Wade A Braunecker

List of Publications by Year
in descending order

41 papers	6,224 citations	236833 25 h-index	315616 38 g-index
44 all docs	44 docs citations	44 times ranked	5109 citing authors

#	Article	IF	Citations
1	Fluorescent Probe of Aminopolymer Mobility in Bulk and in Nanoconfined Direct Air CO₂ Capture Supports. Journal of Physical Chemistry C, 2022, 126, 10419-10428.	1.5	5
2	Molecular insights into photostability of fluorinated organic photovoltaic blends: role of fullerene electron affinity and donorâ€“acceptor miscibility. Sustainable Energy and Fuels, 2020, 4, 5721-5731.	2.5	2
3	Colloidal three-dimensional covalent organic frameworks and their application as porous liquids. Journal of Materials Chemistry A, 2020, 8, 23455-23462.	5.2	37
4	Thermal Activation of a Copper-Loaded Covalent Organic Framework for Near-Ambient Temperature Hydrogen Storage and Delivery. , 2020, 2, 227-232.		21
5	Sustainable Photovoltaics. Lecture Notes in Energy, 2020, , 25-85.	0.2	0
6	Stability of pushâ€“pull small molecule donors for organic photovoltaics: spectroscopic degradation of acceptor endcaps on benzo[1,2-<i>b</i>:4,5-<i>b</i>â€²]dithiophene cores. Journal of Materials Chemistry A, 2019, 7, 19984-19995.	5.2	4
7	Photobleaching dynamics in small molecule <i>vs.</i>Âpolymer organic photovoltaic blends with 1,7-bis-trifluoromethylfullerene. Journal of Materials Chemistry A, 2018, 6, 4623-4628.	5.2	16
8	Strategic fluorination of polymers and fullerenes improves photostability of organic photovoltaic blends. Organic Electronics, 2018, 62, 685-694.	1.4	4
9	The impact of radical loading and oxidation on the conformation of organic radical polymers by small angle neutron scattering. Journal of Materials Chemistry A, 2018, 6, 15659-15667.	5.2	13
10	Phenyl/Perfluorophenyl Stacking Interactions Enhance Structural Order in Two-Dimensional Covalent Organic Frameworks. Crystal Growth and Design, 2018, 18, 4160-4166.	1.4	31
11	Molecular engineering to improve carrier lifetimes for organic photovoltaic devices with thick active layers. Organic Electronics, 2017, 47, 57-65.	1.4	6
12	Promoting Morphology with a Favorable Density of States Using Diiodooctane to Improve Organic Photovoltaic Device Efficiency and Charge Carrier Lifetimes. ACS Energy Letters, 2017, 2, 1556-1563.	8.8	20
13	Simplified Models for Accelerated Structural Prediction of Conjugated Semiconducting Polymers. Journal of Physical Chemistry C, 2017, 121, 26528-26538.	1.5	11
14	Improving photoconductance of fluorinated donors with fluorinated acceptors. , 2016, , .		0
15	Covalently Bound Nitroxyl Radicals in an Organic Framework. Journal of Physical Chemistry Letters, 2016, 7, 3660-3665.	2.1	33
16	Integrating theory, synthesis, spectroscopy and device efficiency to design and characterize donor materials for organic photovoltaics: a case study including 12 donors. Journal of Materials Chemistry A, 2015, 3, 9777-9788.	5.2	15
17	Close Packing of Nitroxide Radicals in Stable Organic Radical Polymeric Materials. Journal of Physical Chemistry Letters, 2015, 6, 1414-1419.	2.1	44
18	Quenching of the Perylene Fluorophore by Stable Nitroxide Radical-Containing Macromolecules. Journal of Physical Chemistry B, 2014, 118, 12541-12548.	1.2	26

#	ARTICLE	IF	CITATIONS
19	Cyclopenta[c]thiopheneâ€•4,6â€•dioneâ€•Based Copolymers as Organic Photovoltaic Donor Materials. Advanced Energy Materials, 2014, 4, 1301821.	10.2	12
20	Semi-random vs Well-Defined Alternating Donorâ€“Acceptor Copolymers. ACS Macro Letters, 2014, 3, 622-627.	2.3	27
21	5,10-Dihydroindolo[3,2-<i>b</i>]indole-Based Copolymers with Alternating Donor and Acceptor Moieties for Organic Photovoltaics. Macromolecules, 2013, 46, 1350-1360.	2.2	63
22	Ethynylene-Linked Donorâ€“Acceptor Alternating Copolymers. Macromolecules, 2013, 46, 3367-3375.	2.2	57
23	Benzodithiophene and Imide-Based Copolymers for Photovoltaic Applications. Chemistry of Materials, 2012, 24, 1346-1356.	3.2	58
24	Highly Branched Polypropylene via Li⁺-Catalyzed Radical Polymerization. Macromolecules, 2011, 44, 1229-1232.	2.2	8
25	Thermodynamic Components of the Atom Transfer Radical Polymerization Equilibrium: Quantifying Solvent Effects. Macromolecules, 2009, 42, 6348-6360.	2.2	215
26	The Atom Transfer Radical Polymerization Equilibrium: Structural and Medium Effects. ACS Symposium Series, 2009, , 85-96.	0.5	8
27	Understanding Atom Transfer Radical Polymerization: Effect of Ligand and Initiator Structures on the Equilibrium Constants. Journal of the American Chemical Society, 2008, 130, 10702-10713.	6.6	511
28	Competitive Equilibria in Atom Transfer Radical Polymerization. Macromolecular Symposia, 2007, 248, 60-70.	0.4	73
29	Origin of Activity in Cu-, Ru-, and Os-Mediated Radical Polymerization. Macromolecules, 2007, 40, 8576-8585.	2.2	97
30	Role of Cu⁰ in Controlled/â€œLivingâ€•Radical Polymerization. Macromolecules, 2007, 40, 7795-7806.	2.2	268
31	Electron transfer reactions relevant to atom transfer radical polymerization. Journal of Organometallic Chemistry, 2007, 692, 3212-3222.	0.8	143
32	Controlled/living radical polymerization: Features, developments, and perspectives. Progress in Polymer Science, 2007, 32, 93-146.	11.8	2,906
33	Rational Selection of Initiating/Catalytic Systems for the Copper-Mediated Atom Transfer Radical Polymerization of Basic Monomers in Protic Media:Â ATRP of 4-Vinylpyridine. Macromolecules, 2006, 39, 6817-6824.	2.2	98
34	Highly Active Copper-Based Catalyst for Atom Transfer Radical Polymerization. Journal of the American Chemical Society, 2006, 128, 16277-16285.	6.6	139
35	Diminishing catalyst concentration in atom transfer radical polymerization with reducing agents. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 15309-15314.	3.3	799
36	Recent mechanistic developments in atom transfer radical polymerization. Journal of Molecular Catalysis A, 2006, 254, 155-164.	4.8	73

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37	Copper-based ATRP catalysts of very high activity derived from dimethyl cross-bridged cyclam. Journal of Molecular Catalysis A, 2006, 257, 132-140.	4.8	68
38	Towards understanding monomer coordination in atom transfer radical polymerization: synthesis of [CuI(PMDETA)(Ï€-M)][BPh4] (M = methyl acrylate, styrene, 1-octene, and methyl methacrylate) and structural studies by FT-IR and 1H NMR spectroscopy and X-ray crystallography. Journal of Organometallic Chemistry, 2005, 690, 916-924.	0.8	67
39	Osmium-Mediated Radical Polymerization. Macromolecules, 2005, 38, 9402-9404.	2.2	101
40	Quantifying Vinyl Monomer Coordination to CuIin Solution and the Effect of Coordination on Monomer Reactivity in Radical Copolymerization. Macromolecules, 2005, 38, 4081-4088.	2.2	50
41	Determination of Rate Constants for the Activation Step in Atom Transfer Radical Polymerization Using the Stopped-Flow Technique. Macromolecules, 2004, 37, 2679-2682.	2.2	89