Gregory I Peterson

List of Publications by Year
in descending order

32 papers	1,617 citations	361413 20 h-index	434195 31 g-index
34 all docs	34 docs citations	34 times ranked	2044 citing authors

#	Article	IF	Citations
1	3D-Printed Mechanochromic Materials. ACS Applied Materials & Interfaces, 2015, 7, 577-583.	8.0	236
2	Mechanically triggered heterolytic unzipping of a low-ceiling-temperature polymer. Nature Chemistry, 2014, 6, 623-628.	13.6	198
3	Controlled Depolymerization: Stimuli-Responsive Self-Immolative Polymers. Macromolecules, 2012, 45, 7317-7328.	4.8	191
4	Biodegradable Shape Memory Polymers in Medicine. Advanced Healthcare Materials, 2017, 6, 1700694.	7.6	136
5	Production of Materials with Spatially-Controlled Cross-Link Density via Vat Photopolymerization. ACS Applied Materials & Interfaces, 2016, 8, 29037-29043.	8.0	114
6	Comparison of Mechanochemical Chain Scission Rates for Linear versus Three-Arm Star Polymers in Strong Acoustic Fields. ACS Macro Letters, 2014, 3, 648-651.	4.8	102
7	Controlled Living Cascade Polymerization To Make Fully Degradable Sugar-Based Polymers from <scp>d</scp>-Glucose and <scp>d</scp>-Galactose. Journal of the American Chemical Society, 2019, 141, 12207-12211.	13.7	58
8	Synthesis of Functional Polyacetylenes via Cyclopolymerization of Diyne Monomers with Grubbs-type Catalysts. Accounts of Chemical Research, 2019, 52, 994-1005.	15.6	57
9	Mechanochemical Degradation of Denpols: Synthesis and Ultrasound-Induced Chain Scission of Polyphenylene-Based Dendronized Polymers. Journal of the American Chemical Society, 2018, 140, 8599-8608.	13.7	56
10	Mechanochemical Degradation of Amorphous Polymers with Ball-Mill Grinding: Influence of the Glass Transition Temperature. Macromolecules, 2020, 53, 7795-7802.	4.8	46
11	Multimechanophore Graft Polymers: Mechanochemical Reactions at Backboneâ€“Arm Junctions. Macromolecules, 2019, 52, 9561-9568.	4.8	37
12	1,2-oxazine linker as a thermal trigger for self-immolative polymers. Polymer, 2014, 55, 5980-5985.	3.8	32
13	Î±-Amino Acid-Based Poly(Ester urea)s as Multishape Memory Polymers for Biomedical Applications. ACS Macro Letters, 2016, 5, 1176-1179.	4.8	32
14	Ru-Catalyzed, <i>cis</i>-Selective Living Ring-Opening Metathesis Polymerization of Various Monomers, Including a Dendronized Macromonomer, and Implications to Enhanced Shear Stability. Journal of the American Chemical Society, 2020, 142, 10438-10445.	13.7	31
15	Kinetic Analysis of Mechanochemical Chain Scission of Linear Poly(phthalaldehyde). Macromolecular Rapid Communications, 2014, 35, 1611-1614.	3.9	29
16	Mechanochemical Reactivity of Bottlebrush and Dendronized Polymers: Solid vs. Solution States. Angewandte Chemie - International Edition, 2021, 60, 18651-18659.	13.8	28
17	Tunable Shape Memory Polymers from Î±-Amino Acid-Based Poly(ester urea)s. Macromolecules, 2017, 50, 4300-4308.	4.8	27
18	The influence of polymer architecture in polymer mechanochemistry. Chemical Communications, 2021, 57, 6465-6474.	4.1	26

#	ARTICLE	IF	CITATIONS
19	Mechanochemical Degradation of Brush Polymers: Kinetics of Ultrasound-Induced Backbone and Arm Scission. Macromolecules, 2020, 53, 1623-1628.	4.8	25
20	Cascade polymerizations: recent developments in the formation of polymer repeat units by cascade reactions. Chemical Science, 2020, 11, 4843-4854.	7.4	24
21	Sugarâ€Based Polymers from <scp>d</scp>â€Xylose: Living Cascade Polymerization, Tunable Degradation, and Small Molecule Release. Angewandte Chemie - International Edition, 2021, 60, 849-855.	13.8	21
22	Additive manufacturing of mechanochromic polycaprolactone on entry-level systems. Rapid Prototyping Journal, 2015, 21, 520-527.	3.2	20
23	Adhesion of Blood Plasma Proteins and Platelet-rich Plasma on <i><i><scp>l</scp></i></i>-Valine-Based Poly(ester urea). Biomacromolecules, 2016, 17, 3396-3403.	5.4	20
24	Postpublication peer review: A crucial tool. Science, 2018, 359, 1225-1226.	12.6	16
25	Influence of Grafting Density on Ultrasound-Induced Backbone and Arm Scission of Graft Copolymers. Macromolecules, 2021, 54, 4219-4226.	4.8	16
26	Modeling the Mechanochemical Degradation of Star Polymers. Macromolecular Theory and Simulations, 2014, 23, 555-563.	1.4	11
27	Direct formation of nano-objects <i>via in situ</i> self-assembly of conjugated polymers. Polymer Chemistry, 2021, 12, 1393-1403.	3.9	11
28	Polymers producing hydrogen. Nature Chemistry, 2020, 12, 1093-1095.	13.6	6
29	Investigation of the dynamic nature of 1,2-oxazines derived from peralkylcyclopentadiene and nitrosocarbonyl species. Organic and Biomolecular Chemistry, 2016, 14, 5617-5621.	2.8	4
30	Mechanochemical Reactivity of Bottlebrush and Dendronized Polymers: Solid vs. Solution States. Angewandte Chemie, 2021, 133, 18799-18807.	2.0	4
31	Sugarâ€Based Polymers from d â€Xylose: Living Cascade Polymerization, Tunable Degradation, and Small Molecule Release. Angewandte Chemie, 2021, 133, 862-868.	2.0	3
32	Titelbild: Sugarâ€Based Polymers from <scp>d</scp>â€Xylose: Living Cascade Polymerization, Tunable Degradation, and Small Molecule Release (Angew. Chem. 2/2021). Angewandte Chemie, 2021, 133, 521-521.	2.0	0