Yutian Zhu

List of Publications by Year
in descending order

80 papers	4,303 citations	109137 35 h-index	114278 63 g-index
80 all docs	80 docs citations	80 times ranked	3313 citing authors

#	Article	IF	Citations
1	An overview of stretchable strain sensors from conductive polymer nanocomposites. Journal of Materials Chemistry C, 2019, 7, 11710-11730.	2.7	315
2	Control of carbon nanotubes at the interface of a co-continuous immiscible polymer blend to fabricate conductive composites with ultralow percolation thresholds. Carbon, 2014, 73, 267-274.	5.4	225
3	Design of Electrical Conductive Composites: Tuning the Morphology to Improve the Electrical Properties of Graphene Filled Immiscible Polymer Blends. ACS Applied Materials & Interfaces, 2012, 4, 5281-5286.	4.0	207
4	Recent Progress in Essential Functions of Soft Electronic Skin. Advanced Functional Materials, 2021, 31, 2104686.	7.8	192
5	Design of superior conductive polymer composite with precisely controlling carbon nanotubes at the interface of a co-continuous polymer blend via a balance of Ï€-Ï€ interactions and dipole-dipole interactions. Carbon, 2017, 114, 441-448.	5.4	179
6	A stretchable and transparent strain sensor based on sandwich-like PDMS/CNTs/PDMS composite containing an ultrathin conductive CNT layer. Composites Science and Technology, 2020, 186, 107938.	3.8	166
7	Balance the electrical properties and mechanical properties of carbon black filled immiscible polymer blends with a double percolation structure. Composites Science and Technology, 2017, 140, 99-105.	3.8	121
8	Flexible, transparent, and antibacterial ionogels toward highly sensitive strain and temperature sensors. Chemical Engineering Journal, 2021, 424, 130418.	6.6	119
9	Massive enhancement in the thermal conductivity of polymer composites by trapping graphene at the interface of a polymer blend. Composites Science and Technology, 2016, 129, 160-165.	3.8	118
10	Advances in transparent and stretchable strain sensors. Advanced Composites and Hybrid Materials, 2021, 4, 435-450.	9.9	109
11	Advances in Responsively Conductive Polymer Composites and Sensing Applications. Polymer Reviews, 2021, 61, 157-193.	5.3	103
12	Recent progress in the self-assembly of block copolymers confined in emulsion droplets. Chemical Communications, 2018, 54, 13183-13195.	2.2	97
13	Well-Ordered Inorganic Nanoparticle Arrays Directed by Block Copolymer Nanosheets. ACS Nano, 2019, 13, 6638-6646.	7.3	96
14	Stretchable and transparent multimodal electronic-skin sensors in detecting strain, temperature, and humidity. Nano Energy, 2022, 96, 107077.	8.2	95
15	A highly stretchable strain sensor with both an ultralow detection limit and an ultrawide sensing range. Journal of Materials Chemistry A, 2021, 9, 1795-1802.	5.2	92
16	Strain sensing behaviors of stretchable conductive polymer composites loaded with different dimensional conductive fillers. Composites Science and Technology, 2018, 168, 388-396.	3.8	89
17	Ionic liquid enabled flexible transparent polydimethylsiloxane sensors for both strain and temperature sensing. Advanced Composites and Hybrid Materials, 2021, 4, 574-583.	9.9	86
18	Breathable Strain/Temperature Sensor Based on Fibrous Networks of Ionogels Capable of Monitoring Human Motion, Respiration, and Proximity. ACS Applied Materials & Interfaces, 2021, 13, 51567-51577.	4.0	77

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19	Entropy-Driven Hierarchical Nanostructures from Cooperative Self-Assembly of Gold Nanoparticles/Block Copolymers under Three-Dimensional Confinement. Macromolecules, 2015, 48, 5980-5987.	2.2	76
20	Three-dimensional light-weight piezoresistive sensors based on conductive polyurethane sponges coated with hybrid CNT/CB nanoparticles. Applied Surface Science, 2021, 548, 149268.	3.1	72
21	Flexible and breathable all-nanofiber iontronic pressure sensors with ultraviolet shielding and antibacterial performances for wearable electronics. Nano Energy, 2022, 95, 107022.	8.2	67
22	Tailored Parallel Graphene Stripes in Plastic Film with Conductive Anisotropy by Shear-Induced Self-Assembly. Journal of Physical Chemistry Letters, 2013, 4, 43-47.	2.1	66
23	Parallel Carbon Nanotube Stripes in Polymer Thin Film with Remarkable Conductive Anisotropy. ACS Applied Materials & Interfaces, 2014, 6, 1754-1758.	4.0	66
24	Controllable Location of Inorganic Nanoparticles on Block Copolymer Self-Assembled Scaffolds by Tailoring the Entropy and Enthalpy Contributions. Macromolecules, 2017, 50, 6771-6778.	2.2	61
25	Natural sunlight-actuated shape memory materials with reversible shape change and self-healing abilities based on carbon nanotubes filled conductive polymer composites. Chemical Engineering Journal, 2020, 382, 122823.	6.6	60
26	Recent Progress on Thermo-electrical Properties of Conductive Polymer Composites and Their Application in Temperature Sensors. Engineered Science, 2020, , .	1.2	57
27	Tune the phase morphology to design conductive polymer composites: A review. Polymer Composites, 2018, 39, 2985-2996.	2.3	52
28	Lightweight and conductive carbon black/chlorinated poly(propylene carbonate) foams with a remarkable negative temperature coefficient effect of resistance for temperature sensor applications. Journal of Materials Chemistry C, 2018, 6, 9354-9362.	2.7	52
29	Monte Carlo Simulation of the Grafting of Maleic Anhydride onto Polypropylene at Higher Temperature. Macromolecules, 2003, 36, 3714-3720.	2.2	50
30	Self-Assembly of Diblock Copolymer Mixtures in Confined States:Â A Monte Carlo Study. Macromolecules, 2007, 40, 2872-2881.	2.2	48
31	Flexible and Transparent Pressure/Temperature Sensors Based on Ionogels with Bioinspired Interlocked Microstructures. ACS Applied Materials & Interfaces, 2022, 14, 2122-2131.	4.0	46
32	Fabrication of a highly tough, strong, and stiff carbon nanotube/epoxy conductive composite with an ultralow percolation threshold <i>via</i> self-assembly. Journal of Materials Chemistry A, 2019, 7, 15731-15740.	5.2	41
33	Design of flexible strain sensor with both ultralow detection limit and wide sensing range via the multiple sensing mechanisms. Composites Science and Technology, 2021, 213, 108932.	3.8	40
34	Wearable Ionogel-Based Fibers for Strain Sensors with Ultrawide Linear Response and Temperature Sensors Insensitive to Strain. ACS Applied Materials & Interfaces, 2022, 14, 30268-30278.	4.0	39
35	Ultralong gold nanoparticle/block copolymer hybrid cylindrical micelles: a strategy combining surface templated self-assembly and Rayleigh instability. Nanoscale, 2013, 5, 6344.	2.8	38
36	Templated Self-Assembly of Block Copolymers and Morphology Transformation Driven by the Rayleigh Instability. Langmuir, 2015, 31, 1660-1669.	1.6	35

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37	Parallel carbon nanotube stripes in polymer thin film with tunable microstructures and anisotropic conductive properties. Composites Part A: Applied Science and Manufacturing, 2015, 69, 240-246.	3.8	35
38	Self-Assembly of AB Diblock Copolymer Confined in a Soft Nano-Droplet: A Combination Study by Monte Carlo Simulation and Experiment. Journal of Physical Chemistry B, 2016, 120, 12023-12029.	1.2	35
39	Stretchable strain and temperature sensor based on fibrous polyurethane film saturated with ionic liquid. Composites Communications, 2021, 27, 100845.	3.3	34
40	Highly Symmetric Patchy Multicompartment Nanoparticles from the Self-Assembly of ABC Linear Terpolymers in C-Selective Solvents. Langmuir, 2012, 28, 11714-11724.	1.6	33
41	Self-assembly of block copolymers into sieve-like particles with arrayed switchable channels and as scaffolds to guide the arrangement of gold nanoparticles. Nanoscale, 2017, 9, 15056-15061.	2.8	33
42	Light-Enabled Reversible Shape Transformation of Block Copolymer Particles. ACS Macro Letters, 2021, 10, 914-920.	2.3	33
43	Highly-stretchable porous thermoplastic polyurethane/carbon nanotubes composites as a multimodal sensor. Carbon, 2022, 195, 364-371.	5.4	33
44	Effect of the initial maleic anhydride content on the grafting of maleic anhydride onto isotactic polypropylene. Journal of Polymer Science Part A, 2005, 43, 5529-5534.	2.5	32
45	Rheological properties of PDMS/clay nanocomposites and their sensitivity to microstructure. Rheologica Acta, 2009, 48, 1049-1058.	1.1	31
46	Inorganic Nanoparticle Induced Morphological Transition for Confined Self-Assembly of Block Copolymers within Emulsion Droplets. Journal of Physical Chemistry B, 2017, 121, 8417-8425.	1.2	31
47	Disassembly of Multicompartment Polymer Micelles in Spatial Sequence Using an Electrostatic Field and Its Application for Release in Chronological Order. Angewandte Chemie - International Edition, 2018, 57, 3578-3582.	7.2	31
48	Nano-reactors for controlling the selectivity of the free radical grafting of maleic anhydride onto polypropylene in the melt. Polymer Engineering and Science, 2006, 46, 1443-1454.	1.5	29
49	Thermal annealing induced enhancement of electrical properties of a co-continuous polymer blend filled with carbon nanotubes. Composites Science and Technology, 2018, 167, 522-528.	3.8	29
50	A Monte Carlo simulation for the micellization of ABC 3-miktoarm star terpolymers in a selective solvent. Chemical Physics, 2006, 327, 137-143.	0.9	27
51	Janus-like spheres, disks, rings, cylinders, and vesicles from the self-assembly of mixture of AB and BC diblock copolymers in A- and C-selective solvents. Soft Matter, 2013, 9, 6254.	1.2	27
52	Highly trans-1,4-stereoselective coordination chain transfer polymerization of 1,3-butadiene and copolymerization with cyclic esters by a neodymium-based catalyst system. Polymer Chemistry, 2015, 6, 6088-6095.	1.9	27
53	Fabrication of Polymer Film with Extraordinary Conductive Anisotropy by Forming Parallel Conductive Vorticityâ€Aligned Stripes and Its Formation Mechanism. Macromolecular Materials and Engineering, 2016, 301, 743-749.	1.7	26
54	Synthesis and Characterization of PEGylated Trityl Radicals: Effect of PEGylation on Physicochemical Properties. Journal of Organic Chemistry, 2017, 82, 588-596.	1.7	25

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55	Multicompartment micellar aggregates of linear ABC amphiphiles in solvents selective for the C block: a Monte Carlo simulation. Soft Matter, 2012, 8, 4695.	1.2	24
56	Highly flexible TPU/SWCNTs composite-based temperature sensors with linear negative temperature coefficient effect and photo-thermal effect. Composites Science and Technology, 2022, 217, 109133.	3.8	23
57	Self-assembly of ABC triblock copolymers under 3D soft confinement: a Monte Carlo study. Soft Matter, 2016, 12, 965-972.	1.2	20
58	Segmented and double-helix multicompartment micelles from self-assembly of blends of ABC and AB block copolymers in C block-selective solvents. Soft Matter, 2012, 8, 11156.	1.2	19
59	Self-assembly of ABA triblock copolymers under soft confinement. Chemical Physics, 2015, 452, 46-52.	0.9	19
60	Release Behavior of Polymeric Vesicles in Solution Controlled by External Electrostatic Field. ACS Macro Letters, 2016, 5, 1212-1216.	2.3	17
61	Controllable Cooperative Self-Assembly of PS-<i>b</i>-PAA/PS-<i>b</i>-P4VP Mixture by Tuning the Intercorona Interaction. Journal of Physical Chemistry B, 2016, 120, 5527-5533.	1.2	17
62	Confined co-assembly of AB/BC diblock copolymer blends under 3D soft confinement. Soft Matter, 2018, 14, 4679-4686.	1.2	17
63	Switchable Isotropic/Anisotropic Wettability and Programmable Droplet Transportation on a Shape-Memory Honeycomb. ACS Applied Materials & Interfaces, 2020, 12, 42314-42320.	4.0	17
64	Monte Carlo simulation of the compatibility of graft copolymer compatibilized two incompatible homopolymer blends: Effect of graft structure. Journal of Applied Polymer Science, 2007, 105, 1591-1596.	1.3	16
65	Simultaneously strengthening, toughening, and conductivity improving for epoxy at ultralow carbonaceous filler content by constructing 3D nanostructures and sacrificial bonds. Composites Part A: Applied Science and Manufacturing, 2020, 137, 106014.	3.8	15
66	Droplet-cluster transition in sheared polyamide 6â€“poly(styrene-ethylene-butadiene-styrene)â€“polypropylene ternary blends. Physical Review E, 2010, 82, 031807.	0.8	13
67	Meshâ€Like Vesicles Formed From Blends of Poly(4â€vinyl pyridine)â€<i>b</i>â€polystyreneâ€<i>b</i>â€poly(4â€vinyl) Tj ETQq1 1 0.7 2012, 213, 2261-2266.	1.1	11
68	Encapsulation of inorganic nanoparticles in a block copolymer vesicle wall driven by the interfacial instability of emulsion droplets. Polymer Chemistry, 2021, 12, 4184-4192.	1.9	10
69	Temperature-Driven Reversible Shape Transformation of Polymeric Nanoparticles from Emulsion Confined Coassembly of Block Copolymers and Poly(<i>N</i>-isopropylacrylamide). Macromolecules, 2022, 55, 6211-6219.	2.2	10
70	Multicompartment nanoparticles from the self-assembly of mixtures of ABC and AC block copolymers in C-selective solvents. Chemical Physics, 2014, 441, 47-52.	0.9	9
71	Light-driven sequential shape transformation of block copolymer particles through three-dimensional confined self-assembly. Nanoscale, 2022, 14, 6291-6298.	2.8	9
72	Self-assembly of AB diblock copolymer solutions confined in cylindrical nanopores. Materials Chemistry Frontiers, 2017, 1, 487-494.	3.2	7

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73	Online study of the formation of PA6 droplets in PP matrix under shear flow. Journal of Applied Polymer Science, 2007, 104, 2690-2695.	1.3	6
74	Morphological transition of dry vesicles into onion-like multilamellar micelles induced through heating at high temperature. Chemical Physics Letters, 2008, 460, 257-260.	1.2	6
75	Stepwise study on Janus-like particles fabricated by polymeric mixtures within soft droplets: a Monte Carlo simulation. RSC Advances, 2017, 7, 38666-38676.	1.7	6
76	Movable-crosslinking tough hydrogels with lithium ion as sensitive and durable compressive sensor. Polymer, 2021, 214, 123257.	1.8	6
77	Synthesis, self-assembly and thermoresponsive behavior of Poly(lactide-co-glycolide)-b-Poly(ethylene) Tj ETQq1 1 0.784314 rgBT /Overlo	1.8	2
78	Disassembly of Multicompartment Polymer Micelles in Spatial Sequence Using an Electrostatic Field and Its Application for Release in Chronological Order. Angewandte Chemie, 2018, 130, 3640-3644.	1.6	1
79	Frontispiz: Disassembly of Multicompartment Polymer Micelles in Spatial Sequence Using an Electrostatic Field and Its Application for Release in Chronological Order. Angewandte Chemie, 2018, 130, .	1.6	0
80	Frontispiece: Disassembly of Multicompartment Polymer Micelles in Spatial Sequence Using an Electrostatic Field and Its Application for Release in Chronological Order. Angewandte Chemie - International Edition, 2018, 57, .	7.2	0