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	Mechanically-Induced Chemical Changes in Polymeric Materials. Chemical Reviews, 2009, 109, 5755-5798.	47.7	1,130
2	Triggered Release from Polymer Capsules. Macromolecules, 2011, 44, 5539-5553.	4.8	534
3	A Spray-Processable, Low Bandgap, and Ambipolar Donorâ^'Acceptor Conjugated Polymer. Journal of the American Chemical Society, 2009, 131, 2824-2826.	13.7	214
4	Stable, Crystalline Acenedithiophenes with up to Seven Linearly Fused Rings. Organic Letters, 2004, 6, 3325-3328.	4.6	199
5	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
6	Tetracene Derivatives as Potential Red Emitters for Organic LEDs. Organic Letters, 2003, 5, 4245-4248.	4.6	182
7	Extending the Lifetime of Organic Flow Batteries via Redox State Management. Journal of the American Chemical Society, 2019, 141, 8014-8019.	13.7	151
8	Masked Cyanoacrylates Unveiled by Mechanical Force. Journal of the American Chemical Society, 2010, 132, 4558-4559.	13.7	149
9	A Selfâ€healing Conductive Ink. Advanced Materials, 2012, 24, 2578-2581.	21.0	143
10	Aromatic Amines:â€‰ A Comparison of Electron-Donor Strengths. Journal of Physical Chemistry A, 2005, 109, 9346-9352.	2.5	134
11	Restoration of Conductivity with TTFâ€TCNQ Chargeâ€Transfer Salts. Advanced Functional Materials, 2010, 20, 1721-1727.	14.9	127
12	A Highly Soluble Organic Catholyte for Nonâ€Aqueous Redox Flow Batteries. Energy Technology, 2015, 3, 476-480.	3.8	108
13	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
14	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
15	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
16	Synthesis and Two-Photon Spectrum of a Bis(Porphyrin)-Substituted Squaraine. Journal of the American Chemical Society, 2009, 131, 7510-7511.	13.7	81
17	Stabilisation of a heptamethine cyanine dye by rotaxane encapsulation. Chemical Communications, 2008, , 2897.	4.1	79
18	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

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19	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
20	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
21	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
22	<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
23	Visual Indication of Mechanical Damage Using Coreâ€"Shell Microcapsules. ACS Applied Materials & Interfaces, 2011, 3, 4547-4551.	8.0	57
24	Overcharge performance of 3,7-disubstituted N-ethylphenothiazine derivatives in lithium-ion batteries. Chemical Communications, 2014, 50, 5339-5341.	4.1	47
25	A fast, inexpensive method for predicting overcharge performance in lithium-ion batteries. Energy and Environmental Science, 2014, 7, 760-767.	30.8	45
26	Linear and Nonlinear Spectroscopy of a Porphyrinâˆ’Squaraineâˆ’Porphyrin Conjugated System. Journal of Physical Chemistry B, 2009, 113, 14854-14867.	2.6	42
27	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
28	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
29	The fate of phenothiazine-based redox shuttles in lithium-ion batteries. Physical Chemistry Chemical Physics, 2015, 17, 6905-6912.	2.8	40
30	Dual function organic active materials for nonaqueous redox flow batteries. Materials Advances, 2021, 2, 1390-1401.	5.4	33
31	Controlling Oxidation Potentials in Redox Shuttle Candidates for Lithium-Ion Batteries. Journal of Physical Chemistry C, 2014, 118, 14824-14832.	3.1	31
32	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
33	Improving carbon capture from power plant emissions with zinc- and cobalt-based catalysts. Catalysis Science and Technology, 2014, 4, 3620-3625.	4.1	28
34	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
35	Experimental Protocols for Studying Organic Non-aqueous Redox Flow Batteries. ACS Energy Letters, 2021, 6, 3932-3943.	17.4	25
36	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

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37	Persistent photoexcited conducting states in functionalized pentacene. Journal of Applied Physics, 2004, 96, 3312-3318.	2.5	23
38	Carbonic anhydrase mimics for enhanced CO₂ absorption in an amine-based capture solvent. Dalton Transactions, 2016, 45, 324-333.	3.3	23
39	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
40	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
41	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
42	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
43	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
44	Determining Parasitic Reaction Enthalpies in Lithium-Ion Cells Using Isothermal Microcalorimetry. Journal of the Electrochemical Society, 2018, 165, A3449-A3458.	2.9	16
45	Preventing Crossover in Redox Flow Batteries through Active Material Oligomerization. ACS Central Science, 2018, 4, 140-141.	11.3	15
46	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
47	Molten Zinc Alloys for Lower Temperature, Lower Cost Liquid Metal Batteries. Advanced Materials Technologies, 2016, 1, 1600035.	5.8	10
48	Beyond the Hammett Effect: Using Strain to Alter the Landscape of Electrochemical Potentials. ChemPhysChem, 2017, 18, 2142-2146.	2.1	10
49	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
50	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
51	A stable, highly oxidizing radical cation. New Journal of Chemistry, 2020, 44, 18138-18148.	2.8	8
52	Cathode candidates for zinc-based thermal-electrochemical energy storage. International Journal of Energy Research, 2016, 40, 393-399.	4.5	7
53	Improved synthesis of N-ethyl-3,7-bis(trifluoromethyl)phenothiazine. New Journal of Chemistry, 2020, 44, 11349-11355.	2.8	7
54	Overcharge protection of lithium-ion batteries with phenothiazine redox shuttles. New Journal of Chemistry, 2021, 45, 3750-3755.	2.8	6

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55	Persistent photo-excited conducting states in functionalized pentacene. Synthetic Metals, 2005, 152, 449-452.	3.9	5
56	Mitigating Chemical Paths to Capacity Fade in Organic Flow Batteries. CheM, 2020, 6, 1207-1209.	11.7	2
57	Transport and melt processing in functionalized pentacene with â€œorganic wireâ€•connections. Current Applied Physics, 2004, 4, 479-483.	2.4	1
58	Ethynylated Acene Synthesis and Photophysics for an Organic Chemistry Laboratory Course. Journal of Chemical Education, 2021, 98, 1741-1749.	2.3	1
59	Toward the realization of practicable materials for χ⁽³⁾ based photonic applications. , 2006, , .		0
60	Processible Polyacetylene-Based χ⁽³⁾ Materials for Photonic Applications. , 2007, , .		0
61	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
62	A Highly Soluble Redox Shuttle with Superior Rate Performance in Overcharge Protection. Materials Research Society Symposia Proceedings, 2015, 1740, 19.	0.1	0
63	A Less Basic, Basic Organic Flow Battery. Joule, 2018, 2, 1652-1653.	24.0	0
64	A Nonaqueous Redox Flow Battery Operating over an 80 Degrees Celsius Temperature Range. ECS Meeting Abstracts, 2021, MA2021-02, 110-110.	0.0	0
65	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