

# Bruce S Dunn

## List of Publications by Year in descending order

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236  
papers

62,556  
citations

9264

74  
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1284

225  
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243  
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243  
docs citations

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times ranked

40571  
citing authors

#	ARTICLE	IF	CITATIONS
1	Electrical Energy Storage for the Grid: A Battery of Choices. <i>Science</i> , 2011, 334, 928-935.	12.6	11,724
2	Where Do Batteries End and Supercapacitors Begin?. <i>Science</i> , 2014, 343, 1210-1211.	12.6	4,605
3	Pseudocapacitive oxide materials for high-rate electrochemical energy storage. <i>Energy and Environmental Science</i> , 2014, 7, 1597.	30.8	4,223
4	High-rate electrochemical energy storage through Li <sup>+</sup> intercalation pseudocapacitance. <i>Nature Materials</i> , 2013, 12, 518-522.	27.5	4,021
5	Pseudocapacitive Contributions to Electrochemical Energy Storage in TiO <sub>2</sub> (Anatase) Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2007, 111, 14925-14931.	3.1	3,863
6	Ordered mesoporous $\gamma$ -MoO <sub>3</sub> with iso-oriented nanocrystalline walls for thin-film pseudocapacitors. <i>Nature Materials</i> , 2010, 9, 146-151.	27.5	2,801
7	Design and Mechanisms of Asymmetric Supercapacitors. <i>Chemical Reviews</i> , 2018, 118, 9233-9280.	47.7	2,379
8	Oxygen vacancies enhance pseudocapacitive charge storage properties of MoO <sub>3</sub> $\cdot$ x. <i>Nature Materials</i> , 2017, 16, 454-460.	27.5	1,632
9	Continuous formation of supported cubic and hexagonal mesoporous films by sol-gel dip-coating. <i>Nature</i> , 1997, 389, 364-368.	27.8	1,417
10	Multidimensional materials and device architectures for future hybrid energy storage. <i>Nature Communications</i> , 2016, 7, 12647.	12.8	1,281
11	Three-dimensional holey-graphene/niobia composite architectures for ultrahigh-rate energy storage. <i>Science</i> , 2017, 356, 599-604.	12.6	1,229
12	Three-Dimensional Battery Architectures. <i>Chemical Reviews</i> , 2004, 104, 4463-4492.	47.7	1,146
13	Achieving high energy density and high power density with pseudocapacitive materials. <i>Nature Reviews Materials</i> , 2020, 5, 5-19.	48.7	1,138
14	Templated Nanocrystal-Based Porous TiO <sub>2</sub> Films for Next-Generation Electrochemical Capacitors. <i>Journal of the American Chemical Society</i> , 2009, 131, 1802-1809.	13.7	887
15	Physical Interpretations of Nyquist Plots for EDLC Electrodes and Devices. <i>Journal of Physical Chemistry C</i> , 2018, 122, 194-206.	3.1	854
16	High-Performance Supercapacitors Based on Intertwined CNT/V <sub>2</sub> O <sub>5</sub> Nanowire Nanocomposites. <i>Advanced Materials</i> , 2011, 23, 791-795.	21.0	788
17	High-Performance Sodium-Ion Pseudocapacitors Based on Hierarchically Porous Nanowire Composites. <i>ACS Nano</i> , 2012, 6, 4319-4327.	14.6	688
18	Sol-gel encapsulation methods for biosensors. <i>Analytical Chemistry</i> , 1994, 66, 1120A-1127A.	6.5	664

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19	Porous One-Dimensional Nanomaterials: Design, Fabrication and Applications in Electrochemical Energy Storage. <i>Advanced Materials</i> , 2017, 29, 1602300.	21.0	615
20	Polymer-modified halide perovskite films for efficient and stable planar heterojunction solar cells. <i>Science Advances</i> , 2017, 3, e1700106.	10.3	588
21	Understanding and applying coulombic efficiency in lithium metal batteries. <i>Nature Energy</i> , 2020, 5, 561-568.	39.5	526
22	High Performance Pseudocapacitor Based on 2D Layered Metal Chalcogenide Nanocrystals. <i>Nano Letters</i> , 2015, 15, 1911-1917.	9.1	495
23	Electrode Degradation in Lithium-Ion Batteries. <i>ACS Nano</i> , 2020, 14, 1243-1295.	14.6	484
24	The Effect of Crystallinity on the Rapid Pseudocapacitive Response of Nb <sub>2</sub> O <sub>5</sub> . <i>Advanced Energy Materials</i> , 2012, 2, 141-148.	19.5	461
25	A fundamental look at electrocatalytic sulfur reduction reaction. <i>Nature Catalysis</i> , 2020, 3, 762-770.	34.4	455
26	Sulfide Solid Electrolytes for Lithium Battery Applications. <i>Advanced Energy Materials</i> , 2018, 8, 1800933.	19.5	407
27	Mesoporous MoS <sub>2</sub> as a Transition Metal Dichalcogenide Exhibiting Pseudocapacitive Li and Na <sup>+</sup> Ion Charge Storage. <i>Advanced Energy Materials</i> , 2016, 6, 1501937.	19.5	395
28	Conformal Lithium Fluoride Protection Layer on Three-Dimensional Lithium by Nonhazardous Gaseous Reagent Freon. <i>Nano Letters</i> , 2017, 17, 3731-3737.	9.1	377
29	A general method to synthesize and sinter bulk ceramics in seconds. <i>Science</i> , 2020, 368, 521-526.	12.6	357
30	Electrically conductive oxide aerogels: new materials in electrochemistry. <i>Journal of Materials Chemistry</i> , 2001, 11, 963-980.	6.7	340
31	Tuning Molecular Interactions for Highly Reproducible and Efficient Formamidinium Perovskite Solar Cells via Adduct Approach. <i>Journal of the American Chemical Society</i> , 2018, 140, 6317-6324.	13.7	338
32	Pseudocapacitive Contributions to Charge Storage in Highly Ordered Mesoporous Group V Transition Metal Oxides with Iso-Oriented Layered Nanocrystalline Domains. <i>Journal of the American Chemical Society</i> , 2010, 132, 6982-6990.	13.7	320
33	High-Performance Supercapacitors Based on Nanocomposites of Nb <sub>2</sub> O <sub>5</sub> Nanocrystals and Carbon Nanotubes. <i>Advanced Energy Materials</i> , 2011, 1, 1089-1093.	19.5	312
34	Three-dimensional electrodes and battery architectures. <i>MRS Bulletin</i> , 2011, 36, 523-531.	3.5	272
35	Enhancing Pseudocapacitive Charge Storage in Polymer Templated Mesoporous Materials. <i>Accounts of Chemical Research</i> , 2013, 46, 1113-1124.	15.6	254
36	Mesoporous Li <sub>x</sub> Mn <sub>2</sub> O <sub>4</sub> Thin Film Cathodes for Lithium-Ion Pseudocapacitors. <i>ACS Nano</i> , 2016, 10, 7572-7581.	14.6	247

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37	Synthesis and electrochromic properties of mesoporous tungsten oxide. <i>Journal of Materials Chemistry</i> , 2001, 11, 92-97.	6.7	245
38	Electrochemical Kinetics of Nanostructured Nb <sub>2</sub> O <sub>5</sub> Electrodes. <i>Journal of the Electrochemical Society</i> , 2014, 161, A718-A725.	2.9	235
39	Probes of Pore Environment and Molecule~Matrix Interactions in Sol~Gel Materials. <i>Chemistry of Materials</i> , 1997, 9, 2280-2291.	6.7	233
40	Pseudocapacitive Charge Storage in Thick Composite MoS <sub>2</sub> Nanocrystal~Based Electrodes. <i>Advanced Energy Materials</i> , 2017, 7, 1601283.	19.5	230
41	Creating Lithium~Ion Electrolytes with Biomimetic Ionic Channels in Metal~Organic Frameworks. <i>Advanced Materials</i> , 2018, 30, e1707476.	21.0	230
42	Challenges for and Pathways toward Li-Metal-Based All-Solid-State Batteries. <i>ACS Energy Letters</i> , 0, , 1399-1404.	17.4	228
43	Synthesis and Charge Storage Properties of Hierarchical Niobium Pentoxide/Carbon/Niobium Carbide (MXene) Hybrid Materials. <i>Chemistry of Materials</i> , 2016, 28, 3937-3943.	6.7	210
44	Enzymatic activity of glucose oxidase encapsulated in transparent glass by the sol-gel method. <i>Chemistry of Materials</i> , 1992, 4, 495-497.	6.7	197
45	High~Performance Supercapacitors Based on Hierarchically Porous Graphite Particles. <i>Advanced Energy Materials</i> , 2011, 1, 551-556.	19.5	194
46	Hierarchical battery electrodes based on inverted opal structures. <i>Journal of Materials Chemistry</i> , 2002, 12, 2859-2861.	6.7	190
47	Fabrication and properties of a carbon/polypyrrole three-dimensional microbattery. <i>Journal of Power Sources</i> , 2008, 178, 795-800.	7.8	175
48	Protection of lithium metal surfaces using tetraethoxysilane. <i>Journal of Materials Chemistry</i> , 2011, 21, 1593-1599.	6.7	171
49	The Development of Pseudocapacitive Properties in Nanosized-MoO <sub>2</sub> . <i>Journal of the Electrochemical Society</i> , 2015, 162, A5083-A5090.	2.9	170
50	3-D Microbatteries. <i>Electrochemistry Communications</i> , 2003, 5, 120-123.	4.7	163
51	Sodium Vanadium Fluorophosphates (NVOPF) Array Cathode Designed for High~Rate Full Sodium Ion Storage Device. <i>Advanced Energy Materials</i> , 2018, 8, 1800058.	19.5	157
52	Physical Interpretations of Electrochemical Impedance Spectroscopy of Redox Active Electrodes for Electrical Energy Storage. <i>Journal of Physical Chemistry C</i> , 2018, 122, 24499-24511.	3.1	149
53	Controlled Placement of Luminescent Molecules and Polymers in Mesostructured Sol~Gel Thin Films. <i>Journal of the American Chemical Society</i> , 2001, 123, 1248-1249.	13.7	144
54	Steric Impediment of Ion Migration Contributes to Improved Operational Stability of Perovskite Solar Cells. <i>Advanced Materials</i> , 2020, 32, e1906995.	21.0	142

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55	Naphthalene Diimide Based Materials with Adjustable Redox Potentials: Evaluation for Organic Lithium-Ion Batteries. <i>Chemistry of Materials</i> , 2014, 26, 7151-7157.	6.7	141
56	Patterned Hexagonal Arrays of Living Cells in Sol-Gel Silica Films. <i>Journal of the American Chemical Society</i> , 2000, 122, 6488-6489.	13.7	136
57	Synthesis of sol-gel encapsulated heme proteins with chemical sensing properties. <i>Journal of Materials Chemistry</i> , 1999, 9, 45-53.	6.7	134
58	High Areal Energy Density 3D Lithium-Ion Microbatteries. <i>Joule</i> , 2018, 2, 1187-1201.	24.0	134
59	On the Correlation between Mechanical Flexibility, Nanoscale Structure, and Charge Storage in Periodic Mesoporous CeO <sub>2</sub> Thin Films. <i>ACS Nano</i> , 2010, 4, 967-977.	14.6	127
60	Development of a Three-Dimensional Bioengineering Technology to Generate Lung Tissue for Personalized Disease Modeling. <i>Stem Cells Translational Medicine</i> , 2017, 6, 622-633.	3.3	127
61	Multiply Doped Nanostructured Silicate Sol-Gel Thin Films: Spatial Segregation of Dopants, Energy Transfer, and Distance Measurements. <i>Journal of the American Chemical Society</i> , 2005, 127, 2656-2665.	13.7	126
62	Synthesis and Electrochemical Properties of Vanadium Oxide Aerogels Prepared by a Freeze-Drying Process. <i>Journal of the Electrochemical Society</i> , 2004, 151, A666.	2.9	118
63	Dual redox mediators accelerate the electrochemical kinetics of lithium-sulfur batteries. <i>Nature Communications</i> , 2020, 11, 5215.	12.8	113
64	The Relationship Between Nanoscale Structure and Electrochemical Properties of Vanadium Oxide Nanorolls. <i>Advanced Functional Materials</i> , 2004, 14, 1197-1204.	14.9	103
65	In Situ Fluorescence Probing of the Chemical Changes during Sol-Gel Thin Film Formation. <i>Journal of the American Ceramic Society</i> , 1995, 78, 1640-1648.	3.8	99
66	Fabrication, Testing, and Simulation of All-Solid-State Three-Dimensional Li-Ion Batteries. <i>ACS Applied Materials &amp; Interfaces</i> , 2016, 8, 32385-32391.	8.0	99
67	Pseudocapacitive Vanadium-based Materials toward High-Rate Sodium-Ion Storage. <i>Energy and Environmental Materials</i> , 2020, 3, 221-234.	12.8	95
68	In Situ Luminescence Probing of the Chemical and Structural Changes during Formation of Dip-Coated Lamellar Phase Sodium Dodecyl Sulfate Sol-Gel Thin Films. <i>Journal of the American Chemical Society</i> , 2000, 122, 3739-3745.	13.7	93
69	Two-Photon Photographic Production of Three-Dimensional Metallic Structures within a Dielectric Matrix. <i>Advanced Materials</i> , 2000, 12, 1438-1441.	21.0	91
70	Preparation of High-Tc Superconducting Oxides by the Amorphous Citrate Process. <i>Journal of the American Ceramic Society</i> , 1987, 70, C-375-C-377.	3.8	86
71	Stabilization of Creatine Kinase Encapsulated in Silicate Sol-Gel Materials and Unusual Temperature Effects on Its Activity. <i>Chemistry of Materials</i> , 2002, 14, 4300-4306.	6.7	84
72	In Situ Probing by Fluorescence Spectroscopy of the Formation of Continuous Highly-Ordered Lamellar-Phase Mesostructured Thin Films. <i>Langmuir</i> , 1998, 14, 7331-7333.	3.5	82

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73	V <sub>2</sub> O <sub>5</sub> aerogel as a versatile host for metal ions. <i>Journal of Non-Crystalline Solids</i> , 2004, 350, 67-72.	3.1	80
74	Protection of Lithium Metal Surfaces Using Chlorosilanes. <i>Langmuir</i> , 2007, 23, 11597-11602.	3.5	78
75	Opening the window for aqueous electrolytes. <i>Science</i> , 2015, 350, 918-918.	12.6	77
76	Nanostructured Pseudocapacitors Based on Atomic Layer Deposition of V <sub>2</sub> O <sub>5</sub> onto Conductive Nanocrystal-based Mesoporous ITO Scaffolds. <i>Advanced Functional Materials</i> , 2014, 24, 6717-6728.	14.9	76
77	NASICON Na <sub>3</sub> V <sub>2</sub> (PO <sub>4</sub> ) <sub>3</sub> Enables Quasi-Two-Stage Na <sup>+</sup> and Zn <sup>2+</sup> Intercalation for Multivalent Zinc Batteries. <i>Chemistry of Materials</i> , 2020, 32, 3028-3035.	6.7	75
78	Na <sub>2</sub> Ti <sub>3</sub> O <sub>7</sub> Nanoplatelets and Nanosheets Derived from a Modified Exfoliation Process for Use as a High-Capacity Sodium-Ion Negative Electrode. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 1416-1425.	8.0	72
79	Ambient Pressure Synthesis of Aerogel-Like Vanadium Oxide and Molybdenum Oxide. <i>Materials Research Bulletin</i> , 1998, 33, 561-567.	5.2	70
80	Lithium-ion storage properties of titanium oxide nanosheets. <i>Materials Horizons</i> , 2014, 1, 219-223.	12.2	70
81	High-rate capability of Na <sub>2</sub> FePO <sub>4</sub> F nanoparticles by enhancing surface carbon functionality for Na-ion batteries. <i>Journal of Materials Chemistry A</i> , 2017, 5, 18707-18715.	10.3	70
82	Synthesis, Densification, and Conductivity Characteristics of BICUVOX Oxygen-ion Conducting Ceramics. <i>Journal of the American Ceramic Society</i> , 1997, 80, 2563-2568.	3.8	69
83	Molybdenum Polysulfide Chalcogels as High-Capacity, Anion-Redox-Driven Electrode Materials for Li-Ion Batteries. <i>Chemistry of Materials</i> , 2016, 28, 8357-8365.	6.7	69
84	Synthesis of ion conducting Li <sub>x</sub> Al <sub>y</sub> Si <sub>z</sub> O thin films by atomic layer deposition. <i>Journal of Materials Chemistry A</i> , 2014, 2, 9566-9573.	10.3	68
85	Designing Pseudocapacitance for Nb <sub>2</sub> O <sub>5</sub> /Carbide-Derived Carbon Electrodes and Hybrid Devices. <i>Langmuir</i> , 2017, 33, 9407-9415.	3.5	67
86	Synthesis and electrochemical properties of niobium pentoxide deposited on layered carbide-derived carbon. <i>Journal of Power Sources</i> , 2015, 274, 121-129.	7.8	66
87	Nanostructured Sol-Gel Electrodes for Biofuel Cells. <i>Journal of the Electrochemical Society</i> , 2007, 154, A140.	2.9	65
88	Molecules in Glass: Probes, Ordered Assemblies, and Functional Materials. <i>Accounts of Chemical Research</i> , 2007, 40, 747-755.	15.6	65
89	A Metal-Organic Framework with Tetrahedral Aluminate Sites as a Single-ion Li <sup>+</sup> Solid Electrolyte. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 16683-16687.	13.8	65
90	Differentiating Double-Layer, Pseudocapacitance, and Battery-like Mechanisms by Analyzing Impedance Measurements in Three Dimensions. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 14071-14078.	8.0	64

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91	Electrochemical properties of vanadium oxide aerogels. <i>Science and Technology of Advanced Materials</i> , 2003, 4, 3-11.	6.1	63
92	Lithium-Ion Insertion Properties of Solution-Exfoliated Germanane. <i>ACS Nano</i> , 2017, 11, 7995-8001.	14.6	63
93	Photonic Materials by the Sol-Gel Process. <i>Journal of the Ceramic Society of Japan</i> , 1991, 99, 878-893.	1.3	61
94	Programmable devices based on reversible solid-state doping of two-dimensional semiconductors with superionic silver iodide. <i>Nature Electronics</i> , 2020, 3, 630-637.	26.0	61
95	Nanoporous Tin with a Granular Hierarchical Ligament Morphology as a Highly Stable Li-Ion Battery Anode. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 293-303.	8.0	60
96	Amorphous VO <sub>2</sub> : A Pseudocapacitive Platform for High-Rate Symmetric Batteries. <i>Advanced Materials</i> , 2021, 33, e2103736.	21.0	60
97	Characterization of gold nanoparticle binding to microtubule filaments. <i>Materials Science and Engineering C</i> , 2010, 30, 20-26.	7.3	59
98	In Situ Fluorescence Probing of Molecular Mobility and Chemical Changes during Formation of Dip-Coated Sol-Gel Silica Thin Films. <i>Chemistry of Materials</i> , 2000, 12, 231-235.	6.7	55
99	Next generation pseudocapacitor materials from sol-gel derived transition metal oxides. <i>Journal of Sol-Gel Science and Technology</i> , 2011, 57, 330-335.	2.4	55
100	Monolithic Flexible Supercapacitors Integrated into Single Sheets of Paper and Membrane via Vapor Printing. <i>Advanced Materials</i> , 2017, 29, 1606091.	21.0	55
101	Two-dimensional quantum-sheet films with sub-1.2%nm channels for ultrahigh-rate electrochemical capacitance. <i>Nature Nanotechnology</i> , 2022, 17, 153-158.	31.5	55
102	A Sol-Gel Solid Electrolyte with High Lithium Ion Conductivity. <i>Chemistry of Materials</i> , 1997, 9, 1004-1011.	6.7	54
103	Gold-Coated M13 Bacteriophage as a Template for Glucose Oxidase Biofuel Cells with Direct Electron Transfer. <i>ACS Nano</i> , 2016, 10, 324-332.	14.6	54
104	Future Directions for Electrochemical Capacitors. <i>ACS Energy Letters</i> , 2021, 6, 4311-4316.	17.4	53
105	Patternable, Solution-Processed Ionogels for Thin-Film Lithium-Ion Electrolytes. <i>Joule</i> , 2017, 1, 344-358.	24.0	52
106	Kinetics of Anode Reactions for a Yeast-Catalysed Microbial Fuel Cell. <i>Fuel Cells</i> , 2009, 9, 44-52.	2.4	51
107	Multielectron Redox and Insulator-to-Metal Transition upon Lithium Insertion in the Fast-Charging, Wadsley-Roth Phase PNB <sub>9</sub> O <sub>25</sub> . <i>Chemistry of Materials</i> , 2020, 32, 4553-4563.	6.7	50
108	Praseodymium Telluride: A High-Temperature, High-ZT Thermoelectric Material. <i>Joule</i> , 2018, 2, 698-709.	24.0	49

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109	Tuning Porosity and Surface Area in Mesoporous Silicon for Application in Li-Ion Battery Electrodes. ACS Applied Materials & Interfaces, 2017, 9, 19063-19073.	8.0	48
110	Structural and electrochemical properties of amorphous and crystalline molybdenum oxide aerogels. Solid State Ionics, 2001, 144, 31-40.	2.7	47
111	Application of Poly(3-hexylthiophene-2,5-diyl) as a Protective Coating for High Rate Cathode Materials. Chemistry of Materials, 2018, 30, 2589-2599.	6.7	47
112	Immunoassays for cortisol using antibody-doped sol-gel silica. Journal of Materials Chemistry, 2004, 14, 2311-2316.	6.7	43
113	Vanadium oxide aerogels: Nanostructured materials for enhanced energy storage. Comptes Rendus Chimie, 2010, 13, 130-141.	0.5	42
114	A three-dimensional human model of the fibroblast activation that accompanies bronchopulmonary dysplasia identifies Notch-mediated pathophysiology. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2016, 310, L889-L898.	2.9	42
115	Wafer-Scale Black Arsenic Phosphorus Thin-Film Synthesis Validated with Density Functional Perturbation Theory Predictions. ACS Applied Nano Materials, 2018, 1, 4737-4745.	5.0	42
116	Dihexyl-Substituted Poly(3,4-Propylenedioxythiophene) as a Dual Ionic and Electronic Conductive Cathode Binder for Lithium-Ion Batteries. Chemistry of Materials, 2020, 32, 9176-9189.	6.7	42
117	Controlling the Spontaneous Precipitation of Silver Nanoparticles in Sol-Gel Materials. Journal of Sol-Gel Science and Technology, 2000, 19, 249-252.	2.4	41
118	Microtubule-Based Gold Nanowires and Nanowire Arrays. Small, 2008, 4, 1507-1515.	10.0	41
119	Simulations and Interpretation of Three-Electrode Cyclic Voltammograms of Pseudocapacitive Electrodes. Electrochimica Acta, 2016, 211, 420-429.	5.2	40
120	Isothermal calorimeter for measurements of time-dependent heat generation rate in individual supercapacitor electrodes. Journal of Power Sources, 2018, 374, 257-268.	7.8	40
121	3D Architectures for Batteries and Electrodes. Advanced Energy Materials, 2020, 10, 2002457.	19.5	40
122	Electrochemical Properties of Vanadium Oxide Aerogels and Aerogel Nanocomposites. Journal of Sol-Gel Science and Technology, 2003, 26, 641-644.	2.4	38
123	Inverse opal ceria-zirconia: architectural engineering for heterogeneous catalysis. Energy and Environmental Science, 2008, 1, 484.	30.8	37
124	3D Architected Anodes for Lithium-Ion Microbatteries with Large Areal Capacity. Energy Technology, 2014, 2, 362-369.	3.8	37
125	Effects of Temperature and Strain Rate on the Plastic Deformation of Fully Dense Polycrystalline Y1Ba2Cu3O7-x Superconductor. Journal of the American Ceramic Society, 1989, 72, 137-139.	3.8	36
126	Suppression of Electrochemically Driven Phase Transitions in Nanostructured MoS <sub>2</sub> Pseudocapacitors Probed Using Operando X-ray Diffraction. ACS Nano, 2019, 13, 1223-1231.	14.6	36



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127	High-Performance Solid-State Lithium-Ion Battery with Mixed 2D and 3D Electrodes. ACS Applied Energy Materials, 2020, 3, 8402-8409.	5.1	35
128	Low-potential lithium-ion reactivity of vanadium oxide aerogels. Electrochimica Acta, 2013, 88, 530-535.	5.2	34
129	Nanoscale, conformal polysiloxane thin film electrolytes for three-dimensional battery architectures. Materials Horizons, 2015, 2, 309-314.	12.2	34
130	Electrochemical Modeling of GITT Measurements for Improved Solid-State Diffusion Coefficient Evaluation. ACS Applied Energy Materials, 2021, 4, 11460-11469.	5.1	34
131	<i>In situ</i> monitoring of the electrochemically induced phase transition of thermodynamically metastable $1T\text{-MoS}_2$ at nanoscale. Nanoscale, 2020, 12, 9246-9254.	5.6	33
132	Posttranslational modification of $\beta$ -catenin is associated with pathogenic fibroblastic changes in bronchopulmonary dysplasia. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2017, 312, L186-L195.	2.9	32
133	Effect of Air Exposure on the Resistivity of Sodium Beta and Beta Aluminas. Journal of the American Ceramic Society, 1981, 64, 125-128.	3.8	31
134	Porous Sol-Gel Silicates Containing Gold Particles as Matrices for Surface-Enhanced Raman Spectroscopy. Journal of Raman Spectroscopy, 1996, 27, 775-783.	2.5	31
135	Passivating lithium electrodes with trimethylsilylacetylene. Solid State Ionics, 2001, 144, 295-299.	2.7	30
136	Hexagonal to Lamellar Mesostructural Changes in Silicate Films Caused by Organic Additives. Chemistry of Materials, 2002, 14, 5153-5162.	6.7	30
137	Correlated Polyhedral Rotations in the Absence of Polarons during Electrochemical Insertion of Lithium in $\text{ReO}_3$ . ACS Energy Letters, 2018, 3, 2513-2519.	17.4	30
138	NMR Relaxometry and Diffusometry Analysis of Dynamics in Ionic Liquids and Ionogels for Use in Lithium-Ion Batteries. Journal of Physical Chemistry B, 2020, 124, 6843-6856.	2.6	30
139	Photopatternable hydroxide ion electrolyte for solid-state micro-supercapacitors. Joule, 2021, 5, 2466-2478.	24.0	30
140	Micromachining of mesoporous oxide films for microelectromechanical system structures. Journal of Materials Research, 2002, 17, 2121-2129.	2.6	28
141	iCVD Cyclic Polysiloxane and Polysilazane as Nanoscale Thin-Film Electrolyte: Synthesis and Properties. Macromolecular Rapid Communications, 2016, 37, 446-452.	3.9	28
142	Frontiers in $\beta$ -Alumina Research. MRS Bulletin, 1989, 14, 22-30.	3.5	27
143	Biomolecular materials based on sol-gel encapsulated proteins. Journal of Sol-Gel Science and Technology, 1994, 2, 791-795.	2.4	27
144	Molecular Motion and Environmental Rigidity in the Framework and Ionic Interface Regions of Mesostructured Silica Thin Films. Journal of Physical Chemistry B, 2001, 105, 10335-10339.	2.6	27

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145	A Group of Cyclic Siloxane and Silazane Polymer Films as Nanoscale Electrolytes for Microbattery Architectures. <i>Macromolecules</i> , 2015, 48, 5222-5229.	4.8	27
146	High Surface Area Ceria Aerogel. <i>Journal of the American Ceramic Society</i> , 2004, 87, 1442-1445.	3.8	26
147	Effects of Constituent Materials on Heat Generation in Individual EDLC Electrodes. <i>Journal of the Electrochemical Society</i> , 2018, 165, A1547-A1557.	2.9	26
148	Optical characteristics of SiO <sub>2</sub> photonic band-gap crystal with ferroelectric perovskite oxide. <i>Applied Physics Letters</i> , 2002, 81, 4440-4442.	3.3	24
149	Operando calorimetry informs the origin of rapid rate performance in microwave-prepared TiNb <sub>2</sub> O <sub>7</sub> . <i>Chemistry of Materials</i> , 2022, 34, 2672-2686.	7.8	24
150	Characterization of Pore Size Distribution by Infrared Scattering in Highly Dense ZnS. <i>Journal of the American Ceramic Society</i> , 1993, 76, 2086-2092.	3.8	23
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