Charles E Diesendruck

List of Publications by Citations

70 papers	3,284 citations	27 h-index	56 g-index
88 ext. papers	3,840 ext. citations	7.7 avg, IF	5.72 L-index

#	Paper	IF	Citations
70	Biomimetic Self-Healing. *Angewandte Chemie - International Edition*, **2015**, 54, 10428-47	16.4	271
69	Effect of Water on the Stability of Quaternary Ammonium Groups for Anion Exchange Membrane Fuel Cell Applications. *Chemistry of Materials*, **2017**, 29, 4425-4431	9.6	214
68	Water in N-heterocyclic carbene-assisted catalysis. *Chemical Reviews*, **2015**, 115, 4607-92	68.1	190
67	Continuous self-healing life cycle in vascularized structural composites. *Advanced Materials*, **2014**, 26, 4302-8	24	167
66	Proton-coupled mechanochemical transduction: a mechanogenerated acid. *Journal of the American Chemical Society*, **2012**, 134, 12446-9	16.4	163
65	Mechanically triggered heterolytic unzipping of a low-ceiling-temperature polymer. *Nature Chemistry*, **2014**, 6, 623-8	17.6	157
64	Poly(bis-arylimidazoliums) possessing high hydroxide ion exchange capacity and high alkaline stability. *Nature Communications*, **2019**, 10, 2306	17.4	149
63	The critical relation between chemical stability of cations and water in anion exchange membrane fuel cells environment. *Journal of Power Sources*, **2018**, 375, 351-360	8.9	137
62	A Thermally Switchable Latent Ruthenium Olefin Metathesis Catalyst. *Organometallics*, **2008**, 27, 811-813	3.8	136
61	Water □A key parameter in the stability of anion exchange membrane fuel cells. *Current Opinion in Electrochemistry*, **2018**, 9, 173-178	7.2	105
60	Photoactivation of Ruthenium Olefin Metathesis Initiators. *Organometallics*, **2009**, 28, 4652-4655	3.8	105
59	End group characterization of poly(phthalaldehyde): surprising discovery of a reversible, cationic macrocyclization mechanism. *Journal of the American Chemical Society*, **2013**, 135, 12755-61	16.4	99
58	Water as a Promoter and Catalyst for Dioxygen Electrochemistry in Aqueous and Organic Media. *ACS Catalysis*, **2015**, 5, 6600-6607	13.1	92
57	Predicting the cis-trans dichloro configuration of group 15-16 chelated ruthenium olefin metathesis complexes: a DFT and experimental study. *Inorganic Chemistry*, **2009**, 48, 10819-25	5.1	89
56	The Versatile Alkylidene Moiety in Ruthenium Olefin Metathesis Catalysts. *European Journal of Inorganic Chemistry*, **2009**, 2009, 4185-4203	2.3	81
55	Solvent Swelling Activation of a Mechanophore in a Polymer Network. *Macromolecules*, **2014**, 47, 2690-2694	5.5	78
54	Chemical stability of poly(phenylene oxide)-based ionomers in an anion exchange-membrane fuel cell environment. *Journal of Materials Chemistry A*, **2018**, 6, 22234-22239	13	78

53	Polycyclooctadiene complexes of rhodium(I): direct access to organometallic nanoparticles. *Angewandte Chemie - International Edition*, **2013**, 52, 5767-70	16.4	74
52	Widening the Latency Gap in Chelated Ruthenium Olefin Metathesis Catalysts. *Organometallics*, **2011**, 30, 3430-3437	3.8	64
51	A latent s-chelated ruthenium benzylidene initiator for ring-opening metathesis polymerization. *Journal of Polymer Science Part A*, **2009**, 47, 4209-4213	2.5	61
50	Ligand Isomerization in Sulfur-Chelated Ruthenium Benzylidenes. *Organometallics*, **2011**, 30, 1607-1615	3.8	57
49	Depolymerizable, adaptive supramolecular polymer nanoparticles and networks. *Polymer Chemistry* , **2014**, 5, 3788-3794	4.9	44
48	Latent and Switchable Olefin Metathesis Catalysts. *Macromolecular Symposia*, **2010**, 293, 33-38	0.8	39
47	Mechanical Unfolding and Thermal Refolding of Single-Chain Nanoparticles Using Ligand-Metal Bonds. *Journal of the American Chemical Society*, **2019**, 141, 7256-7260	16.4	37
46	N-Arylation of Tertiary Amines under Mild Conditions. *Organic Letters*, **2016**, 18, 980-3	6.2	35
45	Enabling Room-Temperature Mechanochromic Activation in a Glassy Polymer: Synthesis and Characterization of Spiropyran Polycarbonate. *Journal of the American Chemical Society*, **2019**, 141, 10060-10067	16.4	34
44	Homodinuclear ruthenium catalysts for dimer ring-closing metathesis. *Angewandte Chemie - International Edition*, **2008**, 47, 6422-5	16.4	34
43	Dynamic Covalent Macrocyclic Poly(phthalaldehyde)s: Scrambling Cyclic Homopolymer Mixtures Produces Multi-Block and Random Cyclic Copolymers. *Macromolecules*, **2013**, 46, 8121-8128	5.5	27
42	BF3-promoted electrochemical properties of quinoxaline in propylene carbonate. *RSC Advances*, **2015**, 5, 18822-18831	3.7	25
41	Intramolecular Cross-Linking: Addressing Mechanochemistry with a Bioinspired Approach. *Angewandte Chemie - International Edition*, **2017**, 56, 6431-6434	16.4	24
40	Changes of Anion Exchange Membrane Properties During Chemical Degradation. *ACS Applied Polymer Materials*, **2020**, 2, 360-367	4.3	23
39	Superoxide (Electro)Chemistry on Well-Defined Surfaces in Organic Environments. *Journal of Physical Chemistry C*, **2016**, 120, 15909-15914	3.8	23
38	Polyphthalaldehyde: Synthesis, Derivatives, and Applications. *Macromolecular Rapid Communications*, **2018**, 39, 1700519	4.8	23
37	The mechanochemical production of phenyl cations through heterolytic bond scission. *Faraday Discussions*, **2014**, 170, 385-94	3.6	22
36	Biomimetische Selbstheilung. *Angewandte Chemie*, **2015**, 127, 10572-10593	3.6	21

35	Divergent Macrocyclization Mechanisms in the Cationic Initiated Polymerization of Ethyl Glyoxylate. *Macromolecules*, **2014**, 47, 3603-3607	5.5	19
34	Increasing the Alkaline Stability of ,-Diaryl Carbazolium Salts Using Substituent Electronic Effects. *ACS Applied Materials & Interfaces*, **2020**, 12, 49617-49625	9.5	18
33	Following Homolytic Mechanochemical Kinetics with a Pyrenyl Nitrone Spin Trap. *ACS Macro Letters* , **2017**, 6, 42-45	6.6	17
32	Highly Stretchable Polymers: Mechanical Properties Improvement by Balancing Intra- and Intermolecular Interactions. *Advanced Functional Materials*, **2020**, 30, 1901806	15.6	17
31	The Effect of Intrachain Cross-Linking on the Thermomechanical Behavior of Bulk Polymers Assembled Solely from Single Chain Polymer Nanoparticles. *Macromolecules*, **2018**, 51, 7160-7168	5.5	16
30	Stability and activity of cis-dichloro ruthenium olefin metathesis precatalysts bearing chelating sulfur alkylidenes. *Journal of Organometallic Chemistry*, **2014**, 769, 24-28	2.3	15
29	The effect of intramolecular cross links on the mechanochemical fragmentation of polymers in solution. *Chemical Communications*, **2017**, 53, 10132-10135	5.8	15
28	The Effect of Intramolecular Cross-Linking on Polymer Interactions in Solution. *Macromolecular Rapid Communications*, **2018**, 39, e1800407	4.8	14
27	Tailoring single chain polymer nanoparticle thermo-mechanical behavior by cross-link density. *Soft Matter*, **2017**, 13, 2808-2816	3.6	12
26	Advantages and limitations of diisocyanates in intramolecular collapse. *Polymer Chemistry*, **2017**, 8, 3712-3720	4.7	11
25	Effect of disulphide loop length on mechanochemical structural stability of macromolecules. *Chemical Communications*, **2020**, 56, 2143-2146	5.8	11
24	Alkyne mechanochemistry: putative activation by transoidal bending. *Chemical Communications*, **2014**, 50, 13235-8	5.8	11
23	Strategies for the Synthesis of N-Arylammonium Salts. *Synthesis*, **2017**, 49, 3535-3545	2.9	11
22	An Effective Synthesis of N,N-Diphenyl Carbazolium Salts. *Synlett*, **2018**, 29, 1314-1318	2.2	10
21	Mechanical and Thermomechanical Characterization of Glassy Thermoplastics with Intrachain Cross-Links. *Macromolecules*, **2017**, 50, 6415-6420	5.5	10
20	Polycyclooctadiene Complexes of Rhodium(I): Direct Access to Organometallic Nanoparticles. *Angewandte Chemie*, **2013**, 125, 5879-5882	3.6	10
19	Effect of intramolecular crosslinker properties on the mechanochemical fragmentation of covalently folded polymers. *Journal of Polymer Science*, **2020**, 58, 692-703	2.4	9
18	Bridging experiments and theory: isolating the effects of metal-ligand interactions on viscoelasticity of reversible polymer networks. *Soft Matter*, **2020**, 16, 8591-8601	3.6	9

17	Long-lasting, monovalent-selective capacitive deionization electrodes. *Npj Clean Water*, **2021**, 4,	11.2	9
16	Intramolecular Cross-Linking: Addressing Mechanochemistry with a Bioinspired Approach. *Angewandte Chemie*, **2017**, 129, 6531-6534	3.6	8
15	Flow Photochemistry for Single-Chain Polymer Nanoparticle Synthesis. *Angewandte Chemie - International Edition*, **2021**, 60, 2042-2046	16.4	8
14	Single chain polymer nanoparticles as shear-resilient viscosity modifiers for lubricating oils. *Reactive and Functional Polymers*, **2018**, 131, 237-242	4.6	7
13	The working mechanisms of low molecular weight polynaphthalene sulfonate superplasticizers. *Construction and Building Materials*, **2020**, 240, 117891	6.7	6
12	The Reaction Mechanism Between Tetraarylammonium Salts and Hydroxide. *European Journal of Organic Chemistry*, **2020**, 2020, 3161-3168	3.2	5
11	Oligomerisation reactions of beta substituted thiols in water. *RSC Advances*, **2013**, 3, 1735-1738	3.7	5
10	Ligand Valency Effects on the Alkaline Stability of Metallopolymer Anion-Exchange Membranes. *Macromolecular Rapid Communications*, **2021**, 42, e2100238	4.8	5
9	Mechanophores for Self-Healing Applications **2013**, 193-214		4
8	Olefination of N-Sulfinylimines under Mild Conditions. *European Journal of Organic Chemistry*, **2017**, 2017, 1184-1190	3.2	2
7	A 50-Year Long Lesson. *Israel Journal of Chemistry*, **2015**, 55, 1154-1155	3.4	2
6	Chemical Communication between Organometallic Single-Chain Polymer Nanoparticles. *Chemistry - A European Journal*, **2020**, 26, 15835-15838	4.8	2
5	Template-Free Formation of Regular Macroporosity in Carbon Materials Made from a Folded Polymer Precursor. *Small*, **2021**, 17, e2100712	11	1
4	A surprising relation between operating temperature and stability of anion exchange membrane fuel cells. *Journal of Power Sources Advances*, **2021**, 11, 100066	3.3	1
3	Innentitelbild: Polycyclooctadiene Complexes of Rhodium(I): Direct Access to Organometallic Nanoparticles (Angew. Chem. 22/2013). *Angewandte Chemie*, **2013**, 125, 5762-5762	3.6	
2	Crystal structure of 1,3-bis-(2,3-di-methyl-quinoxalin-6-yl)benzene. *Acta Crystallographica Section E: Crystallographic Communications*, **2015**, 71, 1429-32	0.7	
1	Flow Photochemistry for Single-Chain Polymer Nanoparticle Synthesis. *Angewandte Chemie*, **2021**, 133, 2070-2074	3.6	