

# Carson J Brunns

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4447406/publications.pdf>

Version: 2024-02-01

44  
papers

3,601  
citations

218677

26  
h-index

265206

42  
g-index

55  
all docs

55  
docs citations

55  
times ranked

4703  
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	Rotaxane-Based Molecular Muscles. <i>Accounts of Chemical Research</i> , 2014, 47, 2186-2199.	15.6	461
3	Tunable solid-state fluorescent materials for supramolecular encryption. <i>Nature Communications</i> , 2015, 6, 6884.	12.8	363
4	ExBox: A Polycyclic Aromatic Hydrocarbon Scavenger. <i>Journal of the American Chemical Society</i> , 2013, 135, 183-192.	13.7	275
5	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
6	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
7	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
8	Emergent Ion-Gated Binding of Cationic Host-Guest Complexes within Cationic M <sub>12</sub> L <sub>24</sub> Molecular Flasks. <i>Journal of the American Chemical Society</i> , 2014, 136, 12027-12034.	13.7	94
9	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
10	Molecular machines muscle up. <i>Nature Nanotechnology</i> , 2013, 8, 9-10.	31.5	83
11	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
12	An Electrochemically and Thermally Switchable Donor-Acceptor [2]Daisy Chain Rotaxane. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 1953-1958.	13.8	62
13	Synthetic oligorotaxanes exert high forces when folding under mechanical load. <i>Nature Nanotechnology</i> , 2018, 13, 209-213.	31.5	53
14	The Mechanical Bond: A Work of Art. <i>Topics in Current Chemistry</i> , 2011, 323, 19-72.	4.0	52
15	Directed self-assembly of a ring-in-ring complex. <i>Chemical Communications</i> , 2010, 46, 5861.	4.1	51
16	Rotaxane-mediated suppression and activation of cucurbit[6]uril for molecular detection by <sup>129</sup> Xe hyperCEST NMR. <i>Chemical Communications</i> , 2016, 52, 3119-3122.	4.1	47
17	Synthesis and solution-state dynamics of donor-acceptor oligorotaxane foldamers. <i>Chemical Science</i> , 2013, 4, 1470.	7.4	43
18	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

#	ARTICLE	IF	CITATIONS
19	Synthesis and Biological Activities of Azalamellarins. <i>Chemistry - an Asian Journal</i> , 2010, 5, 2113-2123.	3.3	40
20	Stepwise self-assembly to improve solar cell morphology. <i>Journal of Materials Chemistry A</i> , 2013, 1, 11674.	10.3	38
21	Rotaxane probes for protease detection by $^{129}\text{Xe}$ hyperCEST NMR. <i>Chemical Communications</i> , 2017, 53, 1076-1079.	4.1	38
22	A Neutral Naphthalene Diimide [2]Rotaxane. <i>Organic Letters</i> , 2012, 14, 5188-5191.	4.6	34
23	Improved synthesis of 1,5-dinaphtho[38]crown-10. <i>Tetrahedron Letters</i> , 2010, 51, 983-986.	1.4	33
24	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
25	Poly(lactic acid)-Based Ink for Biodegradable Printed Electronics With Conductivity Enhanced through Solvent Aging. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 23494-23501.	8.0	30
26	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
27	The Chameleonic Nature of Diazaperopyrenium Recognition Processes. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 11872-11877.	13.8	25
28	Exploring and Exploiting the Symmetry-Breaking Effect of Cyclodextrins in Mechanomolecules. <i>Symmetry</i> , 2019, 11, 1249.	2.2	23
29	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
30	Modular Synthesis of Bipyridinium Oligomers and Corresponding Donor–Acceptor Oligorotaxanes with Crown Ethers. <i>Organic Letters</i> , 2012, 14, 5066-5069.	4.6	21
31	Solar Freckles: Long-Term Photochromic Tattoos for Intradermal Ultraviolet Radiometry. <i>ACS Nano</i> , 2020, 14, 13619-13628.	14.6	20
32	Mechanically Interlaced and Interlocked Donor–Acceptor Foldamers. <i>Advances in Polymer Science</i> , 2013, , 271-294.	0.8	18
33	Rationalizing Molecular Design in the Electrodeposition of Anisotropic Lamellar Nanostructures. <i>Chemistry of Materials</i> , 2013, 25, 4330-4339.	6.7	14
34	Post-synthesis modification of slide-ring gels for thermal and mechanical reconfiguration. <i>Soft Matter</i> , 2021, 17, 5248-5257.	2.7	12
35	All-hydrocarbon, all-conjugated cycloparaphenylene-polycyclic aromatic hydrocarbon host-guest complexes stabilized by $\text{CH}\cdots\text{H}\cdots\text{C}$ interactions. <i>Nano Research</i> , 2022, 15, 5545-5555.	10.4	11
36	Rapid thermally assisted donor–acceptor catenation. <i>Chemical Communications</i> , 2012, 48, 9141.	4.1	8

#	ARTICLE	IF	CITATIONS
37	Mechanochemistry Activated Covalent Conjugation Reactions in Soft Hydrogels Induced by Interfacial Failure. ACS Applied Materials & Interfaces, 2021, 13, 1486-1492.	8.0	6
38	A Reactive Inkjet Printing Process for Fabricating Biodegradable Conductive Zinc Structures. Advanced Engineering Materials, 2023, 25, .	3.5	6
39	Scalable synthesis of [8]cycloparaphenyleneacetylene carbon nanohoop using alkyne metathesis. Chemical Communications, 2021, 57, 10887-10890.	4.1	4
40	Soft Electrohydraulic Actuators for Origami Inspired Shape-Changing Interfaces. , 2021, , .		2
41	Photochromic Intradermal Smart Tattoo Based on Diarylethene-Doped Polystyrene Nanoparticles for Personal $\beta$ -Ray Dosimetry. ACS Applied Nano Materials, 2022, 5, 13840-13844.	5.0	2
42	Electriflow: Augmenting Books With Tangible Animation Using Soft Electrohydraulic Actuators. , 2021, , .		1
43	Chemorheological Monitoring of Cross-Linking in Slide-ring Gels Derived From $\beta$ -cyclodextrin Polyrotaxanes. Frontiers in Chemistry, 0, 10, .	3.6	1
44	Naphthodithiophene-Diketopyrrolopyrrole Small Molecule Donors for Efficient Solution-Processed Solar Cells. Materials Research Society Symposia Proceedings, 2012, 1390, 34.	0.1	0