Bruce S Dunn

List of Publications by Year in descending order

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236 papers

62,556 citations

74 h-index 1484

g-index

225

243 all docs 243 docs citations

times ranked

243

46786 citing authors

#	Article	IF	CITATIONS
1	Transparent silica aerogel slabs synthesized from nanoparticle colloidal suspensions at near ambient conditions on omniphobic liquid substrates. Journal of Colloid and Interface Science, 2022, 606, 884-897.	5.0	6
2	Elastic and plastic mechanical properties of nanoparticle-based silica aerogels and xerogels. Microporous and Mesoporous Materials, 2022, 330, 111569.	2.2	15
3	Two-dimensional quantum-sheet films with sub-1.2 nm channels for ultrahigh-rate electrochemical capacitance. Nature Nanotechnology, 2022, 17, 153-158.	15.6	55
4	Potentiometric entropy and operando calorimetric measurements reveal fast charging mechanisms in PNb <mml:math altimg="si211.svg" display="inline" id="d1e918" xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow></mml:mrow><mml:mrow></mml:mrow></mml:msub></mml:math> O25. Journal of Power Sources, 2022, 520, 230776.	4.0	11
5	Mechanistic Insight and Local Structure Evolution of NiPS ₃ upon Electrochemical Lithiation. ACS Applied Materials & Samp; Interfaces, 2022, 14, 3980-3990.	4.0	9
6	Thermodynamics-driven interfacial engineering of alloy-type anode materials. Cell Reports Physical Science, 2022, 3, 100694.	2.8	4
7	Photopatternable Porous Separators for Microâ€Electrochemical Energy Storage Systems. Advanced Materials, 2022, 34, e2108792.	11.1	3
8	Enhancing the Ionic Conductivity of Poly(3,4-propylenedioxythiophenes) with Oligoether Side Chains for Use as Conductive Cathode Binders in Lithium-Ion Batteries. Chemistry of Materials, 2022, 34, 2672-2686.	3.2	23
9	In Situ UV–Vis Analysis of Polysulfide Shuttling in Ionic Liquid-Based Li-FeS ₂ Batteries. Journal of Physical Chemistry C, 2022, 126, 5101-5111.	1.5	7
10	Mesoporous MoO2 thin films for high rate Li+ storage: Effect of crystallinity and porous structure. Solid State Sciences, 2022, 129, 106890.	1.5	3
11	High-Rate Lithium Cycling and Structure Evolution in Mo ₄ O ₁₁ . Chemistry of Materials, 2022, 34, 4122-4133.	3.2	13
12	Investigating the Perovskite Ag1-3xLaxNbO3 as a High-Rate Negative Electrode for Li-Ion Batteries. Frontiers in Chemistry, 2022, 10, 873783.	1.8	2
13	Quadrupling the stored charge by extending the accessible density of states. CheM, 2022, 8, 2410-2418.	5.8	4
14	Temperature-Dependent Reaction Pathways in FeS ₂ : Reversibility and the Electrochemical Formation of Fe ₃ S ₄ . Chemistry of Materials, 2022, 34, 5422-5432.	3.2	7
15	Room-Temperature Electrochemical Fluoride (De)insertion into CsMnFeF ₆ . ACS Energy Letters, 2022, 7, 2340-2348.	8.8	3
16	Understanding the Electrochemical Performance of FeS ₂ Conversion Cathodes. ACS Applied Materials & Description (2022), 14, 26604-26611.	4.0	13
17	A biocompatible open system Na-doped IrO _{<i>x</i>} (OH) _{<i>y</i>} energy storage device with enhanced charge storage properties and long lifetime. Journal of Materials Chemistry A, 2022, 10, 14479-14487.	5.2	4
18	Fabrication of Flexible Li-ion Battery Electrodes Using "Battlets" Approach with Ionic Liquid Electrolyte for Powering Wearable Devices., 2022,,.		3

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19	Plasma enhanced atomic layer deposition of thin film Li1+xMn2â^'xO4 for realization of all solid-state 3D lithium-ion microbatteries. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2021, 39, .	0.9	7
20	Heat generation in electric double layer capacitors with neat and diluted ionic liquid electrolytes under large potential window between 5 and 80°C. Journal of Power Sources, 2021, 488, 229368.	4.0	16
21	TINb <mmi:math altimg="si117.svg" display="inline" id="d1e860" xmins:mmi="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mrow></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub>O<mml:math <="" display="inline" id="d1e868" td="" xmlns:mmn="http://www.w3.org/1998/Math/MathML"><td>4.0</td><td>24</td></mml:math></mmi:math>	4.0	24
22	Fe-Substituted Sodium β″-Al ₂ O ₃ as a High-Rate Na-Ion Electrode. Chemistry of Materials, 2021, 33, 6136-6145.	3.2	6
23	Role of Electronic Structure in Li Ordering and Chemical Strain in the Fast Charging Wadsley–Roth Phase PNb ₉ O ₂₅ . Chemistry of Materials, 2021, 33, 7755-7766.	3.2	13
24	Photopatternable hydroxide ion electrolyte for solid-state micro-supercapacitors. Joule, 2021, 5, 2466-2478.	11.7	30
25	Avoiding dendrite formation by confining lithium deposition underneath Li–Sn coatings. Journal of Materials Research, 2021, 36, 797-811.	1.2	4
26	Electrochemical Modeling of GITT Measurements for Improved Solid-State Diffusion Coefficient Evaluation. ACS Applied Energy Materials, 2021, 4, 11460-11469.	2.5	34
27	Amorphous VO ₂ : A Pseudocapacitive Platform for Highâ€Rate Symmetric Batteries. Advanced Materials, 2021, 33, e2103736.	11.1	60
28	Siloxane-Modified, Silica-Based Ionogel as a Pseudosolid Electrolyte for Sodium-Ion Batteries. ACS Applied Energy Materials, 2021, 4, 154-163.	2.5	7
29	Future Directions for Electrochemical Capacitors. ACS Energy Letters, 2021, 6, 4311-4316.	8.8	53
30	Achieving high energy density and high power density with pseudocapacitive materials. Nature Reviews Materials, 2020, 5, 5-19.	23.3	1,138
31	Electrode Degradation in Lithium-Ion Batteries. ACS Nano, 2020, 14, 1243-1295.	7.3	484
32	Inâ€Operando Calorimetric Measurements for Activated Carbon Electrodes in Ionic Liquid Electrolytes under Large Potential Windows. ChemSusChem, 2020, 13, 1013-1026.	3.6	19
33	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.	3.2	42
34	3D Architectures for Batteries and Electrodes. Advanced Energy Materials, 2020, 10, 2002457.	10.2	40
35	Dual redox mediators accelerate the electrochemical kinetics of lithium-sulfur batteries. Nature Communications, 2020, 11, 5215.	5. 8	113
36	Effect of temperature on irreversible and reversible heat generation rates in ionic liquid-based electric double layer capacitors. Electrochimica Acta, 2020, 338, 135802.	2.6	16

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37	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.	1.2	30
38	High-Performance Solid-State Lithium-lon Battery with Mixed 2D and 3D Electrodes. ACS Applied Energy Materials, 2020, 3, 8402-8409.	2.5	35
39	Understanding Stabilization in Nanoporous Intermetallic Alloy Anodes for Li-lon Batteries Using <i>Operando</i> Transmission X-ray Microscopy. ACS Nano, 2020, 14, 14820-14830.	7.3	9
40	A Perspective on interfacial engineering of lithium metal anodes and beyond. Applied Physics Letters, 2020, 117, .	1.5	18
41	A fundamental look at electrocatalytic sulfur reduction reaction. Nature Catalysis, 2020, 3, 762-770.	16.1	455
42	Pseudocapacitive Vanadiumâ€based Materials toward Highâ€Rate Sodiumâ€lon Storage. Energy and Environmental Materials, 2020, 3, 221-234.	7.3	95
43	A general method to synthesize and sinter bulk ceramics in seconds. Science, 2020, 368, 521-526.	6.0	357
44	Multielectron Redox and Insulator-to-Metal Transition upon Lithium Insertion in the Fast-Charging, Wadsley-Roth Phase PNb ₉ O ₂₅ . Chemistry of Materials, 2020, 32, 4553-4563.	3.2	50
45	NASICON Na ₃ V ₂ (PO ₄) ₃ Enables Quasi-Two-Stage Na ⁺ and Zn ²⁺ Intercalation for Multivalent Zinc Batteries. Chemistry of Materials, 2020, 32, 3028-3035.	3.2	75
46	<i>In situ</i> monitoring of the electrochemically induced phase transition of thermodynamically metastable 1T-MoS ₂ at nanoscale. Nanoscale, 2020, 12, 9246-9254.	2.8	33
47	Differentiating Double-Layer, Psuedocapacitance, and Battery-like Mechanisms by Analyzing Impedance Measurements in Three Dimensions. ACS Applied Materials & Interfaces, 2020, 12, 14071-14078.	4.0	64
48	Understanding and applying coulombic efficiency in lithium metal batteries. Nature Energy, 2020, 5, 561-568.	19.8	526
49	Steric Impediment of Ion Migration Contributes to Improved Operational Stability of Perovskite Solar Cells. Advanced Materials, 2020, 32, e1906995.	11.1	142
50	Synthesis and Crystallization of Atomic Layer Deposition \hat{l}^2 -Eucryptite LiAlSiO ₄ Thin-Film Solid Electrolytes. ACS Applied Materials & Solid Electrolytes. ACS Applied Materials & Solid Electrolytes.	4.0	6
51	Programmable devices based on reversible solid-state doping of two-dimensional semiconductors with superionic silver iodide. Nature Electronics, 2020, 3, 630-637.	13.1	61
52	Engineering mesoporous silica for superior optical and thermal properties. MRS Energy $\&$ Sustainability, 2020, 7, 1.	1.3	11
53	Cryogenic Milling Method to Fabricate Nanostructured Anodes. ACS Applied Energy Materials, 2020, 3, 11285-11292.	2.5	2
54	Irreversibility at macromolecular scales in the flake graphite of the lithium-ion battery anode. Journal of Power Sources, 2019, 436, 226841.	4.0	16

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55	Thick Transparent Nanoparticle-Based Mesoporous Silica Monolithic Slabs for Thermally Insulating Window Materials. ACS Applied Nano Materials, 2019, 2, 4547-4555.	2.4	16
56	Conformal Ultrathin Film Metal–Organic Framework Analogues: Characterization of Growth, Porosity, and Electronic Transport. Chemistry of Materials, 2019, 31, 8977-8986.	3.2	11
57	Synthesis and Characterization of Vacancy-Doped Neodymium Telluride for Thermoelectric Applications. Chemistry of Materials, 2019, 31, 4460-4468.	3.2	20
58	Thermal signature of ion intercalation and surface redox reactions mechanisms in model pseudocapacitive electrodes. Electrochimica Acta, 2019, 307, 512-524.	2.6	20
59	Designing the Charge Storage Properties of Liâ€Exchanged Sodium Vanadium Fluorophosphate for Powering Implantable Biomedical Devices. Advanced Energy Materials, 2019, 9, 1900226.	10.2	23
60	Electrochemical and Spectroscopic Analysis of the Ionogel–Electrode Interface. ACS Applied Materials & Material	4.0	12
61	Suppression of Electrochemically Driven Phase Transitions in Nanostructured MoS ₂ Pseudocapacitors Probed Using <i>Operando</i> X-ray Diffraction. ACS Nano, 2019, 13, 1223-1231.	7.3	36
62	Praseodymium Telluride: A High-Temperature, High-ZT Thermoelectric Material. Joule, 2018, 2, 698-709.	11.7	49
63	Application of Poly(3-hexylthiophene-2,5-diyl) as a Protective Coating for High Rate Cathode Materials. Chemistry of Materials, 2018, 30, 2589-2599.	3.2	47
64	High Areal Energy Density 3D Lithium-Ion Microbatteries. Joule, 2018, 2, 1187-1201.	11.7	134
65	Tuning Molecular Interactions for Highly Reproducible and Efficient Formamidinium Perovskite Solar Cells via Adduct Approach. Journal of the American Chemical Society, 2018, 140, 6317-6324.	6.6	338
66	Creating Lithiumâ€Ion Electrolytes with Biomimetic Ionic Channels in Metal–Organic Frameworks. Advanced Materials, 2018, 30, e1707476.	11.1	230
67	Probing ion current in solid-electrolytes at the meso- and nanoscale. Faraday Discussions, 2018, 210, 55-67.	1.6	4
68	Sodium Vanadium Fluorophosphates (NVOPF) Array Cathode Designed for Highâ€Rate Full Sodium Ion Storage Device. Advanced Energy Materials, 2018, 8, 1800058.	10.2	157
69	Isothermal calorimeter for measurements of time-dependent heat generation rate in individual supercapacitor electrodes. Journal of Power Sources, 2018, 374, 257-268.	4.0	40
70	Physical Interpretations of Nyquist Plots for EDLC Electrodes and Devices. Journal of Physical Chemistry C, 2018, 122, 194-206.	1.5	854
71	Synthesis and Properties of a Photopatternable Lithiumâ€lon Conducting Solid Electrolyte. Advanced Materials, 2018, 30, 1703772.	11.1	19
72	Growth Temperature and Electrochemical Performance in Vapor-Deposited Poly(3,4-ethylenedioxythiophene) Thin Films for High-Rate Electrochemical Energy Storage. ACS Applied Energy Materials, 2018, 1, 7093-7105.	2.5	22

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73	Physical Interpretations of Electrochemical Impedance Spectroscopy of Redox Active Electrodes for Electrical Energy Storage. Journal of Physical Chemistry C, 2018, 122, 24499-24511.	1.5	149
74	A Metal–Organic Framework with Tetrahedral Aluminate Sites as a Singleâ€lon Li + Solid Electrolyte. Angewandte Chemie, 2018, 130, 16925-16929.	1.6	8
75	A Metal–Organic Framework with Tetrahedral Aluminate Sites as a Single″on Li ⁺ Solid Electrolyte. Angewandte Chemie - International Edition, 2018, 57, 16683-16687.	7.2	65
76	Design and Mechanisms of Asymmetric Supercapacitors. Chemical Reviews, 2018, 118, 9233-9280.	23.0	2,379
77	Correlated Polyhedral Rotations in the Absence of Polarons during Electrochemical Insertion of Lithium in ReO ₃ . ACS Energy Letters, 2018, 3, 2513-2519.	8.8	30
78	Effect of surface hydroxyl groups on heat capacity of mesoporous silica. Applied Physics Letters, 2018, 112, .	1.5	11
79	Effects of Constituent Materials on Heat Generation in Individual EDLC Electrodes. Journal of the Electrochemical Society, 2018, 165, A1547-A1557.	1.3	26
80	Development of a Threeâ€Dimensional Bioengineering Technology to Generate Lung Tissue for Personalized Disease Modeling. Current Protocols in Stem Cell Biology, 2018, 46, e56.	3.0	14
81	Sulfide Solid Electrolytes for Lithium Battery Applications. Advanced Energy Materials, 2018, 8, 1800933.	10.2	407
82	Wafer-Scale Black Arsenic–Phosphorus Thin-Film Synthesis Validated with Density Functional Perturbation Theory Predictions. ACS Applied Nano Materials, 2018, 1, 4737-4745.	2.4	42
83	Tuning ligament shape in dealloyed nanoporous tin and the impact of nanoscale morphology on its applications in Na-ion alloy battery anodes. Physical Review Materials, 2018, 2, .	0.9	20
84	Porous Oneâ€Dimensional Nanomaterials: Design, Fabrication and Applications in Electrochemical Energy Storage. Advanced Materials, 2017, 29, 1602300.	11.1	615
85	Monolithic Flexible Supercapacitors Integrated into Single Sheets of Paper and Membrane via Vapor Printing. Advanced Materials, 2017, 29, 1606091.	11.1	55
86	Posttranslational modification of \hat{l}^2 -catenin is associated with pathogenic fibroblastic changes in bronchopulmonary dysplasia. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2017, 312, L186-L195.	1.3	32
87	Three-dimensional holey-graphene/niobia composite architectures for ultrahigh-rate energy storage. Science, 2017, 356, 599-604.	6.0	1,229
88	Tuning Porosity and Surface Area in Mesoporous Silicon for Application in Li-Ion Battery Electrodes. ACS Applied Materials & Samp; Interfaces, 2017, 9, 19063-19073.	4.0	48
89	Oxygen vacancies enhance pseudocapacitive charge storage properties of MoO3â^'x. Nature Materials, 2017, 16, 454-460.	13.3	1,632
90	Energy Storage: Porous Oneâ€Dimensional Nanomaterials: Design, Fabrication and Applications in Electrochemical Energy Storage (Adv. Mater. 20/2017). Advanced Materials, 2017, 29, .	11.1	5

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91	Conformal Lithium Fluoride Protection Layer on Three-Dimensional Lithium by Nonhazardous Gaseous Reagent Freon. Nano Letters, 2017, 17, 3731-3737.	4.5	377
92	Designing Pseudocapacitance for Nb ₂ O ₅ /Carbide-Derived Carbon Electrodes and Hybrid Devices. Langmuir, 2017, 33, 9407-9415.	1.6	67
93	Highâ€temperature structural stability of ceriaâ€based inverse opals. Journal of the American Ceramic Society, 2017, 100, 2659-2668.	1.9	4
94	Nanoporous Tin with a Granular Hierarchical Ligament Morphology as a Highly Stable Li-Ion Battery Anode. ACS Applied Materials & Samp; Interfaces, 2017, 9, 293-303.	4.0	60
95	Na ₂ Ti ₃ O ₇ Nanoplatelets and Nanosheets Derived from a Modified Exfoliation Process for Use as a High-Capacity Sodium-Ion Negative Electrode. ACS Applied Materials & Amp; Interfaces, 2017, 9, 1416-1425.	4.0	72
96	Patternable, Solution-Processed Ionogels for Thin-Film Lithium-Ion Electrolytes. Joule, 2017, 1, 344-358.	11.7	52
97	Microscale 2.5D Batteries. Journal of the Electrochemical Society, 2017, 164, A2500-A2503.	1.3	12
98	Polymer-modified halide perovskite films for efficient and stable planar heterojunction solar cells. Science Advances, 2017, 3, e1700106.	4.7	588
99	Electrochemical Characterization of Na-Ion Charge-Storage Properties for Nanostructured NaTi ₂ (PO ₄) ₃ as a Function of Crystalline Order. Journal of the Electrochemical Society, 2017, 164, A2124-A2130.	1.3	13
100	Lithium-Ion Insertion Properties of Solution-Exfoliated Germanane. ACS Nano, 2017, 11, 7995-8001.	7.3	63
101	High-rate capability of Na ₂ FePO ₄ F nanoparticles by enhancing surface carbon functionality for Na-ion batteries. Journal of Materials Chemistry A, 2017, 5, 18707-18715.	5.2	70
102	Pseudocapacitive Charge Storage in Thick Composite MoS ₂ Nanocrystalâ€Based Electrodes. Advanced Energy Materials, 2017, 7, 1601283.	10.2	230
103	Development of a Three-Dimensional Bioengineering Technology to Generate Lung Tissue for Personalized Disease Modeling. Stem Cells Translational Medicine, 2017, 6, 622-633.	1.6	127
104	iCVD Cyclic Polysiloxane and Polysilazane as Nanoscale Thin-Film Electrolyte: Synthesis and Properties. Macromolecular Rapid Communications, 2016, 37, 446-452.	2.0	28
105	Simulations and Interpretation of Three-Electrode Cyclic Voltammograms of Pseudocapacitive Electrodes. Electrochimica Acta, 2016, 211, 420-429.	2.6	40
106	Synthesis and Charge Storage Properties of Hierarchical Niobium Pentoxide/Carbon/Niobium Carbide (MXene) Hybrid Materials. Chemistry of Materials, 2016, 28, 3937-3943.	3.2	210
107	Mesoporous Li _{<i>x</i>} Mn ₂ O ₄ Thin Film Cathodes for Lithium-Ion Pseudocapacitors. ACS Nano, 2016, 10, 7572-7581.	7.3	247
108	Multidimensional materials and device architectures for future hybrid energy storage. Nature Communications, 2016, 7, 12647.	5.8	1,281

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109	Molybdenum Polysulfide Chalcogels as High-Capacity, Anion-Redox-Driven Electrode Materials for Li-Ion Batteries. Chemistry of Materials, 2016, 28, 8357-8365.	3.2	69
110	Fabrication, Testing, and Simulation of All-Solid-State Three-Dimensional Li-Ion Batteries. ACS Applied Materials & Samp; Interfaces, 2016, 8, 32385-32391.	4.0	99
111	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.	1.3	42
112	Mesoporous MoS ₂ as a Transition Metal Dichalcogenide Exhibiting Pseudocapacitive Li and Naâ€lon Charge Storage. Advanced Energy Materials, 2016, 6, 1501937.	10.2	395
113	Sol–gel encapsulated lithium polysulfide catholyte and its application in lithium–sulfur batteries. Materials Horizons, 2016, 3, 137-144.	6.4	18
114	Carbon-ionogel supercapacitors for integrated microelectronics. Nanotechnology, 2016, 27, 035204.	1.3	3
115	Gold-Coated M13 Bacteriophage as a Template for Glucose Oxidase Biofuel Cells with Direct Electron Transfer. ACS Nano, 2016, 10, 324-332.	7.3	54
116	Ensemble multivariate analysis to improve identification of articular cartilage disease in noisy Raman spectra. Journal of Biophotonics, 2015, 8, 555-566.	1.1	17
117	Nanoscale, conformal polysiloxane thin film electrolytes for three-dimensional battery architectures. Materials Horizons, 2015, 2, 309-314.	6.4	34
118	High Performance Pseudocapacitor Based on 2D Layered Metal Chalcogenide Nanocrystals. Nano Letters, 2015, 15, 1911-1917.	4.5	495
119	Protein Adsorption Alters Hydrophobic Surfaces Used for Suspension Culture of Pluripotent Stem Cells. Journal of Physical Chemistry Letters, 2015, 6, 388-393.	2.1	3
120	The Development of Pseudocapacitive Properties in Nanosized-MoO ₂ . Journal of the Electrochemical Society, 2015, 162, A5083-A5090.	1.3	170
121	A high-energy-density quasi-solid-state carbon nanotube electrochemical double-layer capacitor with ionogel electrolyte. Translational Materials Research, 2015, 2, 015001.	1.2	12
122	Three-dimensional Batteries. Materials and Energy, 2015, , 701-730.	2.5	0
123	A Group of Cyclic Siloxane and Silazane Polymer Films as Nanoscale Electrolytes for Microbattery Architectures. Macromolecules, 2015, 48, 5222-5229.	2.2	27
124	Opening the window for aqueous electrolytes. Science, 2015, 350, 918-918.	6.0	77
125	Synthesis and electrochemical properties of niobium pentoxide deposited on layered carbide-derived carbon. Journal of Power Sources, 2015, 274, 121-129.	4.0	66
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127	Naphthalene Diimide Based Materials with Adjustable Redox Potentials: Evaluation for Organic Lithium-Ion Batteries. Chemistry of Materials, 2014, 26, 7151-7157.	3.2	141
128	Where Do Batteries End and Supercapacitors Begin?. Science, 2014, 343, 1210-1211.	6.0	4,605
129	Silica sol–gel chemistry: creating materials and architectures for energy generation and storage. Journal of Sol-Gel Science and Technology, 2014, 70, 203-215.	1.1	16
130	Pseudocapacitive oxide materials for high-rate electrochemical energy storage. Energy and Environmental Science, 2014, 7, 1597.	15.6	4,223
131	Electrochemical Kinetics of Nanostructured Nb ₂ O ₅ Electrodes. Journal of the Electrochemical Society, 2014, 161, A718-A725.	1.3	235
132	Lithium-ion storage properties of titanium oxide nanosheets. Materials Horizons, 2014, 1, 219-223.	6.4	70
133	Nanostructured Pseudocapacitors Based on Atomic Layer Deposition of V ₂ O ₅ onto Conductive Nanocrystalâ€based Mesoporous ITO Scaffolds. Advanced Functional Materials, 2014, 24, 6717-6728.	7.8	76
134	Synthesis of ion conducting Li $<$ sub $>$ x $<$ /sub $>$ Al $<$ sub $>$ y $<$ /sub $>$ Si $<$ sub $>$ z $<$ /sub $>$ O thin films by atomic layer deposition. Journal of Materials Chemistry A, 2014, 2, 9566-9573.	5.2	68
135	3D Architectured Anodes for Lithium″on Microbatteries with Large Areal Capacity. Energy Technology, 2014, 2, 362-369.	1.8	37
136	Panoramic View of Electrochemical Pseudocapacitor and Organic Solar Cell Research in Molecularly Engineered Energy Materials (MEEM). Journal of Physical Chemistry C, 2014, 118, 19505-19523.	1.5	19
137	Low-potential lithium-ion reactivity of vanadium oxide aerogels. Electrochimica Acta, 2013, 88, 530-535.	2.6	34
138	Enhancing Pseudocapacitive Charge Storage in Polymer Templated Mesoporous Materials. Accounts of Chemical Research, 2013, 46, 1113-1124.	7.6	254
139	High-rate electrochemical energy storage through Li+ intercalation pseudocapacitance. Nature Materials, 2013, 12, 518-522.	13.3	4,021
140	A spatially and chemically defined platform for the uniform growth of human pluripotent stem cells. Materials Science and Engineering C, 2013, 33, 234-241.	3.8	5
141	High-Performance Sodium-Ion Pseudocapacitors Based on Hierarchically Porous Nanowire Composites. ACS Nano, 2012, 6, 4319-4327.	7.3	688
142	The Effect of Crystallinity on the Rapid Pseudocapacitive Response of Nb ₂ O ₅ . Advanced Energy Materials, 2012, 2, 141-148.	10.2	461
143	Protection of lithium metal surfaces using tetraethoxysilane. Journal of Materials Chemistry, 2011, 21, 1593-1599.	6.7	171
144	Three-dimensional electrodes and battery architectures. MRS Bulletin, 2011, 36, 523-531.	1.7	272

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145	Electrical Energy Storage for the Grid: A Battery of Choices. Science, 2011, 334, 928-935.	6.0	11,724
146	Next generation pseudocapacitor materials from sol–gel derived transition metal oxides. Journal of Sol-Gel Science and Technology, 2011, 57, 330-335.	1.1	55
147	Highâ€Performance Supercapacitors Based on Intertwined CNT/V ₂ O ₅ Nanowire Nanocomposites. Advanced Materials, 2011, 23, 791-795.	11.1	788
148	Highâ€Performance Supercapacitors Based on Hierarchically Porous Graphite Particles. Advanced Energy Materials, 2011, 1, 551-556.	10.2	194
149	Highâ€Performance Supercapacitors Based on Nanocomposites of Nb ₂ O ₅ Nanocrystals and Carbon Nanotubes. Advanced Energy Materials, 2011, 1, 1089-1093.	10.2	312
150	Characterization of gold nanoparticle binding to microtubule filaments. Materials Science and Engineering C, 2010, 30, 20-26.	3.8	59
151	Vanadium oxide aerogels: Nanostructured materials for enhanced energy storage. Comptes Rendus Chimie, 2010, 13, 130-141.	0.2	42
152	Ordered mesoporous α-MoO3 with iso-oriented nanocrystalline walls for thin-film pseudocapacitors. Nature Materials, 2010, 9, 146-151.	13.3	2,801
153	Synthesis and Thermoelectric Properties of Doped Yb ₁₄ MnSb _{11-x} Bi _x Zintls. Materials Research Society Symposia Proceedings, 2010, 1267, 1.	0.1	2
154	Pseudocapacitive Contributions to Charge Storage in Highly Ordered Mesoporous Group V Transition Metal Oxides with Iso-Oriented Layered Nanocrystalline Domains. Journal of the American Chemical Society, 2010, 132, 6982-6990.	6.6	320
155	Three-dimensional microbatteries for MEMS/NEMS technology. , 2010, , .		11
156	On the Correlation between Mechanical Flexibility, Nanoscale Structure, and Charge Storage in Periodic Mesoporous CeO ₂ Thin Films. ACS Nano, 2010, 4, 967-977.	7.3	127
157	Kinetics of Anode Reactions for a Yeastâ€Catalysed Microbial Fuel Cell. Fuel Cells, 2009, 9, 44-52.	1.5	51
158	Bio-hybrid materials for immunoassay-based sensing of cortisol. Journal of Sol-Gel Science and Technology, 2009, 50, 176-183.	1.1	7
159	Templated Nanocrystal-Based Porous TiO ₂ Films for Next-Generation Electrochemical Capacitors. Journal of the American Chemical Society, 2009, 131, 1802-1809.	6.6	887
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