Todd Hoare

List of Publications by Year
in descending order

111 papers	8,833 citations	50273 46 h-index	42393 92 g-index
114 all docs	114 docs citations	114 times ranked	10608 citing authors

#	Article	IF	Citations
1	Click Chemistry Hydrogels for Extrusion Bioprinting: Progress, Challenges, and Opportunities. Biomacromolecules, 2022, 23, 619-640.	5.4	36
2	Microgels and Nanogels for the Delivery of Poorly Water-Soluble Drugs. Molecular Pharmaceutics, 2022, 19, 1704-1721.	4.6	22
3	DNAzyme-Immobilizing Microgel Magnetic Beads Enable Rapid, Specific, Culture-Free, and Wash-Free Electrochemical Quantification of Bacteria in Untreated Urine. ACS Sensors, 2022, 7, 985-994.	7.8	29
4	Polyvinylamine with moderate binding affinity as a highly effective vehicle for RNA delivery. Journal of Controlled Release, 2022, 345, 20-37.	9.9	20
5	Design of Smart Sizeâ€, Surfaceâ€, and Shapeâ€Switching Nanoparticles to Improve Therapeutic Efficacy. Small, 2022, 18, e2104632.	10.0	33
6	Incorporation of Polymer-Grafted Cellulose Nanocrystals into Latex-Based Pressure-Sensitive Adhesives. ACS Materials Au, 2022, 2, 176-189.	6.0	6
7	A DNA Barcodeâ€Based Aptasensor Enables Rapid Testing of Porcine Epidemic Diarrhea Viruses in Swine Saliva Using Electrochemical Readout. Angewandte Chemie, 2022, 134, .	2.0	5
8	Hydrogels for Tissue Engineering: Addressing Key Design Needs Toward Clinical Translation. Frontiers in Bioengineering and Biotechnology, 2022, 10, .	4.1	25
9	Using the Intranasal Route to Administer Drugs to Treat Neurological and Psychiatric Illnesses: Rationale, Successes, and Future Needs. CNS Drugs, 2022, 36, 739-770.	5.9	18
10	Single-Step Printable Hydrogel Microarray Integrating Long-Chain DNA for the Discriminative and Size-Specific Sensing of Nucleic Acids. ACS Applied Materials & Interfaces, 2021, 13, 2360-2370.	8.0	9
11	Fast Thermoresponsive Poly(oligoethylene glycol methacrylate) (POEGMA)-Based Nanostructured Hydrogels for Reversible Tuning of Cell Interactions. ACS Biomaterials Science and Engineering, 2021, 7, 4258-4268.	5.2	11
12	In situ-gelling starch nanoparticle (SNP)/O-carboxymethyl chitosan (CMCh) nanoparticle network hydrogels for the intranasal delivery of an antipsychotic peptide. Journal of Controlled Release, 2021, 330, 738-752.	9.9	36
13	A Review of Design and Fabrication Methods for Nanoparticle Network Hydrogels for Biomedical, Environmental, and Industrial Applications. Advanced Functional Materials, 2021, 31, 2102355.	14.9	46
14	Integrating programmable DNAzymes with electrical readout for rapid and culture-free bacterial detection using a handheld platform. Nature Chemistry, 2021, 13, 895-901.	13.6	69
15	Effect of Reaction Media on Grafting Hydrophobic Polymers from Cellulose Nanocrystals <i>via</i> Surface-Initiated Atom-Transfer Radical Polymerization. Biomacromolecules, 2021, 22, 3601-3612.	5.4	12
16	Multi-scale structuring of cell-instructive cellulose nanocrystal composite hydrogel sheets via sequential electrospinning and thermal wrinkling. Acta Biomaterialia, 2021, 128, 250-261.	8.3	16
17	Ocular drug delivery to the anterior segment using nanocarriers: A mucoadhesive/mucopenetrative perspective. Journal of Controlled Release, 2021, 336, 71-88.	9.9	50
18	Cationic, Anionic, and Amphoteric Dual pH/Temperature-Responsive Degradable Microgels via Self-Assembly of Functionalized Oligomeric Precursor Polymers. Macromolecules, 2021, 54, 351-363.	4.8	15

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19	High-Throughput Synthesis, Analysis, and Optimization of Injectable Hydrogels for Protein Delivery. Biomacromolecules, 2020, 21, 214-229.	5.4	29
20	Nanostructured degradable macroporous hydrogel scaffolds with controllable internal morphologies via reactive electrospinning. Acta Biomaterialia, 2020, 104, 135-146.	8.3	35
21	Mechanically Reinforced Injectable Hydrogels. ACS Applied Polymer Materials, 2020, 2, 1016-1030.	4.4	54
22	Drug-impregnated, pressurized gas expanded liquid-processed alginate hydrogel scaffolds for accelerated burn wound healing. Acta Biomaterialia, 2020, 112, 101-111.	8.3	54
23	Photopolymerized Starchstarch Nanoparticle (SNP) network hydrogels. Carbohydrate Polymers, 2020, 236, 115998.	10.2	16
24	Injectable Poly(oligoethylene glycol methacrylate)-Based Hydrogels Fabricated from Highly Branched Precursor Polymers: Controlling Gel Properties by Precursor Polymer Morphology. ACS Applied Polymer Materials, 2019, 1, 369-380.	4.4	8
25	2.5D Hierarchical Structuring of Nanocomposite Hydrogel Films Containing Cellulose Nanocrystals. ACS Applied Materials & Interfaces, 2019, 11, 6325-6335.	8.0	25
26	Externally Addressable Smart Drug Delivery Vehicles: Current Technologies and Future Directions. Chemistry of Materials, 2019, 31, 4971-4989.	6.7	64
27	Patterned Cellulose Nanocrystal Aerogel Films with Tunable Dimensions and Morphologies as Ultra-Porous Scaffolds for Cell Culture. ACS Applied Nano Materials, 2019, 2, 4169-4179.	5.0	25
28	Hydrogel Properties and Characterization Techniques. Polymers and Polymeric Composites, 2019, , 429-452.	0.6	2
29	Hydrogel Synthesis and Design. Polymers and Polymeric Composites, 2019, , 239-278.	0.6	4
30	Nanogels and Microgels: From Model Colloids to Applications, Recent Developments, and Future Trends. Langmuir, 2019, 35, 6231-6255.	3.5	395
31	Tissue Response and Biodistribution of Injectable Cellulose Nanocrystal Composite Hydrogels. ACS Biomaterials Science and Engineering, 2019, 5, 2235-2246.	5.2	46
32	Applications of Hydrogels. Polymers and Polymeric Composites, 2019, , 453-490.	0.6	16
33	Advanced Hydrogel Structures. Polymers and Polymeric Composites, 2019, , 279-305.	0.6	1
34	Patterning of Structurally Anisotropic Composite Hydrogel Sheets. Biomacromolecules, 2018, 19, 1276-1284.	5.4	62
35	A printable hydrogel microarray for drug screening avoids false positives associated with promiscuous aggregating inhibitors. Nature Communications, 2018, 9, 602.	12.8	32
36	Dynamically Cross-Linked Self-Assembled Thermoresponsive Microgels with Homogeneous Internal Structures. Langmuir, 2018, 34, 1601-1612.	3.5	25

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37	Macroporous Hydrogels: Structured Macroporous Hydrogels: Progress, Challenges, and Opportunities (Adv. Healthcare Mater. 1/2018). Advanced Healthcare Materials, 2018, 7, 1870006.	7.6	6
38	Fabricating Degradable Thermoresponsive Hydrogels on Multiple Length Scales via Reactive Extrusion, Microfluidics, Self-assembly, and Electrospinning. Journal of Visualized Experiments, 2018, , .	0.3	7
39	Injectable and Degradable Poly(Oligoethylene glycol methacrylate) Hydrogels with Tunable Charge Densities as Adhesive Peptide-Free Cell Scaffolds. ACS Biomaterials Science and Engineering, 2018, 4, 3713-3725.	5.2	23
40	Autonomously Self-Adhesive Hydrogels as Building Blocks for Additive Manufacturing. Biomacromolecules, 2018, 19, 62-70.	5.4	25
41	Structured Macroporous Hydrogels: Progress, Challenges, and Opportunities. Advanced Healthcare Materials, 2018, 7, 1700927.	7.6	143
42	Advanced Hydrogel Structures. Polymers and Polymeric Composites, 2018, , 1-27.	0.6	0
43	Hydrogel Properties and Characterization Techniques. Polymers and Polymeric Composites, 2018, , 1-25.	0.6	0
44	Applications of Hydrogels. Polymers and Polymeric Composites, 2018, , 1-39.	0.6	0
45	Single-Step Reactive Electrospinning of Cell-Loaded Nanofibrous Scaffolds as Ready-to-Use Tissue Patches. Biomacromolecules, 2018, 19, 4182-4192.	5.4	22
46	Narrowly Dispersed, Degradable, and Scalable Poly(oligoethylene glycol methacrylate)-Based Nanogels via Thermal Self-Assembly. Industrial & Engineering Chemistry Research, 2018, 57, 7495-7506.	3.7	18
47	Review of Hydrogels and Aerogels Containing Nanocellulose. Chemistry of Materials, 2017, 29, 4609-4631.	6.7	1,056
48	Intranasal delivery of antipsychotic drugs. Schizophrenia Research, 2017, 184, 2-13.	2.0	41
49	Decellularized adipose tissue microcarriers as a dynamic culture platform for human adipose-derived stem/stromal cell expansion. Biomaterials, 2017, 120, 66-80.	11.4	95
50	Injectable Anisotropic Nanocomposite Hydrogels Direct in Situ Growth and Alignment of Myotubes. Nano Letters, 2017, 17, 6487-6495.	9.1	111
51	pH-Ionizable in Situ Gelling Poly(oligo ethylene glycol methacrylate)-Based Hydrogels: The Role of Internal Network Structures in Controlling Macroscopic Properties. Macromolecules, 2017, 50, 7687-7698.	4.8	10
52	Microfluidic production of degradable thermoresponsive poly(<i>N</i>-isopropylacrylamide)-based microgels. Soft Matter, 2017, 13, 9060-9070.	2.7	15
53	Nanostructure of Fully Injectable Hydrazoneâ€œThiosuccinimide Interpenetrating Polymer Network Hydrogels Assessed by Small-Angle Neutron Scattering and dSTORM Single-Molecule Fluorescence Microscopy. ACS Applied Materials & Interfaces, 2017, 9, 42179-42191.	8.0	14
54	Composite Hydrogels with Tunable Anisotropic Morphologies and Mechanical Properties. Chemistry of Materials, 2016, 28, 3406-3415.	6.7	206

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55	An Injectable Hydrogel Prepared Using a PEG/Vitamin E Copolymer Facilitating Aqueous-Driven Gelation. Biomacromolecules, 2016, 17, 3648-3658.	5.4	29
56	Tuning the properties of injectable poly(oligoethylene glycol methacrylate) hydrogels by controlling precursor polymer molecular weight. Journal of Materials Chemistry B, 2016, 4, 6541-6551.	5.8	9
57	â€œClickâ€•Chemistry-Tethered Hyaluronic Acid-Based Contact Lens Coatings Improve Lens Wettability and Lower Protein Adsorption. ACS Applied Materials & Interfaces, 2016, 8, 22064-22073.	8.0	51
58	Cooperative Ordering and Kinetics of Cellulose Nanocrystal Alignment in a Magnetic Field. Langmuir, 2016, 32, 7564-7571.	3.5	119
59	Nanogels of methylcellulose hydrophobized with N-tert-butylacrylamide for ocular drug delivery. Drug Delivery and Translational Research, 2016, 6, 648-659.	5.8	34
60	Properties of Poly(ethylene glycol) Hydrogels Cross-Linked via Strain-Promoted Alkyneâ€“Azide Cycloaddition (SPAAC). Biomacromolecules, 2016, 17, 1093-1100.	5.4	46
61	Controlling the resolution and duration of pulsatile release from injectable magnetic â€˜plum-puddingâ€™ nanocomposite hydrogels. RSC Advances, 2016, 6, 15770-15781.	3.6	15
62	Enhanced Mechanical Properties in Cellulose Nanocrystalâ€“Poly(oligoethylene glycol methacrylate) Injectable Nanocomposite Hydrogels through Control of Physical and Chemical Cross-Linking. Biomacromolecules, 2016, 17, 649-660.	5.4	175
63	A Highly Sensitive Immunosorbent Assay Based on Biotinylated Graphene Oxide and the Quartz Crystal Microbalance. ACS Applied Materials & Interfaces, 2016, 8, 1893-1902.	8.0	39
64	Reactive electrospinning of degradable poly(oligoethylene glycol methacrylate)-based nanofibrous hydrogel networks. Chemical Communications, 2016, 52, 1451-1454.	4.1	54
65	Enhanced Pulsatile Drug Release from Injectable Magnetic Hydrogels with Embedded Thermosensitive Microgels. ACS Macro Letters, 2015, 4, 312-316.	4.8	90
66	Temperature-Induced Assembly of Monodisperse, Covalently Cross-Linked, and Degradable Poly(<i>N</i>-isopropylacrylamide) Microgels Based on Oligomeric Precursors. Langmuir, 2015, 31, 5767-5778.	3.5	23
67	Transmission behavior of pNIPAM microgel particles through porous membranes. Journal of Membrane Science, 2015, 479, 141-147.	8.2	10
68	Hydrophobically-modified poly(vinyl pyrrolidone) as a physically-associative, shear-responsive ophthalmic hydrogel. Experimental Eye Research, 2015, 137, 18-31.	2.6	26
69	â€œOff-the-shelfâ€•thermoresponsive hydrogel design: tuning hydrogel properties by mixing precursor polymers with different lower-critical solution temperatures. RSC Advances, 2015, 5, 33364-33376.	3.6	29
70	Injectable hydrogels based on poly(ethylene glycol) and derivatives as functional biomaterials. RSC Advances, 2015, 5, 35469-35486.	3.6	138
71	Injectable Interpenetrating Network Hydrogels via Kinetically Orthogonal Reactive Mixing of Functionalized Polymeric Precursors. ACS Macro Letters, 2015, 4, 1104-1109.	4.8	34
72	Haloperidol-loaded intranasally administered lectin functionalized poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 67 Td (glycol)â€“ schizophrenia. European Journal of Pharmaceutics and Biopharmaceutics, 2014, 87, 30-39.	4.3	70

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73	Injectable and tunable poly(ethylene glycol) analogue hydrogels based on poly(oligoethylene glycol) Tj ETQq1 1 0.784314 rgBT /Overlo	4.1	107
74	Designing multi-responsive polymers using latent variable methods. Polymer, 2014, 55, 505-516.	3.8	14
75	Externally addressable hydrogel nanocomposites for biomedical applications. Current Opinion in Chemical Engineering, 2014, 4, 1-10.	7.8	42
76	Injectable hydrogels with in situ-forming hydrophobic domains: oligo(<scp>d</scp>,<scp>l</scp>-lactide) modified poly(oligoethylene glycol methacrylate) hydrogels. Polymer Chemistry, 2014, 5, 6811-6823.	3.9	32
77	Designing Injectable, Covalently Crossâ€Linked Hydrogels for Biomedical Applications. Macromolecular Rapid Communications, 2014, 35, 598-617.	3.9	147
78	Injectable, in situ gelling, cyclodextrinâ€"dextran hydrogels for the partitioning-driven release of hydrophobic drugs. Journal of Materials Chemistry B, 2014, 2, 5157.	5.8	52
79	Carboxymethyl and hydrazide functionalized Î²-cyclodextrin derivatives: A systematic investigation of complexation behaviours with the model hydrophobic drug dexamethasone. International Journal of Pharmaceutics, 2014, 472, 315-326.	5.2	19
80	Probing the Internal Morphology of Injectable Poly(oligoethylene glycol methacrylate) Hydrogels by Light and Small-Angle Neutron Scattering. Macromolecules, 2014, 47, 6017-6027.	4.8	16
81	Poly(oligoethylene glycol methacrylate) Dip-Coating: Turning Cellulose Paper into a Protein-Repellent Platform for Biosensors. Journal of the American Chemical Society, 2014, 136, 12852-12855.	13.7	42
82	Tuning Gelation Time and Morphology of Injectable Hydrogels Using Ketoneâ€"Hydrazide Cross-Linking. Biomacromolecules, 2014, 15, 781-790.	5.4	92
83	Prevention of peritoneal adhesions using polymeric rheological blends. Acta Biomaterialia, 2014, 10, 1187-1193.	8.3	19
84	Injectable poly(oligoethylene glycol methacrylate)-based hydrogels with tunable phase transition behaviours: Physicochemical and biological responses. Acta Biomaterialia, 2014, 10, 4143-4155.	8.3	59
85	Tuning drug release from smart microgelâ€"hydrogel composites via cross-linking. Journal of Colloid and Interface Science, 2013, 392, 422-430.	9.4	60
86	Injectable Superparamagnets: Highly Elastic and Degradable Poly(<i>N</i>-isopropylacrylamide)â€"Superparamagnetic Iron Oxide Nanoparticle (SPION) Composite Hydrogels. Biomacromolecules, 2013, 14, 644-653.	5.4	107
87	Designing responsive microgels for drug delivery applications. Journal of Polymer Science Part A, 2013, 51, 3027-3043.	2.3	146
88	Injectable Polysaccharide Hydrogels Reinforced with Cellulose Nanocrystals: Morphology, Rheology, Degradation, and Cytotoxicity. Biomacromolecules, 2013, 14, 4447-4455.	5.4	263
89	Injectable, Degradable Thermoresponsive Poly(<i>N</i>-isopropylacrylamide) Hydrogels. ACS Macro Letters, 2012, 1, 409-413.	4.8	131
90	Injectable, Mixed Natural-Synthetic Polymer Hydrogels with Modular Properties. Biomacromolecules, 2012, 13, 369-378.	5.4	145

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91	Thermoresponsive nanogels for prolonged duration local anesthesia. Acta Biomaterialia, 2012, 8, 3596-3605.	8.3	56
92	Synthesis of Monodisperse, Covalently Crossâ€Linked, Degradable â€œSmartâ€•Microgels Using Microfluidics. Small, 2012, 8, 1092-1098.	10.0	45
93	Semi-batch control over functional group distributions in thermoresponsive microgels. Colloid and Polymer Science, 2012, 290, 1181-1192.	2.1	30
94	Nanogel scavengers for drugs: Local anesthetic uptake by thermoresponsive nanogels. Acta Biomaterialia, 2012, 8, 1450-1458.	8.3	27
95	Magnetically Triggered Nanocomposite Membranes: A Versatile Platform for Triggered Drug Release. Nano Letters, 2011, 11, 1395-1400.	9.1	241
96	Injectable Microgel-Hydrogel Composites for Prolonged Small-Molecule Drug Delivery. Biomacromolecules, 2011, 12, 4112-4120.	5.4	186
97	A Magnetically Triggered Composite Membrane for On-Demand Drug Delivery. Nano Letters, 2009, 9, 3651-3657.	9.1	335
98	Preparation of Monodisperse Biodegradable Polymer Microparticles Using a Microfluidic Flowâ€Focusing Device for Controlled Drug Delivery. Small, 2009, 5, 1575-1581.	10.0	545
99	Characterizing charge and crosslinker distributions in polyelectrolyte microgels. Current Opinion in Colloid and Interface Science, 2008, 13, 413-428.	7.4	95
100	Charge-Switching, Amphoteric Glucose-Responsive Microgels with Physiological Swelling Activity. Biomacromolecules, 2008, 9, 733-740.	5.4	180
101	Impact of Microgel Morphology on Functionalized Microgelâˆ'Drug Interactions. Langmuir, 2008, 24, 1005-1012.	3.5	142
102	Functionalized Microgel Swelling:â€‰ Comparing Theory and Experiment. Journal of Physical Chemistry B, 2007, 111, 11895-11906.	2.6	66
103	Calorimetric Analysis of Thermal Phase Transitions in Functionalized Microgels. Journal of Physical Chemistry B, 2007, 111, 1334-1342.	2.6	33
104	Engineering Glucose Swelling Responses in Poly(N-isopropylacrylamide)-Based Microgels. Macromolecules, 2007, 40, 670-678.	4.8	242
105	Titrametric Characterization of pH-Induced Phase Transitions in Functionalized Microgels. Langmuir, 2006, 22, 7342-7350.	3.5	105
106	Kinetic Prediction of Functional Group Distributions in Thermosensitive Microgels. Journal of Physical Chemistry B, 2006, 110, 20327-20336.	2.6	105
107	Dimensionless plot analysis: A new way to analyze functionalized microgels. Journal of Colloid and Interface Science, 2006, 303, 109-116.	9.4	32
108	Multi-Component Kinetic Modeling for Controlling Local Compositions in Thermosensitive Polymers. Macromolecular Theory and Simulations, 2006, 15, 619-632.	1.4	52

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109	Electrophoresis of functionalized microgels: morphological insights. Polymer, 2005, 46, 1139-1150.	3.8	62
110	Highly pH and Temperature Responsive Microgels Functionalized with Vinylacetic Acid. Macromolecules, 2004, 37, 2544-2550.	4.8	380
111	Functional Group Distributions in Carboxylic Acid Containing Poly(N-isopropylacrylamide) Microgels. Langmuir, 2004, 20, 2123-2133.	3.5	224