Susan A Odom

List of Publications by Year
in descending order

65 papers	4,829 citations	147801 31 h-index	123424 61 g-index
73 all docs	73 docs citations	73 times ranked	6563 citing authors

#	Article	IF	Citations
1	Steric Manipulation as a Mechanism for Tuning the Reduction and Oxidation Potentials of Phenothiazines. Journal of Physical Chemistry A, 2021, 125, 272-278.	2.5	9
2	Overcharge protection of lithium-ion batteries with phenothiazine redox shuttles. New Journal of Chemistry, 2021, 45, 3750-3755.	2.8	6
3	Dual function organic active materials for nonaqueous redox flow batteries. Materials Advances, 2021, 2, 1390-1401.	5.4	33
4	Ethynylated Acene Synthesis and Photophysics for an Organic Chemistry Laboratory Course. Journal of Chemical Education, 2021, 98, 1741-1749.	2.3	1
5	Comparison of Separators vs Membranes in Nonaqueous Redox Flow Battery Electrolytes Containing Small Molecule Active Materials. ACS Applied Energy Materials, 2021, 4, 5443-5451.	5.1	20
6	Comparative Study of Organic Radical Cation Stability and Coulombic Efficiency for Nonaqueous Redox Flow Battery Applications. Journal of Physical Chemistry C, 2021, 125, 14170-14179.	3.1	14
7	Crowded electrolytes containing redoxmers in different states of charge: Solution structure, properties, and fundamental limits on energy density. Journal of Molecular Liquids, 2021, 334, 116533.	4.9	18
8	Experimental Protocols for Studying Organic Non-aqueous Redox Flow Batteries. ACS Energy Letters, 2021, 6, 3932-3943.	17.4	25
9	A Nonaqueous Redox Flow Battery Operating over an 80 Degrees Celsius Temperature Range. ECS Meeting Abstracts, 2021, MA2021-02, 110-110.	0.0	0
10	Combined Computational and Experimental Approach to Determine and Understand the Solubility of Phenothiazines as Redoxmers. ECS Meeting Abstracts, 2021, MA2021-02, 1679-1679.	0.0	0
11	A stable, highly oxidizing radical cation. New Journal of Chemistry, 2020, 44, 18138-18148.	2.8	8
12	Viscous flow properties and hydrodynamic diameter of phenothiazine-based redox-active molecules in different supporting salt environments. Physics of Fluids, 2020, 32, .	4.0	17
13	Improved synthesis of N-ethyl-3,7-bis(trifluoromethyl)phenothiazine. New Journal of Chemistry, 2020, 44, 11349-11355.	2.8	7
14	Mitigating Chemical Paths to Capacity Fade in Organic Flow Batteries. CheM, 2020, 6, 1207-1209.	11.7	2
15	Quantifying Environmental Effects on the Solution and Solid-State Stability of a Phenothiazine Radical Cation. Chemistry of Materials, 2020, 32, 3007-3017.	6.7	26
16	Tailoring Two-Electron-Donating Phenothiazines To Enable High-Concentration Redox Electrolytes for Use in Nonaqueous Redox Flow Batteries. Chemistry of Materials, 2019, 31, 4353-4363.	6.7	92
17	Extending the Lifetime of Organic Flow Batteries via Redox State Management. Journal of the American Chemical Society, 2019, 141, 8014-8019.	13.7	151
18	Preventing Crossover in Redox Flow Batteries through Active Material Oligomerization. ACS Central Science, 2018, 4, 140-141.	11.3	15

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19	Application of Cross-Linked Polyborosiloxanes and Organically Modified Boron Silicate Binders in Silicon-Containing Anodes for Lithium-Ion Batteries. Journal of the Electrochemical Society, 2018, 165, A731-A735.	2.9	9
20	Determining Parasitic Reaction Enthalpies in Lithium-Ion Cells Using Isothermal Microcalorimetry. Journal of the Electrochemical Society, 2018, 165, A3449-A3458.	2.9	16
21	A Less Basic, Basic Organic Flow Battery. Joule, 2018, 2, 1652-1653.	24.0	0
22	Beyond the Hammett Effect: Using Strain to Alter the Landscape of Electrochemical Potentials. ChemPhysChem, 2017, 18, 2142-2146.	2.1	10
23	A stable two-electron-donating phenothiazine for application in nonaqueous redox flow batteries. Journal of Materials Chemistry A, 2017, 5, 24371-24379.	10.3	105
24	Molten Zinc Alloys for Lower Temperature, Lower Cost Liquid Metal Batteries. Advanced Materials Technologies, 2016, 1, 1600035.	5.8	10
25	High current density, long duration cycling of soluble organic active species for non-aqueous redox flow batteries. Energy and Environmental Science, 2016, 9, 3531-3543.	30.8	196
26	Cathode candidates for zinc-based thermal-electrochemical energy storage. International Journal of Energy Research, 2016, 40, 393-399.	4.5	7
27	Overcharge protection of lithium-ion batteries above 4 V with a perfluorinated phenothiazine derivative. Journal of Materials Chemistry A, 2016, 4, 5410-5414.	10.3	24
28	Carbonic anhydrase mimics for enhanced CO₂ absorption in an amine-based capture solvent. Dalton Transactions, 2016, 45, 324-333.	3.3	23
29	Overcharge Performance of 3,7-Bis(trifluoromethyl)-N-ethylphenothiazine at High Concentration in Lithium-Ion Batteries. Journal of the Electrochemical Society, 2016, 163, A1-A7.	2.9	31
30	On the Stability and Reactivity of Redox Shuttles in Their Neutral and Radical Cation Forms. Materials Research Society Symposia Proceedings, 2015, 1740, 58.	0.1	0
31	A Highly Soluble Organic Catholyte for Nonâ€Aqueous Redox Flow Batteries. Energy Technology, 2015, 3, 476-480.	3.8	108
32	The fate of phenothiazine-based redox shuttles in lithium-ion batteries. Physical Chemistry Chemical Physics, 2015, 17, 6905-6912.	2.8	40
33	A Highly Soluble Redox Shuttle with Superior Rate Performance in Overcharge Protection. Materials Research Society Symposia Proceedings, 2015, 1740, 19.	0.1	0
34	<i>N</i>â€Substituted Phenothiazine Derivatives: How the Stability of the Neutral and Radical Cation Forms Affects Overcharge Performance in Lithiumâ€Ion Batteries. ChemPhysChem, 2015, 16, 1179-1189.	2.1	59
35	Overcharge performance of 3,7-disubstituted N-ethylphenothiazine derivatives in lithium-ion batteries. Chemical Communications, 2014, 50, 5339-5341.	4.1	47
36	A fast, inexpensive method for predicting overcharge performance in lithium-ion batteries. Energy and Environmental Science, 2014, 7, 760-767.	30.8	45

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37	Improving carbon capture from power plant emissions with zinc- and cobalt-based catalysts. Catalysis Science and Technology, 2014, 4, 3620-3625.	4.1	28
38	3,7-Bis(trifluoromethyl)-N-ethylphenothiazine: a redox shuttle with extensive overcharge protection in lithium-ion batteries. Journal of Materials Chemistry A, 2014, 2, 18190-18193.	10.3	41
39	Controlling Oxidation Potentials in Redox Shuttle Candidates for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2014, 118, 14824-14832.	3.1	31
40	Tuning Delocalization in the Radical Cations of 1,4-Bis[4-(diarylamino)styryl]benzenes, 2,5-Bis[4-(diarylamino)styryl]thiophenes, and 2,5-Bis[4-(diarylamino)styryl]pyrroles through Substituent Effects. Journal of the American Chemical Society, 2012, 134, 10146-10155.	13.7	72
41	A Selfâ€healing Conductive Ink. Advanced Materials, 2012, 24, 2578-2581.	21.0	143
42	Visual Indication of Mechanical Damage Using Coreâ€"Shell Microcapsules. ACS Applied Materials & Interfaces, 2011, 3, 4547-4551.	8.0	57
43	Triggered Release from Polymer Capsules. Macromolecules, 2011, 44, 5539-5553.	4.8	534
44	Restoration of Conductivity with TTFâ€TCNQ Chargeâ€Transfer Salts. Advanced Functional Materials, 2010, 20, 1721-1727.	14.9	127
45	Electronic Properties of the 2,6-Diiododithieno[3,2-<i>b</i>:2â€²,3â€²-<i>d</i>]thiophene Molecule and Crystal: A Joint Experimental and Theoretical Study. Journal of Physical Chemistry B, 2010, 114, 749-755.	2.6	21
46	Electronic and Optical Properties of 4<i>H</i>-Cyclopenta[2,1-<i>b</i>:3,4-<i>bâ€²</i>]bithiophene Derivatives and Their 4-Heteroatom-Substituted Analogues: A Joint Theoretical and Experimental Comparison. Journal of Physical Chemistry B, 2010, 114, 14397-14407.	2.6	64
47	Masked Cyanoacrylates Unveiled by Mechanical Force. Journal of the American Chemical Society, 2010, 132, 4558-4559.	13.7	149
48	Photophysical Properties of an Alkyne-Bridged Bis(zinc porphyrin)âˆ'Perylene Bis(dicarboximide) Derivative. Journal of Physical Chemistry A, 2009, 113, 10826-10832.	2.5	41
49	Synthesis and Two-Photon Spectrum of a Bis(Porphyrin)-Substituted Squaraine. Journal of the American Chemical Society, 2009, 131, 7510-7511.	13.7	81
50	Linear and Nonlinear Spectroscopy of a Porphyrinâˆ'Squaraineâˆ'Porphyrin Conjugated System. Journal of Physical Chemistry B, 2009, 113, 14854-14867.	2.6	42
51	Synthesis and Photophysical Properties of Donor- and Acceptor-Substituted 1,7-Bis(arylalkynyl)perylene-3,4:9,10-bis(dicarboximide)s. Journal of Physical Chemistry A, 2009, 113, 5585-5593.	2.5	82
52	Intramolecular Electron-Transfer Rates in Mixed-Valence Triarylamines: Measurement by Variable-Temperature ESR Spectroscopy and Comparison with Optical Data. Journal of the American Chemical Society, 2009, 131, 1717-1723.	13.7	75
53	Mechanically-Induced Chemical Changes in Polymeric Materials. Chemical Reviews, 2009, 109, 5755-5798.	47.7	1,130
54	A Spray-Processable, Low Bandgap, and Ambipolar Donorâˆ'Acceptor Conjugated Polymer. Journal of the American Chemical Society, 2009, 131, 2824-2826.	13.7	214

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55	Thick Opticalâ€Quality Films of Substituted Polyacetylenes with Large, Ultrafast Thirdâ€Order Nonlinearities and Application to Image Correlation. Advanced Materials, 2008, 20, 3199-3203.	21.0	18
56	Stabilisation of a heptamethine cyanine dye by rotaxane encapsulation. Chemical Communications, 2008, , 2897.	4.1	79
57	Processible Polyacetylene-Based χ⁽³⁾ Materials for Photonic Applications. , 2007, , .		0
58	Bis[bisâ€(4â€alkoxyphenyl)amino] Derivatives of Dithienylethene, Bithiophene, Dithienothiophene and Dithienopyrrole: Palladiumâ€Catalysed Synthesis and Highly Delocalised Radical Cations. Chemistry - A European Journal, 2007, 13, 9637-9646.	3.3	72
59	Toward the realization of practicable materials for χ⁽³⁾ based photonic applications. , 2006, , .		0
60	Persistent photo-excited conducting states in functionalized pentacene. Synthetic Metals, 2005, 152, 449-452.	3.9	5
61	Aromatic Amines:â€‰ A Comparison of Electron-Donor Strengths. Journal of Physical Chemistry A, 2005, 109, 9346-9352.	2.5	134
62	Persistent photoexcited conducting states in functionalized pentacene. Journal of Applied Physics, 2004, 96, 3312-3318.	2.5	23
63	Transport and melt processing in functionalized pentacene with â€œorganic wireâ€•connections. Current Applied Physics, 2004, 4, 479-483.	2.4	1
64	Stable, Crystalline Acenedithiophenes with up to Seven Linearly Fused Rings. Organic Letters, 2004, 6, 3325-3328.	4.6	199
65	Tetracene Derivatives as Potential Red Emitters for Organic LEDs. Organic Letters, 2003, 5, 4245-4248.	4.6	182