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	Controlled/living radical polymerization: Features, developments, and perspectives. Progress in Polymer Science, 2007, 32, 93-146.	11.8	2,906
2	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
3	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
4	Role of Cu⁰ in Controlled/â€œLivingâ€•Radical Polymerization. Macromolecules, 2007, 40, 7795-7806.	2.2	268
5	Thermodynamic Components of the Atom Transfer Radical Polymerization Equilibrium: Quantifying Solvent Effects. Macromolecules, 2009, 42, 6348-6360.	2.2	215
6	Electron transfer reactions relevant to atom transfer radical polymerization. Journal of Organometallic Chemistry, 2007, 692, 3212-3222.	0.8	143
7	Highly Active Copper-Based Catalyst for Atom Transfer Radical Polymerization. Journal of the American Chemical Society, 2006, 128, 16277-16285.	6.6	139
8	Osmium-Mediated Radical Polymerization. Macromolecules, 2005, 38, 9402-9404.	2.2	101
9	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
10	Origin of Activity in Cu-, Ru-, and Os-Mediated Radical Polymerization. Macromolecules, 2007, 40, 8576-8585.	2.2	97
11	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
12	Recent mechanistic developments in atom transfer radical polymerization. Journal of Molecular Catalysis A, 2006, 254, 155-164.	4.8	73
13	Competitive Equilibria in Atom Transfer Radical Polymerization. Macromolecular Symposia, 2007, 248, 60-70.	0.4	73
14	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
15	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
16	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
17	Benzodithiophene and Imide-Based Copolymers for Photovoltaic Applications. Chemistry of Materials, 2012, 24, 1346-1356.	3.2	58
18	Ethynylene-Linked Donorâ€“Acceptor Alternating Copolymers. Macromolecules, 2013, 46, 3367-3375.	2.2	57

#	ARTICLE	IF	CITATIONS
19	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
20	Close Packing of Nitroxide Radicals in Stable Organic Radical Polymeric Materials. Journal of Physical Chemistry Letters, 2015, 6, 1414-1419.	2.1	44
21	Colloidal three-dimensional covalent organic frameworks and their application as porous liquids. Journal of Materials Chemistry A, 2020, 8, 23455-23462.	5.2	37
22	Covalently Bound Nitroxyl Radicals in an Organic Framework. Journal of Physical Chemistry Letters, 2016, 7, 3660-3665.	2.1	33
23	Phenyl/Perfluorophenyl Stacking Interactions Enhance Structural Order in Two-Dimensional Covalent Organic Frameworks. Crystal Growth and Design, 2018, 18, 4160-4166.	1.4	31
24	Semi-random vs Well-Defined Alternating Donorâ€"Acceptor Copolymers. ACS Macro Letters, 2014, 3, 622-627.	2.3	27
25	Quenching of the Perylene Fluorophore by Stable Nitroxide Radical-Containing Macromolecules. Journal of Physical Chemistry B, 2014, 118, 12541-12548.	1.2	26
26	Thermal Activation of a Copper-Loaded Covalent Organic Framework for Near-Ambient Temperature Hydrogen Storage and Delivery. , 2020, 2, 227-232.		21
27	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
28	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
29	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
30	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
31	Cyclopenta[c]thiopheneâ€4,6â€dioneâ€Based Copolymers as Organic Photovoltaic Donor Materials. Advanced Energy Materials, 2014, 4, 1301821.	10.2	12
32	Simplified Models for Accelerated Structural Prediction of Conjugated Semiconducting Polymers. Journal of Physical Chemistry C, 2017, 121, 26528-26538.	1.5	11
33	The Atom Transfer Radical Polymerization Equilibrium: Structural and Medium Effects. ACS Symposium Series, 2009, , 85-96.	0.5	8
34	Highly Branched Polypropylene via Li⁺-Catalyzed Radical Polymerization. Macromolecules, 2011, 44, 1229-1232.	2.2	8
35	Molecular engineering to improve carrier lifetimes for organic photovoltaic devices with thick active layers. Organic Electronics, 2017, 47, 57-65.	1.4	6
36	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

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37	Strategic fluorination of polymers and fullerenes improves photostability of organic photovoltaic blends. Organic Electronics, 2018, 62, 685-694.	1.4	4
38	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
39	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
40	Improving photoconductance of fluorinated donors with fluorinated acceptors. , 2016, , .		0
41	Sustainable Photovoltaics. Lecture Notes in Energy, 2020, , 25-85.	0.2	0