Sarah H Tolbert

List of Publications by Year
in descending order

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149 papers	21,600 citations	26567 56 h-index	9311 143 g-index
151 all docs	151 docs citations	151 times ranked	21159 citing authors

#	Article	IF	Citations
1	High-rate electrochemical energy storage through Li+ intercalation pseudocapacitance. Nature Materials, 2013, 12, 518-522.	13.3	4,021
2	Ordered mesoporous Î±-MoO3 with iso-oriented nanocrystalline walls for thin-film pseudocapacitors. Nature Materials, 2010, 9, 146-151.	13.3	2,801
3	Oxygen vacancies enhance pseudocapacitive charge storage properties of MoO3âˆ’x. Nature Materials, 2017, 16, 454-460.	13.3	1,632
4	Templated Nanocrystal-Based Porous TiO₂ Films for Next-Generation Electrochemical Capacitors. Journal of the American Chemical Society, 2009, 131, 1802-1809.	6.6	887
5	Synthesis of Ultra-Incompressible Superhard Rhenium Diboride at Ambient Pressure. Science, 2007, 316, 436-439.	6.0	735
6	MATERIALS SCIENCE: Designing Superhard Materials. Science, 2005, 308, 1268-1269.	6.0	657
7	Control of Energy Transfer in Oriented Conjugated Polymer-Mesoporous Silica Composites. Science, 2000, 288, 652-656.	6.0	642
8	High Performance Pseudocapacitor Based on 2D Layered Metal Chalcogenide Nanocrystals. Nano Letters, 2015, 15, 1911-1917.	4.5	495
9	A fundamental look at electrocatalytic sulfur reduction reaction. Nature Catalysis, 2020, 3, 762-770.	16.1	455
10	Osmium Diboride, An Ultra-Incompressible, Hard Material. Journal of the American Chemical Society, 2005, 127, 7264-7265.	6.6	439
11	7.7% Efficient Allâ€Polymer Solar Cells. Advanced Materials, 2015, 27, 4578-4584.	11.1	414
12	Mesoporous MoS₂ as a Transition Metal Dichalcogenide Exhibiting Pseudocapacitive Li and Naâ€Ion Charge Storage. Advanced Energy Materials, 2016, 6, 1501937.	10.2	395
13	The wurtzite to rock salt structural transformation in CdSe nanocrystals under high pressure. Journal of Chemical Physics, 1995, 102, 4642-4656.	1.2	356
14	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
15	Advancements in the Search for Superhard Ultraâ€Incompressible Metal Borides. Advanced Functional Materials, 2009, 19, 3519-3533.	7.8	313
16	Reappraising the Need for Bulk Heterojunctions in Polymerâˆ’Fullerene Photovoltaics: The Role of Carrier Transport in All-Solution-Processed P3HT/PCBM Bilayer Solar Cells. Journal of Physical Chemistry C, 2009, 113, 20050-20060.	1.5	303
17	Tungsten tetraboride, an inexpensive superhard material. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 10958-10962.	3.3	299
18	Enhancing Pseudocapacitive Charge Storage in Polymer Templated Mesoporous Materials. Accounts of Chemical Research, 2013, 46, 1113-1124.	7.6	254

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19	Mesoporous Li_xMn₂O₄Thin Film Cathodes for Lithium-Ion Pseudocapacitors. ACS Nano, 2016, 10, 7572-7581.	7.3	247
20	Pseudocapacitive Charge Storage in Thick Composite MoS₂ Nanocrystalâ€Based Electrodes. Advanced Energy Materials, 2017, 7, 1601283.	10.2	230
21	Pressure-Induced Structural Transformations in Si Nanocrystals: Surface and Shape Effects. Physical Review Letters, 1996, 76, 4384-4387.	2.9	221
22	The Effects of Crystallinity on Charge Transport and the Structure of Sequentially Processed F₄TCNQâ€Doped Conjugated Polymer Films. Advanced Functional Materials, 2017, 27, 1702654.	7.8	190
23	Correlation between hardness and elastic moduli of the ultraincompressible transition metal diborides RuB2, OsB2, and ReB2. Applied Physics Letters, 2008, 92, .	1.5	183
24	Overcoming Film Quality Issues for Conjugated Polymers Doped with F₄TCNQ by Solution Sequential Processing: Hall Effect, Structural, and Optical Measurements. Journal of Physical Chemistry Letters, 2015, 6, 4786-4793.	2.1	175
25	Highly Polarized Luminescence from Optical Quality Films of a Semiconducting Polymer Aligned within Oriented Mesoporous Silica. Journal of the American Chemical Society, 2004, 126, 4476-4477.	6.6	173
26	The Development of Pseudocapacitive Properties in Nanosized-MoO₂. Journal of the Electrochemical Society, 2015, 162, A5083-A5090.	1.3	170
27	Improving the Reproducibility of P3HT:PCBM Solar Cells by Controlling the PCBM/Cathode Interface. Journal of Physical Chemistry C, 2009, 113, 18978-18982.	1.5	150
28	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
29	Ordered Mesoporous Silicon through Magnesium Reduction of Polymer Templated Silica Thin Films. Nano Letters, 2008, 8, 3075-3079.	4.5	140
30	On the Correlation between Mechanical Flexibility, Nanoscale Structure, and Charge Storage in Periodic Mesoporous CeO₂ Thin Films. ACS Nano, 2010, 4, 967-977.	7.3	127
31	Ordered Mesoporous Î±â€Fe₂O₃ (Hematite) Thinâ€Film Electrodes for Application in High Rate Rechargeable Lithium Batteries. Small, 2011, 7, 407-414.	5.2	127
32	Toward Inexpensive Superhard Materials: Tungsten Tetraboride-Based Solid Solutions. Journal of the American Chemical Society, 2012, 134, 20660-20668.	6.6	105
33	Controlling optical gain in semiconducting polymers with nanoscale chain positioning and alignment. Nature Nanotechnology, 2007, 2, 647-652.	15.6	102
34	On the Correlation between Nanoscale Structure and Magnetic Properties in Ordered Mesoporous Cobalt Ferrite (CoFe₂O₄) Thin Films. Nano Letters, 2010, 10, 2982-2988.	4.5	101
35	Tungsten Nitride Inverse Opals by Atomic Layer Deposition. Nano Letters, 2003, 3, 1293-1297.	4.5	97
36	Room to Improve Conjugated Polymer-Based Solar Cells: Understanding How Thermal Annealing Affects the Fullerene Component of a Bulk Heterojunction Photovoltaic Device. Journal of Physical Chemistry C, 2008, 112, 18711-18716.	1.5	94

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37	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
38	Exploring the high-pressure behavior of superhard tungsten tetraboride. Physical Review B, 2012, 85, .	1.1	90
39	Dodecaboraneâ€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
40	Interchain and intrachain exciton transport in conjugated polymers: ultrafast studies of energy migration in aligned MEH-PPV/mesoporous silica composites. Synthetic Metals, 2001, 116, 35-40.	2.1	87
41	General Method for the Synthesis of Hierarchical Nanocrystal-Based Mesoporous Materials. ACS Nano, 2012, 6, 6386-6399.	7.3	85
42	Sequential Processing for Organic Photovoltaics: Design Rules for Morphology Control by Tailored Semiâ€Orthogonal Solvent Blends. Advanced Energy Materials, 2015, 5, 1402020.	10.2	82
43	Structure of superhard tungsten tetraboride: A missing link between MB ₂ and MB ₁₂ higher borides. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 3223-3228.	3.3	82
44	Nanostructured Pseudocapacitors Based on Atomic Layer Deposition of V₂O₅ onto Conductive Nanocrystalâ€based Mesoporous ITO Scaffolds. Advanced Functional Materials, 2014, 24, 6717-6728.	7.8	76
45	Superhard Monoborides: Hardness Enhancement through Alloying in W_{1â^'}_xTa_xB. Advanced Materials, 2016, 28, 6993-6998.	11.1	75
46	Dzyaloshinskii-Moriya Interaction across an Antiferromagnet-Ferromagnet Interface. Physical Review Letters, 2017, 119, 027202.	2.9	75
47	Incompressibility and Hardness of Solid Solution Transition Metal Diborides: Os1â^'xRuxB2. Chemistry of Materials, 2009, 21, 1915-1921.	3.2	70
48	Scalable Synthesis of Ultrathin Mn₃N₂ Exhibiting Roomâ€Temperature Antiferromagnetism. Advanced Functional Materials, 2019, 29, 1809001.	7.8	67
49	Thermal conductivity of cubic and hexagonal mesoporous silica thin films. Journal of Applied Physics, 2009, 106, .	1.1	66
50	Magnetoelectric Control of Superparamagnetism. Nano Letters, 2013, 13, 884-888.	4.5	66
51	A Metalâ€“Organic Framework with Tetrahedral Aluminate Sites as a Singleâ€Ion Li⁺ Solid Electrolyte. Angewandte Chemie - International Edition, 2018, 57, 16683-16687.	7.2	65
52	Lithium-Ion Insertion Properties of Solution-Exfoliated Germanane. ACS Nano, 2017, 11, 7995-8001.	7.3	63
53	Dopant-Induced Ordering of Amorphous Regions in Regiorandom P3HT. Journal of Physical Chemistry Letters, 2019, 10, 4929-4934.	2.1	63
54	Enhancing the Hardness of Superhard Transition-Metal Borides: Molybdenum-Doped Tungsten Tetraboride. Chemistry of Materials, 2016, 28, 632-637.	3.2	60

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55	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
56	Control of Inorganic Layer Thickness in Self-Assembled Iron Oxide/Surfactant Composites. Journal of the American Chemical Society, 1997, 119, 8652-8661.	6.6	57
57	Mesoporous bismuth ferrite with amplified magnetoelectric coupling and electric field-induced ferrimagnetism. Nature Communications, 2015, 6, 6562.	5.8	57
58	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
59	Next generation pseudocapacitor materials from solâ€“gel derived transition metal oxides. Journal of Sol-Gel Science and Technology, 2011, 57, 330-335.	1.1	55
60	Evaporation vs Solution Sequential Doping of Conjugated Polymers: F₄TCNQ Doping of Micrometer-Thick P3HT Films for Thermoelectrics. Journal of Physical Chemistry C, 2019, 123, 22711-22724.	1.5	55
61	Long-lived photoinduced polaron formation in conjugated polyelectrolyte-fullerene assemblies. Science, 2015, 348, 1340-1343.	6.0	53
62	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
63	Using Nanoscale Domain Size To Control Charge Storage Kinetics in Pseudocapacitive Nanoporous LiMn₂O₄Powders. ACS Energy Letters, 2017, 2, 2293-2298.	8.8	51
64	Enhanced Cycling Stability of Macroporous Bulk Antimonyâ€Based Sodiumâ€Ion Battery Anodes Enabled through Active/Inactive Composites. Advanced Energy Materials, 2018, 8, 1801781.	10.2	51
65	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
66	Controlling Optical Properties and Interchain Interactions in Semiconducting Polymers by Encapsulation in Periodic Nanoporous Silicas with Different Pore Sizes. Journal of Physical Chemistry B, 2005, 109, 17879-17886.	1.2	49
67	Superhard Rhenium/Tungsten Diboride Solid Solutions. Journal of the American Chemical Society, 2016, 138, 14398-14408.	6.6	48
68	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
69	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
70	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
71	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
72	Thermal Conductivity of Ordered Mesoporous Titania Films Made from Nanocrystalline Building Blocks and Solâ"Gel Reagents. Journal of Physical Chemistry C, 2010, 114, 12451-12458.	1.5	43

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73	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
74	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
75	Controlling the Formation of Charge Transfer Complexes in Chemically Doped Semiconducting Polymers. Chemistry of Materials, 2021, 33, 2343-2356.	3.2	40
76	Suppression of Electrochemically Driven Phase Transitions in Nanostructured MoS₂ Pseudocapacitors Probed Using Operando X-ray Diffraction. ACS Nano, 2019, 13, 1223-1231.	7.3	36
77	Thermal Conductivity of Highly-Ordered Mesoporous Titania Thin Films from 30 to 320 K. Journal of Physical Chemistry C, 2011, 115, 14606-14614.	1.5	35
78	Thermal Conductivity of Ordered Mesoporous Nanocrystalline Silicon Thin Films Made from Magnesium Reduction of Polymer-Templated Silica. Journal of Physical Chemistry C, 2012, 116, 12926-12933.	1.5	34
79	Lattice stress states of superhard tungsten tetraboride from radial x-ray diffraction under nonhydrostatic compression. Physical Review B, 2014, 90, .	1.1	34
80	Beyond PCBM: methoxylated 1,4-bisbenzyl[60]fullerene adducts for efficient organic solar cells. Journal of Materials Chemistry A, 2016, 4, 416-424.	5.2	34
81	Metallic muscles and beyond: nanofoams at work. Journal of Materials Science, 2016, 51, 615-634.	1.7	33
82	Understanding Local and Macroscopic Electron Mobilities in the Fullerene Network of Conjugated Polymerâ€based Solar Cells: Timeâ€Resolved Microwave Conductivity and Theory. Advanced Functional Materials, 2014, 24, 784-792.	7.8	31
83	From a Colloidal Crystal to an Interconnected Colloidal Array:Â A Mechanism for a Spontaneous Rearrangement. Langmuir, 2003, 19, 7852-7861.	1.6	30
84	Comparing methods for measuring thickness, refractive index, and porosity of mesoporous thin films. Microporous and Mesoporous Materials, 2020, 291, 109677.	2.2	27
85	Poly(3-alkylthiophene)-block-poly(3-alkylselenophene)s: Conjugated Diblock Co-polymers with Atypical Self-Assembly Behavior. ACS Applied Materials & Interfaces, 2019, 11, 7174-7183.	4.0	25
86	Fjord-Edge Graphene Nanoribbons with Site-Specific Nitrogen Substitution. Journal of the American Chemical Society, 2020, 142, 18093-18102.	6.6	24
87	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
88	Using Pentaarylfullerenes to Understand Network Formation in Conjugated Polymer-Based Bulk-Heterojunction Solar Cells. Journal of Physical Chemistry C, 2011, 115, 22563-22571.	1.5	22
89	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
90	Driving Force and Optical Signatures of Bipolaron Formation in Chemically Doped Conjugated Polymers. Advanced Materials, 2021, 33, e2000228.	11.1	21

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91	Exploring hardness enhancement in superhard tungsten tetraboride-based solid solutions using radial X-ray diffraction. Applied Physics Letters, 2015, 107, .	1.5	20
92	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
93	Hardening Effects in Superhard Transition-Metal Borides. Accounts of Materials Research, 2022, 3, 100-109.	5.9	20
94	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
95	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
96	A Perspective on interfacial engineering of lithium metal anodes and beyond. Applied Physics Letters, 2020, 117, .	1.5	18
97	Tuning magnetoelectric coupling using porosity in multiferroic nanocomposites of ALD-grown Pb(Zr,Ti)O3 and templated mesoporous CoFe2O4. Applied Physics Letters, 2016, 109, .	1.5	17
98	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
99	Quantitatively Designing Porous Copper Current Collectors for Lithium Metal Anodes. ACS Applied Energy Materials, 2021, 4, 6454-6465.	2.5	17
100	Thick Transparent Nanoparticle-Based Mesoporous Silica Monolithic Slabs for Thermally Insulating Window Materials. ACS Applied Nano Materials, 2019, 2, 4547-4555.	2.4	16
101	Directing anisotropic charge transport of layered organicâ€“inorganic hybrid perovskite semiconductors in porous templates. Journal of Materials Chemistry C, 2013, 1, 1423.	2.7	15
102	High-Capacity Li⁺ Storage through Multielectron Redox in the Fast-Charging Wadsleyâ€“Roth Phase (W_{0.2}V_{0.8})₃O₇. Chemistry of Materials, 2020, 32, 9415-9424.	3.2	15
103	Elastic and plastic mechanical properties of nanoparticle-based silica aerogels and xerogels. Microporous and Mesoporous Materials, 2022, 330, 111569.	2.2	15
104	Structure and Conductivity of Semiconducting Polymer Hydrogels. Journal of Physical Chemistry B, 2016, 120, 6215-6224.	1.2	14
105	Understanding How Polymer Properties Control OPV Device Performance: Regioregularity, Swelling, and Morphology Optimization Using Random Poly(3-butylthiophene-co-3-octylthiophene) Polymers. Journal of Physical Chemistry C, 2016, 120, 22115-22125.	1.5	14
106	Enhanced magnetoelectric coupling in a composite multiferroic system via interposing a thin film polymer. AIP Advances, 2018, 8, .	0.6	14
107	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
108	Fast-Charging Cathodes from Polymer-Templated Mesoporous LiVPO₄F. ACS Applied Materials & Interfaces, 2020, 12, 33775-33784.	4.0	14

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109	Li+ 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
110	Cr metal thin film memory. Journal of Applied Physics, 2011, 110, .	1.1	12
111	Synthesis and High-Pressure Mechanical Properties of Superhard Rhenium/Tungsten Diboride Nanocrystals. ACS Nano, 2019, 13, 10036-10048.	7.3	12
112	Radial Xâ€Ray Diffraction Study of Superhard Early Transition Metal Dodecaborides under High Pressure. Advanced Functional Materials, 2019, 29, 1900293.	7.8	12
113	Three-dimensional microbatteries for MEMS/NEMS technology. , 2010, , .		11
114	Directed Selfâ€Assembly as a Route to Ferromagnetic and Superparamagnetic Nanoparticle Arrays. Advanced Functional Materials, 2014, 24, 6956-6962.	7.8	11
115	Effect of surface hydroxyl groups on heat capacity of mesoporous silica. Applied Physics Letters, 2018, 112, .	1.5	11
116	Engineering mesoporous silica for superior optical and thermal properties. MRS Energy & Sustainability, 2020, 7, 1.	1.3	11
117	Molecular Dynamics Study of the Thermodynamics of Integer Charge Transfer vs Charge-Transfer Complex Formation in Doped Conjugated Polymers. ACS Applied Materials & Interfaces, 2022, 14, 26988-27001.	4.0	11
118	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
119	Seeded-Growth Experiment Demonstrating Size- and Shape-Dependence on Gold Nanoparticleâ€“Light Interactions. Journal of Chemical Education, 2021, 98, 546-552.	1.1	10
120	Understanding the mechanism of hardness enhancement in tantalum-substituted tungsten monoboride solid solutions. Journal of Applied Physics, 2019, 125, .	1.1	9
121	Understanding Stabilization in Nanoporous Intermetallic Alloy Anodes for Li-Ion Batteries Using Operando Transmission X-ray Microscopy. ACS Nano, 2020, 14, 14820-14830.	7.3	9
122	A Metalâ€“Organic Framework with Tetrahedral Aluminate Sites as a Singleâ€Ion Li + Solid Electrolyte. Angewandte Chemie, 2018, 130, 16925-16929.	1.6	8
123	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
124	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. Research on Chemical Intermediates, 2007, 33, 111-124.	1.3	7
125	Thermoelastic properties of ReB2 at high pressures and temperatures and comparison with Pt, Os, and Re. Journal of Applied Physics, 2011, 110, .	1.1	7
126	Lattice strain of osmium diboride under high pressure and nonhydrostatic stress. Journal of Applied Physics, 2012, 112, .	1.1	7

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127	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
128	Raman scattering from superhard rhenium diboride under high pressure. Applied Physics Letters, 2014, 104, .	1.5	4
129	Organization and controlled coupling between soft and hard magnetic nanocrystals using mesoporous materials. APL Materials, 2014, 2, 113309.	2.2	4
130	Examining the Role of Atomic Scale Heterogeneity on the Thermal Conductivity of Transparent, Thermally Insulating, Mesoporous Silicaâ€“Titania Thin Films. Journal of Physical Chemistry C, 2020, 124, 27442-27452.	1.5	4
131	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
132	Thermodynamics-driven interfacial engineering of alloy-type anode materials. Cell Reports Physical Science, 2022, 3, 100694.	2.8	4
133	Tuning the Porous Structure in PMMA-Templated Mesoporous MoO₂ for Pseudocapacitive Li-Ion Electrodes. Journal of the Electrochemical Society, 2022, 169, 040545.	1.3	4
134	Strain transfer in porous multiferroic composites of CoFe₂O₄ and PbZr_xTi_{1â^'}_xO₃. Applied Physics Letters, 2022, 120, 192902.	1.5	4
135	Mesoporous MoO2 thin films for high rate Li+ storage: Effect of crystallinity and porous structure. Solid State Sciences, 2022, 129, 106890.	1.5	3
136	Simulating the non-monotonic strain response of nanoporous multiferroic composites under electric field control. Applied Physics Letters, 2022, 120, .	1.5	3
137	Room-Temperature Electrochemical Fluoride (De)insertion into CsMnFeF₆. ACS Energy Letters, 2022, 7, 2340-2348.	8.8	3
138	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
139	Cryogenic Milling Method to Fabricate Nanostructured Anodes. ACS Applied Energy Materials, 2020, 3, 11285-11292.	2.5	2
140	Enhanced Hardening Effects on Molybdenum-Doped WB₂ and WB₂â€“SiC/B₄C Composites. Chemistry of Materials, 2022, 34, 5461-5470.	3.2	2
141	Nanoscience and Nanotechnology at UCLA. ACS Nano, 2019, 13, 6127-6129.	7.3	1
142	Room temperature rectification in tapered-channel thermal diodes through nanoscale confinement-induced liquidâ€“solid phase change. Journal of Applied Physics, 2021, 129, 075103.	1.1	1
143	(Invited)ÂUsing Nanoporous and Nanostructured Materials to Improve Fast Charging and High Capacity Battery Materials. ECS Meeting Abstracts, 2019, MA2019-03, 87-87.	0.0	1
144	Promoting Reversibility of Multielectron Redox in Alkali-Rich Sulfide Cathodes through Cryomilling. Chemistry of Materials, 2022, 34, 3236-3245.	3.2	1

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145	Increasing the Capacity of Nano-Structured LiMn2O4 Pseudocapacitors by Selective Crystallization of Dissolution Resistant Surface Facets. ECS Meeting Abstracts, 2018, , .	0.0	0
146	(Invited) Nanoporous Materials for Fast and Reversible Electrochemical Energy Storage. ECS Meeting Abstracts, 2018, , .	0.0	0
147	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
148	Quantitatively Designing Porous Copper Current Collectors for Lithium Metal Anodes. ECS Meeting Abstracts, 2021, MA2021-02, 721-721.	0.0	0
149	Tuning Exchange Coupling in a New Family of Nanocrystal-Based Granular Multiferroics Using an Applied Electric Field. ACS Applied Materials & Interfaces, 2022, 14, 16505-16514.	4.0	0