Serena A. Corr

List of Publications by Year
in descending order

67 papers	3,731 citations	201385 27 h-index	123241 61 g-index
69 all docs	69 docs citations	69 times ranked	6384 citing authors

#	Article	IF	Citations
1	Location and characterization of heterogeneous phases within Mary Rose wood. Matter, 2022, 5, 150-161.	5.0	4
2	Low-voltage SEM of air-sensitive powders: From sample preparation to micro/nano analysis with secondary electron hyperspectral imaging. Micron, 2022, 156, 103234.	1.1	13
3	The Role of the Reducible Dopant in Solid Electrolyteâ€“Lithium Metal Interfaces. Chemistry of Materials, 2022, 34, 5054-5064.	3.2	5
4	Quantitative ion exchange reactions to form Li2Vac2-2La2Ti3O9+ defect layered perovskites from H2La2Ti3O10 via solid acid/base reaction. Journal of Solid State Chemistry, 2022, 314, 123354.	1.4	1
5	In Situ Diffusion Measurements of a NASICON-Structured All-Solid-State Battery Using Muon Spin Relaxation. ACS Applied Energy Materials, 2021, 4, 1527-1536.	2.5	13
6	2021 roadmap for sodium-ion batteries. JPhys Energy, 2021, 3, 031503.	2.3	125
7	Direct observation of breathing phenomenon and phase transformation in Ni-rich cathode materials by in situ TEM. Microscopy and Microanalysis, 2021, 27, 1254-1255.	0.2	1
8	Ion dynamics in fluoride-containing polyatomic anion cathodes by muon spectroscopy. JPhys Materials, 2021, 4, 044015.	1.8	2
9	Perspectives for next generation lithium-ion battery cathode materials. APL Materials, 2021, 9, .	2.2	44
10	A Quinone-Based Cathode Material for High-Performance Organic Lithium and Sodium Batteries. ACS Applied Energy Materials, 2021, 4, 12084-12090.	2.5	9
11	Insights into the Electrochemical Reduction Products and Processes in Silica Anodes for Nextâ€Generation Lithiumâ€Ion Batteries. Advanced Energy Materials, 2020, 10, 2001826.	10.2	26
12	Benzo-Dipteridine Derivatives as Organic Cathodes for Li- and Na-ion Batteries. ACS Applied Energy Materials, 2020, 3, 8302-8308.	2.5	6
13	Li1.5La1.5MO6 (Mâ€‰=â€‰W6+, Te6+) as a new series of lithium-rich double perovskites for all-solid-state lithium-ion batteries. Nature Communications, 2020, 11, 6392.	5.8	26
14	Muon Spectroscopy for Investigating Diffusion in Energy Storage Materials. Annual Review of Materials Research, 2020, 50, 371-393.	4.3	22
15	Exploiting cation aggregation in new magnesium amidohaloaluminate electrolytes for magnesium batteries. Inorganic Chemistry Frontiers, 2020, 7, 2305-2312.	3.0	5
16	2020 roadmap on solid-state batteries. JPhys Energy, 2020, 2, 032008.	2.3	74
17	Morphology-Directed Synthesis of LiFePO₄ and LiCoPO₄ from Nanostructured Li_{1+2<i>x</i>}PO_{3+<i>x</i>}. Inorganic Chemistry, 2019, 58, 6946-6949.	1.9	6
18	A facile synthetic approach to nanostructured Li₂S cathodes for rechargeable solid-state Liâ€“S batteries. Nanoscale, 2019, 11, 19297-19300.	2.8	16

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19	NASICON LiM₂(PO₄)₃ electrolyte (M = Zr) and electrode (M = Ti) materials for all solid-state Li-ion batteries with high total conductivity and low interfacial resistance. Journal of Materials Chemistry A, 2018, 6, 5296-5303.	5.2	62
20	Mechanistic insights of Li+ diffusion within doped LiFePO4 from Muon Spectroscopy. Scientific Reports, 2018, 8, 4114.	1.6	25
21	Structureâ€“property insights into nanostructured electrodes for Li-ion batteries from local structural and diffusional probes. Journal of Materials Chemistry A, 2018, 6, 127-137.	5.2	22
22	A Conversation with Serena Corr. ACS Central Science, 2018, 4, 1594-1595.	5.3	1
23	Na_{1.5}La_{1.5}TeO₆: Na⁺ conduction in a novel Na-rich double perovskite. Chemical Communications, 2018, 54, 10040-10043.	2.2	18
24	Selective and Facile Synthesis of Sodium Sulfide and Sodium Disulfide Polymorphs. Inorganic Chemistry, 2018, 57, 7499-7502.	1.9	6
25	Insulating to metallic behaviour in the cation ordered perovskites Ba2Nd1âˆ'xFexMoO6. Journal of Materials Chemistry C, 2017, 5, 3056-3064.	2.7	1
26	Synthesis and Ionic Conductivity Studies of In- and Y-Doped Li₆Hf₂O₇as Solid-State Electrolyte for All-Solid State Li-Ion Batteries. Journal of the Electrochemical Society, 2017, 164, A6395-A6400.	1.3	8
27	Enhancement of the lithium ion conductivity of Ta-doped Li₇La₃Zr₂O₁₂ by incorporation of calcium. Dalton Transactions, 2017, 46, 9415-9419.	1.6	45
28	Low-temperature densification of Al-doped Li₇La₃Zr₂O₁₂: a reliable and controllable synthesis of fast-ion conducting garnets. Journal of Materials Chemistry A, 2017, 5, 319-329.	5.2	115
29	Microwave-assisted synthesis of highly crystalline, multifunctional iron oxide nanocomposites for imaging applications. RSC Advances, 2016, 6, 83520-83528.	1.7	28
30	Fast microwave-assisted synthesis of Li-stuffed garnets and insights into Li diffusion from muon spin spectroscopy. Journal of Materials Chemistry A, 2016, 4, 1729-1736.	5.2	59
31	Fast microwave treatments of single source alkoxides for nanostructured Li-ion battery electrodes. Chemical Communications, 2016, 52, 9028-9031.	2.2	9
32	Metal oxide nanoparticles. SPR Nanoscience, 2016, , 31-56.	0.3	10
33	Pressure-induced cation-cation bonding in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="normal">V</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2015, 92, .	1.1	17
34	Microwave-assisted synthesis and electrochemical evaluation of VO₂ (B) nanostructures. Acta Crystallographica Section B: Structural Science, Crystal Engineering and Materials, 2015, 71, 722-726.	0.5	12
35	X-Ray Diffraction Computed Tomography for Structural Analysis of Electrode Materials in Batteries. Journal of the Electrochemical Society, 2015, 162, A1310-A1314.	1.3	50
36	Ultra-rapid microwave synthesis of Li_{3âˆ'xâˆ'y}M_xN (M = Co, Ni and Cu) nitridometallates. Inorganic Chemistry Frontiers, 2015, 2, 1045-1050.	3.0	5

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37	Pressure-induced phase transitions and metallization in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>VO</mml:mi><mml:mn>2</mml:mn></mml:msub></m Physical Review B, 2015, 91, .	1.1	82
38	Muon studies of Li⁺ diffusion in LiFePO₄ nanoparticles of different polymorphs. Journal of Materials Chemistry A, 2014, 2, 6238-6245.	5.2	50
39	Synthetic Methodologies. , 2013, , 1-15.		0
40	Magnetic Nanoparticles for Targeted Cancer Diagnosis and Therapy. Frontiers of Nanoscience, 2013, , 29-63.	0.3	13
41	Two applications of solid phantoms in performance assessment of optical coherence tomography systems. Applied Optics, 2013, 52, 7054.	0.9	30
42	Chapter 7. Metal oxide nanoparticles. SPR Nanoscience, 2013, , 204-224.	0.3	4
43	Phantoms for performance assessment of optical coherence tomography systems. Proceedings of SPIE, 2012, , .	0.8	1
44	A 3.90 V iron-based fluorosulphate material for lithium-ion batteries crystallizing in the triplite structure. Nature Materials, 2011, 10, 772-779.	13.3	301
45	Porphyrin-magnetite nanoconjugates for biological imaging. Journal of Nanobiotechnology, 2011, 9, 13.	4.2	24
46	NMR Relaxation of Water in Nanostructures: Analysis of Ferromagnetic Cobalt-Ferrite Polyelectrolyte Nanocomposites. ChemPhysChem, 2011, 12, 772-776.	1.0	19
47	Real-Space Investigation of Structural Changes at the Metal-Insulator Transition in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>VO</mml:mi><mml:mn>2</mml:mn></mml:msub></mml:math>. Physical Review Letters, 2010, 105, 056404.	2.9	45
48	NMR studies into colloidal stability and magnetic order in fatty acid stabilised aqueous magnetic fluids. Physical Chemistry Chemical Physics, 2010, 12, 14009.	1.3	11
49	Spontaneously formed porous and composite materials. Journal of Materials Chemistry, 2010, 20, 1413-1422.	6.7	27
50	Ordered Mesoporous Metallic MoO₂ Materials with Highly Reversible Lithium Storage Capacity. Nano Letters, 2009, 9, 4215-4220.	4.5	650
51	VO2(B) nanorods: solvothermal preparation, electrical properties, and conversion to rutile VO2 and V2O3. Journal of Materials Chemistry, 2009, 19, 4362.	6.7	117
52	Multifunctional Magnetic-fluorescent Nanocomposites for Biomedical Applications. Nanoscale Research Letters, 2008, 3, .	3.1	436
53	Linear Assemblies of Magnetic Nanoparticles as MRI Contrast Agents. Journal of the American Chemical Society, 2008, 130, 4214-4215.	6.6	142
54	Poly(sodium-4-styrene)sulfonateâ˘Iron Oxide Nanocomposite Dispersions with Controlled Magnetic Resonance Properties. Journal of Physical Chemistry C, 2008, 112, 13324-13327.	1.5	30

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55	From Nanocrystals to Nanorods:â€‰ New Iron Oxideâˆ’Silica Nanocomposites from Metallorganic Precursors. Journal of Physical Chemistry C, 2008, 112, 1008-1018.	1.5	44
56	Controlled Reduction of Vanadium Oxide Nanoscrolls: Crystal Structure, Morphology, and Electrical Properties. Chemistry of Materials, 2008, 20, 6396-6404.	3.2	78
57	Porosity through reduction in metal oxides. Materials Research Society Symposia Proceedings, 2008, 1148, 1.	0.1	3
58	A Magnetic-Nanoparticle-Supported 4-N,N-Dialkylaminopyridine Catalyst: Excellent Reactivity Combined with Facile Catalyst Recovery and Recyclability. Angewandte Chemie - International Edition, 2007, 46, 4329-4332.	7.2	258
59	Synthesis, Characterisation, and Biological Studies of CdTe Quantum Dotâ€"Naproxen Conjugates. ChemMedChem, 2007, 2, 183-186.	1.6	31
60	â€œJelly Dotsâ€: Synthesis and Cytotoxicity Studies of CdTe Quantum Dotâ€"Gelatin Nanocomposites. Small, 2007, 3, 1152-1156.	5.2	99
61	Magnetic-fluorescent nanocomposites for biomedical multitasking. Chemical Communications, 2006, , 4474.	2.2	68
62	Emission properties of colloidal quantum dots on polyelectrolyte multilayers. Nanotechnology, 2006, 17, 4117-4122.	1.3	38
63	Optimisation of the synthesis and modification of CdTe quantum dots for enhanced live cell imaging. Journal of Materials Chemistry, 2006, 16, 2896.	6.7	154
64	Preparation and biological investigation of luminescent water soluble CdTe nanoparticles. , 2005, 5824, 129.		1
65	New two in one magnetic fluorescent nanocomposites. , 2005, , .		1
66	Magnetite nanocrystals from a single source metallorganic precursor: metallorganic chemistry vs. biogeneric bacteria. Journal of Materials Chemistry, 2004, 14, 944-946.	6.7	23
67	Magnetic nanoparticle assemblies on denatured DNA show unusual magnetic relaxivity and potential applications for MRI. Chemical Communications, 2004, , 2560.	2.2	60