

# Sarah H Tolbert

## List of Publications by Year in descending order

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149  
papers

21,600  
citations

26567

56  
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9311

143  
g-index

151  
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151  
docs citations

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times ranked

21159  
citing authors

#	ARTICLE	IF	CITATIONS
1	Transparent silica aerogel slabs synthesized from nanoparticle colloidal suspensions at near ambient conditions on omniphobic liquid substrates. <i>Journal of Colloid and Interface Science</i> , 2022, 606, 884-897.	5.0	6
2	Elastic and plastic mechanical properties of nanoparticle-based silica aerogels and xerogels. <i>Microporous and Mesoporous Materials</i> , 2022, 330, 111569.	2.2	15
3	Thermodynamics-driven interfacial engineering of alloy-type anode materials. <i>Cell Reports Physical Science</i> , 2022, 3, 100694.	2.8	4
4	Enhancing the Ionic Conductivity of Poly(3,4-propylenedioxythiophenes) with Oligoether Side Chains for Use as Conductive Cathode Binders in Lithium-Ion Batteries. <i>Chemistry of Materials</i> , 2022, 34, 2672-2686.	3.2	23
5	Tuning Exchange Coupling in a New Family of Nanocrystal-Based Granular Multiferroics Using an Applied Electric Field. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 16505-16514.	4.0	0
6	Promoting Reversibility of Multielectron Redox in Alkali-Rich Sulfide Cathodes through Cryomilling. <i>Chemistry of Materials</i> , 2022, 34, 3236-3245.	3.2	1
7	Tuning the Porous Structure in PMMA-Templated Mesoporous MoO <sub>2</sub> for Pseudocapacitive Li-Ion Electrodes. <i>Journal of the Electrochemical Society</i> , 2022, 169, 040545.	1.3	4
8	Hardening Effects in Superhard Transition-Metal Borides. <i>Accounts of Materials Research</i> , 2022, 3, 100-109.	5.9	20
9	Mesoporous MoO <sub>2</sub> thin films for high rate Li <sup>+</sup> storage: Effect of crystallinity and porous structure. <i>Solid State Sciences</i> , 2022, 129, 106890.	1.5	3
10	Strain transfer in porous multiferroic composites of CoFe <sub>2</sub> O <sub>4</sub> and PbZr <sub>1-x</sub> Ti <sub>x</sub> O <sub>3</sub> . <i>Applied Physics Letters</i> , 2022, 120, 192902.	1.5	4
11	Simulating the non-monotonic strain response of nanoporous multiferroic composites under electric field control. <i>Applied Physics Letters</i> , 2022, 120, .	1.5	3
12	Molecular Dynamics Study of the Thermodynamics of Integer Charge Transfer vs Charge-Transfer Complex Formation in Doped Conjugated Polymers. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 26988-27001.	4.0	11
13	Enhanced Hardening Effects on Molybdenum-Doped WB <sub>2</sub> and WB <sub>2</sub> -SiC/B <sub>4</sub> C Composites. <i>Chemistry of Materials</i> , 2022, 34, 5461-5470.	3.2	2
14	Room-Temperature Electrochemical Fluoride (De)insertion into CsMnFeF <sub>6</sub> . <i>ACS Energy Letters</i> , 2022, 7, 2340-2348.	8.8	3
15	Driving Force and Optical Signatures of Bipolaron Formation in Chemically Doped Conjugated Polymers. <i>Advanced Materials</i> , 2021, 33, e2000228.	11.1	21
16	Seeded-Growth Experiment Demonstrating Size- and Shape-Dependence on Gold Nanoparticle-Light Interactions. <i>Journal of Chemical Education</i> , 2021, 98, 546-552.	1.1	10
17	Room temperature rectification in tapered-channel thermal diodes through nanoscale confinement-induced liquid-solid phase change. <i>Journal of Applied Physics</i> , 2021, 129, 075103.	1.1	1
18	Controlling the Formation of Charge Transfer Complexes in Chemically Doped Semiconducting Polymers. <i>Chemistry of Materials</i> , 2021, 33, 2343-2356.	3.2	40

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19	Covalent Bonding-Based Adhesion Method for Rigidly Coupling Metal Nanocrystals to Metal and Metal Oxide Surfaces. ACS Applied Nano Materials, 2021, 4, 3426-3433.	2.4	2
20	Quantitatively Designing Porous Copper Current Collectors for Lithium Metal Anodes. ACS Applied Energy Materials, 2021, 4, 6454-6465.	2.5	17
21	Li <sup>+</sup> and Oxidant Addition To Control Ionic and Electronic Conduction in Ionic Liquid-Functionalized Conjugated Polymers. Chemistry of Materials, 2021, 33, 6464-6474.	3.2	13
22	Understanding the Effects of Confinement and Crystallinity on HJ-Coupling in Conjugated Polymers via Alignment and Isolation in an Oriented Mesoporous Silica Host. Journal of Physical Chemistry C, 2021, 125, 23240-23249.	1.5	4
23	Quantitatively Designing Porous Copper Current Collectors for Lithium Metal Anodes. ECS Meeting Abstracts, 2021, MA2021-02, 721-721.	0.0	0
24	Comparing methods for measuring thickness, refractive index, and porosity of mesoporous thin films. Microporous and Mesoporous Materials, 2020, 291, 109677.	2.2	27
25	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
26	Understanding Stabilization in Nanoporous Intermetallic Alloy Anodes for Li-Ion Batteries Using <i>in Operando</i> Transmission X-ray Microscopy. ACS Nano, 2020, 14, 14820-14830.	7.3	9
27	High-Capacity Li <sup>+</sup> Storage through Multielectron Redox in the Fast-Charging Wadsley-Roth Phase (W <sub>0.2</sub> V <sub>0.8</sub> ) <sub>3</sub> O <sub>7</sub> . Chemistry of Materials, 2020, 32, 9415-9424.	3.2	15
28	A Perspective on interfacial engineering of lithium metal anodes and beyond. Applied Physics Letters, 2020, 117, .	1.5	18
29	A fundamental look at electrocatalytic sulfur reduction reaction. Nature Catalysis, 2020, 3, 762-770.	16.1	455
30	Fjord-Edge Graphene Nanoribbons with Site-Specific Nitrogen Substitution. Journal of the American Chemical Society, 2020, 142, 18093-18102.	6.6	24
31	Examining the Role of Atomic Scale Heterogeneity on the Thermal Conductivity of Transparent, Thermally Insulating, Mesoporous Silica-Titania Thin Films. Journal of Physical Chemistry C, 2020, 124, 27442-27452.	1.5	4
32	Fast-Charging Cathodes from Polymer-Templated Mesoporous LiVPO <sub>4</sub> F. ACS Applied Materials & Interfaces, 2020, 12, 33775-33784.	4.0	14
33	Controlling Thermal Conductivity in Mesoporous Silica Films Using Pore Size and Nanoscale Architecture. Journal of Physical Chemistry Letters, 2020, 11, 3731-3737.	2.1	8
34	Tunable Dopants with Intrinsic Counterion Separation Reveal the Effects of Electron Affinity on Dopant Intercalation and Free Carrier Production in Sequentially Doped Conjugated Polymer Films. Advanced Functional Materials, 2020, 30, 2001800.	7.8	53
35	Engineering mesoporous silica for superior optical and thermal properties. MRS Energy & Sustainability, 2020, 7, 1.	1.3	11
36	Nanostructured NCA As a Fast Charging High Rate Cathode Material for Lithium-Ion Batteries. ECS Meeting Abstracts, 2020, MA2020-01, 233-233.	0.0	0

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37	Cryogenic Milling Method to Fabricate Nanostructured Anodes. ACS Applied Energy Materials, 2020, 3, 11285-11292.	2.5	2
38	Dopant-Induced Ordering of Amorphous Regions in Regiorandom P3HT. Journal of Physical Chemistry Letters, 2019, 10, 4929-4934.	2.1	63
39	Synthesis and High-Pressure Mechanical Properties of Superhard Rhenium/Tungsten Diboride Nanocrystals. ACS Nano, 2019, 13, 10036-10048.	7.3	12
40	Thick Transparent Nanoparticle-Based Mesoporous Silica Monolithic Slabs for Thermally Insulating Window Materials. ACS Applied Nano Materials, 2019, 2, 4547-4555.	2.4	16
41	Evaporation vs Solution Sequential Doping of Conjugated Polymers: F <sub>4</sub> TCNQ Doping of Micrometer-Thick P3HT Films for Thermoelectrics. Journal of Physical Chemistry C, 2019, 123, 22711-22724.	1.5	55
42	Exploring the Effect of Porous Structure on Thermal Conductivity in Templated Mesoporous Silica Films. Journal of Physical Chemistry C, 2019, 123, 21721-21730.	1.5	19
43	Dodecaborane-Based Dopants Designed to Shield Anion Electrostatics Lead to Increased Carrier Mobility in a Doped Conjugated Polymer. Advanced Materials, 2019, 31, e1805647.	11.1	90
44	Poly(3-alkylthiophene)- <i>block</i> -poly(3-alkylselenophene)s: Conjugated Diblock Co-polymers with Atypical Self-Assembly Behavior. ACS Applied Materials & Interfaces, 2019, 11, 7174-7183.	4.0	25
45	Understanding the mechanism of hardness enhancement in tantalum-substituted tungsten monoboride solid solutions. Journal of Applied Physics, 2019, 125, .	1.1	9
46	Nanoscience and Nanotechnology at UCLA. ACS Nano, 2019, 13, 6127-6129.	7.3	1
47	Scalable Synthesis of Ultrathin Mn <sub>3</sub> N <sub>2</sub> Exhibiting Room-Temperature Antiferromagnetism. Advanced Functional Materials, 2019, 29, 1809001.	7.8	67
48	Radial X-Ray Diffraction Study of Superhard Early Transition Metal Dodecaborides under High Pressure. Advanced Functional Materials, 2019, 29, 1900293.	7.8	12
49	Suppression of Electrochemically Driven Phase Transitions in Nanostructured MoS <sub>2</sub> Pseudocapacitors Probed Using <i>Operando</i> X-ray Diffraction. ACS Nano, 2019, 13, 1223-1231.	7.3	36
50	Designing Conjugated Polymers for Molecular Doping: The Roles of Crystallinity, Swelling, and Conductivity in Sequentially-Doped Selenophene-Based Copolymers. Chemistry of Materials, 2019, 31, 73-82.	3.2	56
51	(Invited) Using Nanoporous and Nanostructured Materials to Improve Fast Charging and High Capacity Battery Materials. ECS Meeting Abstracts, 2019, MA2019-03, 87-87.	0.0	1
52	Understanding How Bonding Controls Strength Anisotropy in Hard Materials by Comparing the High-Pressure Behavior of Orthorhombic and Tetragonal Tungsten Monoboride. Journal of Physical Chemistry C, 2018, 122, 5647-5656.	1.5	10
53	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
54	Enhanced magnetoelectric coupling in a composite multiferroic system via interposing a thin film polymer. AIP Advances, 2018, 8, .	0.6	14

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55	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
56	Enhanced Cycling Stability of Macroporous Bulk Antimony-Based Sodium-Ion Battery Anodes Enabled through Active/Inactive Composites. Advanced Energy Materials, 2018, 8, 1801781.	10.2	51
57	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
58	A Metal-Organic Framework with Tetrahedral Aluminate Sites as a Single-Ion Li + Solid Electrolyte. Angewandte Chemie, 2018, 130, 16925-16929.	1.6	8
59	A Metal-Organic Framework with Tetrahedral Aluminate Sites as a Single-Ion Li <sup>+</sup> Solid Electrolyte. Angewandte Chemie - International Edition, 2018, 57, 16683-16687.	7.2	65
60	Effect of surface hydroxyl groups on heat capacity of mesoporous silica. Applied Physics Letters, 2018, 112, .	1.5	11
61	Low-Vapor-Pressure Solvent Additives Function as Polymer Swelling Agents in Bulk Heterojunction Organic Photovoltaics. Journal of Physical Chemistry C, 2018, 122, 16574-16588.	1.5	17
62	Processing Methods for Obtaining a Face-On Crystalline Domain Orientation in Conjugated Polymer-Based Photovoltaics. Journal of Physical Chemistry C, 2018, 122, 15078-15089.	1.5	14
63	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
64	Increasing the Capacity of Nano-Structured LiMn <sub>2</sub> O <sub>4</sub> Pseudocapacitors by Selective Crystallization of Dissolution Resistant Surface Facets. ECS Meeting Abstracts, 2018, , .	0.0	0
65	(Invited) Nanoporous Materials for Fast and Reversible Electrochemical Energy Storage. ECS Meeting Abstracts, 2018, , .	0.0	0
66	Using X-ray Microscopy To Understand How Nanoporous Materials Can Be Used To Reduce the Large Volume Change in Alloy Anodes. Nano Letters, 2017, 17, 870-877.	4.5	48
67	Enhancement of voltage-controlled magnetic anisotropy through precise control of Mg insertion thickness at CoFeB MgO interface. Applied Physics Letters, 2017, 110, .	1.5	92
68	Tuning Porosity and Surface Area in Mesoporous Silicon for Application in Li-Ion Battery Electrodes. ACS Applied Materials & Interfaces, 2017, 9, 19063-19073.	4.0	48
69	Oxygen vacancies enhance pseudocapacitive charge storage properties of MoO <sub>3</sub> ·x. Nature Materials, 2017, 16, 454-460.	13.3	1,632
70	Nanoporous Tin with a Granular Hierarchical Ligament Morphology as a Highly Stable Li-Ion Battery Anode. ACS Applied Materials & Interfaces, 2017, 9, 293-303.	4.0	60
71	The Effects of Crystallinity on Charge Transport and the Structure of Sequentially Processed F <sub>4</sub> TCNQ-Doped Conjugated Polymer Films. Advanced Functional Materials, 2017, 27, 1702654.	7.8	190
72	Using Nanoscale Domain Size To Control Charge Storage Kinetics in Pseudocapacitive Nanoporous LiMn <sub>2</sub> O <sub>4</sub> Powders. ACS Energy Letters, 2017, 2, 2293-2298.	8.8	51

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73	Lithium-Ion Insertion Properties of Solution-Exfoliated Germanane. <i>ACS Nano</i> , 2017, 11, 7995-8001.	7.3	63
74	Dzyaloshinskii-Moriya Interaction across an Antiferromagnet-Ferromagnet Interface. <i>Physical Review Letters</i> , 2017, 119, 027202.	2.9	75
75	Pseudocapacitive Charge Storage in Thick Composite MoS <sub>2</sub> Nanocrystal-Based Electrodes. <i>Advanced Energy Materials</i> , 2017, 7, 1601283.	10.2	230
76	Superhard Monoborides: Hardness Enhancement through Alloying in W <sub>1-x</sub> Ta <sub>x</sub> B. <i>Advanced Materials</i> , 2016, 28, 6993-6998.	11.1	75
77	Tuning magnetoelectric coupling using porosity in multiferroic nanocomposites of ALD-grown Pb(Zr,Ti)O <sub>3</sub> and templated mesoporous CoFe <sub>2</sub> O <sub>4</sub> . <i>Applied Physics Letters</i> , 2016, 109, .	1.5	17
78	Structure and Conductivity of Semiconducting Polymer Hydrogels. <i>Journal of Physical Chemistry B</i> , 2016, 120, 6215-6224.	1.2	14
79	Superhard Rhenium/Tungsten Diboride Solid Solutions. <i>Journal of the American Chemical Society</i> , 2016, 138, 14398-14408.	6.6	48
80	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.	7.3	247
81	Understanding How Polymer Properties Control OPV Device Performance: Regioregularity, Swelling, and Morphology Optimization Using Random Poly(3-butylthiophene-co-3-octylthiophene) Polymers. <i>Journal of Physical Chemistry C</i> , 2016, 120, 22115-22125.	1.5	14
82	Mesoporous MoS <sub>2</sub> as a Transition Metal Dichalcogenide Exhibiting Pseudocapacitive Li and Na <sup>+</sup> Charge Storage. <i>Advanced Energy Materials</i> , 2016, 6, 1501937.	10.2	395
83	Enhancing the Hardness of Superhard Transition-Metal Borides: Molybdenum-Doped Tungsten Tetraboride. <i>Chemistry of Materials</i> , 2016, 28, 632-637.	3.2	60
84	Beyond PCBM: methoxylated 1,4-bisbenzyl[60]fullerene adducts for efficient organic solar cells. <i>Journal of Materials Chemistry A</i> , 2016, 4, 416-424.	5.2	34
85	Metallic muscles and beyond: nanofoams at work. <i>Journal of Materials Science</i> , 2016, 51, 615-634.	1.7	33
86	7.7% Efficient All-Polymer Solar Cells. <i>Advanced Materials</i> , 2015, 27, 4578-4584.	11.1	414
87	Sequential Processing for Organic Photovoltaics: Design Rules for Morphology Control by Tailored Semi-Orthogonal Solvent Blends. <i>Advanced Energy Materials</i> , 2015, 5, 1402020.	10.2	82
88	High Performance Pseudocapacitor Based on 2D Layered Metal Chalcogenide Nanocrystals. <i>Nano Letters</i> , 2015, 15, 1911-1917.	4.5	495
89	Mesoporous bismuth ferrite with amplified magnetoelectric coupling and electric field-induced ferrimagnetism. <i>Nature Communications</i> , 2015, 6, 6562.	5.8	57
90	Long-lived photoinduced polaron formation in conjugated polyelectrolyte-fullerene assemblies. <i>Science</i> , 2015, 348, 1340-1343.	6.0	53

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91	The Development of Pseudocapacitive Properties in Nanosized-MoO <sub>2</sub> . Journal of the Electrochemical Society, 2015, 162, A5083-A5090.	1.3	170
92	Structure of superhard tungsten tetraboride: A missing link between MB <sub>12</sub> higher borides. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3223-3228.	3.3	82
93	Extensive Penetration of Evaporated Electrode Metals into Fullerene Films: Intercalated Metal Nanostructures and Influence on Device Architecture. ACS Applied Materials & Interfaces, 2015, 7, 25247-25258.	4.0	40
94	Exploring hardness enhancement in superhard tungsten tetraboride-based solid solutions using radial X-ray diffraction. Applied Physics Letters, 2015, 107, .	1.5	20
95	Overcoming Film Quality Issues for Conjugated Polymers Doped with F <sub>4</sub> TCNQ by Solution Sequential Processing: Hall Effect, Structural, and Optical Measurements. Journal of Physical Chemistry Letters, 2015, 6, 4786-4793.	2.1	175
96	Raman scattering from superhard rhenium diboride under high pressure. Applied Physics Letters, 2014, 104, .	1.5	4
97	Lattice stress states of superhard tungsten tetraboride from radial x-ray diffraction under nonhydrostatic compression. Physical Review B, 2014, 90, .	1.1	34
98	Organization and controlled coupling between soft and hard magnetic nanocrystals using mesoporous materials. APL Materials, 2014, 2, 113309.	2.2	4
99	Directed Self-Assembly as a Route to Ferromagnetic and Superparamagnetic Nanoparticle Arrays. Advanced Functional Materials, 2014, 24, 6956-6962.	7.8	11
100	Understanding Local and Macroscopic Electron Mobilities in the Fullerene Network of Conjugated Polymer-based Solar Cells: Time-Resolved Microwave Conductivity and Theory. Advanced Functional Materials, 2014, 24, 784-792.	7.8	31
101	Nanostructured Pseudocapacitors Based on Atomic Layer Deposition of V <sub>2</sub> O <sub>5</sub> onto Conductive Nanocrystal-based Mesoporous ITO Scaffolds. Advanced Functional Materials, 2014, 24, 6717-6728.	7.8	76
102	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
103	Crystallinity Effects in Sequentially Processed and Blend-Cast Bulk-Heterojunction Polymer/Fullerene Photovoltaics. Journal of Physical Chemistry C, 2014, 118, 18424-18435.	1.5	46
104	Comparing Matched Polymer:Fullerene Solar Cells Made by Solution-Sequential Processing and Traditional Blend Casting: Nanoscale Structure and Device Performance. Journal of Physical Chemistry C, 2014, 118, 17413-17425.	1.5	50
105	Magnetolectric Control of Superparamagnetism. Nano Letters, 2013, 13, 884-888.	4.5	66
106	Enhancing Pseudocapacitive Charge Storage in Polymer Templated Mesoporous Materials. Accounts of Chemical Research, 2013, 46, 1113-1124.	7.6	254
107	High-rate electrochemical energy storage through Li <sup>+</sup> intercalation pseudocapacitance. Nature Materials, 2013, 12, 518-522.	13.3	4,021
108	Directing anisotropic charge transport of layered organic-inorganic hybrid perovskite semiconductors in porous templates. Journal of Materials Chemistry C, 2013, 1, 1423.	2.7	15

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109	Exploring the high-pressure behavior of superhard tungsten tetraboride. <i>Physical Review B</i> , 2012, 85, .	1.1	90
110	Lattice strain of osmium diboride under high pressure and nonhydrostatic stress. <i>Journal of Applied Physics</i> , 2012, 112, .	1.1	7
111	Toward Inexpensive Superhard Materials: Tungsten Tetraboride-Based Solid Solutions. <i>Journal of the American Chemical Society</i> , 2012, 134, 20660-20668.	6.6	105
112	Thermal Conductivity of Ordered Mesoporous Nanocrystalline Silicon Thin Films Made from Magnesium Reduction of Polymer-Templated Silica. <i>Journal of Physical Chemistry C</i> , 2012, 116, 12926-12933.	1.5	34
113	General Method for the Synthesis of Hierarchical Nanocrystal-Based Mesoporous Materials. <i>ACS Nano</i> , 2012, 6, 6386-6399.	7.3	85
114	Thermoelastic properties of ReB <sub>2</sub> at high pressures and temperatures and comparison with Pt, Os, and Re. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	7
115	Tungsten tetraboride, an inexpensive superhard material. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2011, 108, 10958-10962.	3.3	299
116	Thermal Conductivity of Highly-Ordered Mesoporous Titania Thin Films from 30 to 320 K. <i>Journal of Physical Chemistry C</i> , 2011, 115, 14606-14614.	1.5	35
117	Using Pentaarylfullerenes to Understand Network Formation in Conjugated Polymer-Based Bulk-Heterojunction Solar Cells. <i>Journal of Physical Chemistry C</i> , 2011, 115, 22563-22571.	1.5	22
118	Next generation pseudocapacitor materials from sol-gel derived transition metal oxides. <i>Journal of Sol-Gel Science and Technology</i> , 2011, 57, 330-335.	1.1	55
119	Ordered Mesoporous Fe <sub>2</sub> O <sub>3</sub> (Hematite) Thin Film Electrodes for Application in High Rate Rechargeable Lithium Batteries. <i>Small</i> , 2011, 7, 407-414.	5.2	127
120	Cr metal thin film memory. <i>Journal of Applied Physics</i> , 2011, 110, .	1.1	12
121	On the Correlation between Nanoscale Structure and Magnetic Properties in Ordered Mesoporous Cobalt Ferrite (CoFe <sub>2</sub> O <sub>4</sub> ) Thin Films. <i>Nano Letters</i> , 2010, 10, 2982-2988.	4.5	101
122	Ordered mesoporous MoO <sub>3</sub> with iso-oriented nanocrystalline walls for thin-film pseudocapacitors. <i>Nature Materials</i> , 2010, 9, 146-151.	13.3	2,801
123	Thermal Conductivity of Ordered Mesoporous Titania Films Made from Nanocrystalline Building Blocks and Sol-Gel Reagents. <i>Journal of Physical Chemistry C</i> , 2010, 114, 12451-12458.	1.5	43
124	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.	6.6	320
125	Three-dimensional microbatteries for MEMS/NEMS technology. , 2010, , .		11
126	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.	7.3	127



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127	Advancements in the Search for Superhard Ultra-Incompressible Metal Borides. <i>Advanced Functional Materials</i> , 2009, 19, 3519-3533.	7.8	313
128	Improving the Reproducibility of P3HT:PCBM Solar Cells by Controlling the PCBM/Cathode Interface. <i>Journal of Physical Chemistry C</i> , 2009, 113, 18978-18982.	1.5	150
129	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.	6.6	887
130	Thermal conductivity of cubic and hexagonal mesoporous silica thin films. <i>Journal of Applied Physics</i> , 2009, 106, .	1.1	66
131	Incompressibility and Hardness of Solid Solution Transition Metal Diborides: Os <sub>1-x</sub> Ru <sub>x</sub> B <sub>2</sub> . <i>Chemistry of Materials</i> , 2009, 21, 1915-1921.	3.2	70
132	Reappraising the Need for Bulk Heterojunctions in Polymer-Fullerene Photovoltaics: The Role of Carrier Transport in All-Solution-Processed P3HT/PCBM Bilayer Solar Cells. <i>Journal of Physical Chemistry C</i> , 2009, 113, 20050-20060.	1.5	303
133	Room to Improve Conjugated Polymer-Based Solar Cells: Understanding How Thermal Annealing Affects the Fullerene Component of a Bulk Heterojunction Photovoltaic Device. <i>Journal of Physical Chemistry C</i> , 2008, 112, 18711-18716.	1.5	94
134	Ordered Mesoporous Silicon through Magnesium Reduction of Polymer Templated Silica Thin Films. <i>Nano Letters</i> , 2008, 8, 3075-3079.	4.5	140
135	Correlation between hardness and elastic moduli of the ultraincompressible transition metal diborides RuB <sub>2</sub> , OsB <sub>2</sub> , and ReB <sub>2</sub> . <i>Applied Physics Letters</i> , 2008, 92, .	1.5	183
136	Synthesis of Ultra-Incompressible Superhard Rhenium Diboride at Ambient Pressure. <i>Science</i> , 2007, 316, 436-439.	6.0	735
137	Controlling optical gain in semiconducting polymers with nanoscale chain positioning and alignment. <i>Nature Nanotechnology</i> , 2007, 2, 647-652.	15.6	102
138	Synthesis and characterization of tin telluride inorganic/organic composite materials with nanoscale periodicity through solution-phase self-assembly: a new class of composite materials based on Zintl cluster self-oligomerization. <i>Research on Chemical Intermediates</i> , 2007, 33, 111-124.	1.3	7
139	Osmium Diboride, An Ultra-Incompressible, Hard Material. <i>Journal of the American Chemical Society</i> , 2005, 127, 7264-7265.	6.6	439
140	Controlling Optical Properties and Interchain Interactions in Semiconducting Polymers by Encapsulation in Periodic Nanoporous Silicas with Different Pore Sizes. <i>Journal of Physical Chemistry B</i> , 2005, 109, 17879-17886.	1.2	49
141	MATERIALS SCIENCE: Designing Superhard Materials. <i>Science</i> , 2005, 308, 1268-1269.	6.0	657
142	Highly Polarized Luminescence from Optical Quality Films of a Semiconducting Polymer Aligned within Oriented Mesoporous Silica. <i>Journal of the American Chemical Society</i> , 2004, 126, 4476-4477.	6.6	173
143	Tungsten Nitride Inverse Opals by Atomic Layer Deposition. <i>Nano Letters</i> , 2003, 3, 1293-1297.	4.5	97
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