

Shannon Boettcher

List of Publications by Year in descending order

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papers

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23879

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142
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160
docs citations

160
times ranked

29100
citing authors

#	ARTICLE	IF	CITATIONS
1	Controlling Catalystâ€“Semiconductor Contacts: Interfacial Charge Separation in p-InP Photocathodes. ACS Energy Letters, 2022, 7, 541-549.	8.8	8
2	Understanding methanol dissociative adsorption and oxidation on amorphous oxide films. Faraday Discussions, 2022, 236, 58-70.	1.6	2
3	Hydrogen-evolution-reaction kinetics pH dependence: Is it covered?. Chem Catalysis, 2022, 2, 236-238.	2.9	4
4	Three-Electrode Study of Electrochemical Ionomer Degradation Relevant to Anion-Exchange-Membrane Water Electrolyzers. ACS Applied Materials & Interfaces, 2022, 14, 18261-18274.	4.0	28
5	Bipolar membrane electrolyzers enable high single-pass CO2 electroreduction to multicarbon products. Nature Communications, 2022, 13, .	5.8	81
6	Purification of Residual Ni and Co Hydroxides from Feâ€“Free Alkaline Electrolyte for Electrocatalysis Studies. ChemElectroChem, 2022, 9, .	1.7	9
7	Anode Catalysts in Anionâ€“Exchangeâ€“Membrane Electrolysis without Supporting Electrolyte: Conductivity, Dynamics, and Ionomer Degradation. Advanced Materials, 2022, 34, .	11.1	42
8	Design principles for water dissociation catalysts in high-performance bipolar membranes. Nature Communications, 2022, 13, .	5.8	42
9	Fluorination-enabled Reconstruction of NiFe Electrocatalysts for Efficient Water Oxidation. Nano Letters, 2021, 21, 492-499.	4.5	190
10	Thin Cation-Exchange Layers Enable High-Current-Density Bipolar Membrane Electrolyzers via Improved Water Transport. ACS Energy Letters, 2021, 6, 1-8.	8.8	57
11	Potentially Confusing: Potentials in Electrochemistry. ACS Energy Letters, 2021, 6, 261-266.	8.8	73
12	Heterogeneous electrocatalysis goes chemical. Nature Catalysis, 2021, 4, 4-5.	16.1	47
13	What Structural Features Make Porous Carbons Work for Redox-Enhanced Electrochemical Capacitors? A Fundamental Investigation. ACS Energy Letters, 2021, 6, 854-861.	8.8	25
14	Reinvigorating electrochemistry education. IScience, 2021, 24, 102481.	1.9	20
15	Correction to â€œIntegrated Reference Electrodes in Anion-Exchange-Membrane Electrolyzers: Impact of Stainless-Steel Gas-Diffusion Layers and Internal Mechanical Pressureâ€“. ACS Energy Letters, 2021, 6, 2238-2239.	8.8	0
16	Oxygen Electrocatalysis on Mixed-Metal Oxides/Oxyhydroxides: From Fundamentals to Membrane Electrolyzer Technology. Accounts of Materials Research, 2021, 2, 548-558.	5.9	41
17	Performance and Durability of Pure-Water-Fed Anion Exchange Membrane Electrolyzers Using Baseline Materials and Operation. ACS Applied Materials & Interfaces, 2021, 13, 51917-51924.	4.0	63
18	Integrated Reference Electrodes in Anion-Exchange-Membrane Electrolyzers: Impact of Stainless-Steel Gas-Diffusion Layers and Internal Mechanical Pressure. ACS Energy Letters, 2021, 6, 305-312.	8.8	63

#	ARTICLE	IF	CITATIONS
19	Electrochemistry-Induced Restructuring of Tin-Doped Indium Oxide Nanocrystal Films of Relevance to CO ₂ Reduction. <i>Journal of the Electrochemical Society</i> , 2021, 168, 126521.	1.3	0
20	Nanoscale semiconductor/catalyst interfaces in photoelectrochemistry. <i>Nature Materials</i> , 2020, 19, 69-76.	13.3	106
21	Benchmarks and Protocols for Electrolytic, Photoelectrochemical, and Solar-Thermal Water-Splitting Technologies. <i>ACS Energy Letters</i> , 2020, 5, 70-71.	8.8	9
22	Energy Spotlight. <i>ACS Energy Letters</i> , 2020, 5, 3265-3267.	8.8	0
23	Membrane Electrolyzers for Impure-Water Splitting. <i>Joule</i> , 2020, 4, 2549-2561.	11.7	102
24	Sculpting Optical Properties of Thin Film IR Filters through Nanocrystal Synthesis and Additive, Solution Processing. <i>Chemistry of Materials</i> , 2020, 32, 8683-8693.	3.2	1
25	Energy Spotlight. <i>ACS Energy Letters</i> , 2020, 5, 2739-2741.	8.8	1
26	Accelerating water dissociation in bipolar membranes and for electrocatalysis. <i>Science</i> , 2020, 369, 1099-1103.	6.0	255
27	Energy Spotlight. <i>ACS Energy Letters</i> , 2020, 5, 938-939.	8.8	0
28	Effects of Metal Electrode Support on the Catalytic Activity of Fe(oxy)hydroxide for the Oxygen Evolution Reaction in Alkaline Media. <i>ChemPhysChem</i> , 2019, 20, 3089-3095.	1.0	39
29	Understanding Surface Reactivity of Amorphous Transition-Metal-Incorporated Aluminum Oxide Thin Films. <i>Journal of Physical Chemistry C</i> , 2019, 123, 27048-27054.	1.5	3
30	Electrocatalytic Hot Spots in San Diego. <i>ACS Energy Letters</i> , 2019, 4, 2489-2490.	8.8	0
31	Ternary Ni-Co-Fe oxyhydroxide oxygen evolution catalysts: Intrinsic activity trends, electrical conductivity, and electronic band structure. <i>Nano Research</i> , 2019, 12, 2288-2295.	5.8	134
32	Unique chemistries of metal-nitrate precursors to form metal-oxide thin films from solution: materials for electronic and energy applications. <i>Journal of Materials Chemistry A</i> , 2019, 7, 24124-24149.	5.2	78
33	Earth-Abundant Oxygen Electrocatalysts for Alkaline Anion-Exchange-Membrane Water Electrolysis: Effects of Catalyst Conductivity and Comparison with Performance in Three-Electrode Cells. <i>ACS Catalysis</i> , 2019, 9, 7-15.	5.5	189
34	Modes of Fe Incorporation in Co ²⁺ /Fe (Oxy)hydroxide Oxygen Evolution Electrocatalysts. <i>ChemSusChem</i> , 2019, 12, 2015-2021.	3.6	55
35	Close-spaced vapor transport reactor for III-V growth using HCl as the transport agent. <i>Journal of Crystal Growth</i> , 2019, 506, 147-155.	0.7	5
36	Metal Oxide/(oxy)hydroxide Overlayers as Hole Collectors and Oxygen-Evolution Catalysts on Water-Splitting Photoanodes. <i>Journal of the American Chemical Society</i> , 2019, 141, 1394-1405.	6.6	128

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37	Structural Evolution of Metal (Oxy)hydroxide Nanosheets during the Oxygen Evolution Reaction. ACS Applied Materials & Interfaces, 2019, 11, 5590-5594.	4.0	58
38	The role of Cr doping in Ni Fe oxide/(oxy)hydroxide electrocatalysts for oxygen evolution. Electrochimica Acta, 2018, 265, 10-18.	2.6	79
39	Water-Vapor-Mediated Close-Spaced Vapor Transport Growth of Epitaxial Gallium Indium Phosphide Films on Gallium Arsenide Substrates. ACS Applied Energy Materials, 2018, 1, 284-289.	2.5	2
40	Catalyst Deposition on Photoanodes: The Roles of Intrinsic Catalytic Activity, Catalyst Electrical Conductivity, and Semiconductor Morphology. ACS Energy Letters, 2018, 3, 961-969.	8.8	47
41	Transition-Metal-Incorporated Aluminum Oxide Thin Films: Toward Electronic Structure Design in Amorphous Mixed-Metal Oxides. Journal of Physical Chemistry C, 2018, 122, 13691-13704.	1.5	8
42	Potential-sensing electrochemical atomic force microscopy for in operando analysis of water-splitting catalysts and interfaces. Nature Energy, 2018, 3, 46-52.	19.8	159
43	Oxygen stays put during water oxidation. Nature Catalysis, 2018, 1, 814-815.	16.1	24
44	Aluminum Oxide Thin Films from Aqueous Solutions: Insights from Solid-State NMR and Dielectric Response. Chemistry of Materials, 2018, 30, 7456-7463.	3.2	24
45	Operando X-ray Absorption Spectroscopy Shows Iron Oxidation Is Concurrent with Oxygen Evolution in Cobalt-Iron (Oxy)hydroxide Electrocatalysts. Angewandte Chemie, 2018, 130, 13022-13026.	1.6	28
46	Potential-Sensing Electrochemical AFM Shows CoPi as a Hole Collector and Oxygen Evolution Catalyst on BiVO ₄ Water-Splitting Photoanodes. ACS Energy Letters, 2018, 3, 2286-2291.	8.8	96
47	Operando X-ray Absorption Spectroscopy Shows Iron Oxidation Is Concurrent with Oxygen Evolution in Cobalt-Iron (Oxy)hydroxide Electrocatalysts. Angewandte Chemie - International Edition, 2018, 57, 12840-12844.	7.2	131
48	Transient photocurrents on catalyst-modified n-Si photoelectrodes: insight from dual-working electrode photoelectrochemistry. Sustainable Energy and Fuels, 2018, 2, 1995-2005.	2.5	15
49	Stackable bipolar pouch cells with corrosion-resistant current collectors enable high-power aqueous electrochemical energy storage. Energy and Environmental Science, 2018, 11, 2865-2875.	15.6	58
50	Characterization of Electric Double-Layer Capacitor with 0.75M NaI and 0.5 M VOSO ₄ Electrolyte. Journal of Electrochemical Science and Technology, 2018, 9, 20-27.	0.9	3
51	Atomic force microscopy with nanoelectrode tips for high resolution electrochemical, nanoadhesion and nanoelectrical imaging. Nanotechnology, 2017, 28, 095711.	1.3	58
52	Junction behavior of n-Si photoanodes protected by thin Ni elucidated from dual working electrode photoelectrochemistry. Energy and Environmental Science, 2017, 10, 570-579.	15.6	91
53	High- $\hat{\eta}$ Lanthanum Zirconium Oxide Thin Film Dielectrics from Aqueous Solution Precursors. ACS Applied Materials & Interfaces, 2017, 9, 10897-10903.	4.0	41
54	Influence of Electrolyte Cations on Ni(Fe)OOH Catalyzed Oxygen Evolution Reaction. Chemistry of Materials, 2017, 29, 4761-4767.	3.2	105

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55	Arsenic antsite and oxygen incorporation trends in GaAs grown by water-mediated close-spaced vapor transport. <i>Journal of Applied Physics</i> , 2017, 121, 093102.	1.1	5
56	Perovskite Nanowire Extrusion. <i>Nano Letters</i> , 2017, 17, 6557-6563.	4.5	42
57	Redox-Enhanced Electrochemical Capacitors: Status, Opportunity, and Best Practices for Performance Evaluation. <i>ACS Energy Letters</i> , 2017, 2, 2581-2590.	8.8	164
58	Morphology Dynamics of Single-Layered Ni(OH) ₂ /NiOOH Nanosheets and Subsequent Fe Incorporation Studied by <i>in Situ</i> Electrochemical Atomic Force Microscopy. <i>Nano Letters</i> , 2017, 17, 6922-6926.	4.5	121
59	Ionic Processes in Water Electrolysis: The Role of Ion-Selective Membranes. <i>ACS Energy Letters</i> , 2017, 2, 2625-2634.	8.8	68
60	Role of Combustion Chemistry in Low-Temperature Deposition of Metal Oxide Thin Films from Solution. <i>Chemistry of Materials</i> , 2017, 29, 9480-9488.	3.2	30
61	Low-Temperature Steam Annealing of Metal Oxide Thin Films from Aqueous Precursors: Enhanced Counterion Removal, Resistance to Water Absorption, and Dielectric Constant. <i>Chemistry of Materials</i> , 2017, 29, 8531-8538.	3.2	12
62	Domain Structures of Ni and NiFe (Oxy)Hydroxide Oxygen-Evolution Catalysts from X-ray Pair Distribution Function Analysis. <i>Journal of Physical Chemistry C</i> , 2017, 121, 25421-25429.	1.5	25
63	Tunable high- ϵ Zr _x Al _{1-x} O _y thin film dielectrics from all-inorganic aqueous precursor solutions. <i>RSC Advances</i> , 2017, 7, 39147-39152.	1.7	7
64	Minerals to Materials: Bulk Synthesis of Aqueous Aluminum Clusters and Their Use as Precursors for Metal Oxide Thin Films. <i>Chemistry of Materials</i> , 2017, 29, 7760-7765.	3.2	15
65	Catalytic hotspots get noisy. <i>Nature</i> , 2017, 549, 34-35.	13.7	4
66	Direct in Situ Measurement of Charge Transfer Processes During Photoelectrochemical Water Oxidation on Catalyzed Hematite. <i>ACS Central Science</i> , 2017, 3, 1015-1025.	5.3	61
67	Reactive Fe-Sites in Ni/Fe (Oxy)hydroxide Are Responsible for Exceptional Oxygen Electrocatalysis Activity. <i>Journal of the American Chemical Society</i> , 2017, 139, 11361-11364.	6.6	532
68	Fundamentally Addressing Bromine Storage through Reversible Solid-State Confinement in Porous Carbon Electrodes: Design of a High-Performance Dual-Redox Electrochemical Capacitor. <i>Journal of the American Chemical Society</i> , 2017, 139, 9985-9993.	6.6	115
69	Measurement Techniques for the Study of Thin Film Heterogeneous Water Oxidation Electrocatalysts. <i>Chemistry of Materials</i> , 2017, 29, 120-140.	3.2	473
70	Analysis of performance-limiting defects in pn junction GaAs solar cells grown by water-mediated close-spaced vapor transport epitaxy. <i>Solar Energy Materials and Solar Cells</i> , 2017, 159, 546-552.	3.0	12
71	Low-Cost Approaches to III-V Semiconductor Growth for Photovoltaic Applications. <i>ACS Energy Letters</i> , 2017, 2, 2270-2282.	8.8	42
72	PeakForce Scanning Electrochemical Microscopy with Nanoelectrode Probes. <i>Microscopy Today</i> , 2016, 24, 18-25.	0.2	32

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73	Amorphous Mixed-Metal Oxide Thin Films from Aqueous Solution Precursors with Near-Atomic Smoothness. <i>Journal of the American Chemical Society</i> , 2016, 138, 16800-16808.	6.6	20
74	Semiconductorâ€“Electrocatalyst Interfaces: Theory, Experiment, and Applications in Photoelectrochemical Water Splitting. <i>Accounts of Chemical Research</i> , 2016, 49, 733-740.	7.6	281
75	Advanced Photoelectrochemical Characterization: Principles and Applications of Dual-Working-Electrode Photoelectrochemistry. , 2016, , 323-351.		2
76	Efficient Charge Storage in Dual-Redox Electrochemical Capacitors through Reversible Counterion-Induced Solid Complexation. <i>Journal of the American Chemical Society</i> , 2016, 138, 9373-9376.	6.6	83
77	Selective Area Epitaxy of GaAs Microstructures by Close-Spaced Vapor Transport for Solar Energy Conversion Applications. <i>ACS Energy Letters</i> , 2016, 1, 402-408.	8.8	11
78	ACS Energy Letters: Elevating Solar Fuels and Electrocatalysis Research. <i>ACS Energy Letters</i> , 2016, 1, 920-921.	8.8	7
79	Themed issue on water splitting and photocatalysis. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2764-2765.	5.2	14
80	Effects of Intentionally Incorporated Metal Cations on the Oxygen Evolution Electrocatalytic Activity of Nickel (Oxy)hydroxide in Alkaline Media. <i>ACS Catalysis</i> , 2016, 6, 2416-2423.	5.5	199
81	Solar energy conversion properties and defect physics of ZnSiP ₂ . <i>Energy and Environmental Science</i> , 2016, 9, 1031-1041.	15.6	49
82	Gallium arsenide phosphide grown by close-spaced vapor transport from mixed powder sources for low-cost IIIâ€“V photovoltaic and photoelectrochemical devices. <i>Journal of Materials Chemistry A</i> , 2016, 4, 2909-2918.	5.2	9
83	Low-cost growth of IIIâ€“V layers on si using close-spaced vapor transport. , 2015, , .		1
84	Collaboration and Near-Peer Mentoring as a Platform for Sustainable Science Education Outreach. <i>Journal of Chemical Education</i> , 2015, 92, 625-630.	1.1	35
85	Contributions to activity enhancement via Fe incorporation in Ni-(oxy)hydroxide/borate catalysts for near-neutral pH oxygen evolution. <i>Chemical Communications</i> , 2015, 51, 5261-5263.	2.2	138
86	Cobaltâ€“Iron (Oxy)hydroxide Oxygen Evolution Electrocatalysts: The Role of Structure and Composition on Activity, Stability, and Mechanism. <i>Journal of the American Chemical Society</i> , 2015, 137, 3638-3648.	6.6	1,587
87	Impact of Electrocatalyst Activity and Ion Permeability on Water-Splitting Photoanodes. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 2427-2433.	2.1	59
88	Design of aqueous redox-enhanced electrochemical capacitors with high specific energies and slow self-discharge. <i>Nature Communications</i> , 2015, 6, 7818.	5.8	300
89	Pulse-Electrodeposited Niâ€“Fe (Oxy)hydroxide Oxygen Evolution Electrocatalysts with High Geometric and Intrinsic Activities at Large Mass Loadings. <i>ACS Catalysis</i> , 2015, 5, 6680-6689.	5.5	265
90	Amorphous Inâ€“Gaâ€“Zn Oxide Semiconducting Thin Films with High Mobility from Electrochemically Generated Aqueous Nanocluster Inks. <i>Chemistry of Materials</i> , 2015, 27, 5587-5596.	3.2	41

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91	Oxygen Evolution Reaction Electrocatalysis on Transition Metal Oxides and (Oxy)hydroxides: Activity Trends and Design Principles. <i>Chemistry of Materials</i> , 2015, 27, 7549-7558.	3.2	944
92	Advanced and In Situ Analytical Methods for Solar Fuel Materials. <i>Topics in Current Chemistry</i> , 2015, 371, 253-324.	4.0	4
93	Revised Oxygen Evolution Reaction Activity Trends for First-Row Transition-Metal (Oxy)hydroxides in Alkaline Media. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 3737-3742.	2.1	417
94	High Energy Density Aqueous Electrochemical Capacitors with a KI-KOH Electrolyte. <i>ACS Applied Materials & Interfaces</i> , 2015, 7, 19978-19985.	4.0	83
95	Fe (Oxy)hydroxide Oxygen Evolution Reaction Electrocatalysis: Intrinsic Activity and the Roles of Electrical Conductivity, Substrate, and Dissolution. <i>Chemistry of Materials</i> , 2015, 27, 8011-8020.	3.2	395
96	Doping and electronic properties of GaAs grown by close-spaced vapor transport from powder sources for scalable III-V photovoltaics. <i>Energy and Environmental Science</i> , 2015, 8, 278-285.	15.6	30
97	Solution-Deposited F:SnO ₂ /TiO ₂ as a Base-Stable Protective Layer and Antireflective Coating for Microtextured Buried-Junction H ₂ -evolving Si Photocathodes. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 22830-22837.	4.0	84
98	Precise oxygen evolution catalysts: Status and opportunities. <i>Scripta Materialia</i> , 2014, 74, 25-32.	2.6	165
99	Adaptive semiconductor/electrocatalyst junctions in water-splitting photoanodes. <i>Nature Materials</i> , 2014, 13, 81-86.	13.3	418
100	Homojunction GaAs solar cells grown by close space vapor transport. , 2014, , .		6
101	Electrochemical synthesis of flat-[Ga ₁₃ xIn _x (¹ / ₄ -OH) ₆ (¹ / ₄ -OH) ₁₈ (H ₂ O) ₂₄] clusters as aqueous precursors for solution-processed semiconductors. <i>Journal of Materials Chemistry C</i> , 2014, 2, 8492-8496.	2.7	14
102	A planar-defect-driven growth mechanism of oxygen deficient tungsten oxide nanowires. <i>Journal of Materials Chemistry A</i> , 2014, 2, 6121-6129.	5.2	45
103	A Hybrid Redox-Supercapacitor System with Anionic Catholyte and Cationic Anolyte. <i>Journal of the Electrochemical Society</i> , 2014, 161, A1090-A1093.	1.3	41
104	Nickel-Iron Oxyhydroxide Oxygen-Evolution Electrocatalysts: The Role of Intentional and Incidental Iron Incorporation. <i>Journal of the American Chemical Society</i> , 2014, 136, 6744-6753.	6.6	2,659
105	Optical response of deep defects as revealed by transient photocapacitance and photocurrent spectroscopy in CdTe/CdS solar cells. <i>Solar Energy Materials and Solar Cells</i> , 2014, 129, 57-63.	3.0	20
106	Theory and Simulations of Electrocatalyst-Coated Semiconductor Electrodes for Solar Water Splitting. <i>Physical Review Letters</i> , 2014, 112, 148304.	2.9	87
107	Electrochemical Nanostructuring of n-GaAs Photoelectrodes. <i>ACS Nano</i> , 2013, 7, 6840-6849.	7.3	21
108	Aqueous Solution Processing of F-Doped SnO ₂ Transparent Conducting Oxide Films Using a Reactive Tin(II) Hydroxide Nitrate Nanoscale Cluster. <i>Chemistry of Materials</i> , 2013, 25, 4080-4087.	3.2	50

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109	Electrolytic synthesis of aqueous aluminum nanoclusters and in situ characterization by femtosecond Raman spectroscopy and computations. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 18397-18401.	3.3	58
110	Earth-abundant Cu-based chalcogenide semiconductors as photovoltaic absorbers. Journal of Materials Chemistry C, 2013, 1, 657-662.	2.7	29
111	An Optocatalytic Model for Semiconductorâ€“Catalyst Water-Splitting Photoelectrodes Based on In Situ Optical Measurements on Operational Catalysts. Journal of Physical Chemistry Letters, 2013, 4, 931-935.	2.1	130
112	Towards low-cost high-efficiency GaAs photovoltaics and photoelectrodes grown via vapor transport from a solid source. Proceedings of SPIE, 2013, , .	0.8	4
113	Towards high-efficiency GaAs thin-film solar cells grown via close space vapor transport from a solid source. , 2012, , .		4
114	Efficient n-GaAs Photoelectrodes Grown by Close-Spaced Vapor Transport from a Solid Source. ACS Applied Materials & Interfaces, 2012, 4, 69-73.	4.0	31
115	Solution-Cast Metal Oxide Thin Film Electrocatalysts for Oxygen Evolution. Journal of the American Chemical Society, 2012, 134, 17253-17261.	6.6	1,403
116	High-performance Si microwire photovoltaics. Energy and Environmental Science, 2011, 4, 866.	15.6	196
117	Control of the pH-Dependence of the Band Edges of Si(111) Surfaces Using Mixed Methyl/Allyl Monolayers. Journal of Physical Chemistry C, 2011, 115, 8594-8601.	1.5	33
118	Photoelectrochemical Hydrogen Evolution Using Si Microwire Arrays. Journal of the American Chemical Society, 2011, 133, 1216-1219.	6.6	561
119	pH-Independent, 520 mV Open-Circuit Voltages of Si/Methyl Viologen ^{2+/+} Contacts Through Use of Radial n ⁺ /p-Si Junction Microwire Array Photoelectrodes. Journal of Physical Chemistry C, 2011, 115, 594-598.	1.5	52
120	Evaluation of Pt, Ni, and Niâ€“Mo electrocatalysts for hydrogen evolution on crystalline Si electrodes. Energy and Environmental Science, 2011, 4, 3573.	15.6	440
121	Synthesis of Rutile-Phase Sn _x Ti _{1-x} O ₂ Solid-Solution and (SnO ₂) _x /(TiO ₂) _{1-x} Core/Shell Nanoparticles with Tunable Lattice Constants and Controlled Morphologies. Chemistry of Materials, 2011, 23, 4920-4930.	3.2	45
122	NSF Program Benefits Schools in Need. Science, 2011, 332, 173-174.	6.0	13
123	Solar Water Splitting Cells. Chemical Reviews, 2010, 110, 6446-6473.	23.0	8,307
124	Flexible, Polymerâ€“Supported, Si Wire Array Photoelectrodes. Advanced Materials, 2010, 22, 3277-3281.	11.1	85
125	Enhanced absorption and carrier collection in Si wire arrays for photovoltaic applications. Nature Materials, 2010, 9, 239-244.	13.3	1,085
126	Photoelectrochemical water splitting: silicon photocathodes for hydrogen evolution. , 2010, , .		11

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127	Energy-Conversion Properties of Vapor-Liquid-Solid-Grown Silicon Wire-Array Photocathodes. <i>Science</i> , 2010, 327, 185-187.	6.0	489
128	CdSe Nanorods Dominate Photocurrent of Hybrid CdSe/P3HT Photovoltaic Cell. <i>ACS Nano</i> , 2010, 4, 6132-6136.	7.3	50
129	Ionic-Ligand-Mediated Electrochemical Charging of Anionic Gold Nanoparticle Films and Anionic-Cationic Gold Nanoparticle Bilayers. <i>Journal of Physical Chemistry C</i> , 2010, 114, 4168-4178.	1.5	4
130	In Situ Photopolymerization of Pyrrole in Mesoporous TiO ₂ . <i>Langmuir</i> , 2010, 26, 5319-5322.	1.6	73
131	Si microwire-array solar cells. <i>Energy and Environmental Science</i> , 2010, 3, 1037.	15.6	217
132	10 μ m minority-carrier diffusion lengths in Si wires synthesized by Cu-catalyzed vapor-liquid-solid growth. <i>Applied Physics Letters</i> , 2009, 95, .	1.5	84
133	Photoelectrochemical Performance of CdSe Nanorod Arrays Grown on a Transparent Conducting Substrate. <i>Nano Letters</i> , 2009, 9, 3262-3267.	4.5	59
134	Field-Directed and Confined Molecular Assembly of Mesostructured Materials: Basic Principles and New Opportunities. <i>Chemistry of Materials</i> , 2008, 20, 909-921.	3.2	57
135	One- and Two-Photon Induced Polymerization of Methylmethacrylate Using Colloidal CdS Semiconductor Quantum Dots. <i>Journal of the American Chemical Society</i> , 2008, 130, 8280-8288.	6.6	56
136	Ionic Ligand Mediated Electrochemical Charging of Gold Nanoparticle Assemblies. <i>Nano Letters</i> , 2008, 8, 3404-3408.	4.5	9
137	Fabrication and Electrochemical Photovoltaic Response of CdSe Nanorod Arrays. <i>Journal of Physical Chemistry C</i> , 2008, 112, 8516-8520.	1.5	30
138	Harnessing the Sol-Gel Process for the Assembly of Non-Silicate Mesostructured Oxide Materials. <i>Accounts of Chemical Research</i> , 2007, 40, 784-792.	7.6	152
139	Tunable electronic interfaces between bulk semiconductors and ligand-stabilized nanoparticle assemblies. <i>Nature Materials</i> , 2007, 6, 592-596.	13.3	89
140	Nanoparticle Assembly of Ordered Multicomponent Mesostructured Metal Oxides via a Versatile Sol-Gel Process. <i>Chemistry of Materials</i> , 2006, 18, 6391-6396.	3.2	232
141	Metal-Silica Hybrid Nanostructures for Surface-Enhanced Raman Spectroscopy. <i>Advanced Materials</i> , 2006, 18, 2829-2832.	11.1	82
142	Structural Analysis of Hybrid Titania-Based Mesostructured Composites. <i>Journal of the American Chemical Society</i> , 2005, 127, 9721-9730.	6.6	79
143	3-D Molecular Assembly of Function in Titania-Based Composite Material Systems. <i>ChemInform</i> , 2005, 36, no.	0.1	0
144	3-D Molecular Assembly of Function in Titania-Based Composite Material Systems. <i>Accounts of Chemical Research</i> , 2005, 38, 263-271.	7.6	136

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145	Ag/AgCl-Loaded Ordered Mesoporous Anatase for Photocatalysis. Chemistry of Materials, 2005, 17, 1409-1415.	3.2	109
146	Dye-Activated Hybrid Organic/Inorganic Mesostructured Titania Waveguides. Journal of the American Chemical Society, 2004, 126, 10826-10827.	6.6	63
147	Unidirectional Current in a Polyacetylene Hetero-ionic Junction. Journal of the American Chemical Society, 2004, 126, 8666-8667.	6.6	31
148	Tuning Charge Transport at the Interface between Indium Phosphide and a Polypyrrole ⁺ Phosphomolybdate Hybrid through Manipulation of Electrochemical Potential. Journal of Physical Chemistry B, 2002, 106, 1622-1636.	1.2	9
149	Synthesis, characterization and properties of Mo ₆ S ₈ (4-tert-butylpyridine) ₆ and related M ₆ S ₈ L ₆ cluster complexes (M = Mo, W). Dalton Transactions RSC, 2002, , 3096.	2.3	16
150	The Calculation of Transmission Coefficients at Heterogeneous Semiconductor Interfaces: A Case Study Based on the n-InP poly(pyrrole) Interface. Materials Research Society Symposia Proceedings, 2001, 679, 1.	0.1	0
151	Nanoscale Catalyst/Semiconductor Contacts in Water-Splitting Photoelectrodes. , 0, , .		0
152	Towards a Molecular Understanding of Dynamic Fe-based Oxygen Evolution Catalysts. , 0, , .		0