Robert J Hickey

List of Publications by Year
in descending order

40 papers	1,486 citations	393982 19 h-index	315357 38 g-index
43 all docs	43 docs citations	43 times ranked	2159 citing authors

#	Article	IF	Citations
1	Controlling the Self-Assembly Structure of Magnetic Nanoparticles and Amphiphilic Block-Copolymers: From Micelles to Vesicles. Journal of the American Chemical Society, 2011, 133, 1517-1525.	6.6	307
2	Size-Controlled Self-Assembly of Superparamagnetic Polymersomes. ACS Nano, 2014, 8, 495-502.	7.3	117
3	Artificial water channels enable fast and selective water permeation through water-wire networks. Nature Nanotechnology, 2020, 15, 73-79.	15.6	111
4	Achieving high permeability and enhanced selectivity for Angstrom-scale separations using artificial water channel membranes. Nature Communications, 2018, 9, 2294.	5.8	95
5	Spiky Gold Nanoshells: Synthesis and Enhanced Scattering Properties. Journal of Physical Chemistry C, 2012, 116, 10318-10324.	1.5	70
6	Structureâ€“Conductivity Relationships in Ordered and Disordered Salt-Doped Diblock Copolymer/Homopolymer Blends. Macromolecules, 2016, 49, 6928-6939.	2.2	61
7	Controlling the Location of Nanoparticles in Colloidal Assemblies of Amphiphilic Polymers by Tuning Nanoparticle Surface Chemistry. ACS Macro Letters, 2013, 2, 107-111.	2.3	60
8	Rapid fabrication of precise high-throughput filters from membrane protein nanosheets. Nature Materials, 2020, 19, 347-354.	13.3	59
9	Nanostructured block copolymer muscles. Nature Nanotechnology, 2022, 17, 752-758.	15.6	53
10	Low-Dimensional Nanoparticle Clustering in Polymer Micelles and Their Transverse Relaxivity Rates. ACS Nano, 2013, 7, 5824-5833.	7.3	48
11	Structure, viscoelasticity, and interfacial dynamics of a model polymeric bicontinuous microemulsion. Soft Matter, 2016, 12, 53-66.	1.2	45
12	Biomimetic Separation of Transport and Matrix Functions in Lamellar Block Copolymer Channel-Based Membranes. ACS Nano, 2019, 13, 8292-8302.	7.3	37
13	Morphological Transitions of Blockâ€Copolymer Bilayers via Nanoparticle Clustering. Small, 2010, 6, 48-51.	5.2	36
14	Phase Behavior of Diblock Copolymerâ€“Homopolymer Ternary Blends: Congruent First-Order Lamellarâ€“Disorder Transition. Macromolecules, 2016, 49, 7928-7944.	2.2	30
15	Solvent-non-solvent rapid-injection for preparing nanostructured materials from micelles to hydrogels. Nature Communications, 2019, 10, 3855.	5.8	30
16	Simultaneous Reduction and Polymerization of Graphene Oxide/Styrene Mixtures To Create Polymer Nanocomposites with Tunable Dielectric Constants. ACS Applied Nano Materials, 2020, 3, 962-968.	2.4	28
17	Directional Self-Assembly of Ligand-Stabilized Gold Nanoparticles into Hollow Vesicles through Dynamic Ligand Rearrangement. Langmuir, 2015, 31, 4299-4304.	1.6	24
18	Zwitterions Raise the Dielectric Constant of Soft Materials. Physical Review Letters, 2021, 127, 228001.	2.9	24

#	Article	IF	Citations
19	Controlling the Radial Position of Nanoparticles in Amphiphilic Block-Copolymer Assemblies. Journal of Physical Chemistry C, 2011, 115, 7836-7842.	1.5	21
20	Polymerization-Induced Nanostructural Transitions Driven by In Situ Polymer Grafting. ACS Macro Letters, 2018, 7, 822-827.	2.3	21
21	Rapid Stabilization of Immiscible Fluids using Nanostructured Interfaces via Surfactant Association. Physical Review Letters, 2019, 122, 178003.	2.9	20
22	Nanoparticle-Induced Self-Assembly of Block Copolymers into Nanoporous Films at the Airâ€“Water Interface. ACS Nano, 2020, 14, 12203-12209.	7.3	20
23	Surface-Initiated Ring-Opening Metathesis Polymerization: A Method for Synthesizing Polymer-Functionalized Nanoparticles Exhibiting Semicrystalline Properties and Diverse Macromolecular Architectures. Macromolecules, 2020, 53, 8216-8232.	2.2	19
24	Deciphering the Complex Phase Behavior during Polymerization-Induced Nanostructural Transitions of a Block Polymer/Monomer Blend. Macromolecules, 2020, 53, 835-843.	2.2	19
25	Solvent-Responsive and Reversible Structural Coloration in Nanostructured Block Polymer Films. Macromolecules, 2020, 53, 5711-5719.	2.2	18
26	Creating cross-linked lamellar block copolymer supporting layers for biomimetic membranes. Faraday Discussions, 2018, 209, 179-191.	1.6	15
27	In situ polymerization and polymer grafting to stabilize polymer-functionalized nanoparticles in polymer matrices. Journal of Applied Physics, 2020, 127, .	1.1	14
28	Unique selectivity trends of highly permeable PAP[5] water channel membranes. Faraday Discussions, 2018, 209, 193-204.	1.6	13
29	Influence of Hydrotropes on the Solubilities and Diffusivities of Redox-Active Organic Compounds for Aqueous Flow Batteries. ACS Omega, 2021, 6, 30800-30810.	1.6	11
30	Influence of block sequence on the colloidal self-assembly of poly(norbornene)-block-poly(ethylene oxide) amphiphilic block polymers using rapid injection processing. Polymer Chemistry, 2020, 11, 375-384.	1.9	9
31	Fabricating Robust Constructs with Internal Phase Nanostructures via Liquidâ€inâ€Liquid 3D Printing. Macromolecular Rapid Communications, 2021, 42, e2100445.	2.0	9
32	Controlling nanostructure and mechanical properties in triblock copolymer/monomer blends via reaction-induced phase transitions. Soft Matter, 2021, 17, 1505-1512.	1.2	8
33	Current status and future directions of self-assembled block copolymer membranes for molecular separations. Soft Matter, 2021, 17, 10405-10415.	1.2	8
34	Investigating Nanoparticle Organization in Polymer Matrices during Reaction-Induced Phase Transitions and Material Processing. ACS Applied Materials & Interfaces, 2021, 13, 42104-42113.	4.0	7
35	Investigating the morphological transitions in an associative surfactant ternary system. Soft Matter, 2022, 18, 2611-2633.	1.2	4
36	Porous Vesicles with Extrusionâ€Tunable Permeability and Pore Size from Mixed Solutions of PEOâ€“PPOâ€“PEO Triblock Copolymers. Macromolecular Chemistry and Physics, 2018, 219, 1700620.	1.1	3

#	Article	IF	Citations
37	Cocrystalline Polymer Films Exhibiting Second-Order Nonlinear Optical Properties. ACS Macro Letters, 2021, 10, 1216-1222.	2.3	3
38	Lewis Adduct-Induced Phase Transitions in Polymer/Solvent Mixtures. ACS Polymers Au, 2022, 2, 35-41.	1.7	2
39	Effect of Chemical Substituents Attached to the Zwitterion Cation on Dielectric Constant. Journal of Chemical Physics, 2021, 155, 244505.	1.2	2
40	Preparation and Characterization of DNA Block Copolymer Assemblies Loaded with Nanoparticles. Methods in Molecular Biology, 2013, 1025, 207-224.	0.4	0