Mark H Engelhard

List of Publications by Citations

495 papers	40,770 citations	103 h-index	186 g-index
511 ext. papers	46,582 ext. citations	8.8 avg, IF	7.45 L-index

#	Paper	IF	Citations
495	High rate and stable cycling of lithium metal anode. *Nature Communications*, **2015**, 6, 6362	17.4	1485
494	Dendrite-free lithium deposition via self-healing electrostatic shield mechanism. *Journal of the American Chemical Society*, **2013**, 135, 4450-6	16.4	1374
493	Nitrogen-doped graphene and its electrochemical applications. *Journal of Materials Chemistry*, **2010**, 20, 7491		934
492	A soft approach to encapsulate sulfur: polyaniline nanotubes for lithium-sulfur batteries with long cycle life. *Advanced Materials*, **2012**, 24, 1176-81	24	881
491	Oxidation of black carbon by biotic and abiotic processes. *Organic Geochemistry*, **2006**, 37, 1477-1488	3.1	783
490	Electrolyte additive enabled fast charging and stable cycling lithium metal batteries. *Nature Energy*, **2017**, 2,	62.3	769
489	Activation of surface lattice oxygen in single-atom Pt/CeO for low-temperature CO oxidation. *Science*, **2017**, 358, 1419-1423	33.3	740
488	Facile and controllable electrochemical reduction of graphene oxide and its applications. *Journal of Materials Chemistry*, **2010**, 20, 743-748		702
487	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	5.5	634
486	Nitrogen-Coordinated Single Cobalt Atom Catalysts for Oxygen Reduction in Proton Exchange Membrane Fuel Cells. *Advanced Materials*, **2018**, 30, 1706758	24	590
485	Enhanced activity and stability of Pt catalysts on functionalized graphene sheets for electrocatalytic oxygen reduction. *Electrochemistry Communications*, **2009**, 11, 954-957	5.1	562
484	Lewis acid-base interactions between polysulfides and metal organic framework in lithium sulfur batteries. *Nano Letters*, **2014**, 14, 2345-52	11.5	529
483	Monodispersed core-shell Fe3O4@Au nanoparticles. *Journal of Physical Chemistry B*, **2005**, 109, 21593-601	3.4	500
482	Stable cycling of high-voltage lithium metal batteries in ether electrolytes. *Nature Energy*, **2018**, 3, 739-746	62.3	466
481	High-Voltage Lithium-Metal Batteries Enabled by Localized High-Concentration Electrolytes. *Advanced Materials*, **2018**, 30, e1706102	24	452
480	Failure Mechanism for Fast-Charged Lithium Metal Batteries with Liquid Electrolytes. *Advanced Energy Materials*, **2015**, 5, 1400993	21.8	413
479	Sensitive immunosensor for cancer biomarker based on dual signal amplification strategy of graphene sheets and multienzyme functionalized carbon nanospheres. *Analytical Chemistry*, **2010**, 82, 2989-95	7.8	404

478	Controlling SEI formation on SnSb-porous carbon nanofibers for improved Na ion storage. *Advanced Materials*, **2014**, 26, 2901-8	24	396
477	Localized High-Concentration Sulfone Electrolytes for High-Efficiency Lithium-Metal Batteries. *CheM*, **2018**, 4, 1877-1892	16.2	348
476	Redox properties of water on the oxidized and reduced surfaces of CeO2. *Surface Science*, **2003**, 526, 1-18	1.8	332
475	Monolithic solid□electrolyte interphases formed in fluorinated orthoformate-based electrolytes minimize Li depletion and pulverization. *Nature Energy*, **2019**, 4, 796-805	62.3	325
474	Porous silicon as a versatile platform for laser desorption/ionization mass spectrometry. *Analytical Chemistry*, **2001**, 73, 612-9	7.8	309
473	Hard carbon nanoparticles as high-capacity, high-stability anodic materials for Na-ion batteries. *Nano Energy*, **2016**, 19, 279-288	17.1	289
472	Functionalized graphene oxide as a nanocarrier in a multienzyme labeling amplification strategy for ultrasensitive electrochemical immunoassay of phosphorylated p53 (S392). *Analytical Chemistry*, **2011**, 83, 746-52	7.8	287
471	Degradation Mechanisms of La□Sr□Co□Fe□O[sub 3] SOFC Cathodes. *Electrochemical and Solid-State Letters*, **2006**, 9, A478		285
470	Dendrite-free lithium deposition with self-aligned nanorod structure. *Nano Letters*, **2014**, 14, 6889-96	11.5	276
469	Nitrogen-doped mesoporous carbon for energy storage in vanadium redox flow batteries. *Journal of Power Sources*, **2010**, 195, 4375-4379	8.9	276
468	Role of extracellular polymeric substances in bioflocculation of activated sludge microorganisms under glucose-controlled conditions. *Water Research*, **2010**, 44, 4505-16	12.5	275
467	Polyelectrolyte-induced reduction of exfoliated graphite oxide: a facile route to synthesis of soluble graphene nanosheets. *ACS Nano*, **2011**, 5, 1785-91	16.7	274
466	Enabling High-Voltage Lithium-Metal Batteries under Practical Conditions. *Joule*, **2019**, 3, 1662-1676	27.8	272
465	Bimetallic Cobalt-Based Phosphide Zeolitic Imidazolate Framework: CoPx Phase-Dependent Electrical Conductivity and Hydrogen Atom Adsorption Energy for Efficient Overall Water Splitting. *Advanced Energy Materials*, **2017**, 7, 1601555	21.8	271
464	Thiophene hydrodesulfurization over nickel phosphide catalysts: effect of the precursor composition and support. *Journal of Catalysis*, **2005**, 231, 300-313	7.3	269
463	Manipulating surface reactions in lithium-sulphur batteries using hybrid anode structures. *Nature Communications*, **2014**, 5, 3015	17.4	267
462	Surface plasmon-driven water reduction: gold nanoparticle size matters. *Journal of the American Chemical Society*, **2014**, 136, 9842-5	16.4	259
461	Hollow core□shell structured porous Si□C nanocomposites for Li-ion battery anodes. *Journal of Materials Chemistry*, **2012**, 22, 11014		259

460	High-Efficiency Lithium Metal Batteries with Fire-Retardant Electrolytes. *Joule*, **2018**, 2, 1548-1558	27.8	257
459	Non-encapsulation approach for high-performance Li–S batteries through controlled nucleation and growth. *Nature Energy*, **2017**, 2, 813-820	62.3	256
458	Stability of biomass-derived black carbon in soils. *Geochimica Et Cosmochimica Acta*, **2008**, 72, 6069-6078	5.5	242
457	Extremely Stable Sodium Metal Batteries Enabled by Localized High-Concentration Electrolytes. *ACS Energy Letters*, **2018**, 3, 315-321	20.1	241
456	Instability, intermixing and electronic structure at the epitaxial LaAlO3/SrTiO3(001) heterojunction. *Surface Science Reports*, **2010**, 65, 317-352	12.9	241
455	Relationship between the structural and magnetic properties of Co-doped SnO2 nanoparticles. *Physical Review B*, **2005**, 72,	3.3	233
454	Supercritical fluid synthesis and characterization of catalytic metal nanoparticles on carbon nanotubes. *Journal of Materials Chemistry*, **2004**, 14, 908		229
453	Dendrite-free Li deposition using trace-amounts of water as an electrolyte additive. *Nano Energy*, **2015**, 15, 135-144	17.1	227
452	Effects of nanocrystalline CeO2 supports on the properties and performance of Ni–Rh bimetallic catalyst for oxidative steam reforming of ethanol. *Journal of Catalysis*, **2006**, 238, 430-440	7.3	221
451	Self-Assembled Fe-N-Doped Carbon Nanotube Aerogels with Single-Atom Catalyst Feature as High-Efficiency Oxygen Reduction Electrocatalysts. *Small*, **2017**, 13, 1603407	11	207
450	Ionic liquid-enhanced solid state electrolyte interface (SEI) for lithium–sulfur batteries. *Journal of Materials Chemistry A*, **2013**, 1, 8464	13	207
449	The adsorption of liquid and vapor water on TiO2(110) surfaces: the role of defects. *Surface Science* , **1995**, 344, 237-250	1.8	206
448	Surface-driven sodium ion energy storage in nanocellular carbon foams. *Nano Letters*, **2013**, 13, 3909-14	11.5	202
447	Iron oxide–gold core–shell nanoparticles and thin film assembly. *Journal of Materials Chemistry*, **2005**, 15, 1821		202
446	High Voltage Operation of Ni-Rich NMC Cathodes Enabled by Stable Electrode/Electrolyte Interphases. *Advanced Energy Materials*, **2018**, 8, 1800297	21.8	201
445	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	2.9	196
444	Effects of Carbonate Solvents and Lithium Salts on Morphology and Coulombic Efficiency of Lithium Electrode. *Journal of the Electrochemical Society*, **2013**, 160, A1894-A1901	3.9	196
443	Self assembly of acetylcholinesterase on a gold nanoparticles–graphene nanosheet hybrid for organophosphate pesticide detection using polyelectrolyte as a linker. *Journal of Materials Chemistry*, **2011**, 21, 5319		196

442	Behavior of Lithium Metal Anodes under Various Capacity Utilization and High Current Density in Lithium Metal Batteries. *Joule*, **2018**, 2, 110-124	27.8	194
441	Development of high-temperature ferromagnetism in SnO2 and paramagnetism in SnO by Fe doping. *Physical Review B*, **2005**, 72,	3.3	192
440	Morphology and electronic structure of the oxide shell on the surface of iron nanoparticles. *Journal of the American Chemical Society*, **2009**, 131, 8824-32	16.4	187
439	Performance enhancement and degradation mechanism identification of a single-atom Co-N-C catalyst for proton exchange membrane fuel cells. *Nature Catalysis*, **2020**, 3, 1044-1054	36.5	186
438	Nanoscale Alloying, Phase-Segregation, and Core–Shell Evolution of Gold–Platinum Nanoparticles and Their Electrocatalytic Effect on Oxygen Reduction Reaction. *Chemistry of Materials*, **2010**, 22, 4282-4294	9.6	184
437	Enabling room temperature sodium metal batteries. *Nano Energy*, **2016**, 30, 825-830	17.1	182
436	The stability of organic solvents and carbon electrode in nonaqueous Li-O2 batteries. *Journal of Power Sources*, **2012**, 215, 240-247	8.9	181
435	Effects of Electrolyte Salts on the Performance of Li-O2 Batteries. *Journal of Physical Chemistry C*, **2013**, 117, 2635-2645	3.8	179
434	Effect of nitrogen additives on flame retardant action of tributyl phosphate: Phosphorus–nitrogen synergism. *Polymer Degradation and Stability*, **2008**, 93, 99-108	4.7	179
433	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	13.1	173
432	Epitaxial growth and properties of cobalt-doped ZnO on Al2O3 single-crystal substrates. *Physical Review B*, **2004**, 70,	3.3	171
431	Long-term black carbon dynamics in cultivated soil. *Biogeochemistry*, **2008**, 89, 295-308	3.8	165
430	Highly Stable Operation of Lithium Metal Batteries Enabled by the Formation of a Transient High-Concentration Electrolyte Layer. *Advanced Energy Materials*, **2016**, 6, 1502151	21.8	165
429	A Localized High-Concentration Electrolyte with Optimized Solvents and Lithium Difluoro(oxalate)borate Additive for Stable Lithium Metal Batteries. *ACS Energy Letters*, **2018**, 3, 2059-2067	20.1	164
428	Joint Charge Storage for High-Rate Aqueous Zinc-Manganese Dioxide Batteries. *Advanced Materials* , **2019**, 31, e1900567	24	163
427	Sensitive immunoassay of a biomarker tumor necrosis factor-alpha based on poly(guanine)-functionalized silica nanoparticle label. *Analytical Chemistry*, **2006**, 78, 6974-9	7.8	162
426	High-Concentration Ether Electrolytes for Stable High-Voltage Lithium Metal Batteries. *ACS Energy Letters*, **2019**, 4, 896-902	20.1	160
425	Nanoscale effects on ion conductance of layer-by-layer structures of gadolinia-doped ceria and zirconia. *Applied Physics Letters*, **2005**, 86, 131906	3.4	160

424	Hidden ferromagnetic secondary phases in cobalt-doped ZnO epitaxial thin films. *Physical Review B*, **2008**, 77,	3.3	159
423	Tuning Pt-CeO interactions by high-temperature vapor-phase synthesis for improved reducibility of lattice oxygen. *Nature Communications*, **2019**, 10, 1358	17.4	156
422	Selective sorption of cesium using self-assembled monolayers on mesoporous supports. *Environmental Science & Technology*, **2001**, 35, 3962-6	10.3	155
421	Synergistic Catalysis between Pd and Fe in Gas Phase Hydrodeoxygenation of m-Cresol. *ACS Catalysis*, **2014**, 4, 3335-3345	13.1	153
420	Ethanol synthesis from syngas over Rh-based/SiO2 catalysts: A combined experimental and theoretical modeling study. *Journal of Catalysis*, **2010**, 271, 325-342	7.3	150
419	XPS analysis of nanostructured materials and biological surfaces. *Journal of Electron Spectroscopy and Related Phenomena*, **2010**, 178-179, 415-432	1.7	144
418	Ferromagnetism in chemically synthesized CeO2 nanoparticles by Ni doping. *Physical Review B*, **2007**, 76,	3.3	142
417	Origin of lithium whisker formation and growth under stress. *Nature Nanotechnology*, **2019**, 14, 1042-1047	38.7	141
416	Creation of variable concentrations of defects on TiO2(110) using low-density electron beams. *Surface Science*, **1994**, 320, 295-306	1.8	141
415	Effects of reduction temperature and metal-support interactions on the catalytic activity of Pt/gamma-Al2O3 and Pt/TiO2 for the oxidation of CO in the presence and absence of H2. *Journal of Physical Chemistry B*, **2005**, 109, 23430-43	3.4	138
414	Coordination chemistry in magnesium battery electrolytes: how ligands affect their performance. *Scientific Reports*, **2013**, 3, 3130	4.9	133
413	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	1.8	126
412	Nucleophilic Displacements in Mixed Self-Assembled Monolayers. *Langmuir*, **1996**, 12, 5064-5075	4	126
411	The structure of Na2O·Al2O3·SiO2 glass: impact on sodium ion exchange in H2O and D2O. *Journal of Non-Crystalline Solids*, **2001**, 296, 10-26	3.9	124
410	Infrared transparent spinel films with p-type conductivity. *Thin Solid Films*, **2001**, 398-399, 45-52	2.2	124
409	Characterization of CeO2-supported Cu–Pd bimetallic catalyst for the oxygen-assisted water–gas shift reaction. *Journal of Catalysis*, **2008**, 260, 358-370	7.3	122
408	Reductive sequestration of pertechnetate (99TcO4−) by nano zerovalent iron (nZVI) transformed by abiotic sulfide. *Environmental Science & Technology*, **2013**, 47, 5302-10	10.3	120
407	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	20.1	120

406	Tuning the Solid Electrolyte Interphase for Selective Li- and Na-Ion Storage in Hard Carbon. *Advanced Materials*, **2017**, 29, 1606860	24	119
405	Long-term black carbon dynamics in cultivated soil. *Biogeochemistry*, **2009**, 92, 163-176	3.8	118
404	Composition-controlled synthesis of bimetallic gold-silver nanoparticles. *Langmuir*, **2004**, 20, 11240-6	4	117
403	Highly Ordered Mesoporous Bimetallic Phosphides as Efficient Oxygen Evolution Electrocatalysts. *ACS Energy Letters*, **2016**, 1, 792-796	20.1	116
402	Low-Temperature Pd/Zeolite Passive NOx Adsorbers: Structure, Performance, and Adsorption Chemistry. *Journal of Physical Chemistry C*, **2017**, 121, 15793-15803	3.8	115
401	Correlation of Pt–Re surface properties with reaction pathways for the aqueous-phase reforming of glycerol. *Journal of Catalysis*, **2012**, 287, 37-43	7.3	112
400	Addressing Passivation in Lithium–Sulfur Battery Under Lean Electrolyte Condition. *Advanced Functional Materials*, **2018**, 28, 1707234	15.6	111
399	Characterization challenges for nanomaterials. *Surface and Interface Analysis*, **2008**, 40, 529-537	1.5	110
398	Minimal proton channel enables H2 oxidation and production with a water-soluble nickel-based catalyst. *Journal of the American Chemical Society*, **2013**, 135, 18490-6	16.4	109
397	Nitrogen-doped graphitized carbon shell encapsulated NiFe nanoparticles: A highly durable oxygen evolution catalyst. *Nano Energy*, **2017**, 39, 245-252	17.1	109
396	Enhanced performance of graphite anode materials by AlF3 coating for lithium-ion batteries. *Journal of Materials Chemistry*, **2012**, 22, 12745		108
395	Reduction mechanism of fluoroethylene carbonate for stable solid–electrolyte interphase film on silicon anode. *ChemSusChem*, **2014**, 7, 549-54	8.3	106
394	Suppressing Lithium Dendrite Growth by Metallic Coating on a Separator. *Advanced Functional Materials*, **2017**, 27, 1704391	15.6	104
393	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	2.9	103
392	High-performance, superparamagnetic, nanoparticle-based heavy metal sorbents for removal of contaminants from natural waters. *ChemSusChem*, **2010**, 3, 749-57	8.3	101
391	Structure of the cleaved CaCO3(101 4) surface in an aqueous environment. *Surface Science*, **1996**, 351, 172-182	1.8	100
390	Effects of Cesium Cations in Lithium Deposition via Self-Healing Electrostatic Shield Mechanism. *Journal of Physical Chemistry C*, **2014**, 118, 4043-4049	3.8	99
389	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	4.5	99

388	Revisiting the Corrosion of the Aluminum Current Collector in Lithium-Ion Batteries. *Journal of Physical Chemistry Letters*, **2017**, 8, 1072-1077	6.4	98
387	Correlation between surface chemistry, density, and band gap in nanocrystalline WO3 thin films. *ACS Applied Materials & Interfaces*, **2012**, 4, 1371-7	9.5	98
386	An advanced understanding of the specific effects of xylan and surface lignin contents on enzymatic hydrolysis of lignocellulosic biomass. *Bioresource Technology*, **2013**, 132, 137-45	11	97
385	Dendrite-Free and Performance-Enhanced Lithium Metal Batteries through Optimizing Solvent Compositions and Adding Combinational Additives. *Advanced Energy Materials*, **2018**, 8, 1703022	21.8	95
384	Nanovoid Incorporated IrxCu Metallic Aerogels for Oxygen Evolution Reaction Catalysis. *ACS Energy Letters*, **2018**, 3, 2038-2044	20.1	94
383	Spectroscopic characterization of extracellular polymeric substances from Escherichia coli and Serratia marcescens: suppression using sub-inhibitory concentrations of bismuth thiols. *Biomacromolecules*, **2008**, 9, 3079-89	6.9	94
382	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	3.9	93
381	High-Performance Silicon Anodes Enabled By Nonflammable Localized High-Concentration Electrolytes. *Advanced Energy Materials*, **2019**, 9, 1900784	21.8	92
380	The corrosion of PEM fuel cell catalyst supports and its implications for developing durable catalysts. *Electrochimica Acta*, **2009**, 54, 3109-3114	6.7	92
379	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	3.9	92
378	Surfaces with Reversible Hydrophilic/Hydrophobic Characteristics on Cross-linked Poly(N-isopropylacrylamide) Hydrogels. *Langmuir*, **2000**, 16, 8016-8023	4	90
377	Porous Carbon-Hosted Atomically Dispersed Iron-Nitrogen Moiety as Enhanced Electrocatalysts for Oxygen Reduction Reaction in a Wide Range of pH. *Small*, **2018**, 14, e1703118	11	89
376	Atomic-structural synergy for catalytic CO oxidation over palladium-nickel nanoalloys. *Journal of the American Chemical Society*, **2014**, 136, 7140-51	16.4	89
375	Stability of polymer binders in Li□2 batteries. *Journal of Power Sources*, **2013**, 243, 899-907	8.9	89
374	Correlation between atomic coordination structure and enhanced electrocatalytic activity for trimetallic alloy catalysts. *Journal of the American Chemical Society*, **2011**, 133, 12714-27	16.4	89
373	Effect of the Anion Activity on the Stability of Li Metal Anodes in Lithium-Sulfur Batteries. *Advanced Functional Materials*, **2016**, 26, 3059-3066	15.6	89
372	One-Pot Process for Hydrodeoxygenation of Lignin to Alkanes Using Ru-Based Bimetallic and Bifunctional Catalysts Supported on Zeolite Y. *ChemSusChem*, **2017**, 10, 1846-1856	8.3	88
371	X-ray Photoelectron Spectroscopic Study of the Activation of Molecularly-Linked Gold Nanoparticle Catalysts. *Langmuir*, **2003**, 19, 125-131	4	88

370	Interactions of HCOOH with stoichiometric and defective TiO2(110) surfaces. *Surface Science*, **1997**, 380, 352-364	1.8	87
369	Spatially Resolved Mineral Deposition on Patterned Self-Assembled Monolayers. *Langmuir*, **1994**, 10, 619-622	4	85
368	Ultrafine and highly disordered Ni2Fe1 nanofoams enabled highly efficient oxygen evolution reaction in alkaline electrolyte. *Nano Energy*, **2018**, 44, 319-326	17.1	85
367	The role of H2O in the carbonation of forsterite in supercritical CO2. *International Journal of Greenhouse Gas Control*, **2011**, 5, 1081-1092	4.2	84
366	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	82
365	Silicon (100)/SiO2 by XPS. *Surface Science Spectra*, **2013**, 20, 36-42	1.2	81
364	Advanced Electrolytes for Fast-Charging High-Voltage Lithium-Ion Batteries in Wide-Temperature Range. *Advanced Energy Materials*, **2020**, 10, 2000368	21.8	81
363	Practical Guides for X-Ray Photoelectron Spectroscopy (XPS): First Steps in planning, conducting and reporting XPS measurements. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **2019**, 37,	2.9	80
362	Catalytic Roles of Co0 and Co2+ during Steam Reforming of Ethanol on Co/MgO Catalysts. *ACS Catalysis*, **2011**, 1, 279-286	13.1	80
361	Complete Decomposition of LiCO in Li-O Batteries Using Ir/BC as Noncarbon-Based Oxygen Electrode. *Nano Letters*, **2017**, 17, 1417-1424	11.5	79
360	Stabilization of Li Metal Anode in DMSO-Based Electrolytes via Optimization of Salt–Solvent Coordination for Li–O2 Batteries. *Advanced Energy Materials*, **2017**, 7, 1602605	21.8	78
359	Influence of Aging and Environment on Nanoparticle Chemistry - Implication to Confinement Effects in Nanoceria. *Journal of Physical Chemistry C*, **2012**, 116, 14108-14114	3.8	78
358	Effect of Co doping on the structural, optical and magnetic properties of ZnO nanoparticles. *Journal of Physics Condensed Matter*, **2007**, 19, 266203	1.8	78
357	Interparticle chiral recognition of enantiomers: a nanoparticle-based regulation strategy. *Analytical Chemistry*, **2009**, 81, 689-98	7.8	77
356	Role of inner solvation sheath within salt-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	11.5	76
355	N incorporation and electronic structure in N-doped TiO2(110) rutile. *Surface Science*, **2007**, 601, 1754-1762	1.8	76
354	Effects of Imide-Orthoborate Dual-Salt Mixtures in Organic Carbonate Electrolytes on the Stability of Lithium Metal Batteries. *ACS Applied Materials & Interfaces*, **2018**, 10, 2469-2479	9.5	75
353	Gold–Copper Nanoparticles: Nanostructural Evolution and Bifunctional Catalytic Sites. *Chemistry of Materials*, **2012**, 24, 4662-4674	9.6	75

352	Role of support-nanoalloy interactions in the atomic-scale structural and chemical ordering for tuning catalytic sites. *Journal of the American Chemical Society*, **2012**, 134, 15048-60	16.4	75
351	Water-induced formation of cobalt oxides over supported cobalt/ceria–zirconia catalysts under ethanol-steam conditions. *Journal of Catalysis*, **2010**, 273, 229-235	7.3	75
350	From Ultrafine Thiolate-Capped Copper Nanoclusters toward Copper Sulfide Nanodiscs: A Thermally Activated Evolution Route. *Chemistry of Materials*, **2010**, 22, 261-271	9.6	73
349	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	3.8	72
348	Electrochemically stable cathode current collectors for rechargeable magnesium batteries. *Journal of Materials Chemistry A*, **2014**, 2, 2473-2477	13	71
347	Lithium-Pretreated Hard Carbon as High-Performance Sodium-Ion Battery Anodes. *Advanced Energy Materials*, **2018**, 8, 1801441	21.8	69
346	Effect of Co/Ni ratios in cobalt nickel mixed oxide catalysts on methane combustion. *Applied Catalysis A: General*, **2015**, 505, 62-69	5.1	67
345	Rational design of efficient electrode-electrolyte interfaces for solid-state energy storage using ion soft landing. *Nature Communications*, **2016**, 7, 11399	17.4	66
344	Formation of Reversible Solid Electrolyte Interface on Graphite Surface from Concentrated Electrolytes. *Nano Letters*, **2017**, 17, 1602-1609	11.5	64
343	Electrocatalytic Hydrogen Evolution in Neutral pH Solutions: Dual-Phase Synergy. *ACS Catalysis*, **2019**, 9, 8712-8718	13.1	64
342	Reduction of U(VI) incorporated in the structure of hematite. *Environmental Science & Technology*, **2012**, 46, 9428-36	10.3	64
341	Defining active catalyst structure and reaction pathways from ab initio molecular dynamics and operando XAFS: dehydrogenation of dimethylaminoborane by rhodium clusters. *Journal of the American Chemical Society*, **2009**, 131, 10516-24	16.4	63
340	Simultaneous Stabilization of LiNi Mn Co O Cathode and Lithium Metal Anode by Lithium Bis(oxalato)borate as Additive. *ChemSusChem*, **2018**, 11, 2211-2220	8.3	62
339	Nonflammable Electrolytes for Lithium Ion Batteries Enabled by Ultraconformal Passivation Interphases. *ACS Energy Letters*, **2019**, 4, 2529-2534	20.1	61
338	Low Pt-content ternary PdCuPt nanodendrites: an efficient electrocatalyst for oxygen reduction reaction. *Nanoscale*, **2017**, 9, 1279-1284	7.7	59
337	PdCuPt Nanocrystals with Multibranches for Enzyme-Free Glucose Detection. *ACS Applied Materials & Interfaces*, **2016**, 8, 22196-200	9.5	59
336	New insights into reaction mechanisms of ethanol steam reforming on Co–ZrO2. *Applied Catalysis B: Environmental*, **2015**, 162, 141-148	21.8	58
335	Oxidative remobilization of technetium sequestered by sulfide-transformed nano zerovalent iron. *Environmental Science & Technology*, **2014**, 48, 7409-17	10.3	58

334	Microbial and mineralogical characterizations of soils collected from the deep biosphere of the former Homestake gold mine, South Dakota. *Microbial Ecology*, **2010**, 60, 539-50	4.4	58
333	The ion beam materials analysis laboratory at the environmental molecular sciences laboratory. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **1999**, 420, 81-89	1.2	58
332	Mixed salts of LiTFSI and LiBOB for stable LiFePO4-based batteries at elevated temperatures. *Journal of Materials Chemistry A*, **2014**, 2, 2346	13	57
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330	Very stable electron field emission from strontium titanate coated carbon nanotube matrices with low emission thresholds. *ACS Nano*, **2013**, 7, 117-25	16.7	57
329	Role of Metal Coordination Structures in Enhancement of Electrocatalytic Activity of Ternary Nanoalloys for Oxygen Reduction Reaction. *ACS Catalysis*, **2012**, 2, 795-806	13.1	57
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