

# Rui-Ying Bao

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

106  
papers

4,951  
citations

41  
h-index

68  
g-index

109  
ext. papers

6,277  
ext. citations

7.6  
avg, IF

5.97  
L-index

#	Paper	IF	Citations
106	In situ interfacial engineering enabled mechanically adaptive and highly stretchable liquid metal conductor. <i>Polymer</i> , <b>2022</b> , 240, 124482	3.9	0
105	Polymer Composites for Thermal Energy Storage <b>2021</b> , 29-61		
104	Recent Advances in Multiresponsive Flexible Sensors towards E-skin: A Delicate Design for Versatile Sensing. <i>Small</i> , <b>2021</b> , e2103734	11	10
103	Low-entropy structured wearable film sensor with piezoresistive-piezoelectric hybrid effect for 3D mechanical signal screening. <i>Nano Energy</i> , <b>2021</b> , 90, 106603	17.1	8
102	Vitrimers of polyolefin elastomer with physically cross-linked network. <i>Journal of Polymer Research</i> , <b>2021</b> , 28, 1	2.7	1
101	Electrospun Modified Polyketone-Based Anion Exchange Membranes with High Ionic Conductivity and Robust Mechanical Properties. <i>ACS Applied Energy Materials</i> , <b>2021</b> , 4, 5187-5200	6.1	3
100	Boosting solar steam generation in dynamically tunable polymer porous architectures. <i>Polymer</i> , <b>2021</b> , 226, 123811	3.9	5
99	Boosting piezoelectric response of PVDF-TrFE via MXene for self-powered linear pressure sensor. <i>Composites Science and Technology</i> , <b>2021</b> , 202, 108600	8.6	51
98	Degradable ultrathin high-performance photocatalytic hydrogen generator from porous electrospun composite fiber membrane with enhanced light absorption ability. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 10277-10288	13	3
97	Imidazole-functionalized polyketone-based polyelectrolytes with efficient ionic channels and superwettability for alkaline polyelectrolyte fuel cells and multiple liquid purification. <i>Journal of Materials Chemistry A</i> , <b>2021</b> , 9, 14827-14840	13	5
96	Template-Free Self-Caging Nanochemistry for Large-Scale Synthesis of Sulfonated-Graphene@Sulfur Nanocage for Long-Life Lithium-Sulfur Batteries. <i>Advanced Functional Materials</i> , <b>2021</b> , 31, 2008652	15.6	17
95	Tunable reversible deformation of semicrystalline polymer networks based on temperature memory effect. <i>Polymer</i> , <b>2021</b> , 232, 124157	3.9	2
94	Phase change mediated mechanically transformative dynamic gel for intelligent control of versatile devices. <i>Materials Horizons</i> , <b>2021</b> , 8, 1230-1241	14.4	15
93	Scalable Flexible Phase Change Materials with a Swollen Polymer Network Structure for Thermal Energy Storage. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2021</b> ,	9.5	3
92	A strain localization directed crack control strategy for designing MXene-based customizable sensitivity and sensing range strain sensors for full-range human motion monitoring. <i>Nano Energy</i> , <b>2020</b> , 74, 104814	17.1	37
91	Hierarchically Porous PVA Aerogel for Leakage-Proof Phase Change Materials with Superior Energy Storage Capacity. <i>Energy &amp; Fuels</i> , <b>2020</b> , 34, 2471-2479	4.1	34
90	Highly thermally conductive electrospun stereocomplex polylactide fibrous film dip-coated with silver nanowires. <i>Polymer</i> , <b>2020</b> , 194, 122390	3.9	12

89	Nanofibrillar Poly(vinyl alcohol) Ionic Organohydrogels for Smart Contact Lens and Human-Interactive Sensing. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 23514-23522	9.5	26
88	Achieving improved electromagnetic interference shielding performance and balanced mechanical properties in polyketone nanocomposites via a composite MWCNTs carrier. <i>Composites Part A: Applied Science and Manufacturing</i> , <b>2020</b> , 136, 105967	8.4	23
87	All-weather-available, continuous steam generation based on the synergistic photo-thermal and electro-thermal conversion by MXene-based aerogels. <i>Materials Horizons</i> , <b>2020</b> , 7, 855-865	14.4	83
86	A bridge-arched and layer-structured hollow melamine foam/reduced graphene oxide composite with an enlarged evaporation area and superior thermal insulation for high-performance solar steam generation. <i>Journal of Materials Chemistry A</i> , <b>2020</b> , 8, 2701-2711	13	49
85	Self-assembled core-shell polydopamine@MXene with synergistic solar absorption capability for highly efficient solar-to-vapor generation. <i>Nano Research</i> , <b>2020</b> , 13, 255-264	10	82
84	Robust polymer-based paper-like thermal interface materials with a through-plane thermal conductivity over 9 Wm <sup>-1</sup> K <sup>-1</sup> . <i>Chemical Engineering Journal</i> , <b>2020</b> , 392, 123784	14.7	42
83	Photo-Driven Self-Healing of Arbitrary Nondestructive Damage in Polyethylene-Based Nanocomposites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 1650-1657	9.5	7
82	Recent advances in polymer-based thermal interface materials for thermal management: A mini-review. <i>Composites Communications</i> , <b>2020</b> , 22, 100528	6.7	30
81	Morphologies, interfacial interaction and mechanical performance of super-tough nanostructured PK/PA6 blends. <i>Polymer Testing</i> , <b>2020</b> , 91, 106777	4.5	3
80	Surface structure engineering for a bionic fiber-based sensor toward linear, tunable, and multifunctional sensing. <i>Materials Horizons</i> , <b>2020</b> , 7, 2450-2459	14.4	24
79	Smart TiCT MXene Fabric with Fast Humidity Response and Joule Heating for Healthcare and Medical Therapy Applications. <i>ACS Nano</i> , <b>2020</b> , 14, 8793-8805	16.7	106
78	Scalable fabrication of flexible piezoresistive pressure sensors based on occluded microstructures for subtle pressure and force waveform detection. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 16774-16783 <sup>71</sup>	7.1	9
77	Biobinder Nanocoating for Upgrading the Assembling Structures of High-Capacity Composite Electrodes with a Robust Polymeric Artificial Solid Electrolyte Interphase. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 58201-58211	9.5	5
76	Flexible Anti-Biofouling MXene/Cellulose Fibrous Membrane for Sustainable Solar-Driven Water Purification. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 36589-36597	9.5	106
75	Direct modification of polyketone resin for anion exchange membrane of alkaline fuel cells. <i>Journal of Colloid and Interface Science</i> , <b>2019</b> , 556, 420-431	9.3	13
74	Nitrogen-doped carbon-coated Fe <sub>3</sub> O <sub>4</sub> /rGO nanocomposite anode material for enhanced initial coulombic efficiency of lithium-ion batteries. <i>Ionics</i> , <b>2019</b> , 25, 1513-1521	2.7	7
73	Multilayer structured AgNW/WPU-MXene fiber strain sensors with ultrahigh sensitivity and a wide operating range for wearable monitoring and healthcare. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 15913-15923	13	87
72	Multifunctional Thermal Management Materials with Excellent Heat Dissipation and Generation Capability for Future Electronics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 18739-18745	9.5	69

71	Macroporous three-dimensional MXene architectures for highly efficient solar steam generation. <i>Journal of Materials Chemistry A</i> , <b>2019</b> , 7, 10446-10455	13	138
70	Enhanced Thermal Conductivity and Balanced Mechanical Performance of PP/BN Composites with 1 vol% Finely Dispersed MWCNTs Assisted by OBC. <i>Advanced Materials Interfaces</i> , <b>2019</b> , 6, 1900081	4.6	19
69	Constructing Sandwich-Architected Poly(l-lactide)/High-Melting-Point Poly(l-lactide) Nonwoven Fabrics: Toward Heat-Resistant Poly(l-lactide) Barrier Biocomposites with Full Biodegradability.. <i>ACS Applied Bio Materials</i> , <b>2019</b> , 2, 1357-1367	4.1	9
68	Electro and Light-Active Actuators Based on Reversible Shape-Memory Polymer Composites with Segregated Conductive Networks. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 30332-30340	9.5	44
67	Bacterial cellulose/MXene hybrid aerogels for photodriven shape-stabilized composite phase change materials. <i>Solar Energy Materials and Solar Cells</i> , <b>2019</b> , 203, 110174	6.4	54
66	High-performance composite phase change materials for energy conversion based on macroscopically three-dimensional structural materials. <i>Materials Horizons</i> , <b>2019</b> , 6, 250-273	14.4	116
65	Effect of aspect ratio of multi-wall carbon nanotubes on the dispersion in ethylene-octene block copolymer and the properties of the Nanocomposites. <i>Journal of Polymer Research</i> , <b>2019</b> , 26, 1	2.7	7
64	Scalable Synthesis of an Artificial Polydopamine Solid-Electrolyte-Interface-Assisted 3D rGO/Fe3O4@PDA Hydrogel for a Highly Stable Anode with Enhanced Lithium-Ion-Storage Properties. <i>ChemElectroChem</i> , <b>2019</b> , 6, 1069-1077	4.3	6
63	Dopamine-induced functionalization of cellulose nanocrystals with polyethylene glycol towards poly(-lactic acid) bionanocomposites for green packaging. <i>Carbohydrate Polymers</i> , <b>2019</b> , 203, 275-284	10.3	32
62	Effect of temperature, crystallinity and molecular chain orientation on the thermal conductivity of polymers: a case study of PLLA. <i>Journal of Materials Science</i> , <b>2018</b> , 53, 10543-10553	4.3	45
61	Hybridizing graphene aerogel into three-dimensional graphene foam for high-performance composite phase change materials. <i>Energy Storage Materials</i> , <b>2018</b> , 13, 88-95	19.4	123
60	Photodriven Shape-Stabilized Phase Change Materials with Optimized Thermal Conductivity by Tailoring the Microstructure of Hierarchically Ordered Hybrid Porous Scaffolds. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2018</b> , 6, 6761-6770	8.3	62
59	Hybrid network structure of boron nitride and graphene oxide in shape-stabilized composite phase change materials with enhanced thermal conductivity and light-to-electric energy conversion capability. <i>Solar Energy Materials and Solar Cells</i> , <b>2018</b> , 174, 56-64	6.4	168
58	High-performance porous polylactide stereocomplex crystallite scaffolds prepared by solution blending and salt leaching. <i>Materials Science and Engineering C</i> , <b>2018</b> , 90, 602-609	8.3	38
57	A Facile Route to Fabricate Highly Anisotropic Thermally Conductive Elastomeric POE/NG Composites for Thermal Management. <i>Advanced Materials Interfaces</i> , <b>2018</b> , 5, 1700946	4.6	37
56	Electrically insulating POE/BN elastomeric composites with high through-plane thermal conductivity fabricated by two-roll milling and hot compression. <i>Advanced Composites and Hybrid Materials</i> , <b>2018</b> , 1, 160-167	8.7	56
55	Human Skin-Inspired Electronic Sensor Skin with Electromagnetic Interference Shielding for the Sensation and Protection of Wearable Electronics. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 40880-40889	8.5	58
54	Tannic acid functionalized graphene hydrogel for organic dye adsorption. <i>Ecotoxicology and Environmental Safety</i> , <b>2018</b> , 165, 299-306	7	41

53	Tailoring Crystalline Morphology by High-Efficiency Nucleating Fiber: Toward High-Performance Poly(l-lactide) Biocomposites. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 20044-20054	9.5	21
52	Progress in polyketone materials: blends and composites. <i>Polymer International</i> , <b>2018</b> , 67, 1478-1487	3.3	12
51	Largely enhanced thermal conductivity of poly (ethylene glycol)/boron nitride composite phase change materials for solar-thermal-electric energy conversion and storage with very low content of graphene nanoplatelets. <i>Chemical Engineering Journal</i> , <b>2017</b> , 315, 481-490	14.7	168
50	Supercooling-dependent morphology evolution of an organic nucleating agent in poly(L-lactide)/poly(D-lactide) blends. <i>CrystEngComm</i> , <b>2017</b> , 19, 1648-1657	3.3	17
49	Polyethylene glycol/graphene oxide aerogel shape-stabilized phase change materials for photo-to-thermal energy conversion and storage via tuning the oxidation degree of graphene oxide. <i>Energy Conversion and Management</i> , <b>2017</b> , 146, 253-264	10.6	74
48	Hierarchical graphene foam-based phase change materials with enhanced thermal conductivity and shape stability for efficient solar-to-thermal energy conversion and storage. <i>Nano Research</i> , <b>2017</b> , 10, 802-813	10	153
47	Self-Assembled Sponge-like Chitosan/Reduced Graphene Oxide/Montmorillonite Composite Hydrogels without Cross-Linking of Chitosan for Effective Cr(VI) Sorption. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2017</b> , 5, 1557-1566	8.3	85
46	Excellent mechanical performance and enhanced dielectric properties of OBC/SiO <sub>2</sub> elastomeric nanocomposites: effect of dispersion of the SiO <sub>2</sub> nanoparticles. <i>RSC Advances</i> , <b>2017</b> , 7, 46297-46305	3.7	1
45	Poly(l-lactic acid)-polyethylene glycol-poly(l-lactic acid) triblock copolymer: A novel macromolecular plasticizer to enhance the crystallization of poly(l-lactic acid). <i>European Polymer Journal</i> , <b>2017</b> , 97, 272-281	5.2	25
44	A Green and Facile Melt Approach for Hierarchically Porous Polylactide Monoliths Based on Stereocomplex Crystallite Network. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2017</b> , 5, 8334-8343	8.3	20
43	Hierarchically interconnected porous scaffolds for phase change materials with improved thermal conductivity and efficient solar-to-electric energy conversion. <i>Nanoscale</i> , <b>2017</b> , 9, 17704-17709	7.7	97
42	Self-assembled high-strength hydroxyapatite/graphene oxide/chitosan composite hydrogel for bone tissue engineering. <i>Carbohydrate Polymers</i> , <b>2017</b> , 155, 507-515	10.3	168
41	Effect of cross-linking degree of EPDM phase on the electrical properties and formation of dual networks of thermoplastic vulcanizate composites based on isotactic polypropylene (iPP)/ethylene-propylene-diene rubber (EPDM) blends. <i>RSC Advances</i> , <b>2016</b> , 6, 74567-74574	3.7	16
40	An ice-templated assembly strategy to construct graphene oxide/boron nitride hybrid porous scaffolds in phase change materials with enhanced thermal conductivity and shape stability for light-thermal-electric energy conversion. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 18841-18851	13	145
39	Effect of chain entanglement on the melt-crystallization behavior of poly(l-lactide) acid. <i>Journal of Polymer Research</i> , <b>2016</b> , 23, 1	2.7	14
38	Low percolation threshold and balanced electrical and mechanical performances in polypropylene/carbon black composites with a continuous segregated structure. <i>Composites Part B: Engineering</i> , <b>2016</b> , 99, 348-357	10	51
37	Solvent-controlled formation of a reduced graphite oxide gel via hydrogen bonding. <i>RSC Advances</i> , <b>2016</b> , 6, 27267-27271	3.7	2
36	Hybrid graphene aerogels/phase change material composites: Thermal conductivity, shape-stabilization and light-to-thermal energy storage. <i>Carbon</i> , <b>2016</b> , 100, 693-702	10.4	263

35	Novel photodriven composite phase change materials with bioinspired modification of BN for solar-thermal energy conversion and storage. <i>Journal of Materials Chemistry A</i> , <b>2016</b> , 4, 9625-9634	13	126
34	Balanced strength and ductility improvement of in situ crosslinked polylactide/poly(ethylene terephthalate glycol) blends. <i>RSC Advances</i> , <b>2015</b> , 5, 34821-34830	3-7	14
33	Enhancing Thermomechanical Properties and Heat Distortion Resistance of Poly(l-lactide) with High Crystallinity under High Cooling Rate. <i>ACS Sustainable Chemistry and Engineering</i> , <b>2015</b> , 3, 654-661	8-3	58
32	Suppressing phase coarsening in immiscible polymer blends using nano-silica particles located at the interface. <i>RSC Advances</i> , <b>2015</b> , 5, 74295-74303	3-7	21
31	An extremely uniform dispersion of MWCNTs in olefin block copolymers significantly enhances electrical and mechanical performances. <i>Polymer Chemistry</i> , <b>2015</b> , 6, 7160-7170	4-9	34
30	Temperature: a nonnegligible factor for the formation of a structurally stable, self-assembled reduced graphite oxide hydrogel. <i>RSC Advances</i> , <b>2015</b> , 5, 10-15	3-7	13
29	Enantiomeric poly(D-lactide) with a higher melting point served as a significant nucleating agent for poly(L-lactide). <i>CrystEngComm</i> , <b>2015</b> , 17, 4334-4342	3-3	16
28	Enhanced comprehensive performance of polyethylene glycol based phase change material with hybrid graphene nanomaterials for thermal energy storage. <i>Carbon</i> , <b>2015</b> , 88, 196-205	10-4	147
27	Temperature induced gelation transition of a fumed silica/PEG shear thickening fluid. <i>RSC Advances</i> , <b>2015</b> , 5, 18367-18374	3-7	68
26	High-melting-point crystals of poly(L-lactic acid) (PLLA): the most efficient nucleating agent to enhance the crystallization of PLLA. <i>CrystEngComm</i> , <b>2015</b> , 17, 2310-2320	3-3	35
25	Polymorphism of a high-molecular-weight racemic poly(L-lactide)/poly(D-lactide) blend: effect of melt blending with poly(methyl methacrylate). <i>RSC Advances</i> , <b>2015</b> , 5, 19058-19066	3-7	25
24	A new approach to construct segregated structures in thermoplastic polyolefin elastomers towards improved conductive and mechanical properties. <i>Journal of Materials Chemistry A</i> , <b>2015</b> , 3, 5482-5490	13	77
23	Induced formation of polar phases in poly(vinylidene fluoride) by cetyl trimethyl ammonium bromide. <i>Journal of Materials Science</i> , <b>2014</b> , 49, 4171-4179	4-3	26
22	Polyethylene glycol based shape-stabilized phase change material for thermal energy storage with ultra-low content of graphene oxide. <i>Solar Energy Materials and Solar Cells</i> , <b>2014</b> , 123, 171-177	6-4	145
21	Stereocomplex Crystallite Network in Asymmetric PLLA/PDLA Blends: Formation, Structure, and Confining Effect on the Crystallization Rate of Homocrystallites. <i>Macromolecules</i> , <b>2014</b> , 47, 1439-1448	5-5	212
20	Synergistic effect of stereocomplex crystals and shear flow on the crystallization rate of poly(L-lactic acid): A rheological study. <i>RSC Advances</i> , <b>2014</b> , 4, 2733-2742	3-7	16
19	Suppressing phase retraction and coalescence of co-continuous polymer blends: effect of nanoparticles and particle network. <i>RSC Advances</i> , <b>2014</b> , 4, 49429-49441	3-7	15
18	A high-performance temperature sensitive TPV/CB elastomeric composite with balanced electrical and mechanical properties via PF-induced dynamic vulcanization. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 16989-16996	13	39

17	Nanoparticle retarded shape relaxation of dispersed droplets in polymer blends: an understanding from the viewpoint of molecular movement. <i>RSC Advances</i> , <b>2014</b> , 4, 41059-41068	3.7	13
16	Effect of graphite oxide structure on the formation of stable self-assembled conductive reduced graphite oxide hydrogel. <i>Journal of Materials Chemistry C</i> , <b>2014</b> , 2, 3846	7.1	19
15	Towards balanced strength and toughness improvement of isotactic polypropylene nanocomposites by surface functionalized graphene oxide. <i>Journal of Materials Chemistry A</i> , <b>2014</b> , 2, 3190-3199	13	60
14	Crystallization kinetics of $\beta$ phase poly(vinylidene fluoride)(PVDF) induced by tetrabutylammonium bisulfate. <i>Journal of Polymer Research</i> , <b>2014</b> , 21, 1	2.7	5
13	Greatly accelerated crystallization of poly(lactic acid): cooperative effect of stereocomplex crystallites and polyethylene glycol. <i>Colloid and Polymer Science</i> , <b>2014</b> , 292, 163-172	2.4	38
12	Effects of annealing on structure and deformation mechanism of isotactic polypropylene film with row-nucleated lamellar structure. <i>Journal of Applied Polymer Science</i> , <b>2013</b> , 130, 1659-1666	2.9	38
11	Tuning the structure of graphene oxide and the properties of poly(vinyl alcohol)/graphene oxide nanocomposites by ultrasonication. <i>Journal of Materials Chemistry A</i> , <b>2013</b> , 1, 3163	13	44
10	Polymorphism of racemic poly(L-lactide)/poly(D-lactide) blend: effect of melt and cold crystallization. <i>Journal of Physical Chemistry B</i> , <b>2013</b> , 117, 3667-74	3.4	83
9	Electrical properties and morphology of carbon black filled PP/EPDM blends: effect of selective distribution of fillers induced by dynamic vulcanization. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 4942-4954	4.3	36
8	Insight into the nucleating and reinforcing efficiencies of carbon nanofillers in poly(vinylidene fluoride): a comparison between carbon nanotubes and carbon black. <i>Journal of Materials Science</i> , <b>2013</b> , 48, 8509-8519	4.3	10
7	Deformation-induced morphology evolution during uniaxial stretching of isotactic polypropylene: effect of temperature. <i>Colloid and Polymer Science</i> , <b>2012</b> , 290, 261-274	2.4	46
6	The preparation, structures, and properties of poly(vinylidene fluoride)/multiwall carbon nanotubes nanocomposites. <i>Journal of Applied Polymer Science</i> , <b>2012</b> , 125, E592	2.9	18
5	Effect of repetitive processing on the mechanical properties and fracture toughness of dynamically vulcanized iPP/EPDM blends. <i>Journal of Applied Polymer Science</i> , <b>2011</b> , 120, 86-94	2.9	12
4	Studies on the Blends of Polyamide66 and Thermoplastic Polyimide. <i>Journal of Macromolecular Science - Physics</i> , <b>2010</b> , 49, 629-639	1.4	5
3	Hierarchical Distribution of $\beta$ Phase in Compression- and Injection-Molded, Polypropylene-Based TPV. <i>Journal of Macromolecular Science - Physics</i> , <b>2010</b> , 50, 62-74	1.4	2
2	The enhanced nucleating ability of carbon nanotube-supported nucleating agent in isotactic polypropylene. <i>Colloid and Polymer Science</i> , <b>2010</b> , 288, 681-688	2.4	50
1	Leakage-Proof and Malleable Polyethylene Wax Vitrimer Phase Change Materials for Thermal Interface Management. <i>ACS Applied Energy Materials</i> ,	6.1	4