Charles Buddie Mullins

List of Publications by Year
in descending order

238 papers	16,668 citations	11608 70 h-index	18606 119 g-index
244 all docs	244 docs citations	244 times ranked	19255 citing authors

#	Article	IF	Citations
1	Enhancing Visible Light Photo-oxidation of Water with TiO₂ Nanowire Arrays via Cotreatment with H₂O and NH₃: Synergistic Effects between Ti³⁺ and N. Journal of the American Chemical Society, 2012, 134, 3659-3662.	6.6	585
2	Amorphous FeOOH Oxygen Evolution Reaction Catalyst for Photoelectrochemical Water Splitting. Journal of the American Chemical Society, 2014, 136, 2843-2850.	6.6	524
3	Visible Light Driven Photoelectrochemical Water Oxidation on Nitrogen-Modified TiO₂ Nanowires. Nano Letters, 2012, 12, 26-32.	4.5	518
4	Electrode Degradation in Lithium-Ion Batteries. ACS Nano, 2020, 14, 1243-1295.	7.3	484
5	Combined Charge Carrier Transport and Photoelectrochemical Characterization of BiVO₄ Single Crystals: Intrinsic Behavior of a Complex Metal Oxide. Journal of the American Chemical Society, 2013, 135, 11389-11396.	6.6	435
6	Metal-free photocatalysts for hydrogen evolution. Chemical Society Reviews, 2020, 49, 1887-1931.	18.7	374
7	The Role of Anions in Metal Chalcogenide Oxygen Evolution Catalysis: Electrodeposited Thin Films of Nickel Sulfide as â€œPre-catalystsâ€. ACS Energy Letters, 2016, 1, 195-201.	8.8	328
8	Beyond Doping and Coating: Prospective Strategies for Stable High-Capacity Layered Ni-Rich Cathodes. ACS Energy Letters, 2020, 5, 1136-1146.	8.8	313
9	Catalyst or Precatalyst? The Effect of Oxidation on Transition Metal Carbide, Pnictide, and Chalcogenide Oxygen Evolution Catalysts. ACS Energy Letters, 2018, 3, 2956-2966.	8.8	309
10	Î±-Fe₂O₃ Nanorods as Anode Material for Lithium Ion Batteries. Journal of Physical Chemistry Letters, 2011, 2, 2885-2891.	2.1	306
11	Photoelectrochemical Performance of Nanostructured Ti- and Sn-Doped Î±-Fe₂O₃ Photoanodes. Chemistry of Materials, 2010, 22, 6474-6482.	3.2	266
12	Silicon Nanowire Fabric as a Lithium Ion Battery Electrode Material. Journal of the American Chemical Society, 2011, 133, 20914-20921.	6.6	251
13	Photoelectrochemical Oxidation of Water Using Nanostructured BiVO₄ Films. Journal of Physical Chemistry C, 2011, 115, 3794-3802.	1.5	230
14	Unravelling Small-Polaron Transport in Metal Oxide Photoelectrodes. Journal of Physical Chemistry Letters, 2016, 7, 471-479.	2.1	224
15	Incorporation of Mo and W into nanostructured BiVO4 films for efficient photoelectrochemical water oxidation. Physical Chemistry Chemical Physics, 2012, 14, 7065.	1.3	211
16	Selective Hydrogen Production from Formic Acid Decomposition on Pdâ€“Au Bimetallic Surfaces. Journal of the American Chemical Society, 2014, 136, 11070-11078.	6.6	208
17	Surface Science Investigations of Oxidative Chemistry on Gold. Accounts of Chemical Research, 2009, 42, 1063-1073.	7.6	206
18	Solution-Grown Germanium Nanowire Anodes for Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2012, 4, 4658-4664.	4.0	181

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19	Simple Synthesis of Nanocrystalline Tin Sulfide/N-Doped Reduced Graphene Oxide Composites as Lithium Ion Battery Anodes. ACS Nano, 2016, 10, 10778-10788.	7.3	178
20	Nanocolumnar Germanium Thin Films as a High-Rate Sodium-Ion Battery Anode Material. Journal of Physical Chemistry C, 2013, 117, 18885-18890.	1.5	175
21	Snâ€“Cu Nanocomposite Anodes for Rechargeable Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2013, 5, 8273-8277.	4.0	173
22	Reactive Ballistic Deposition of Î±-Fe₂O₃ Thin Films for Photoelectrochemical Water Oxidation. ACS Nano, 2010, 4, 1977-1986.	7.3	172
23	Water-Enhanced Low-Temperature CO Oxidation and Isotope Effects on Atomic Oxygen-Covered Au(111). Journal of the American Chemical Society, 2008, 130, 6801-6812.	6.6	171
24	Transition metal-doped Ni-rich layered cathode materials for durable Li-ion batteries. Nature Communications, 2021, 12, 6552.	5.8	167
25	Highly Efficient Photoelectrochemical Water Splitting from Hierarchical WO₃/BiVO₄ Nanoporous Sphere Arrays. Nano Letters, 2017, 17, 8012-8017.	4.5	164
26	Spray Pyrolysis Deposition and Photoelectrochemical Properties of n-Type BiOI Nanoplatelet Thin Films. ACS Nano, 2012, 6, 7712-7722.	7.3	162
27	Improving the Stability of Nanostructured Silicon Thin Film Lithium-Ion Battery Anodes through Their Controlled Oxidation. ACS Nano, 2012, 6, 2506-2516.	7.3	160
28	On the nature of trapping and desorption at high surface temperatures. Theory and experiments for the Arâ€“Pt(111) system. Journal of Chemical Physics, 1991, 94, 1516-1527.	1.2	158
29	Cryogenic CO Oxidation on TiO2-Supported Gold Nanoclusters Precovered with Atomic Oxygen. Journal of the American Chemical Society, 2003, 125, 2018-2019.	6.6	151
30	Enhanced Activity Promoted by CeO_x on a CoO_x Electrocatalyst for the Oxygen Evolution Reaction. ACS Catalysis, 2018, 8, 4257-4265.	5.5	151
31	Nanostructured Si_(1-x)Ge_x for Tunable Thin Film Lithium-Ion Battery Anodes. ACS Nano, 2013, 7, 2249-2257.	7.3	150
32	Selective Oxidation of Ethanol to Acetaldehyde on Gold. Journal of the American Chemical Society, 2008, 130, 16458-16459.	6.6	141
33	Facet effect on the photoelectrochemical performance of a WO3/BiVO4 heterojunction photoanode. Applied Catalysis B: Environmental, 2019, 245, 227-239.	10.8	141
34	Synthesis of BiVO₄ nanoflake array films for photoelectrochemical water oxidation. Journal of Materials Chemistry A, 2014, 2, 9371-9379.	5.2	139
35	Nanostructured Bi2S3/WO3 heterojunction films exhibiting enhanced photoelectrochemical performance. Journal of Materials Chemistry A, 2013, 1, 12826.	5.2	134
36	Electrochemical Synthesis and Characterization of p-CuBi₂O₄ Thin Film Photocathodes. Journal of Physical Chemistry C, 2012, 116, 6459-6466.	1.5	133

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37	Simple Synthesis of Nanostructured Sn/Nitrogen-Doped Carbon Composite Using Nitrilotriacetic Acid as Lithium Ion Battery Anode. Chemistry of Materials, 2016, 28, 1343-1347.	3.2	122
38	Synthesis of Ta₃N₅ Nanotube Arrays Modified with Electrocatalysts for Photoelectrochemical Water Oxidation. Journal of Physical Chemistry C, 2012, 116, 14541-14550.	1.5	116
39	In Situ Optical Imaging of Sodium Electrodeposition: Effects of Fluoroethylene Carbonate. ACS Energy Letters, 2017, 2, 2051-2057.	8.8	116
40	Surface Chemistry of Methanol on Clean and Atomic Oxygen Pre-Covered Au(111). Journal of Physical Chemistry C, 2008, 112, 5501-5509.	1.5	114
41	Evidence for Molecularly Chemisorbed Oxygen on TiO2Supported Gold Nanoclusters and Au(111). Journal of the American Chemical Society, 2004, 126, 1606-1607.	6.6	108
42	Synthesis and Characterization of CuV₂O₆ and Cu₂V₂O₇: Two Photoanode Candidates for Photoelectrochemical Water Oxidation. Journal of Physical Chemistry C, 2015, 119, 27220-27227.	1.5	107
43	Water Activated by Atomic Oxygen on Au(111) to Oxidize CO at Low Temperatures. Journal of the American Chemical Society, 2006, 128, 6282-6283.	6.6	106
44	Tin-Seeded Silicon Nanowires for High Capacity Li-Ion Batteries. Chemistry of Materials, 2012, 24, 3738-3745.	3.2	106
45	An active nanoporous Ni(Fe) OER electrocatalyst via selective dissolution of Cd in alkaline media. Applied Catalysis B: Environmental, 2018, 225, 1-7.	10.8	104
46	Na 2 Ni 2 TeO 6 : Evaluation as a cathode for sodium battery. Journal of Power Sources, 2013, 243, 817-821.	4.0	95
47	In situ formation of a multicomponent inorganic-rich SEI layer provides a fast charging and high specific energy Li-metal battery. Journal of Materials Chemistry A, 2019, 7, 17782-17789.	5.2	95
48	Interaction of CO with OH on Au(111): HCOO, CO₃, and HOCO as Key Intermediates in the Water-Gas Shift Reaction. Journal of Physical Chemistry C, 2009, 113, 19536-19544.	1.5	93
49	Understanding Charge Transport in Carbon Nitride for Enhanced Photocatalytic Solar Fuel Production. Accounts of Chemical Research, 2019, 52, 248-257.	7.6	93
50	Tuning the Intrinsic Properties of Carbon Nitride for High Quantum Yield Photocatalytic Hydrogen Production. Advanced Science, 2018, 5, 1800820.	5.6	92
51	Reaction of CO with Molecularly Chemisorbed Oxygen on TiO2-Supported Gold Nanoclusters. Journal of the American Chemical Society, 2004, 126, 13574-13575.	6.6	91
52	A high-rate germanium-particle slurry cast Li-ion anode with high Coulombic efficiency and long cycle life. Journal of Power Sources, 2013, 238, 123-136.	4.0	90
53	Model studies of heterogeneous catalytic hydrogenation reactions with gold. Chemical Society Reviews, 2013, 42, 5002.	18.7	89
54	Electrodeposition of Ni-doped FeOOH oxygen evolution reaction catalyst for photoelectrochemical water splitting. Journal of Materials Chemistry A, 2014, 2, 14957.	5.2	88

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55	Electrochemical Lithiation of Graphene-Supported Silicon and Germanium for Rechargeable Batteries. Journal of Physical Chemistry C, 2012, 116, 11917-11923.	1.5	87
56	Tinâ€“Germanium Alloys as Anode Materials for Sodium-Ion Batteries. ACS Applied Materials & Interfaces, 2014, 6, 15860-15867.	4.0	85
57	Selective Catalytic Oxidation of Ammonia to Nitrogen on Atomic Oxygen Precovered Au(111). Journal of the American Chemical Society, 2006, 128, 9012-9013.	6.6	83
58	Evaluating Electrocatalysts for the Hydrogen Evolution Reaction Using Bipolar Electrode Arrays: Bi- and Trimetallic Combinations of Co, Fe, Ni, Mo, and W. ACS Catalysis, 2014, 4, 1332-1339.	5.5	83
59	Improved Visible Light Harvesting of WO₃ by Incorporation of Sulfur or Iodine: A Tale of Two Impurities. Chemistry of Materials, 2014, 26, 1670-1677.	3.2	83
60	Morphology Dependence of the Lithium Storage Capability and Rate Performance of Amorphous TiO₂ Electrodes. Journal of Physical Chemistry C, 2011, 115, 2585-2591.	1.5	82
61	Capacity Degradation Mechanism and Cycling Stability Enhancement of AlF₃-Coated Nanorod Gradient Na[Ni_{0.65}Co_{0.08}Mn_{0.27}]O₂ Cathode for Sodium-Ion Batteries. ACS Nano, 2018, 12, 12912-12922.	7.3	82
62	Hydrogen Adsorption and Absorption with Pdâ€“Au Bimetallic Surfaces. Journal of Physical Chemistry C, 2013, 117, 19535-19543.	1.5	81
63	Recent Developments in Dendrite-Free Lithium-Metal Deposition through Tailoring of Micro- and Nanoscale Artificial Coatings. ACS Nano, 2021, 15, 29-46.	7.3	80
64	Influences of Gold, Binder and Electrolyte on Silicon Nanowire Performance in Li-Ion Batteries. Journal of Physical Chemistry C, 2012, 116, 18079-18086.	1.5	79
65	p-Si/W₂C and p-Si/W₂C/Pt Photocathodes for the Hydrogen Evolution Reaction. Journal of the American Chemical Society, 2014, 136, 1535-1544.	6.6	77
66	Ethanol Decomposition on Pdâ€“Au Alloy Catalysts. Journal of Physical Chemistry C, 2018, 122, 22024-22032.	1.5	77
67	Nanostructured Ta₃N₅ Films as Visible-Light Active Photoanodes for Water Oxidation. Journal of Physical Chemistry C, 2012, 116, 19225-19232.	1.5	76
68	Anisotropic small-polaron hopping in W:BiVO4 single crystals. Applied Physics Letters, 2015, 106, .	1.5	75
69	Screening of transition and post-transition metals to incorporate into copper oxide and copper bismuth oxide for photoelectrochemical hydrogen evolution. Physical Chemistry Chemical Physics, 2013, 15, 4554.	1.3	74
70	Highâ€Rate Oxygen Evolution Reaction on Alâ€Doped LiNiO₂. Advanced Materials, 2015, 27, 6063-6067.	11.1	74
71	K⁺Reduces Lithium Dendrite Growth by Forming a Thin, Less-Resistive Solid Electrolyte Interphase. ACS Energy Letters, 2016, 1, 414-419.	8.8	72
72	Tantalum Cobalt Nitride Photocatalysts for Water Oxidation under Visible Light. Chemistry of Materials, 2012, 24, 579-586.	3.2	71

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73	Effect of Si Doping and Porosity on Hematiteâ€™s (Î±-Fe₂O₃) Photoelectrochemical Water Oxidation Performance. Journal of Physical Chemistry C, 2012, 116, 5255-5261.	1.5	70
74	SnO2 and TiO2-supported-SnO2 lithium battery anodes with improved electrochemical performance. Journal of Materials Chemistry, 2012, 22, 11134.	6.7	70
75	Optimum lithium-ion conductivity in cubic Li7â^'xLa3Hf2â^'xTaxO12. Journal of Power Sources, 2012, 209, 184-188.	4.0	70
76	Parallel Screening of Electrocatalyst Candidates Using Bipolar Electrochemistry. Analytical Chemistry, 2013, 85, 2493-2499.	3.2	70
77	Selective Oxidation of Propanol on Au(111): Mechanistic Insights into Aerobic Oxidation of Alcohols. ChemPhysChem, 2008, 9, 2461-2466.	1.0	67
78	Coincorporation of N and Ta into TiO₂ Nanowires for Visible Light Driven Photoelectrochemical Water Oxidation. Journal of Physical Chemistry C, 2012, 116, 23283-23290.	1.5	64
79	Antimony-Doped Tin Oxide Nanorods as a Transparent Conducting Electrode for Enhancing Photoelectrochemical Oxidation of Water by Hematite. ACS Applied Materials & Interfaces, 2014, 6, 5494-5499.	4.0	63
80	Highly active and stable nickelâ€“molybdenum nitride (Ni₂Mo₃N) electrocatalyst for hydrogen evolution. Journal of Materials Chemistry A, 2021, 9, 4945-4951.	5.2	60
81	Facile Synthesis of Ge/N-Doped Carbon Spheres with Varying Nitrogen Content for Lithium Ion Battery Anodes. ACS Applied Materials & Interfaces, 2016, 8, 27788-27794.	4.0	59
82	Mechanism for the waterâ€“gas shift reaction on monofunctional platinum and cause of catalyst deactivation. Journal of Catalysis, 2011, 282, 278-288.	3.1	58
83	Carbon Nitride Transforms into a High Lithium Storage Capacity Nitrogen-Rich Carbon. ACS Nano, 2019, 13, 9279-9291.	7.3	58
84	Adsorption and Reaction of Nitric Oxide with Atomic Oxygen Covered Au(111). Journal of Physical Chemistry B, 2004, 108, 17952-17958.	1.2	57
85	Low-Temperature Hydrogenation of Acetaldehyde to Ethanol on H-Precovered Au(111). Journal of Physical Chemistry Letters, 2011, 2, 1363-1367.	2.1	57
86	Oxygen Activation and Reaction on Pdâ€“Au Bimetallic Surfaces. Journal of Physical Chemistry C, 2015, 119, 11754-11762.	1.5	57
87	Mechanistic insights on ethanol dehydrogenation on Pdâ€“Au model catalysts: a combined experimental and DFT study. Physical Chemistry Chemical Physics, 2017, 19, 30578-30589.	1.3	57
88	Reactive Ballistic Deposition of Porous TiO2Films:â€‰ Growth and Characterization. Journal of Physical Chemistry C, 2007, 111, 4765-4773.	1.5	56
89	Modulating Charge Transfer Efficiency of Hematite Photoanode with Hybrid Dualâ€Metalâ€“Organic Frameworks for Boosting Photoelectrochemical Water Oxidation. Advanced Science, 2020, 7, 2002563.	5.6	56
90	Selective decomposition of formic acid on molybdenum carbide: A new reaction pathway. Journal of Catalysis, 2010, 269, 33-43.	3.1	55

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91	Low Temperature Synthesis and Characterization of Nanocrystalline Titanium Carbide with Tunable Porous Architectures. Chemistry of Materials, 2010, 22, 319-329.	3.2	54
92	Interface Engineering and its Effect on WO₃-Based Photoanode and Tandem Cell. ACS Applied Materials & Interfaces, 2018, 10, 12639-12650.	4.0	54
93	Solvent-free vacuum growth of oriented HKUST-1 thin films. Journal of Materials Chemistry A, 2019, 7, 19396-19406.	5.2	54
94	Anodized Nickel Foam for Oxygen Evolution Reaction in Fe-Free and Unpurified Alkaline Electrolytes at High Current Densities. ACS Nano, 2021, 15, 3468-3480.	7.3	54
95	Storage of Lithium in Hydrothermally Synthesized GeO₂ Nanoparticles. Journal of Physical Chemistry Letters, 2013, 4, 999-1004.	2.1	53
96	High tap density microparticles of selenium-doped germanium as a high efficiency, stable cycling lithium-ion battery anode material. Journal of Materials Chemistry A, 2015, 3, 5829-5834.	5.2	52
97	Activation of a Nickel-Based Oxygen Evolution Reaction Catalyst on a Hematite Photoanode via Incorporation of Cerium for Photoelectrochemical Water Oxidation. ACS Applied Materials & Interfaces, 2017, 9, 30654-30661.	4.0	52
98	n-BiSI Thin Films: Selenium Doping and Solar Cell Behavior. Journal of Physical Chemistry C, 2012, 116, 24878-24886.	1.5	51
99	BiSI Micro-Rod Thin Films: Efficient Solar Absorber Electrodes?. Journal of Physical Chemistry Letters, 2012, 3, 1571-1576.	2.1	51
100	Mechanisms of Initial Dissociative Chemisorption of Oxygen on Transition-Metal Surfaces. Accounts of Chemical Research, 1998, 31, 798-804.	7.6	50
101	Probing the Degradation Chemistry and Enhanced Stability of 2D Organolead Halide Perovskites. Journal of the American Chemical Society, 2019, 141, 18170-18181.	6.6	50
102	Stabilization of a Highly Ni-Rich Layered Oxide Cathode through Flower-Petal Grain Arrays. ACS Nano, 2020, 14, 17142-17150.	7.3	50
103	Pulsed Laser Deposition of Epitaxial and Polycrystalline Bismuth Vanadate Thin Films. Journal of Physical Chemistry C, 2014, 118, 26543-26550.	1.5	49
104	Facile growth of porous Fe₂V₄O₁₃ films for photoelectrochemical water oxidation. Journal of Materials Chemistry A, 2016, 4, 3034-3042.	5.2	49
105	Surface Alloy Composition Controlled O₂ Activation on Pdâ€“Au Bimetallic Model Catalysts. ACS Catalysis, 2018, 8, 3641-3649.	5.5	49
106	Mass transport-enhanced electrodeposition of Niâ€“Sâ€“Pâ€“O films on nickel foam for electrochemical water splitting. Journal of Materials Chemistry A, 2021, 9, 7736-7749.	5.2	49
107	Growth and Characterization of High Surface Area Titanium Carbide. Journal of Physical Chemistry C, 2009, 113, 12742-12752.	1.5	48
108	Li- and Na-reduction products of meso-Co₃O₄form high-rate, stably cycling battery anode materials. Journal of Materials Chemistry A, 2014, 2, 14209-14221.	5.2	48

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109	Development of a chlorine mechanism for use in the carbon bond IV chemistry model. Journal of Geophysical Research, 2003, 108, .	3.3	45
110	CO oxidation on inverse Fe2O3/Au(111) model catalysts. Journal of Catalysis, 2012, 294, 216-222.	3.1	45
111	Electrodeposition of MoS_x Hydrogen Evolution Catalysts from Sulfur-Rich Precursors. ACS Applied Materials & Interfaces, 2019, 11, 32879-32886.	4.0	45
112	Nanorod Gradient Cathode: Preventing Electrolyte Penetration into Cathode Particles. ACS Applied Energy Materials, 2019, 2, 6002-6011.	2.5	45
113	The effect of local lithium surface chemistry and topography on solid electrolyte interphase composition and dendrite nucleation. Journal of Materials Chemistry A, 2019, 7, 14882-14894.	5.2	45
114	A Perspective on the Electrochemical Oxidation of Methane to Methanol in Membrane Electrode Assemblies. ACS Energy Letters, 2020, 5, 2954-2963.	8.8	45
115	Low temperature CO oxidation on Au(111) and the role of adsorbed water. Topics in Catalysis, 2007, 44, 57-63.	1.3	44
116	Tin microparticles for a lithium ion battery anode with enhanced cycling stability and efficiency derived from Se-doping. Journal of Materials Chemistry A, 2015, 3, 13500-13506.	5.2	42
117	In Situ Growth of Fe(Ni)OOH Catalyst on Stainless Steel for Water Oxidation. ChemistrySelect, 2017, 2, 2230-2234.	0.7	42
118	Lithium Fluoride Coated Silicon Nanocolumns as Anodes for Lithium Ion Batteries. ACS Applied Materials & Interfaces, 2020, 12, 18465-18472.	4.0	41
119	Carbonate Formation and Decomposition on Atomic Oxygen Precovered Au(111). Journal of the American Chemical Society, 2008, 130, 11250-11251.	6.6	39
120	Structural and Catalytic Effects of Iron- and Scandium-Doping on a Strontium Cobalt Oxide Electrocatalyst for Water Oxidation. ACS Catalysis, 2016, 6, 1122-1133.	5.5	39
121	Evidence that Amorphous Water below 160 K Is Not a Fragile Liquid. Journal of Physical Chemistry B, 2006, 110, 11033-11036.	1.2	38
122	Chemical bath deposition of vertically aligned TiO2 nanoplatelet arrays for solar energy conversion applications. Journal of Materials Chemistry A, 2013, 1, 4307.	5.2	38
123	Sulfur-Rich MoS₆ as an Electrocatalyst for the Hydrogen Evolution Reaction. ACS Applied Energy Materials, 2018, 1, 4453-4458.	2.5	38
124	Reactive Scattering of CO from an Oxygen-Atom-Covered Au/TiO2Model Catalyst. Journal of Physical Chemistry B, 2004, 108, 7917-7926.	1.2	37
125	Oxygen and Hydroxyl Species Induce Multiple Reaction Pathways for the Partial Oxidation of Allyl Alcohol on Gold. Journal of the American Chemical Society, 2014, 136, 6489-6498.	6.6	37
126	Reactive Ballistic Deposition of Nanostructured Model Materials for Electrochemical Energy Conversion and Storage. Accounts of Chemical Research, 2012, 45, 434-443.	7.6	36

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127	Self-Assembled Cuâ€“Snâ€“S Nanotubes with High (De)Lithiation Performance. ACS Nano, 2017, 11, 10347-10356.	7.3	35
128	Transport in Amorphous Solid Water Films:Â Implications for Self-Diffusivity. Journal of Physical Chemistry B, 2006, 110, 17987-17997.	1.2	34
129	Structure Revealing H/D Exchange with Co-Adsorbed Hydrogen and Water on Gold. Journal of Physical Chemistry Letters, 2012, 3, 1894-1899.	2.1	34
130	Oxygen Exchange in the Selective Oxidation of 2-Butanol on Oxygen Precovered Au(111). Journal of the American Chemical Society, 2009, 131, 16189-16194.	6.6	32
131	Model Studies with Gold: A Versatile Oxidation and Hydrogenation Catalyst. Accounts of Chemical Research, 2014, 47, 750-760.	7.6	32
132	SILAR Growth of Ag₃VO₄ and Characterization for Photoelectrochemical Water Oxidation. Journal of Physical Chemistry C, 2015, 119, 26803-26808.	1.5	32
133	Cobalt Metalâ€“Cobalt Carbide Composite Microspheres for Water Reduction Electrocatalysis. ACS Applied Energy Materials, 2020, 3, 3909-3918.	2.5	32
134	Hydrogen Evolution by Ni₂P Catalysts Derived from Phosphine MOFs. ACS Applied Energy Materials, 2020, 3, 176-183.	2.5	31
135	Water Influences the Activity and Selectivity of Ceria-Supported Gold Catalysts for Oxidative Dehydrogenation and Esterification of Ethanol. ACS Catalysis, 2017, 7, 1216-1226.	5.5	30
136	Effect of the Electrolyte on the Cycling Efficiency of Lithium-Limited Cells and their Morphology Studied Through in Situ Optical Imaging. ACS Applied Energy Materials, 2018, 1, 5830-5835.	2.5	30
137	NiAl2O4 as a beneficial precursor for Ni/Al2O3 catalysts for the dry reforming of methane. Journal of CO2 Utilization, 2022, 63, 102112.	3.3	30
138	Hybrid Generalized Ellipsometry and Quartz Crystal Microbalance Nanogravimetry for the Determination of Adsorption Isotherms on Biaxial Metal Oxide Films. Journal of Physical Chemistry Letters, 2010, 1, 1264-1268.	2.1	29
139	The Effects of Adsorbed Water on Gold Catalysis and Surface Chemistry. Topics in Catalysis, 2013, 56, 1499-1511.	1.3	29
140	Atomic layer deposition of photoactive CoO/SrTiO3 and CoO/TiO2 on Si(001) for visible light driven photoelectrochemical water oxidation. Journal of Applied Physics, 2013, 114, .	1.1	29
141	The Effect of Adsorbed Water in CO Oxidation on Au/TiO₂(110). Journal of Physical Chemistry C, 2011, 115, 2057-2065.	1.5	28
142	p-Type BP nanosheet photocatalyst with AQE of 3.9% in the absence of a noble metal cocatalyst: investigation and elucidation of photophysical properties. Journal of Materials Chemistry A, 2018, 6, 18403-18408.	5.2	28
143	Oxidative Cross-Esterification and Related Pathways of Co-Adsorbed Oxygen and Ethanol on Pdâ€“Au. ACS Catalysis, 2019, 9, 4516-4525.	5.5	28
144	Boosting Photoelectrochemical Performance of BiVO₄ through Photoassisted Self-Reduction. ACS Applied Energy Materials, 2020, 3, 4403-4410.	2.5	28

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145	Electrochemical behavior of a Ni₃N OER precatalyst in Fe-purified alkaline media: the impact of self-oxidation and Fe incorporation. Materials Advances, 2021, 2, 2299-2309.	2.6	28
146	Lithium Insertion/Deinsertion Characteristics of Nanostructured Amorphous Tantalum Oxide Thin Films. ChemElectroChem, 2014, 1, 158-164.	1.7	27
147	Bandgap engineering of Fe₂O₃ with Cr â€“ application to photoelectrochemical oxidation. Physical Chemistry Chemical Physics, 2016, 18, 1644-1648.	1.3	27
148	Sub-stoichiometric germanium sulfide thin-films as a high-rate lithium storage material. Journal of Materials Chemistry A, 2014, 2, 19011-19018.	5.2	26
149	Synthesis, electronic transport and optical properties of Si:Î±-Fe₂O₃ single crystals. Journal of Materials Chemistry C, 2016, 4, 559-567.	2.7	26
150	Reduced-Graphene Oxide/Poly(acrylic acid) Aerogels as a Three-Dimensional Replacement for Metal-Foil Current Collectors in Lithium-Ion Batteries. ACS Applied Materials & Interfaces, 2017, 9, 22641-22651.	4.0	26
151	Cu₄SnS₄-Rich Nanomaterials for Thin-Film Lithium Batteries with Enhanced Conversion Reaction. ACS Nano, 2019, 13, 10671-10681.	7.3	26
152	Selective Oxidation of Acetaldehyde to Acetic Acid on Pdâ€“Au Bimetallic Model Catalysts. ACS Catalysis, 2019, 9, 4360-4368.	5.5	26
153	Fast lithium transport in PbTe for lithium-ion battery anodes. Journal of Materials Chemistry A, 2014, 2, 7238.	5.2	25
154	NH₃-assisted chloride flux-coating method for direct fabrication of visible-light-responsive SrNbO₂N crystal layers. CrystEngComm, 2017, 19, 5532-5541.	1.3	25
155	Methanol Oxidation Catalyzed by Copper Nanoclusters Incorporated in Vacuum-Deposited HKUST-1 Thin Films. ACS Catalysis, 2020, 10, 4997-5007.	5.5	25
156	Visible-Light-Active NiV₂O₆ Films for Photoelectrochemical Water Oxidation. Journal of Physical Chemistry C, 2015, 119, 14524-14531.	1.5	24
157	Phase transition systematics in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>BiVO</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:math> by means of high-pressureâ€“high-temperature Raman experiments. Physical Review B, 2018, 98, .	1.1	24
158	Reactivity of Molecularly Chemisorbed Oxygen on a Au/TiO2Model Catalyst. Journal of Physical Chemistry B, 2006, 110, 20337-20343.	1.2	23
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