i>RSC Advances</i> , 2021, 11, 15264-15272.	3.6	13
129	Accessing crystal-crystal interaction forces with oriented nanocrystal atomic force microscopy probes. <i>Nature Protocols</i> , 2018, 13, 2005-2030.	12.0	12
130	Microbe-Encapsulated Silica Gel Biosorbents for Selective Extraction of Scandium from Coal Byproducts. <i>Environmental Science & Technology</i> , 2021, 55, 6320-6328.	10.0	12
131	Crystallographic and compositional analysis of impurity phase U ₂ MoSi ₂ C in UMo alloys. <i>Journal of Nuclear Materials</i> , 2019, 519, 287-291.	2.7	11
132	Kinetics and Mechanisms of ZnO to ZIF-8 Transformations in Supercritical CO ₂ Revealed by In-Situ X-ray Diffraction. <i>ChemSusChem</i> , 2020, 13, 2602-2612.	6.8	11
133	Structure sensitivity of n-butane hydrogenolysis on supported Ir catalysts. <i>Journal of Catalysis</i> , 2021, 394, 376-386.	6.2	11
134	Understanding the Deactivation of Ag ⁺ /ZrO ₂ /SiO ₂ Catalysts for the Single-step Conversion of Ethanol to Butenes. <i>ChemCatChem</i> , 2021, 13, 999-1008.	3.7	11
135	Characterization of CoCu- and CoMn-Based Catalysts for the Fischer-Tropsch Reaction Toward Chain-Lengthened Oxygenates. <i>Topics in Catalysis</i> , 2018, 61, 1016-1023.	2.8	10
136	Silicate stabilisation of colloidal UO ₂ produced by uranium metal corrosion. <i>Journal of Nuclear Materials</i> , 2019, 526, 151751.	2.7	10
137	Facet-selective adsorption of Fe(II) on hematite visualized by nanoscale secondary ion mass spectrometry. <i>Environmental Science: Nano</i> , 2019, 6, 2429-2440.	4.3	10
138	Economizing on Precious Metals in Three-Way Catalysts: Thermally Stable and Highly Active Single-Atom Rhodium on Ceria for NO Abatement under Dry and Industrially Relevant Conditions**. <i>Angewandte Chemie</i> , 2021, 133, 395-402.	2.0	10
139	Using Atom Dynamics to Map the Defect Structure Around an Impurity in Nano-Hematite. <i>Journal of Physical Chemistry Letters</i> , 2020, 11, 10396-10400.	4.6	9
140	Hierarchically structured catalysts for cascade and selective steam reforming/hydrodeoxygenation reactions. <i>Chemical Communications</i> , 2015, 51, 16617-16620.	4.1	8
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