

# Debra R Rolison

## List of Publications by Year in descending order

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177  
papers

15,833  
citations

28274

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15732

125  
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185  
all docs

185  
docs citations

185  
times ranked

15651  
citing authors

#	ARTICLE	IF	CITATIONS
1	Protons in Catalytic Architectures: Near (NMR) and Far (Impedance). Journal of the Electrochemical Society, 2022, 169, 036514.	2.9	0
2	NGenE 2021: Electrochemistry Is Everywhere. ACS Energy Letters, 2022, 7, 368-374.	17.4	6
3	Sodiation-Induced Electrochromism in Carbon Nanofoam "Paper Electrodes. Journal of the Electrochemical Society, 2022, 169, 060514.	2.9	2
4	(Invited) Distinguishing High-Rate Electrochemical Mechanisms Via Advanced Impedance Spectroscopy Analysis. ECS Meeting Abstracts, 2022, MA2022-01, 1875-1875.	0.0	0
5	(Invited) Sustainability, Safety, Scalability, Rechargeability, and Manufacturability Courtesy of Architected Zinc Anodes. ECS Meeting Abstracts, 2022, MA2022-01, 456-456.	0.0	0
6	Capacity and phase stability of metal-substituted $\text{Ni}(\text{OH})_2$ nanosheets in aqueous $\text{Ni-Zn}$ batteries. Materials Advances, 2021, 2, 3060-3074.	5.4	13
7	Quantifying an acceptable open-circuit corrosion current for aluminum "air batteries. Materials Advances, 2021, 2, 1595-1599.	5.4	5
8	Elucidating zinc-ion battery mechanisms in freestanding carbon electrode architectures decorated with nanocrystalline $\text{ZnMn}_2\text{O}_4$ . Materials Advances, 2021, 2, 2730-2738.	5.4	9
9	Designing Oxide Aerogels With Enhanced Sorptive and Degradative Activity for Acute Chemical Threats. Frontiers in Materials, 2021, 8, .	2.4	7
10	Enhancing Li-ion capacity and rate capability in cation-defective vanadium ferrite aerogels via aluminum substitution. RSC Advances, 2021, 11, 14495-14503.	3.6	1
11	Redox Cycling within Nanoparticle-Nucleated Protein Superstructures: Electron Transfer between Nanoparticulate Gold, Molecular Reductant, and Cytochrome c. Journal of Physical Chemistry B, 2021, 125, 1735-1745.	2.6	2
12	Pyrolytic Carbon Films with Tunable Electronic Structure and Surface Functionality: A Planar Standard for Electroanalysis of Energy-Relevant Reactions. ChemElectroChem, 2020, 7, 672-683.	3.4	1
13	Zirconia-Based Aerogels for Sorption and Degradation of Dimethyl Methylphosphonate. Industrial & Engineering Chemistry Research, 2020, 59, 19584-19592.	3.7	12
14	3D Architectures for Batteries and Electrodes. Advanced Energy Materials, 2020, 10, 2002457.	19.5	40
15	High-Performance Structural Batteries. Joule, 2020, 4, 2240-2243.	24.0	27
16	Projecting the Specific Energy of Rechargeable Zinc "Air Batteries. ACS Energy Letters, 2020, 5, 3405-3408.	17.4	34
17	Photocatalytic CO Oxidation over Nanoparticulate Au-Modified $\text{TiO}_2$ Aerogels: The Importance of Size and Intimacy. ACS Catalysis, 2020, 10, 14834-14846.	11.2	25
18	Power of Aerogel Platforms to Explore Mesoscale Transport in Catalysis. ACS Applied Materials & Interfaces, 2020, 12, 41277-41287.	8.0	13

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19	Stabilization of reduced copper on ceria aerogels for CO oxidation. <i>Nanoscale Advances</i> , 2020, 2, 4547-4556.	4.6	12
20	Electronic Metal-Support Interactions in the Activation of CO Oxidation over a Cu/TiO <sub>2</sub> Aerogel Catalyst. <i>Journal of Physical Chemistry C</i> , 2020, 124, 21491-21501.	3.1	21
21	Low-cost green synthesis of zinc sponge for rechargeable, sustainable batteries. <i>Sustainable Energy and Fuels</i> , 2020, 4, 3363-3369.	4.9	22
22	An Area Energy Standard to Validate Air-Breathing Electrodes for Rechargeable Zinc-Air Batteries. <i>Advanced Energy Materials</i> , 2020, 10, 2001287.	19.5	28
23	Mesoporous Copper Nanoparticle/TiO <sub>2</sub> Aerogels for Room-Temperature Hydrolytic Decomposition of the Chemical Warfare Simulant Dimethyl Methylphosphonate. <i>ACS Applied Nano Materials</i> , 2020, 3, 3503-3512.	5.0	21
24	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
25	Fabricating architected zinc electrodes with unprecedented volumetric capacity in rechargeable alkaline cells. <i>Energy Storage Materials</i> , 2020, 27, 370-376.	18.0	32
26	Sustainable Electrocatalytic Architectures Enable Rechargeable Zinc-Air Batteries with Low Voltage Hysteresis. <i>ACS Applied Energy Materials</i> , 2020, 3, 10485-10494.	5.1	3
27	Zinc-Sponge Battery Electrodes that Suppress Dendrites. <i>Journal of Visualized Experiments</i> , 2020, , .	0.3	1
28	Deciphering charge-storage mechanisms in 3D MnOx@carbon electrode nanoarchitectures for rechargeable zinc-ion cells. <i>MRS Communications</i> , 2019, 9, 99-106.	1.8	8
29	Carbon nanofoam paper enables high-rate and high-capacity Na-ion storage. <i>Energy Storage Materials</i> , 2019, 21, 481-486.	18.0	15
30	Low-temperature CO oxidation at persistent low-valent Cu nanoparticles on TiO <sub>2</sub> aerogels. <i>Applied Catalysis B: Environmental</i> , 2019, 252, 205-213.	20.2	47
31	Robust 3D Zn Sponges Enable High-Power, Energy-Dense Alkaline Batteries. <i>ACS Applied Energy Materials</i> , 2019, 2, 212-216.	5.1	69
32	(Keynote) Architectural Re-Design of Zinc Anodes Physically Thwarts Dendrite Formation with Zinc Batteries Now Rechargeable, What's Next?. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
33	(Invited) Carbon Fiber-Paper-Supported Carbon Nanofoams As Free-Standing Electrode Architectures for Reversible Sodium-Ion Storage. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
34	(Invited) The Intersection of Battery and Capacitor Function in Nanostructured Manganese Oxides for Zinc-Ion Cells: Insights from 2D Interfaces to 3D Architectures. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
35	(Keynote) Effect of Architecturally Expressed Electrodes and Catalysts on Energy Storage/Conversion in Aqueous Electrolytes. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
36	(Invited) Electrochemical Zn-Ion Storage at Nanostructured Manganese Oxides: Mechanistic Insights from 2D Interfaces to Advanced 3D Electrode Architectures. <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0

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37	Opportunities for 3D Zinc Anode Architectures in Aqueous Batteries. ECS Meeting Abstracts, 2019, , .	0.0	0
38	Combining battery-like and pseudocapacitive charge storage in 3D MnO <sub>x</sub> @carbon electrode architectures for zinc-ion cells. Sustainable Energy and Fuels, 2018, 2, 626-636.	4.9	81
39	Deconvolving double-layer, pseudocapacitance, and battery-like charge-storage mechanisms in nanoscale LiMn <sub>2</sub> O <sub>4</sub> at 3D carbon architectures. Electrochimica Acta, 2018, 275, 225-235.	5.2	78
40	Trapping a Ru <sub>2</sub> O <sub>3</sub> Corundum-like Structure at Ultrathin, Disordered RuO <sub>2</sub> Nanoskins Expressed in 3D. Journal of Physical Chemistry C, 2018, 122, 28895-28900.	3.1	8
41	Translating Materials-Level Performance into Device-Relevant Metrics for Zinc-Based Batteries. Joule, 2018, 2, 2519-2527.	24.0	134
42	Editors' Choice "Electrocatalyzed Oxygen Reduction at Manganese Oxide Nanoarchitectures: From Electroanalytical Characterization to Device-Relevant Performance in Composite Electrodes. Journal of the Electrochemical Society, 2018, 165, H777-H783.	2.9	7
43	(Invited) (More) Uniform Control of Oxidative Dissolution, Complexation, and Electrodeposition Using 3D Wiring of Aperiodic Zinc Sponge Anodes in Rechargeable Alkaline Batteries. ECS Meeting Abstracts, 2018, , .	0.0	0
44	(Invited) Deconvolution of Double-Layer, Pseudocapacitance, and Battery-like Contributions to Charge Storage in MnO <sub>x</sub> @Carbon Electrode Architectures and Interfaces. ECS Meeting Abstracts, 2018, , .	0.0	0
45	(Keynote) Integrating Catalytic and Transport Functions within Multiscale Architectures. ECS Meeting Abstracts, 2018, MA2018-01, 1843-1843.	0.0	0
46	Static and Time-Resolved Terahertz Measurements of Photoconductivity in Solution-Deposited Ruthenium Dioxide Nanofilms. Journal of Physical Chemistry C, 2017, 121, 4037-4044.	3.1	17
47	Rechargeable nickel "3D zinc batteries: An energy-dense, safer alternative to lithium-ion. Science, 2017, 356, 415-418.	12.6	1,015
48	Rewriting Electron-Transfer Kinetics at Pyrolytic Carbon Electrodes Decorated with Nanometric Ruthenium Oxide. Langmuir, 2017, 33, 9416-9425.	3.5	5
49	Electroanalytical Assessment of the Effect of Ni:Fe Stoichiometry and Architectural Expression on the Bifunctional Activity of Nanoscale Ni <sub>y</sub> Fe <sub>1-y</sub> O <sub>x</sub> . Langmuir, 2017, 33, 9390-9397.	3.5	11
50	Competitive Oxygen Evolution in Acid Electrolyte Catalyzed at Technologically Relevant Electrodes Painted with Nanoscale RuO <sub>2</sub> . ACS Applied Materials & Interfaces, 2017, 9, 2387-2395.	8.0	48
51	Preface to the Fundamental Interfacial Science for Energy Applications Special Issue. Langmuir, 2017, 33, 9245-9245.	3.5	1
52	Plasmonic Aerogels as a Three-Dimensional Nanoscale Platform for Solar Fuel Photocatalysis. Langmuir, 2017, 33, 9444-9454.	3.5	33
53	Oxidation-stable plasmonic copper nanoparticles in photocatalytic TiO <sub>2</sub> nanoarchitectures. Nanoscale, 2017, 9, 11720-11729.	5.6	76
54	Transient Optical and Terahertz Spectroscopy of Nanoscale Films of RuO <sub>2</sub> . Plasmonics, 2017, 12, 743-750.	3.4	6

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55	Cytochrome c Stabilization and Immobilization in Aerogels. <i>Methods in Molecular Biology</i> , 2017, 1504, 149-163.	0.9	2
56	Rechargeable Zn-Air Batteries Enabled By Zn Sponge Anodes and Bi(tri?)Functional Cathodes. <i>ECS Meeting Abstracts</i> , 2017, , .	0.0	1
57	From Designing and Characterizing Multifunctional Nanoarchitectures to Commercializing Zinc Sponge-Based Alkaline Batteries That Refuse to Launch Dendrites. <i>ECS Meeting Abstracts</i> , 2017, , .	0.0	0
58	(Invited) Capabilities and Opportunities for Next-Generation Ag-3D Zn Batteries. <i>ECS Meeting Abstracts</i> , 2017, , .	0.0	0
59	Electroless Deposition of Disordered RuO <sub>2</sub> Nanoskins: An Example from the Fourth Quadrant of Electronic Materials. <i>ECS Meeting Abstracts</i> , 2017, , .	0.0	0
60	Interfacial Phenomena at the Junction of Conductive Carbon with Pseudocapacitive Metal Oxides and Polymers: Implications for Electrochemical Capacitors. <i>ECS Meeting Abstracts</i> , 2017, , .	0.0	0
61	Aberration-corrected Scanning Transmission Electron Microscopy and Spectroscopy of Nonprecious Metal Nanoparticles in Titania Aerogels. <i>Microscopy and Microanalysis</i> , 2016, 22, 324-325.	0.4	0
62	CAD/CAM-designed 3D-printed electroanalytical cell for the evaluation of nanostructured gas-diffusion electrodes. <i>Nanotechnology</i> , 2016, 27, 174002.	2.6	7
63	Aerogel Architectures Boost Oxygen Evolution Performance of NiFe <sub>2</sub> O <sub>4</sub> Spinel to Activity Levels Commensurate with Nickel-Rich Oxides. <i>ChemElectroChem</i> , 2016, 3, 1369-1375.	3.4	20
64	Crystal engineering in 3D: converting nanoscale lamellar manganese oxide to cubic spinel while affixed to a carbon architecture. <i>CrystEngComm</i> , 2016, 18, 6035-6048.	2.6	9
65	Minimizing Shape Change at Zn Sponge Anodes in Rechargeable Ni-Zn Cells: Impact of Electrolyte Formulation. <i>Journal of the Electrochemical Society</i> , 2016, 163, A351-A355.	2.9	78
66	Routes to 3D conformal solid-state dielectric polymers: electrodeposition versus initiated chemical vapor deposition. <i>Materials Horizons</i> , 2015, 2, 502-508.	12.2	16
67	Correlating Changes in Electron Lifetime and Mobility on Photocatalytic Activity at Network-Modified TiO <sub>2</sub> Aerogels. <i>Journal of Physical Chemistry C</i> , 2015, 119, 17529-17538.	3.1	42
68	Defective by design: vanadium-substituted iron oxide nanoarchitectures as cation-insertion hosts for electrochemical charge storage. <i>Journal of Materials Chemistry A</i> , 2015, 3, 12059-12068.	10.3	17
69	Wiring zinc in three dimensions re-writes battery performance—dendrite-free cycling. <i>Energy and Environmental Science</i> , 2014, 7, 1117-1124.	30.8	350
70	Retaining the 3D Framework of Zinc Sponge Anodes upon Deep Discharge in Zn-Air Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2014, 6, 19471-19476.	8.0	116
71	Plasmonic enhancement of visible-light water splitting with Au-TiO <sub>2</sub> composite aerogels. <i>Nanoscale</i> , 2013, 5, 8073.	5.6	130
72	Carbon Nanofoam-Based Cathodes for Li-O <sub>2</sub> Batteries: Correlation of Pore-Solid Architecture and Electrochemical Performance. <i>Journal of the Electrochemical Society</i> , 2013, 160, A1510-A1516.	2.9	40

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73	Designing high-performance electrochemical energy-storage nanoarchitectures to balance rate and capacity. <i>Nanoscale</i> , 2013, 5, 1649.	5.6	24
74	Something from Nothing: Enhancing Electrochemical Charge Storage with Cation Vacancies. <i>Accounts of Chemical Research</i> , 2013, 46, 1181-1191.	15.6	86
75	Redox Deposition of Nanoscale Metal Oxides on Carbon for Next-Generation Electrochemical Capacitors. <i>Accounts of Chemical Research</i> , 2013, 46, 1062-1074.	15.6	172
76	Achieving electrochemical capacitor functionality from nanoscale LiMn <sub>2</sub> O <sub>4</sub> coatings on 3-D carbon nanoarchitectures. <i>Journal of Materials Chemistry A</i> , 2013, 1, 2431.	10.3	24
77	Ultraviolet and Visible Photochemistry of Methanol at 3D Mesoporous Networks: TiO <sub>2</sub> and Au@TiO <sub>2</sub> . <i>Journal of Physical Chemistry C</i> , 2013, 117, 15035-15049.	3.1	49
78	Dual-Function Air Cathode for Metal-Air Batteries with Pulse-Power Capability. <i>Advanced Energy Materials</i> , 2013, 3, 584-588.	19.5	8
79	Carbon Ductwork with Nanometric Walls and Micron-to-Submicron Inner Diameters. <i>ECS Journal of Solid State Science and Technology</i> , 2013, 2, M3078-M3083.	1.8	3
80	Direct methanol oxidation at low overpotentials using Pt nanoparticles electrodeposited at ultrathin conductive RuO <sub>2</sub> nanoskins. <i>Journal of Materials Chemistry</i> , 2012, 22, 5197.	6.7	36
81	3D-Addressable Redox: Modifying Porous Carbon Electrodes with Ferrocenated 2 nm Gold Nanoparticles. <i>Journal of Physical Chemistry C</i> , 2012, 116, 9283-9289.	3.1	11
82	Redesigning air cathodes for metal-air batteries using MnO <sub>x</sub> -functionalized carbon nanofoam architectures. <i>Journal of Power Sources</i> , 2012, 207, 191-198.	7.8	39
83	Electrochemical Li-ion storage in defect spinel iron oxides: the critical role of cation vacancies. <i>Energy and Environmental Science</i> , 2011, 4, 1495.	30.8	80
84	Cytochrome c Stabilization and Immobilization in Aerogels. <i>Methods in Molecular Biology</i> , 2011, 679, 193-205.	0.9	2
85	Architectural integration of the components necessary for electrical energy storage on the nanoscale and in 3D. <i>Nanoscale</i> , 2011, 3, 1731.	5.6	38
86	3D architectures are not just for microbatteries anymore. , 2011, , .		1
87	The right kind of interior for multifunctional electrode architectures: carbon nanofoam papers with aperiodic submicrometre pore networks interconnected in 3D. <i>Energy and Environmental Science</i> , 2011, 4, 1913.	30.8	111
88	Electrochemical energy storage to power the 21st century. <i>MRS Bulletin</i> , 2011, 36, 486-493.	3.5	139
89	Carbon Nanofoam-Based Cathodes for Li-O <sub>2</sub> Batteries: Correlation of Pore-Solid Architecture and Electrochemical Performance. <i>ECS Transactions</i> , 2011, 35, 33-42.	0.5	11
90	Effect of temperature and atmosphere on the conductivity and electrochemical capacitance of single-unit-thick ruthenium dioxide. <i>Journal of Electroanalytical Chemistry</i> , 2010, 644, 155-163.	3.8	22

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91	Multifunctional carbon nano-architectures as designer platforms for electrochemical power sources. Proceedings of SPIE, 2010, , .	0.8	4
92	Controlling the Sensitivity, Specificity, and Time Signature of Sensors through Architectural Design on the Nanoscale. ECS Transactions, 2009, 19, 171-179.	0.5	3
93	Multifunctional 3D nanoarchitectures for energy storage and conversion. Chemical Society Reviews, 2009, 38, 226-252.	38.1	744
94	Multifunctional MnO <sub>2</sub> Carbon Nanoarchitectures Exhibit Battery and Capacitor Characteristics in Alkaline Electrolytes. Journal of Physical Chemistry C, 2009, 113, 17595-17598.	3.1	70
95	Nanoscale design to enable the revolution in renewable energy. Energy and Environmental Science, 2009, 2, 559.	30.8	348
96	Making the Most of a Scarce Platinum-Group Metal: Conductive Ruthenia Nanoskins on Insulating Silica Paper. Nano Letters, 2009, 9, 2316-2321.	9.1	28
97	Self-Limiting Electropolymerization of o-Aminophenol on Ultraporous Carbon Nanoarchitectures for Electrochemical Capacitor Applications. ECS Transactions, 2008, 6, 159-164.	0.5	5
98	A simple synthesis of catalytically active, high surface area ceria aerogels. Journal of Non-Crystalline Solids, 2008, 354, 5509-5514.	3.1	32
99	Nickel Ferrite Aerogels with Monodisperse Nanoscale Building Blocks—The Importance of Processing Temperature and Atmosphere. ACS Nano, 2008, 2, 784-790.	14.6	32
100	Electroless Deposition of Nanoscale MnO <sub>2</sub> on Ultraporous Carbon Nanoarchitectures: Correlation of Evolving Pore-Solid Structure and Electrochemical Performance. Journal of the Electrochemical Society, 2008, 155, A246.	2.9	93
101	Rethinking Multifunction in Three Dimensions for Miniaturizing Electrical Energy Storage. Electrochemical Society Interface, 2008, 17, 49-53.	0.4	40
102	The importance of combining disorder with order for Li-ion insertion into cryogenically prepared nanoscopic ruthenia. Journal of Materials Chemistry, 2007, 17, 1292.	6.7	23
103	Architectural Design, Interior Decoration, and Three-Dimensional Plumbing en Route to Multifunctional Nanoarchitectures. Accounts of Chemical Research, 2007, 40, 854-862.	15.6	117
104	Incorporation of Homogeneous, Nanoscale MnO <sub>2</sub> within Ultraporous Carbon Structures via Self-Limiting Electroless Deposition: Implications for Electrochemical Capacitors. Nano Letters, 2007, 7, 281-286.	9.1	565
105	Dye-sensitized titania aerogels as photovoltaic electrodes for electrochemical solar cells. Solar Energy Materials and Solar Cells, 2007, 91, 1066-1074.	6.2	35
106	Sol-Gel-Derived Ceria Nanoarchitectures: Synthesis, Characterization, and Electrical Properties. Chemistry of Materials, 2006, 18, 50-58.	6.7	219
107	Selective Vapor Deposition of Hydrous RuO <sub>2</sub> Thin Films. Journal of the Electrochemical Society, 2005, 152, C158.	2.9	19
108	Direct Electrodeposition of Nanoscale Solid Polymer Electrolytes via Electropolymerization of Sulfonated Phenols. Electrochemical and Solid-State Letters, 2005, 8, A579.	2.2	22

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109	Using an Oxide Nanoarchitecture To Make or Break a Proton Wire. <i>Analytical Chemistry</i> , 2005, 77, 7924-7932.	6.5	31
110	Three-Dimensional Battery Architectures. <i>ChemInform</i> , 2004, 35, no.	0.0	746
111	Energy and the Environment: Perpetual Dilemma or Nanotechnology-Enabled Opportunity?. <i>ACS Symposium Series</i> , 2004, , 324-330.	0.5	0
112	Silver-Colloid-Nucleated Cytochrome Superstructures Encapsulated in Silica Nanoarchitectures. <i>Langmuir</i> , 2004, 20, 9276-9281.	3.5	27
113	Nanoscale Polymer Electrolytes: Ultrathin Electrodeposited Poly(Phenylene Oxide) with Solid-State Ionic Conductivity. <i>Journal of Physical Chemistry B</i> , 2004, 108, 13079-13087.	2.6	65
114	Carbon aerogels with ultrathin, electroactive poly(o-methoxyaniline) coatings for high-performance electrochemical capacitors. <i>Journal of Non-Crystalline Solids</i> , 2004, 350, 97-106.	3.1	29
115	Improving the efficiency of titania aerogel-based photovoltaic electrodes by electrochemically grafting isopropyl moieties on the titania surface. <i>Journal of Non-Crystalline Solids</i> , 2004, 350, 107-112.	3.1	17
116	Synthesis and characterization of Mn-FeOx aerogels with magnetic properties. <i>Journal of Non-Crystalline Solids</i> , 2004, 350, 182-188.	3.1	25
117	Charge insertion into hybrid nanoarchitectures: mesoporous manganese oxide coated with ultrathin poly(phenylene oxide). <i>Journal of Non-Crystalline Solids</i> , 2004, 350, 73-79.	3.1	42
118	Silica aerogels with enhanced durability, 30-nm mean pore-size, and improved immersibility in liquids. <i>Journal of Non-Crystalline Solids</i> , 2004, 350, 244-252.	3.1	44
119	The effect of particle size and protein content on nanoparticle-gold-nucleated cytochrome c superstructures encapsulated in silica nanoarchitectures. <i>Journal of Non-Crystalline Solids</i> , 2004, 350, 31-38.	3.1	24
120	Sulfur-functionalized carbon aerogels: a new approach for loading high-surface-area electrode nanoarchitectures with precious metal catalysts. <i>Journal of Non-Crystalline Solids</i> , 2004, 350, 80-87.	3.1	56
121	Nanocrystalline Iron Oxide Aerogels as Mesoporous Magnetic Architectures. <i>Journal of the American Chemical Society</i> , 2004, 126, 16879-16889.	13.7	164
122	Three-Dimensional Battery Architectures. <i>Chemical Reviews</i> , 2004, 104, 4463-4492.	47.7	1,146
123	3-D Microbatteries. <i>Electrochemistry Communications</i> , 2003, 5, 120-123.	4.7	163
124	Charge Transfer on the Nanoscale: Current Status. <i>Journal of Physical Chemistry B</i> , 2003, 107, 6668-6697.	2.6	946
125	Silica Nanoarchitectures Incorporating Self-Organized Protein Superstructures with Gas-Phase Bioactivity. <i>Nano Letters</i> , 2003, 3, 1463-1467.	9.1	84
126	Catalytic Nanoarchitectures--the Importance of Nothing and the Unimportance of Periodicity. <i>Science</i> , 2003, 299, 1698-1701.	12.6	985



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127	Ultrathin, Protective Coatings of Poly(o-phenylenediamine) as Electrochemical Proton Gates: Making Mesoporous MnO <sub>2</sub> Nanoarchitectures Stable in Acid Electrolytes. <i>Nano Letters</i> , 2003, 3, 1155-1161.	9.1	108
128	Sonochemically induced decomposition of energetic materials in aqueous media. <i>Chemosphere</i> , 2003, 50, 1107-1114.	8.2	8
129	Spectroelectrochemical Characterization of Nanostructured, Mesoporous Manganese Oxide in Aqueous Electrolytes. <i>Journal of the Electrochemical Society</i> , 2003, 150, A1161.	2.9	89
130	Transmission Electron Microscopy Studies of the Nanoscale Structure and Chemistry of Pt <sub>50</sub> Ru <sub>50</sub> Electrocatalysts. <i>Microscopy and Microanalysis</i> , 2002, 8, 50-57.	0.4	25
131	Local Atomic Structure and Conduction Mechanism of Nanocrystalline Hydrous RuO <sub>2</sub> from X-ray Scattering. <i>Journal of Physical Chemistry B</i> , 2002, 106, 12677-12683.	2.6	275
132	Using Three Dimensions in Catalytic Mesoporous Nanoarchitectures. <i>Nano Letters</i> , 2002, 2, 545-549.	9.1	147
133	Using Nanoscopic Hosts, Magnetic Guests, and Field Alignment to Create Anisotropic Composite Gels and Aerogels. <i>Nano Letters</i> , 2002, 2, 63-67.	9.1	32
134	Enhancing the Activity of Fuel-cell Reactions by Designing Three-dimensional Nanostructured Architectures: Catalyst-modified Carbon-Silica Composite Aerogels. <i>Nano Letters</i> , 2002, 2, 235-240.	9.1	200
135	Improved lithium capacity of defective V <sub>2</sub> O <sub>5</sub> materials. <i>Solid State Ionics</i> , 2002, 152-153, 99-104.	2.7	112
136	Electrically conductive oxide aerogels: new materials in electrochemistry. <i>Journal of Materials Chemistry</i> , 2001, 11, 963-980.	6.7	340
137	Electrochemically induced surface modification of titanols in a 'nanoglued' titania aerogel-silica aerogel composite film. <i>Journal of Non-Crystalline Solids</i> , 2001, 285, 13-21.	3.1	12
138	Modifying nanoscale silica with itself: a method to control surface properties of silica aerogels independently of bulk structure. <i>Journal of Non-Crystalline Solids</i> , 2001, 285, 29-36.	3.1	24
139	Controlling the pore-solid architecture of mesoporous, high surface area manganese oxides with the birnessite structure. <i>Journal of Non-Crystalline Solids</i> , 2001, 285, 288-294.	3.1	40
140	Spectroelectrochemical Investigations of Cation-Insertion Reactions at Sol-Gel-Derived Nanostructured, Mesoporous Thin Films of Manganese Oxide. <i>Journal of Physical Chemistry B</i> , 2001, 105, 8712-8717.	2.6	64
141	Nanoscale Structural and Chemical Segregation in Pt <sub>50</sub> Ru <sub>50</sub> Electrocatalysts. <i>Microscopy and Microanalysis</i> , 2001, 7, 1112-1113.	0.4	0
142	Electronic connection to the interior of a mesoporous insulator with nanowires of crystalline RuO <sub>2</sub> . <i>Nature</i> , 2000, 406, 169-172.	27.8	150
143	How To Make Electrocatalysts More Active for Direct Methanol Oxidation Avoid PtRu Bimetallic Alloys!. <i>Journal of Physical Chemistry B</i> , 2000, 104, 9772-9776.	2.6	333
144	A Title IX Challenge. <i>Chemical &amp; Engineering News</i> , 2000, 78, 5.	0.1	0

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145	Electrocatalysis and Charge-Transfer Reactions at Redox-Modified Zeolites. <i>Accounts of Chemical Research</i> , 2000, 33, 737-744.	15.6	83
146	Composite aerogels for sensing applications. , 1999, 3790, 38.		6
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