C Allan Guymon

List of Publications by Year
in descending order

83 papers	2,377 citations	136950 32 h-index	243625 44 g-index
85 all docs	85 docs citations	85 times ranked	2266 citing authors

#	Article	IF	Citations
1	Recent advances to decrease shrinkage stress and enhance mechanical properties in free radical polymerization: a review. Polymer International, 2022, 71, 596-607.	3.1	11
2	Controlling phase separated domains in UV-curable formulations with OH-functionalized prepolymers. Polymer Chemistry, 2022, 13, 3102-3115.	3.9	3
3	Photograftable Zwitterionic Coatings Prevent <i>Staphylococcus aureus</i> and <i>Staphylococcus epidermidis</i> Adhesion to PDMS Surfaces. ACS Applied Bio Materials, 2021, 4, 1283-1293.	4.6	22
4	Zwitterionic Photografted Coatings of Cochlear Implant Biomaterials Reduce Friction and Insertion Forces. Otology and Neurotology, 2021, 42, 1476-1483.	1.3	12
5	Antifouling and Mechanical Properties of Photografted Zwitterionic Hydrogel Thin-Film Coatings Depend on the Cross-Link Density. ACS Biomaterials Science and Engineering, 2021, 7, 4494-4502.	5.2	18
6	Interaction of micropatterned topographical and biochemical cues to direct neurite growth from spiral ganglion neurons. Hearing Research, 2021, 409, 108315.	2.0	5
7	Field implementation of WMA mixtures containing recycled asphalt shingles (RAS). Construction and Building Materials, 2020, 250, 118836.	7.2	2
8	Manipulation of crosslinking in photo-induced phase separated polymers to control morphology and thermo-mechanical properties. Polymer, 2020, 202, 122699.	3.8	16
9	Antifouling Photograftable Zwitterionic Coatings on PDMS Substrates. Langmuir, 2019, 35, 1100-1110.	3.5	72
10	Two-photon polymerized poly(caprolactone) retinal cell delivery scaffolds and their systemic and retinal biocompatibility. Acta Biomaterialia, 2019, 94, 204-218.	8.3	51
11	Kinetically Controlled Photoinduced Phase Separation for Hybrid Radical/Cationic Systems. Macromolecules, 2019, 52, 2975-2986.	4.8	32
12	Modification of mechanical properties and resolution of printed stereolithographic objects through RAFT agent incorporation. Additive Manufacturing, 2019, 27, 20-31.	3.0	21
13	Responsive superabsorbent hydrogels via photopolymerization in lyotropic liquid crystal templates. Polymer, 2018, 142, 119-126.	3.8	23
14	Nanoporous Polymer Networks Templated by Gemini Surfactant Lyotropic Liquid Crystals. Chemistry of Materials, 2018, 30, 185-196.	6.7	25
15	Photopolymerized micropatterns with high feature frequencies overcome chemorepulsive borders to direct neurite growth. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e1392-e1403.	2.7	7
16	Photopolymerized Microfeatures Guide Adult Spiral Ganglion and Dorsal Root Ganglion Neurite Growth. Otology and Neurotology, 2018, 39, 119-126.	1.3	13
17	Effect of Molecular Weight and Functionality on Acrylated Poly(caprolactone) for Stereolithography and Biomedical Applications. Biomacromolecules, 2018, 19, 3682-3692.	5.4	51
18	Photopolymerization kinetics in and of selfâ€assembling lyotropic liquid crystal templates. Journal of Polymer Science, Part B: Polymer Physics, 2017, 55, 471-489.	2.1	14

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19	A novel approach to evaluate fracture surfaces of aged and rejuvenator-restored asphalt using cryo-SEM and image analysis techniques. Construction and Building Materials, 2017, 133, 301-313.	7.2	38
20	Tuning Surface and Topographical Features to Investigate Competitive Guidance of Spiral Ganglion Neurons. ACS Applied Materials & Interfaces, 2017, 9, 31488-31496.	8.0	9
21	Photopolymerizable Zwitterionic Polymer Patterns Control Cell Adhesion and Guide Neural Growth. Biomacromolecules, 2017, 18, 2389-2401.	5.4	45
22	Effects of directed architecture in epoxy functionalized prepolymers for photocurable thin films. Journal of Polymer Science Part A, 2017, 55, 144-154.	2.3	7
23	Neuronal Differentiation of Induced Pluripotent Stem Cells on Surfactant Templated Chitosan Hydrogels. Biomacromolecules, 2016, 17, 1684-1695.	5.4	38
24	Quantifying Spiral Ganglion Neurite and Schwann Behavior on Micropatterned Polymer Substrates. Methods in Molecular Biology, 2016, 1427, 305-318.	0.9	6
25	Intracellular calcium and cyclic nucleotide levels modulate neurite guidance by microtopographical substrate features. Journal of Biomedical Materials Research - Part A, 2016, 104, 2037-2048.	4.0	8
26	Radical polymerization behavior and molecular weight development of homologous monoacrylate monomers in lyotropic liquid crystal phases. Journal of Polymer Science Part A, 2016, 54, 144-154.	2.3	10
27	Differentiation of Induced Pluripotent Stem Cells to Neural Retinal Precursor Cells on Porous Poly-Lactic-co-Glycolic Acid Scaffolds. Journal of Ocular Pharmacology and Therapeutics, 2016, 32, 310-316.	1.4	17
28	Microtopographical features generated by photopolymerization recruit RhoA/ROCK through TRPV1 to direct cell and neurite growth. Biomaterials, 2015, 53, 95-106.	11.4	24
29	Neural Pathfinding on Uni- and Multidirectional Photopolymerized Micropatterns. ACS Applied Materials & Interfaces, 2014, 6, 11265-11276.	8.0	31
30	Material Stiffness Effects on Neurite Alignment to Photopolymerized Micropatterns. Biomacromolecules, 2014, 15, 3717-3727.	5.4	29
31	Polymer Structure Development in Lyotropic Liquid Crystalline Solutions. Macromolecules, 2014, 47, 5728-5738.	4.8	24
32	Mechanical properties of murine and porcine ocular tissues in compression. Experimental Eye Research, 2014, 121, 194-199.	2.6	51
33	Effects of Controlling Polymer Nanostructure Using Photopolymerization within Lyotropic Liquid Crystalline Templates. Chemistry of Materials, 2013, 25, 2950-2960.	6.7	31
34	Improved stimuli-response and mechanical properties of nanostructured poly(N-isopropylacrylamide-co-dimethylsiloxane) hydrogels generated through photopolymerization in lyotropic liquid crystal templates. Soft Matter, 2013, 9, 7458.	2.7	32
35	Photopolymerized microfeatures for directed spiral ganglion neurite andÂSchwann cell growth. Biomaterials, 2013, 34, 42-54.	11.4	58
36	Influence of Photopolymerization Characteristics on Thermoâ€<scp>M</scp>echanical Properties of Nanocomposites Utilizing Polymerizable Organoclays in Thiolâ€<scp>A</scp>crylate Systems. Macromolecular Symposia, 2013, 329, 173-192.	0.7	5

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37	Effects of polymerizable organoclays on oxygen inhibition of acrylate and thiol-acrylate photopolymerization. Polymer, 2012, 53, 1640-1650.	3.8	19
38	Micropatterned methacrylate polymers direct spiral ganglion neurite and Schwann cell growth. Hearing Research, 2011, 278, 96-105.	2.0	49
39	Photopolymerization behavior in nanocomposites formed with thiolâ€“acrylate and polymerizable organoclays. Journal of Polymer Science Part A, 2011, 49, 465-475.	2.3	19
40	Fast Deswelling Kinetics of Nanostructured Poly(<i>N</i>â€isopropylacrylamide) Photopolymerized in a Lyotropic Liquid Crystal Template. Macromolecular Rapid Communications, 2011, 32, 765-769.	3.9	28
41	Influence of non-reactive solvent on optical performance, photopolymerization kinetics and morphology of nanoporous polymer gratings. European Polymer Journal, 2010, 46, 937-943.	5.4	7
42	Nanostructure Evolution during Photopolymerization in Lyotropic Liquid Crystal Templates. Macromolecules, 2010, 43, 8502-8510.	4.8	28
43	Chemical Compatibility and Reaction-Induced Exfoliation in Photopolymerizable Clay Nanocomposites. Macromolecules, 2009, 42, 180-187.	4.8	24
44	Cross-Linking of Reactive Lyotropic Liquid Crystals for Nanostructure Retention. Chemistry of Materials, 2009, 21, 1060-1068.	6.7	27
45	Photopolymerization Behavior of Thiolâ˘’Acrylate Monomers in Clay Nanocomposites. Macromolecules, 2009, 42, 3275-3284.	4.8	28
46	Polymerization Kinetics and Nanostructure Evolution of Reactive Lyotropic Liquid Crystals with Different Reactive Group Position. Macromolecules, 2009, 42, 9243-9250.	4.8	10
47	Nanostructured Hydrogels via Photopolymerization in Lyotropic Liquid Crystalline Systems. Molecular Crystals and Liquid Crystals, 2009, 509, 30/[772]-38/[780].	0.9	5
48	Aliphatic chain length effects on photopolymerization kinetics and structural evolution of polymerizable lyotropic liquid crystals. Polymer, 2008, 49, 2260-2267.	3.8	21
49	Photopolymerization kinetics of poly(acrylate)â€“clay composites using polymerizable surfactants. Polymer, 2008, 49, 2636-2643.	3.8	36
50	High-sensitivity molecular recognition with light-induced polymerization. Trends in Biotechnology, 2008, 26, 581-583.	9.3	0
51	Photopolymerization in Polymer Templating. Chemistry of Materials, 2008, 20, 768-781.	6.7	60
52	Biotinylated Biodegradable Nanotemplated Hydrogel Networks for Cell Interactive Applications. Biomacromolecules, 2008, 9, 1188-1194.	5.4	47
53	Physical Behavior of Cross-Linked PEG Hydrogels Photopolymerized within Nanostructured Lyotropic Liquid Crystalline Templates. Macromolecules, 2007, 40, 1101-1107.	4.8	49
54	Contribution of monomer functionality and additives to polymerization kinetics and liquid crystal phase separation in acrylateâ€based polymerâ€dispersed liquid crystals (PDLCs). Liquid Crystals, 2007, 34, 1377-1385.	2.2	39

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55	Monomer Functionality Effects in the Formation of Thiolâˆ’Ene Holographic Polymer Dispersed Liquid Crystals. Macromolecules, 2007, 40, 1121-1127.	4.8	55
56	Nanostructured Biodegradable Polymer Networks Using Lyotropic Liquid Crystalline Templates. Biomacromolecules, 2007, 8, 2104-2111.	5.4	27
57	Nanostructured Biodegradable Polymer Composites Generated Using Lyotropic Liquid Crystalline Media. Macromolecules, 2007, 40, 7951-7959.	4.8	16
58	Polymerization Kinetics and Monomer Functionality Effects in Thiolâˆ’Ene Polymer Dispersed Liquid Crystals. Macromolecules, 2007, 40, 1112-1120.	4.8	71
59	Holographic polymer dispersed liquid crystals (HPDLCs) containing triallyl isocyanurate monomer. Polymer, 2007, 48, 5979-5987.	3.8	47
60	Development and characterization of photopolymerizable biodegradable materials from PEGâ€“PLAâ€“PEG block macromonomers. Polymer, 2007, 48, 6554-6564.	3.8	75
61	The influence of <i>N</i>â€vinyl pyrrolidone on polymerization kinetics and thermoâ€mechanical properties of crosslinked acrylate polymers. Journal of Polymer Science Part A, 2007, 45, 4062-4073.	2.3	47
62	Influence of Polymerization Conditions on Nanostructure and Properties of Polyacrylamide Hydrogels Templated from Lyotropic Liquid Crystals. Chemistry of Materials, 2006, 18, 5609-5617.	6.7	51
63	Photoinitiation and Monomer Segregation Behavior in Polymerization of Lyotropic Liquid Crystalline Systems. Macromolecules, 2006, 39, 617-626.	4.8	33
64	Photopolymerization of Acid Containing Monomers:Â Real-Time Monitoring of Polymerization Rates. Macromolecules, 2006, 39, 8269-8273.	4.8	43
65	Photopolymerization Kinetics of Pigmented Systems Using a Thin-Film Calorimeter. ACS Symposium Series, 2006, , 29-40.	0.5	0
66	Copolymerization Mechanism of Photoinitiator Free Thiolâ€”Vinyl Acrylate Systems. ACS Symposium Series, 2006, , 17-28.	0.5	7
67	The influence of N-vinyl-2-pyrrolidinone in polymerization of holographic polymer dispersed liquid crystals (HPDLCs). Polymer, 2006, 47, 2289-2298.	3.8	44
68	Effect of photoinitiator segregation on polymerization kinetics in lyotropic liquid crystals. Polymer, 2005, 46, 335-345.	3.8	18
69	Design and performance of a thin-film calorimeter for quantitative characterization of photopolymerizable systems. Review of Scientific Instruments, 2005, 76, 054102.	1.3	4
70	Polymer molecular weight and chain transfer during the photopolymerization of an aliphatic monoacrylate in a smectic liquid crystal. Polymer, 2003, 44, 2751-2759.	3.8	5
71	Photopolymerization in Pluronic Lyotropic Liquid Crystals:Â Induced Mesophase Thermal Stability. Macromolecules, 2003, 36, 6549-6558.	4.8	34
72	Effects of Monomer Organization on the Photopolymerization Kinetics of Acrylamide in Lyotropic Liquid Crystalline Phases. Langmuir, 2003, 19, 9466-9472.	3.5	43

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73	Physical Properties of Hydrogels Synthesized from Lyotropic Liquid Crystalline Templates. Chemistry of Materials, 2003, 15, 3376-3384.	6.7	53
74	Polymer nanostructure development of fluorinated and aliphatic monoacrylates in smectic liquid crystals via photopolymerization. Liquid Crystals, 2003, 30, 49-58.	2.2	7
75	Acceleration of Polyacrylamide Photopolymerization Using Lyotropic Liquid Crystals. Macromolecules, 2001, 34, 8587-8589.	4.8	33
76	Photopolymerization Kinetics and Structure Development of Templated Lyotropic Liquid Crystalline Systems. Macromolecules, 2001, 34, 4430-4438.	4.8	52
77	Phase Behavior and Polymerization Kinetics of a Semifluorinated Lyotropic Liquid Crystal. Macromolecules, 2000, 33, 5448-5454.	4.8	30
78	Polymerization Conditions and Electrooptic Properties of Polymer-Stabilized Ferroelectric Liquid Crystals. Chemistry of Materials, 1998, 10, 2378-2388.	6.7	56
79	Photopolymerization and Electrooptic Properties of Polymer Network/Ferroelectric Liquid-Crystal Composites. ACS Symposium Series, 1997, , 16-27.	0.5	2
80	Polymerization Behavior and Kinetics during the Formation of Polymer-Stabilized Ferroelectric Liquid Crystals. Macromolecules, 1997, 30, 1594-1600.	4.8	53
81	Kinetic Analysis of Polymerization Rate Acceleration During the Formation of Polymer/Smectic Liquid Crystal Composites. Macromolecules, 1997, 30, 5271-5278.	4.8	55
82	Polymerization Effects on the Electro-Optic Properties of a Polymer Stabilized Ferroelectric Liquid Crystal. Materials Research Society Symposia Proceedings, 1996, 425, 197.	0.1	0
83	Phase behaviour and electro-optic characteristics of a polymer stabilized ferroelectric liquid crystal. Liquid Crystals, 1995, 19, 719-727.	2.2	58