

Carson J Bruns

List of Publications by Year in descending order

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44

papers

3,601

citations

218677

26

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265206

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docs citations

55

times ranked

4703

citing authors

#	ARTICLE	IF	CITATIONS
1	A Reactive Inkjet Printing Process for Fabricating Biodegradable Conductive Zinc Structures. <i>Advanced Engineering Materials</i> , 2023, 25, .	3.5	6
2	All-hydrocarbon, all-conjugated cycloparaphenyleno-polycyclic aromatic hydrocarbon host-guest complexes stabilized by CH ₂ ^{2+/-} interactions. <i>Nano Research</i> , 2022, 15, 5545-5555.	10.4	11
3	Photochromic Intradermal Smart Tattoo Based on Diarylethene-Doped Polystyrene Nanoparticles for Personal β -Ray Dosimetry. <i>ACS Applied Nano Materials</i> , 2022, 5, 13840-13844.	5.0	2
4	Soft Electrohydraulic Actuators for Origami Inspired Shape-Changing Interfaces. , 2021, , .		2
5	Post-synthesis modification of slide-ring gels for thermal and mechanical reconfiguration. <i>Soft Matter</i> , 2021, 17, 5248-5257.	2.7	12
6	Scalable synthesis of [8]cycloparaphenylenoacetylene carbon nanohoop using alkyne metathesis. <i>Chemical Communications</i> , 2021, 57, 10887-10890.	4.1	4
7	Mechanochemistry Activated Covalent Conjugation Reactions in Soft Hydrogels Induced by Interfacial Failure. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 1486-1492.	8.0	6
8	Electriflow: Augmenting Books With Tangible Animation Using Soft Electrohydraulic Actuators. , 2021, , .		1
9	Solar Freckles: Long-Term Photochromic Tattoos for Intradermal Ultraviolet Radiometry. <i>ACS Nano</i> , 2020, 14, 13619-13628.	14.6	20
10	Poly(lactic acid)-Based Ink for Biodegradable Printed Electronics With Conductivity Enhanced through Solvent Aging. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 23494-23501.	8.0	30
11	Exploring and Exploiting the Symmetry-Breaking Effect of Cyclodextrins in Mechanomolecules. <i>Symmetry</i> , 2019, 11, 1249.	2.2	23
12	Dynamic force spectroscopy of synthetic oligorotaxane foldamers. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 9362-9366.	7.1	42
13	Synthetic oligorotaxanes exert high forces when folding under mechanical load. <i>Nature Nanotechnology</i> , 2018, 13, 209-213.	31.5	53
14	Systematic evaluation of structure -- property relationships in heteroacene -- diketopyrrolopyrrole molecular donors for organic solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 9217-9232.	10.3	31
15	Rotaxane probes for protease detection by ^{129}Xe hyperCEST NMR. <i>Chemical Communications</i> , 2017, 53, 1076-1079.	4.1	38
16	Near-Quantitative Aqueous Synthesis of Rotaxanes via Bioconjugation to Oligopeptides and Proteins. <i>Journal of the American Chemical Society</i> , 2016, 138, 15307-15310.	13.7	28
17	Rotaxane-mediated suppression and activation of cucurbit[6]uril for molecular detection by ^{129}Xe hyperCEST NMR. <i>Chemical Communications</i> , 2016, 52, 3119-3122.	4.1	47
18	Self-Assembling Tripodal Small-Molecule Donors for Bulk Heterojunction Solar Cells. <i>Journal of Physical Chemistry C</i> , 2016, 120, 3602-3611.	3.1	22

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19	Tunable solid-state fluorescent materials for supramolecular encryption. <i>Nature Communications</i> , 2015, 6, 6884.	12.8	363
20	An Electrochemically and Thermally Switchable Donor-“Acceptor [<i>i>c</i>2]Daisy Chain Rotaxane. <i>Angewandte Chemie - International Edition</i>, 2014, 53, 1953-1958.</i>	13.8	62
21	Ground-State Kinetics of Bistable Redox-Active Donor-“Acceptor Mechanically Interlocked Molecules. <i>Accounts of Chemical Research</i> , 2014, 47, 482-493.	15.6	107
22	Emergent Ion-Gated Binding of Cationic Host-“Guest Complexes within Cationic M ₁₂ L ₂₄ Molecular Flasks. <i>Journal of the American Chemical Society</i> , 2014, 136, 12027-12034.	13.7	94
23	Redox Switchable Daisy Chain Rotaxanes Driven by Radical-“Radical Interactions. <i>Journal of the American Chemical Society</i> , 2014, 136, 4714-4723.	13.7	122
24	Rotaxane-Based Molecular Muscles. <i>Accounts of Chemical Research</i> , 2014, 47, 2186-2199.	15.6	461
25	Ex2Box: Interdependent Modes of Binding in a Two-Nanometer-Long Synthetic Receptor. <i>Journal of the American Chemical Society</i> , 2013, 135, 12736-12746.	13.7	92
26	Solution-processed small molecule:fullerene bulk-heterojunction solar cells: impedance spectroscopy deduced bulk and interfacial limits to fill-factors. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 16456.	2.8	76
27	Stepwise self-assembly to improve solar cell morphology. <i>Journal of Materials Chemistry A</i> , 2013, 1, 11674.	10.3	38
28	Rationalizing Molecular Design in the Electrodeposition of Anisotropic Lamellar Nanostructures. <i>Chemistry of Materials</i> , 2013, 25, 4330-4339.	6.7	14
29	Molecular machines muscle up. <i>Nature Nanotechnology</i> , 2013, 8, 9-10.	31.5	83
30	Synthesis and solution-state dynamics of donor-“acceptor oligorotaxane foldamers. <i>Chemical Science</i> , 2013, 4, 1470.	7.4	43
31	ExBox: A Polycyclic Aromatic Hydrocarbon Scavenger. <i>Journal of the American Chemical Society</i> , 2013, 135, 183-192.	13.7	275
32	Mechanically Interlaced and Interlocked Donor-“Acceptor Foldamers. <i>Advances in Polymer Science</i> , 2013, , 271-294.	0.8	18
33	Naphthodithiophene-Diketopyrrolopyrrole Small Molecule Donors for Efficient Solution-Processed Solar Cells. <i>Materials Research Society Symposia Proceedings</i> , 2012, 1390, 34.	0.1	0
34	The Chameleonic Nature of Diazaperopyrenium Recognition Processes. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 11872-11877.	13.8	25
35	Modular Synthesis of Bipyridinium Oligomers and Corresponding Donor-“Acceptor Oligorotaxanes with Crown Ethers. <i>Organic Letters</i> , 2012, 14, 5066-5069.	4.6	21
36	Ground-State Thermodynamics of Bistable Redox-Active Donor-“Acceptor Mechanically Interlocked Molecules. <i>Accounts of Chemical Research</i> , 2012, 45, 1581-1592.	15.6	119

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37	A Neutral Naphthalene Diimide [2]Rotaxane. <i>Organic Letters</i> , 2012, 14, 5188-5191.		4.6	34
38	Rapid thermally assisted donor-acceptor catenation. <i>Chemical Communications</i> , 2012, 48, 9141.		4.1	8
39	The Mechanical Bond: A Work of Art. <i>Topics in Current Chemistry</i> , 2011, 323, 19-72.		4.0	52
40	A Naphthodithiophene-Diketopyrrolopyrrole Donor Molecule for Efficient Solution-Processed Solar Cells. <i>Journal of the American Chemical Society</i> , 2011, 133, 8142-8145.		13.7	474
41	Synthesis and Biological Activities of Azalamellarins. <i>Chemistry - an Asian Journal</i> , 2010, 5, 2113-2123.		3.3	40
42	Improved synthesis of 1,5-dinaphtho[38]crown-10. <i>Tetrahedron Letters</i> , 2010, 51, 983-986.		1.4	33
43	Directed self-assembly of a ring-in-ring complex. <i>Chemical Communications</i> , 2010, 46, 5861.		4.1	51
44	Chemorheological Monitoring of Cross-Linking in Slide-ring Gels Derived From \textpm -cyclodextrin Polyrotaxanes. <i>Frontiers in Chemistry</i> , 0, 10, .		3.6	1