Mark H Engelhard

List of Publications by Year
in descending order

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506 papers	52,708 citations	906 116 h-index	1799 211 g-index
511 all docs	511 docs citations	511 times ranked	45621 citing authors

#	Article	IF	Citations
1	High rate and stable cycling of lithium metal anode. Nature Communications, 2015, 6, 6362.	12.8	1,954
2	Dendrite-Free Lithium Deposition via Self-Healing Electrostatic Shield Mechanism. Journal of the American Chemical Society, 2013, 135, 4450-4456.	13.7	1,736
3	Activation of surface lattice oxygen in single-atom Pt/CeO ₂ for low-temperature CO oxidation. Science, 2017, 358, 1419-1423.	12.6	1,114
4	Electrolyte additive enabled fast charging and stable cycling lithium metal batteries. Nature Energy, 2017, 2, .	39.5	1,048
5	Nitrogen-doped graphene and its electrochemical applications. Journal of Materials Chemistry, 2010, 20, 7491.	6.7	1,040
6	A Soft Approach to Encapsulate Sulfur: Polyaniline Nanotubes for Lithiumâ€Sulfur Batteries with Long Cycle Life. Advanced Materials, 2012, 24, 1176-1181.	21.0	959
7	Oxidation of black carbon by biotic and abiotic processes. Organic Geochemistry, 2006, 37, 1477-1488.	1.8	942
8	Nitrogenâ€Coordinated Single Cobalt Atom Catalysts for Oxygen Reduction in Proton Exchange Membrane Fuel Cells. Advanced Materials, 2018, 30, 1706758.	21.0	788
9	Facile and controllable electrochemical reduction of graphene oxide and its applications. Journal of Materials Chemistry, 2010, 20, 743-748.	6.7	787
10	Stable cycling of high-voltage lithium metal batteries in ether electrolytes. Nature Energy, 2018, 3, 739-746.	39.5	767
11	Highâ€Voltage Lithiumâ€Metal Batteries Enabled by Localized Highâ€Concentration Electrolytes. Advanced Materials, 2018, 30, e1706102.	21.0	761
12	Natural oxidation of black carbon in soils: Changes in molecular form and surface charge along a climosequence. Geochimica Et Cosmochimica Acta, 2008, 72, 1598-1610.	3.9	733
13	Localized High-Concentration Sulfone Electrolytes for High-Efficiency Lithium-Metal Batteries. CheM, 2018, 4, 1877-1892.	11.7	628
14	Lewis Acidâ€“Base Interactions between Polysulfides and Metal Organic Framework in Lithium Sulfur Batteries. Nano Letters, 2014, 14, 2345-2352.	9.1	623
15	Monolithic solidâ€“electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. Nature Energy, 2019, 4, 796-805.	39.5	621
16	Enhanced activity and stability of Pt catalysts on functionalized graphene sheets for electrocatalytic oxygen reduction. Electrochemistry Communications, 2009, 11, 954-957.	4.7	615
17	Enabling High-Voltage Lithium-Metal Batteries under Practical Conditions. Joule, 2019, 3, 1662-1676.	24.0	598
18	Monodispersed Coreâ^'Shell Fe3O4@Au Nanoparticles. Journal of Physical Chemistry B, 2005, 109, 21593-21601.	2.6	545

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19	Failure Mechanism for Fastâ€Charged Lithium Metal Batteries with Liquid Electrolytes. Advanced Energy Materials, 2015, 5, 1400993.	19.5	540
20	Performance enhancement and degradation mechanism identification of a single-atom Coâ€“Nâ€“C catalyst for proton exchange membrane fuel cells. Nature Catalysis, 2020, 3, 1044-1054.	34.4	443
21	Controlling SEI Formation on SnSbâ€Porous Carbon Nanofibers for Improved Na Ion Storage. Advanced Materials, 2014, 26, 2901-2908.	21.0	441
22	Sensitive Immunosensor for Cancer Biomarker Based on Dual Signal Amplification Strategy of Graphene Sheets and Multienzyme Functionalized Carbon Nanospheres. Analytical Chemistry, 2010, 82, 2989-2995.	6.5	438
23	High-Efficiency Lithium Metal Batteries with Fire-Retardant Electrolytes. Joule, 2018, 2, 1548-1558.	24.0	436
24	Role of extracellular polymeric substances in bioflocculation of activated sludge microorganisms under glucose-controlled conditions. Water Research, 2010, 44, 4505-4516.	11.3	396
25	Redox properties of water on the oxidized and reduced surfaces of CeO2. Surface Science, 2003, 526, 1-18.	1.9	376
26	Extremely Stable Sodium Metal Batteries Enabled by Localized High-Concentration Electrolytes. ACS Energy Letters, 2018, 3, 315-321.	17.4	373
27	Hard carbon nanoparticles as high-capacity, high-stability anodic materials for Na-ion batteries. Nano Energy, 2016, 19, 279-288.	16.0	341
28	Bimetallic Cobaltâ€Based Phosphide Zeolitic Imidazolate Framework: CoP_x Phaseâ€Dependent Electrical Conductivity and Hydrogen Atom Adsorption Energy for Efficient Overall Water Splitting. Advanced Energy Materials, 2017, 7, 1601555.	19.5	340
29	Porous Silicon as a Versatile Platform for Laser Desorption/Ionization Mass Spectrometry. Analytical Chemistry, 2001, 73, 612-619.	6.5	337
30	Degradation Mechanisms of Laâ€“Srâ€“Coâ€“Feâ€“O[sub 3] SOFC Cathodes. Electrochemical and Solid-State Letters, 2006, 9, A478.	2.2	329
31	Dendrite-Free Lithium Deposition with Self-Aligned Nanorod Structure. Nano Letters, 2014, 14, 6889-6896.	9.1	326
32	Non-encapsulation approach for high-performance Liâ€“S batteries through controlled nucleation and growth. Nature Energy, 2017, 2, 813-820.	39.5	326
33	Thiophene hydrodesulfurization over nickel phosphide catalysts: effect of the precursor composition and support. Journal of Catalysis, 2005, 231, 300-313.	6.2	313
34	Nitrogen-doped mesoporous carbon for energy storage in vanadium redox flow batteries. Journal of Power Sources, 2010, 195, 4375-4379.	7.8	306
35	Functionalized Graphene Oxide as a Nanocarrier in a Multienzyme Labeling Amplification Strategy for Ultrasensitive Electrochemical Immunoassay of Phosphorylated p53 (S392). Analytical Chemistry, 2011, 83, 746-752.	6.5	305
36	Tuning Pt-CeO2 interactions by high-temperature vapor-phase synthesis for improved reducibility of lattice oxygen. Nature Communications, 2019, 10, 1358.	12.8	302

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37	High-Concentration Ether Electrolytes for Stable High-Voltage Lithium Metal Batteries. ACS Energy Letters, 2019, 4, 896-902.	17.4	302
38	Surface Plasmon-Driven Water Reduction: Gold Nanoparticle Size Matters. Journal of the American Chemical Society, 2014, 136, 9842-9845.	13.7	301
39	Joint Charge Storage for Highâ€Rate Aqueous Zincâ€“Manganese Dioxide Batteries. Advanced Materials, 2019, 31, e1900567.	21.0	299
40	High Voltage Operation of Niâ€Rich NMC Cathodes Enabled by Stable Electrode/Electrolyte Interphases. Advanced Energy Materials, 2018, 8, 1800297.	19.5	298
41	Dendrite-free Li deposition using trace-amounts of water as an electrolyte additive. Nano Energy, 2015, 15, 135-144.	16.0	297
42	Polyelectrolyte-Induced Reduction of Exfoliated Graphite Oxide: A Facile Route to Synthesis of Soluble Graphene Nanosheets. ACS Nano, 2011, 5, 1785-1791.	14.6	293
43	Manipulating surface reactions in lithiumâ€“sulphur batteries using hybrid anode structures. Nature Communications, 2014, 5, 3015.	12.8	290
44	Stability of biomass-derived black carbon in soils. Geochimica Et Cosmochimica Acta, 2008, 72, 6069-6078.	3.9	287
45	Hollow coreâ€“shell structured porous Siâ€“C nanocomposites for Li-ion battery anodes. Journal of Materials Chemistry, 2012, 22, 11014.	6.7	280
46	Behavior of Lithium Metal Anodes under Various Capacity Utilization and High Current Density in Lithium Metal Batteries. Joule, 2018, 2, 110-124.	24.0	280
47	Toward Rational Design of Cu/SSZ-13 Selective Catalytic Reduction Catalysts: Implications from Atomic-Level Understanding of Hydrothermal Stability. ACS Catalysis, 2017, 7, 8214-8227.	11.2	278
48	Instability, intermixing and electronic structure at the epitaxial <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si51.gif" display="inline" overflow="scroll"><mml:msub><mml:mrow><mml:mstyle mathvariant="normal"><mml:mi>LaAlO</mml:mi></mml:mstyle></mml:mrow><mml:mrow><mml:mn>3</mml:mn></mml:mrow></mm		

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55	Supercritical fluid synthesis and characterization of catalytic metal nanoparticles on carbon nanotubes. Journal of Materials Chemistry, 2004, 14, 908.	6.7	246
56	Surface-Driven Sodium Ion Energy Storage in Nanocellular Carbon Foams. Nano Letters, 2013, 13, 3909-3914.	9.1	245
57	Highly Stable Operation of Lithium Metal Batteries Enabled by the Formation of a Transient Highâ€Concentration Electrolyte Layer. Advanced Energy Materials, 2016, 6, 1502151.	19.5	236
58	Ionic liquid-enhanced solid state electrolyte interface (SEI) for lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2013, 1, 8464.	10.3	229
59	The adsorption of liquid and vapor water on TiO2(110) surfaces: the role of defects. Surface Science, 1995, 344, 237-250.	1.9	228
60	Surface characterization of nanomaterials and nanoparticles: Important needs and challenging opportunities. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, 50820.	2.1	227
61	Self assembly of acetylcholinesterase on a gold nanoparticlesâ€“graphene nanosheet hybrid for organophosphate pesticide detection using polyelectrolyte as a linker. Journal of Materials Chemistry, 2011, 21, 5319.	6.7	219
62	Morphology and Electronic Structure of the Oxide Shell on the Surface of Iron Nanoparticles. Journal of the American Chemical Society, 2009, 131, 8824-8832.	13.7	218
63	Effect of nitrogen additives on flame retardant action of tributyl phosphate: Phosphorusâ€“nitrogen synergism. Polymer Degradation and Stability, 2008, 93, 99-108.	5.8	213
64	Iron oxideâ€“gold coreâ€“shell nanoparticles and thin film assembly. Journal of Materials Chemistry, 2005, 15, 1821.	6.7	211
65	Origin of lithium whisker formation and growth under stress. Nature Nanotechnology, 2019, 14, 1042-1047.	31.5	211
66	Nanoscale Alloying, Phase-Segregation, and Coreâ˜Shell Evolution of Goldâ˜Platinum Nanoparticles and Their Electrocatalytic Effect on Oxygen Reduction Reaction. Chemistry of Materials, 2010, 22, 4282-4294.	6.7	205
67	Development of high-temperature ferromagnetism inSnO2and paramagnetism in SnO by Fe doping. Physical Review B, 2005, 72, .	3.2	204
68	Effects of Electrolyte Salts on the Performance of Liâ€“O₂ Batteries. Journal of Physical Chemistry C, 2013, 117, 2635-2645.	3.1	204
69	The stability of organic solvents and carbon electrode in nonaqueous Li-O2 batteries. Journal of Power Sources, 2012, 215, 240-247.	7.8	197
70	Role of inner solvation sheath within saltâ€“solvent complexes in tailoring electrode/electrolyte interphases for lithium metal batteries. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 28603-28613.	7.1	191
71	Long-term black carbon dynamics in cultivated soil. Biogeochemistry, 2008, 89, 295-308.	3.5	186
72	Low-Temperature Pd/Zeolite Passive NO_x Adsorbers: Structure, Performance, and Adsorption Chemistry. Journal of Physical Chemistry C, 2017, 121, 15793-15803.	3.1	178

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73	XPS analysis of nanostructured materials and biological surfaces. Journal of Electron Spectroscopy and Related Phenomena, 2010, 178-179, 415-432.	1.7	177
74	Epitaxial growth and properties of cobalt-dopedZnOonÎ±â^'Al2O3single-crystal substrates. Physical Review B, 2004, 70, .	3.2	175
75	Highâ€Performance Silicon Anodes Enabled By Nonflammable Localized Highâ€Concentration Electrolytes. Advanced Energy Materials, 2019, 9, 1900784.	19.5	175
76	Ethanol synthesis from syngas over Rh-based/SiO2 catalysts: A combined experimental and theoretical modeling study. Journal of Catalysis, 2010, 271, 325-342.	6.2	174
77	Synergistic Catalysis between Pd and Fe in Gas Phase Hydrodeoxygenation of m-Cresol. ACS Catalysis, 2014, 4, 3335-3345.	11.2	173
78	Sensitive Immunoassay of a Biomarker Tumor Necrosis Factor-Î± Based on Poly(guanine)-Functionalized Silica Nanoparticle Label. Analytical Chemistry, 2006, 78, 6974-6979.	6.5	172
79	Selective Sorption of Cesium Using Self-Assembled Monolayers on Mesoporous Supports. Environmental Science & Technology, 2001, 35, 3962-3966.	10.0	168
80	Nanoscale effects on ion conductance of layer-by-layer structures of gadolinia-doped ceria and zirconia. Applied Physics Letters, 2005, 86, 131906.	3.3	168
81	Hidden ferromagnetic secondary phases in cobalt-doped ZnO epitaxial thin films. Physical Review B, 2008, 77, .	3.2	168
82	Reductive Sequestration of Pertechnetate (⁹⁹TcO₄^{â€“}) by Nano Zerovalent Iron (nZVI) Transformed by Abiotic Sulfide. Environmental Science & Technology, 2013, 47, 5302-5310.	10.0	162
83	Guided Lithium Metal Deposition and Improved Lithium Coulombic Efficiency through Synergistic Effects of LiAsF₆ and Cyclic Carbonate Additives. ACS Energy Letters, 2018, 3, 14-19.	17.4	161
84	Effects of Reduction Temperature and Metalâ^'Support Interactions on the Catalytic Activity of Pt/Î³-Al2O3 and Pt/TiO2 for the Oxidation of CO in the Presence and Absence of H2. Journal of Physical Chemistry B, 2005, 109, 23430-23443.	2.6	159
85	Advanced Electrolytes for Fastâ€Charging Highâ€Voltage Lithiumâ€Ion Batteries in Wideâ€Temperature Range. Advanced Energy Materials, 2020, 10, 2000368.	19.5	159
86	Coordination Chemistry in magnesium battery electrolytes: how ligands affect their performance. Scientific Reports, 2013, 3, 3130.	3.3	157
87	Tuning the Solid Electrolyte Interphase for Selective Liâ€• and Naâ€•Ion Storage in Hard Carbon. Advanced Materials, 2017, 29, 1606860.	21.0	157
88	Ferromagnetism in chemically synthesized<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi mathvariant="normal">Ce</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:mrow></mml:math>nanoparticles by Ni doping. Physical Review B, 2007, 76, .	3.2	156
89	Revisiting the Corrosion of the Aluminum Current Collector in Lithium-Ion Batteries. Journal of Physical Chemistry Letters, 2017, 8, 1072-1077.	4.6	156
90	Creation of variable concentrations of defects on TiO2(110) using low-density electron beams. Surface Science, 1994, 320, 295-306.	1.9	148

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91	Nitrogenâ€“doped graphitized carbon shell encapsulated NiFe nanoparticles: A highly durable oxygen evolution catalyst. Nano Energy, 2017, 39, 245-252.	16.0	143
92	Addressing Passivation in Lithiumâ€“Sulfur Battery Under Lean Electrolyte Condition. Advanced Functional Materials, 2018, 28, 1707234.	14.9	143
93	The structure of Na2Oâ€“Al2O3â€“SiO2 glass: impact on sodium ion exchange in H2O and D2O. Journal of Non-Crystalline Solids, 2001, 296, 10-26.	3.1	142
94	Suppressing Lithium Dendrite Growth by Metallic Coating on a Separator. Advanced Functional Materials, 2017, 27, 1704391.	14.9	141
95	Comparative second harmonic generation and X-ray photoelectron spectroscopy studies of the UV creation and O2 healing of Ti3+ defects on (110) rutile TiO2 surfaces. Surface Science, 1995, 339, 114-124.	1.9	140
96	Infrared transparent spinel films with p-type conductivity. Thin Solid Films, 2001, 398-399, 45-52.	1.8	140
97	Highly Ordered Mesoporous Bimetallic Phosphides as Efficient Oxygen Evolution Electrocatalysts. ACS Energy Letters, 2016, 1, 792-796.	17.4	139
98	Characterization of CeO2-supported Cuâ€“Pd bimetallic catalyst for the oxygen-assisted waterâ€“gas shift reaction. Journal of Catalysis, 2008, 260, 358-370.	6.2	138
99	Practical guides for x-ray photoelectron spectroscopy: First steps in planning, conducting, and reporting XPS measurements. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2019, 37, .	2.1	137
100	Low-solvation electrolytes for high-voltage sodium-ion batteries. Nature Energy, 2022, 7, 718-725.	39.5	137
101	Nucleophilic Displacements in Mixed Self-Assembled Monolayersâ€. Langmuir, 1996, 12, 5064-5075.	3.5	136
102	Correlation between Surface Chemistry, Density, and Band Gap in Nanocrystalline WO₃ Thin Films. ACS Applied Materials & Interfaces, 2012, 4, 1371-1377.	8.0	135
103	Silicon (100)/SiO2 by XPS. Surface Science Spectra, 2013, 20, 36-42.	1.3	134
104	Long-term black carbon dynamics in cultivated soil. Biogeochemistry, 2009, 92, 163-176.	3.5	133
105	Minimal Proton Channel Enables H₂ Oxidation and Production with a Water-Soluble Nickel-Based Catalyst. Journal of the American Chemical Society, 2013, 135, 18490-18496.	13.7	131
106	Effects of fluorinated solvents on electrolyte solvation structures and electrode/electrolyte interphases for lithium metal batteries. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	131
107	Enhanced performance of graphite anode materials by AlF3 coating for lithium-ion batteries. Journal of Materials Chemistry, 2012, 22, 12745.	6.7	129
108	Nanovoid Incorporated Ir_xCu Metallic Aerogels for Oxygen Evolution Reaction Catalysis. ACS Energy Letters, 2018, 3, 2038-2044.	17.4	129

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109	Oneâ€Pot Process for Hydrodeoxygenation of Lignin to Alkanes Using Ruâ€Based Bimetallic and Bifunctional Catalysts Supported on Zeolite Y. ChemSusChem, 2017, 10, 1846-1856.	6.8	127
110	Reduction Mechanism of Fluoroethylene Carbonate for Stable Solidâ€“Electrolyte Interphase Film on Silicon Anode. ChemSusChem, 2014, 7, 549-554.	6.8	126
111	Composition-Controlled Synthesis of Bimetallic Goldâ^'Silver Nanoparticles. Langmuir, 2004, 20, 11240-11246.	3.5	125
112	Dendriteâ€Free and Performanceâ€Enhanced Lithium Metal Batteries through Optimizing Solvent Compositions and Adding Combinational Additives. Advanced Energy Materials, 2018, 8, 1703022.	19.5	123
113	Designing Advanced In Situ Electrode/Electrolyte Interphases for Wide Temperature Operation of 4.5 V Li||LiCoO₂ Batteries. Advanced Materials, 2020, 32, e2004898.	21.0	123
114	Comparison of the sputter rates of oxide films relative to the sputter rate of SiO2. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2010, 28, 1060-1072.	2.1	122
115	Characterization challenges for nanomaterials. Surface and Interface Analysis, 2008, 40, 529-537.	1.8	121
116	Fluorescent dye encapsulated ZnO particles with cell-specific toxicity for potential use in biomedical applications. Journal of Materials Science: Materials in Medicine, 2009, 20, 11-22.	3.6	121
117	Correlation of Ptâ€“Re surface properties with reaction pathways for the aqueous-phase reforming of glycerol. Journal of Catalysis, 2012, 287, 37-43.	6.2	118
118	Ultrafine and highly disordered Ni2Fe1 nanofoams enabled highly efficient oxygen evolution reaction in alkaline electrolyte. Nano Energy, 2018, 44, 319-326.	16.0	118
119	Highâ€Performance, Superparamagnetic, Nanoparticleâ€Based Heavy Metal Sorbents for Removal of Contaminants from Natural Waters. ChemSusChem, 2010, 3, 749-757.	6.8	117
120	Effects of Cesium Cations in Lithium Deposition via Self-Healing Electrostatic Shield Mechanism. Journal of Physical Chemistry C, 2014, 118, 4043-4049.	3.1	117
121	Effect of the Anion Activity on the Stability of Li Metal Anodes in Lithiumâ€Sulfur Batteries. Advanced Functional Materials, 2016, 26, 3059-3066.	14.9	117
122	Porous Carbonâ€Hosted Atomically Dispersed Ironâ€“Nitrogen Moiety as Enhanced Electrocatalysts for Oxygen Reduction Reaction in a Wide Range of pH. Small, 2018, 14, e1703118.	10.0	117
123	An advanced understanding of the specific effects of xylan and surface lignin contents on enzymatic hydrolysis of lignocellulosic biomass. Bioresource Technology, 2013, 132, 137-145.	9.6	115
124	Structure of the cleaved CaCO3(101Ì„4) surface in an aqueous environment. Surface Science, 1996, 351, 172-182.	1.9	114
125	XPS guide: Charge neutralization and binding energy referencing for insulating samples. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	2.1	114
126	Spectroscopic Characterization of Extracellular Polymeric Substances from Escherichia coli and Serratia marcescens: Suppression Using Sub-Inhibitory Concentrations of Bismuth Thiols. Biomacromolecules, 2008, 9, 3079-3089.	5.4	113

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127	Nonflammable Electrolytes for Lithium Ion Batteries Enabled by Ultraconformal Passivation Interphases. ACS Energy Letters, 2019, 4, 2529-2534.	17.4	112
128	Structure Sensitivity of Acetylene Semi-Hydrogenation on Pt Single Atoms and Subnanometer Clusters. ACS Catalysis, 2019, 9, 11030-11041.	11.2	111
129	Effects of Imideâ€“Orthoborate Dual-Salt Mixtures in Organic Carbonate Electrolytes on the Stability of Lithium Metal Batteries. ACS Applied Materials & Interfaces, 2018, 10, 2469-2479.	8.0	110
130	Adsorptive Removal of Organic Sulfur Compounds from Jet Fuel over K-Exchanged NiY Zeolites Prepared by Impregnation and Ion Exchange. Industrial & Engineering Chemistry Research, 2005, 44, 5740-5749.	3.7	106
131	Lithiumâ€Pretreated Hard Carbon as Highâ€Performance Sodiumâ€Ion Battery Anodes. Advanced Energy Materials, 2018, 8, 1801441.	19.5	105
132	Atomic-Structural Synergy for Catalytic CO Oxidation over Palladiumâ€“Nickel Nanoalloys. Journal of the American Chemical Society, 2014, 136, 7140-7151.	13.7	104
133	Complete Decomposition of Li₂CO₃ in Liâ€“O₂ Batteries Using Ir/B₄C as Noncarbon-Based Oxygen Electrode. Nano Letters, 2017, 17, 1417-1424.	9.1	104
134	Chemical Processing in High-Pressure Aqueous Environments. 7. Process Development for Catalytic Gasification of Wet Biomass Feedstocks. Industrial & Engineering Chemistry Research, 2004, 43, 1999-2004.	3.7	103
135	The role of H2O in the carbonation of forsterite in supercritical CO2. International Journal of Greenhouse Gas Control, 2011, 5, 1081-1092.	4.6	103
136	Influence of Aging and Environment on Nanoparticle Chemistry: Implication to Confinement Effects in Nanoceria. Journal of Physical Chemistry C, 2012, 116, 14108-14114.	3.1	103
137	Electrocatalytic Hydrogen Evolution in Neutral pH Solutions: Dual-Phase Synergy. ACS Catalysis, 2019, 9, 8712-8718.	11.2	103
138	Surfaces with Reversible Hydrophilic/Hydrophobic Characteristics on Cross-linked Poly(N-isopropylacrylamide) Hydrogels. Langmuir, 2000, 16, 8016-8023.	3.5	102
139	Stability of polymer binders in Liâ€“O 2 batteries. Journal of Power Sources, 2013, 243, 899-907.	7.8	102
140	Applications of XPS in the characterization of Battery materials. Journal of Electron Spectroscopy and Related Phenomena, 2019, 231, 2-10.	1.7	101
141	The corrosion of PEM fuel cell catalyst supports and its implications for developing durable catalysts. Electrochimica Acta, 2009, 54, 3109-3114.	5.2	100
142	Stabilization of Li Metal Anode in DMSOâ€Based Electrolytes via Optimization of Saltâ€“Solvent Coordination for Liâ€“O₂ Batteries. Advanced Energy Materials, 2017, 7, 1602605.	19.5	99
143	Catalytic Roles of Co⁰ and Co²⁺ during Steam Reforming of Ethanol on Co/MgO Catalysts. ACS Catalysis, 2011, 1, 279-286.	11.2	98
144	Spatially Resolved Mineral Deposition on Patterned Self-Assembled Monolayers. Langmuir, 1994, 10, 619-622.	3.5	97

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145	Highly Reversible Sodium Ion Batteries Enabled by Stable Electrolyte-Electrode Interphases. ACS Energy Letters, 2020, 5, 3212-3220.	17.4	97
146	Correlation between Atomic Coordination Structure and Enhanced Electrocatalytic Activity for Trimetallic Alloy Catalysts. Journal of the American Chemical Society, 2011, 133, 12714-12727.	13.7	96
147	X-ray Photoelectron Spectroscopic Study of the Activation of Molecularly-Linked Gold Nanoparticle Catalysts. Langmuir, 2003, 19, 125-131.	3.5	93
148	Formation of Reversible Solid Electrolyte Interface on Graphite Surface from Concentrated Electrolytes. Nano Letters, 2017, 17, 1602-1609.	9.1	91
149	Interactions of HCOOH with stoichiometric and defective TiO2(110) surfaces. Surface Science, 1997, 380, 352-364.	1.9	90
150	Size Dependence of Lattice Parameter and Electronic Structure in CeO₂ Nanoparticles. Inorganic Chemistry, 2020, 59, 5760-5767.	4.0	90
151	Advanced spectroscopic synchrotron techniques to unravel the intrinsic properties of dilute magnetic oxides: the case of Co:ZnO. New Journal of Physics, 2010, 12, 013020.	2.9	89
152	Role of Supportâ€“Nanoalloy Interactions in the Atomic-Scale Structural and Chemical Ordering for Tuning Catalytic Sites. Journal of the American Chemical Society, 2012, 134, 15048-15060.	13.7	89
153	Effect of Co/Ni ratios in cobalt nickel mixed oxide catalysts on methane combustion. Applied Catalysis A: General, 2015, 505, 62-69.	4.3	89
154	Simultaneous Stabilization of LiNi_{0.76}Mn_{0.14}Co_{0.10}O₂ Cathode and Lithium Metal Anode by Lithium Bis(oxalato)borate as Additive. ChemSusChem, 2018, 11, 2211-2220.	6.8	89
155	Detrimental Effects of Chemical Crossover from the Lithium Anode to Cathode in Rechargeable Lithium Metal Batteries. ACS Energy Letters, 2018, 3, 2921-2930.	17.4	89
156	Effect of Co doping on the structural, optical and magnetic properties of ZnO nanoparticles. Journal of Physics Condensed Matter, 2007, 19, 266203.	1.8	88
157	Rational design of efficient electrodeâ€“electrolyte interfaces for solid-state energy storage using ion soft landing. Nature Communications, 2016, 7, 11399.	12.8	86
158	Goldâ€“Copper Nanoparticles: Nanostructural Evolution and Bifunctional Catalytic Sites. Chemistry of Materials, 2012, 24, 4662-4674.	6.7	85
159	Mixed salts of LiTFSI and LiBOB for stable LiFePO4-based batteries at elevated temperatures. Journal of Materials Chemistry A, 2014, 2, 2346.	10.3	85
160	Tailoring the Local Environment of Platinum in Singleâ€Atom Pt₁/CeO₂ Catalysts for Robust Lowâ€Temperature CO Oxidation. Angewandte Chemie - International Edition, 2021, 60, 26054-26062.	13.8	84
161	Interparticle Chiral Recognition of Enantiomers: A Nanoparticle-Based Regulation Strategy. Analytical Chemistry, 2009, 81, 689-698.	6.5	82
162	Reduction of U(VI) Incorporated in the Structure of Hematite. Environmental Science & Technology, 2012, 46, 9428-9436.	10.0	82

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163	Low-Temperature Synthesis of Tunable Mesoporous Crystalline Transition Metal Oxides and Applications as Au Catalyst Supports. Journal of Physical Chemistry C, 2008, 112, 13499-13509.	3.1	81
164	N incorporation and electronic structure in N-doped TiO2(110) rutile. Surface Science, 2007, 601, 1754-1762.	1.9	79
165	Intermetallic Pd₃Pb nanowire networks boost ethanol oxidation and oxygen reduction reactions with significantly improved methanol tolerance. Journal of Materials Chemistry A, 2017, 5, 23952-23959.	10.3	78
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