Bo Zhu

List of Publications by Year
in descending order

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102 papers	5,779 citations	81900 39 h-index	76900 74 g-index
102 all docs	102 docs citations	102 times ranked	6329 citing authors

#	Article	IF	Citations
1	Polymorphous Crystallization and Multiple Melting Behavior of Poly(<scp>l</scp>-lactide):â€‰Molecular Weight Dependence. Macromolecules, 2007, 40, 6898-6905.	4.8	591
2	Hydrogen bonds in polymer blends. Progress in Polymer Science, 2004, 29, 1021-1051.	24.7	433
3	Polymorphic Transition in Disordered Poly(<scp>l</scp>-lactide) Crystals Induced by Annealing at Elevated Temperatures. Macromolecules, 2008, 41, 4296-4304.	4.8	305
4	Enthalpy Relaxation and Embrittlement of Poly(<scp>l</scp>-lactide) during Physical Aging. Macromolecules, 2007, 40, 9664-9671.	4.8	222
5	Effect of crystallization temperature on crystal modifications and crystallization kinetics of poly(<scp>L</scp>â€‰lactide). Journal of Applied Polymer Science, 2008, 107, 54-62.	2.6	204
6	Hierarchical Photothermal Fabrics with Low Evaporation Enthalpy as Heliotropic Evaporators for Efficient, Continuous, Salt-Free Desalination. ACS Nano, 2021, 15, 13007-13018.	14.6	191
7	Continuously Producing Watersteam and Concentrated Brine from Seawater by Hanging Photothermal Fabrics under Sunlight. Advanced Functional Materials, 2019, 29, 1905485.	14.9	178
8	Functionalized Conducting Polymer Nanodots for Enhanced Cell Capturing: The Synergistic Effect of Capture Agents and Nanostructures. Advanced Materials, 2011, 23, 4788-4792.	21.0	164
9	Blending Effects on Polymorphic Crystallization of Poly(<scp>l</scp>-lactide). Macromolecules, 2009, 42, 3374-3380.	4.8	142
10	Large enhancement in neurite outgrowth on a cell membrane-mimicking conducting polymer. Nature Communications, 2014, 5, 4523.	12.8	136
11	Polydioxythiophene Nanodots, Nonowires, Nano-Networks, and Tubular Structures: The Effect of Functional Groups and Temperature in Template-Free Electropolymerization. ACS Nano, 2012, 6, 3018-3026.	14.6	133
12	A Single Integrated 3Dâ€‰Printing Process Customizes Elastic and Sustainable Triboelectric Nanogenerators for Wearable Electronics. Advanced Functional Materials, 2018, 28, 1805108.	14.9	126
13	Thiol-capped Bi nanoparticles as stable and all-in-one type theranostic nanoagents for tumor imaging and thermoradiotherapy. Biomaterials, 2018, 161, 279-291.	11.4	113
14	Crystallization behavior and mechanical properties of bio-based green composites based on poly(L-lactide) and kenaf fiber. Journal of Applied Polymer Science, 2007, 105, 1511-1520.	2.6	109
15	Nanoscale-Confined and Fractional Crystallization of Poly(ethylene oxide) in the Interlamellar Region of Poly(butylene succinate). Macromolecules, 2004, 37, 3337-3345.	4.8	107
16	Roles of Physical Aging on Crystallization Kinetics and Induction Period of Poly(<scp>l</scp>-lactide). Macromolecules, 2008, 41, 8011-8019.	4.8	105
17	Polymorphic Crystallization and Phase Transition of Poly(butylene adipate) in Its Miscible Crystalline/Crystalline Blend with Poly(vinylidene fluoride). Macromolecules, 2010, 43, 8610-8618.	4.8	95
18	Nucleation Mechanism of Î±-Cyclodextrin-Enhanced Crystallization of Some Semicrystalline Aliphatic Polymers. Macromolecules, 2005, 38, 7736-7744.	4.8	93

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19	A general strategy of 3D printing thermosets for diverse applications. Materials Horizons, 2019, 6, 394-404.	12.2	89
20	3D printing of biomimetic vasculature for tissue regeneration. Materials Horizons, 2019, 6, 1197-1206.	12.2	88
21	Preparation of TiO2/C3N4 heterojunctions on carbon-fiber cloth as efficient filter-membrane-shaped photocatalyst for removing various pollutants from the flowing wastewater. Journal of Colloid and Interface Science, 2018, 532, 798-807.	9.4	85
22	Fractionated crystallization, polymorphic crystalline structure, and spherulite morphology of poly(butylene adipate) in its miscible blend with poly(butylene succinate). Polymer, 2011, 52, 3460-3468.	3.8	83
23	Synthesis of Au nanoparticle-decorated carbon nitride nanorods with plasmon-enhanced photoabsorption and photocatalytic activity for removing various pollutants from water. Journal of Hazardous Materials, 2018, 344, 1188-1197.	12.4	81
24	Mechanical and thermal properties of poly(butylene succinate)/plant fiber biodegradable composite. Journal of Applied Polymer Science, 2010, 115, 3559-3567.	2.6	79
25	Facile Syntheses of Dioxythiophene-Based Conjugated Polymers by Direct Câ€“H Arylation. Macromolecules, 2012, 45, 7783-7790.	4.8	75
26	Controlled Protein Absorption and Cell Adhesion on Polymer-Brush-Grafted Poly(3,4-ethylenedioxythiophene) Films. ACS Applied Materials & Interfaces, 2013, 5, 4536-4543.	8.0	72
27	Molecular or Nanoscale Structures? The Deciding Factor of Surface Properties on Functionalized Poly(3,4â€ethylenedioxythiophene) Nanorod Arrays. Advanced Functional Materials, 2013, 23, 3212-3219.	14.9	67
28	Effects of Crystallization Condition of Poly(butylene succinate) Component on the Crystallization of Poly(ethylene oxide) Component in Their Miscible Blends. Macromolecules, 2004, 37, 8050-8056.	4.8	63
29	Conformational and microstructural characteristics of poly(L-lactide) during glass transition and physical aging. Journal of Chemical Physics, 2008, 129, 184902.	3.0	63
30	3D Bioelectronic Interface: Capturing Circulating Tumor Cells onto Conducting Polymerâ€Based Micro/Nanorod Arrays with Chemical and Topographical Control. Small, 2014, 10, 3012-3017.	10.0	61
31	Interactions between an Anticancer Drug and Polymeric Micelles Based on Biodegradable Polyesters. Macromolecular Bioscience, 2008, 8, 1116-1125.	4.1	56
32	Oligoethylene-Glycol-Functionalized Polyoxythiophenes for Cell Engineering: Syntheses, Characterizations, and Cell Compatibilities. ACS Applied Materials & Interfaces, 2012, 4, 680-686.	8.0	55
33	Nucleation and Crystallization Behavior of Poly(butylene succinate) Induced by Its Î±-Cyclodextrin Inclusion Complex: Effect of Stoichiometry. Macromolecules, 2006, 39, 2427-2428.	4.8	49
34	Isomorphic Crystallization of Poly(hexamethylene adipate-co-butylene adipate): Regulating Crystal Modification of Polymorphic Polyester from Internal Crystalline Lattice. Macromolecules, 2010, 43, 6429-6437.	4.8	48
35	Effect of steric hindrance on hydrogen-bonding interaction between polyesters and natural polyphenol catechin. Journal of Applied Polymer Science, 2004, 91, 3565-3573.	2.6	47
36	Hydrogen-Bonding Interaction and Crystalline Morphology in the Binary Blends of Poly(É›-caprolactone) and Polyphenol Catechin. Macromolecular Bioscience, 2003, 3, 684-693.	4.1	44

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37	Crystallization of poly(butylene adipate) in the presence of nucleating agents. Journal of Polymer Science, Part B: Polymer Physics, 2005, 43, 2340-2351.	2.1	44
38	Poly(<scp>L</scp>â€lactide)/layered double hydroxides nanocomposites: Preparation and crystallization behavior. Journal of Polymer Science, Part B: Polymer Physics, 2008, 46, 2222-2233.	2.1	43
39	Fabrication of NH2-MIL-125(Ti) nanodots on carbon fiber/MoS2-based weavable photocatalysts for boosting the adsorption and photocatalytic performance. Journal of Colloid and Interface Science, 2022, 611, 706-717.	9.4	43
40	Graphene trapped silk scaffolds integrate high conductivity and stability. Carbon, 2019, 148, 16-27.	10.3	42
41	Isomorphic crystallization of aliphatic copolyesters derived from 1,6-hexanediol: Effect of the chemical structure of comonomer units on the extent of cocrystallization. Polymer, 2011, 52, 2667-2676.	3.8	41
42	Crystalline Phase of Isomorphic Poly(hexamethylene sebacate-co-hexamethylene adipate) Copolyester: Effects of Comonomer Composition and Crystallization Temperature. Macromolecules, 2010, 43, 2925-2932.	4.8	40
43	Temperatureâ€dependent polymorphic crystalline structure and melting behavior of poly(butylene) Tj ETQq1 1 0.784314 rgBT /Overlo Physics, 2009, 47, 1997-2007.	2.1	38
44	Solution-Processed MoO_x Hole-Transport Layer with F4-TCNQ Modification for Efficient and Stable Inverted Perovskite Solar Cells. ACS Applied Energy Materials, 2019, 2, 5862-5870.	5.1	35
45	Partial Phase Segregation in Strongly Hydrogen-Bonded and Miscible Blends. Macromolecules, 2004, 37, 3257-3266.	4.8	34
46	UV/NIR-Light-Triggered Rapid and Reversible Color Switching for Rewritable Smart Fabrics. ACS Applied Materials & Interfaces, 2019, 11, 13370-13379.	8.0	33
47	Polymorphic crystallization of fractionated microbial medium-chain-length polyhydroxyalkanoates. Polymer, 2009, 50, 4378-4388.	3.8	32
48	Molecularly engineered metal-based bioactive soft materials â€“ Neuroactive magnesium ion/polymer hybrids. Acta Biomaterialia, 2019, 85, 310-319.	8.3	32
49	Construction of Ag/AgCl-CN heterojunctions with enhanced photocatalytic activities for degrading contaminants in wastewater. Journal of Colloid and Interface Science, 2019, 543, 25-33.	9.4	31
50	Kenaf fiber/poly(Îµâ€caprolactone) biocomposite with enhanced crystallization rate and mechanical properties. Journal of Applied Polymer Science, 2008, 107, 3512-3519.	2.6	30
51	Dynamic Poly(3,4â€ethylenedioxythiophene)s Integrate Low Impedance with Redoxâ€Switchable Biofunction. Advanced Functional Materials, 2018, 28, 1703890.	14.9	27
52	Effect of aging on fractional crystallization of poly(ethylene oxide) component in poly(ethylene) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 14 2665-2676.	2.1	26
53	Polymorphic Crystallization and Meltingâ^'Recrystallization Behavior of Poly(3-hydroxypropionate). Macromolecules, 2005, 38, 6455-6465.	4.8	26
54	Tunable, dynamic and electrically stimulated lectinâ€“carbohydrate recognition on a glycan-grafted conjugated polymer. Chemical Communications, 2012, 48, 6942.	4.1	26

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55	Thermal and Infrared Spectroscopic Studies on Hydrogen-Bonding Interaction between Poly(3-hydroxybutyrate) and Catechin. Polymer Journal, 2003, 35, 384-392.	2.7	25
56	Natural DNA Mixed with Trehalose Persists in B-Form Double-Stranding Even in the Dry State. Journal of Physical Chemistry B, 2007, 111, 5542-5544.	2.6	25
57	Synthesis of NiTiO₃â€“Bi₂MoO₆ coreâ€“shell fiber-shaped heterojunctions as efficient and easily recyclable photocatalysts. New Journal of Chemistry, 2018, 42, 411-419.	2.8	24
58	Thermal and infrared spectroscopic studies on hydrogen-bonding interaction of biodegradable poly(3-hydroxybutyrate)s with natural polyphenol catechin. Green Chemistry, 2003, 5, 580-586.	9.0	22
59	Flexible and Reusable Non-woven Fabric Photodetector Based on Polypyrrole/Crystal Violate Lactone for NIR Light Detection and Writing. Advanced Fiber Materials, 2020, 2, 150-160.	16.1	22
60	Polyhedral Oligomeric Silsesquioxaneâ€•and Fullereneâ€Endâ€Capped Poly(Îµâ€caprolactone). Macromolecular Chemistry and Physics, 2008, 209, 1191-1197.	2.2	19
61	Fullerene Endâ€Capped Biodegradable Poly(Îµâ€caprolactone). Macromolecular Chemistry and Physics, 2008, 209, 104-111.	2.2	18
62	A New Crystal Form Favored in Low Molecular Weight Biodegradable Poly(3-hydroxypropionate). Macromolecules, 2006, 39, 194-203.	4.8	17
63	Enforcing Effect of Double-Fullerene End-Capped Poly(ethylene oxide) on Mechanical Properties of Poly(L-lactic acid). Macromolecular Rapid Communications, 2006, 27, 109-113.	3.9	17
64	One-Step Approach to Prepare Transparent Conductive Regenerated Silk Fibroin/PEDOT:PSS Films for Electroactive Cell Culture. ACS Applied Materials & Interfaces, 2022, 14, 123-137.	8.0	17
65	Electropolymerized Conjugated Polyelectrolytes with Tunable Work Function and Hydrophobicity as an Anode Buffer in Organic Optoelectronics. ACS Applied Materials & Interfaces, 2012, 4, 3396-3404.	8.0	16
66	All-Organic Conductive Biomaterial as an Electroactive Cell Interface. ACS Applied Materials & Interfaces, 2018, 10, 35547-35556.	8.0	16
67	Tunable Protein/Cell Binding and Interaction with Neurite Outgrowth of Low-Impedance Zwitterionic PEDOTs. ACS Applied Materials & Interfaces, 2020, 12, 12362-12372.	8.0	16
68	A New Crystal Form, Polymorphism, and Multi-Morphology in Biodegradable Poly(3-hydroxypropionate). Macromolecular Rapid Communications, 2005, 26, 581-585.	3.9	14
69	Crystallization behavior and mechanical properties of poly(Îµâ€caprolactone)/cyclodextrin biodegradable composites. Journal of Applied Polymer Science, 2009, 112, 2351-2357.	2.6	14
70	Reusable Cu2-xS-modified masks with infrared lamp-driven antibacterial and antiviral activity for real-time personal protection. Chemical Engineering Journal, 2022, 441, 136043.	12.7	13
71	Studies on Binary Blends of Poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) and Natural Polyphenol Catechin: Specific Interactions and Thermal Properties. Macromolecular Bioscience, 2003, 3, 258-267.	4.1	12
72	Miscibility and intermolecular hydrogenâ€bonding interactions in poly(3â€hydroxybutyrateâ€coâ€3â€hydroxyhexanoate)/poly(4â€vinyl phenol) binary blends. Journal of Applied Polymer Science, 2007, 106, 2025-2030.	2.6	12

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73	Mechanical Properties of Comonomer-Compositionally Fractionated Poly[(3-hydroxybutyrate)-co-(3-mercaptopropionate)] with Low 3-Mercaptopropionate Unit Content. Macromolecular Bioscience, 2007, 7, 810-819.	4.1	12
74	Critical role of the conformation of comonomer units in isomorphic crystallization of poly(hexamethylene adipate-co-butylene adipate) forming Poly(hexamethylene adipate) type crystal. Polymer, 2011, 52, 5204-5211.	3.8	12
75	Watermelon Fleshâ€Derived Carbon Aerogel with Hierarchical Porous Structure for Interfacial Solar Steam Generation. Solar Rrl, 2022, 6, .	5.8	12
76	Fractionated crystallization and selfâ€nucleation behavior of poly(ethylene oxide) in its miscible blends with poly(3â€hydroxybutyrate). Journal of Applied Polymer Science, 2010, 117, 3013-3022.	2.6	11
77	Crystalline-Structure-Dependent Enzymatic Degradation of Polymorphic Poly(3-hydroxypropionate). Biomacromolecules, 2008, 9, 1221-1228.	5.4	10
78	Polymorphic Packing and Dynamics of Biodegradable Poly(3-hydroxypropionate). Journal of Physical Chemistry B, 2008, 112, 9684-9692.	2.6	10
79	Synthesis and properties of bioâ€based poly(pentamethylene oxamide). Polymer Engineering and Science, 2018, 58, 659-664.	3.1	10
80	Mechanical Properties of Blends of Double-Fullerene End-Capped Poly(ethylene oxide) and Poly(L-lactic acid). Macromolecular Chemistry and Physics, 2006, 207, 746-754.	2.2	9
81	Bio-based poly(pentamethylene oxamide) synthesized by spray/solid-state polycondensation. Polymer Bulletin, 2018, 75, 121-134.	3.3	9
82	Synthesis and characterization of poly(hexamethylene terephthalate/hexamethylene oxamide) alternating copolyamide (altâ€PA6T /62). Journal of Applied Polymer Science, 2021, 138, 49773.	2.6	9
83	Functionalized Conducting Polymer Nanoâ€Networks from Controlled Oxidation Polymerization toward Cell Engineering. Advanced Engineering Materials, 2011, 13, B423.	3.5	8
84	Transparent Conductive Silk Film with a PEDOTâ€“OH Nano Layer as an Electroactive Cell Interface. ACS Biomaterials Science and Engineering, 2021, 7, 1202-1215.	5.2	8
85	Enzymatic Hydrolysis of Thioester Linkages in Bacterial Poly(3-hydroxybutyrate-co-3-mercaptopropionate)s by Poly(3-hydroxybutyrate) Depolymerase Isolated from Ralstonia pickettii T1. Polymer Journal, 2005, 37, 711-715.	2.7	7
86	Synthesis and characterization of fullerene grafted poly(Îµâ€caprolactone). Journal of Applied Polymer Science, 2008, 107, 4029-4035.	2.6	7
87	Self-Extinguishing Resin Transfer Molding Composites Using Non-Fire-Retardant Epoxy Resin. Materials, 2018, 11, 2554.	2.9	7
88	A trade-off between antifouling and the electrochemical stabilities of PEDOTs. Journal of Materials Chemistry B, 2021, 9, 2717-2726.	5.8	7
89	Effect of Comonomerâ€Unit Compositional Distribution on Thermal and Crystallization Behavior of Bacterial Poly[(3â€hydroxybutyrate)â€coâ€(3â€mercaptopropionate)]. Macromolecular Bioscience, 2009, 9, 702-712.	4.1	6
90	Nanoscale Analysis of a Functionalized Polythiophene Surface by Adhesion Mapping. Analytical Chemistry, 2014, 86, 6865-6871.	6.5	6

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91	Synthesis and characterization of poly (1,6â€hexamethylene oxamideâ€coâ€mâ€xylene oxamide) copolymers. Polymers for Advanced Technologies, 2018, 29, 2943-2951.	3.2	4
92	Evaluation and selection of potent fluorescent immunosensors by combining fluorescent peptide and nanobodies displayed on yeast surface. Scientific Reports, 2021, 11, 22590.	3.3	4
93	Nanoscale analysis of functionalized polythiophene surfaces: the effects of electropolymerization methods and thermal treatment. RSC Advances, 2014, 4, 62666-62672.	3.6	3
94	Effect of a polyetheramine additive on the melt-flowability of poly(butylene terephthalate). Polymer Testing, 2017, 61, 191-196.	4.8	3
95	Preparation, analysis, and isothermal crystallization behavior of poly[1,3â€bis(aminomethyl)cyclohexamethylene oxamide]. Journal of Applied Polymer Science, 2018, 135, 46345.	2.6	2
96	Preparation and characterization of poly(2â€methylâ€1,5â€pentamethylene oxamide) (PM52) polymer. Polymers for Advanced Technologies, 2018, 29, 1613-1619.	3.2	2
97	Wearable Electronics: A Single Integrated 3D-Printing Process Customizes Elastic and Sustainable Triboelectric Nanogenerators for Wearable Electronics (Adv. Funct. Mater. 46/2018). Advanced Functional Materials, 2018, 28, 1870331.	14.9	2
98	Electrochemical Assembling of Functionalized PEDOT Thin Films with Excellent Electroactivity and Superhydrophobicity. IOP Conference Series: Materials Science and Engineering, 2018, 436, 012021.	0.6	2
99	PEDOT-hydroxypropyl-Î²-cyclodextrin Inclusion Complex as Additive for Epoxy Coating with Enhanced Anticorrosion Performance. International Journal of Electrochemical Science, 2021, 16, 210443.	1.3	2
100	Electrochemical Stability of Poly(3,4-Ethylenedioxythiophene) Derivatives Under Cell Culture Conditions. Journal of Physics: Conference Series, 2021, 1885, 032004.	0.4	1
101	3P124 Analysis of Hydrogen Bonds in the Glassy States of Trehalose and Neotrehalose Using Molecular Dynamics Simulation and FT-IR Spectroscopy(Water, hydration, and elctrolytes,Poster) Tj ETQq1 1 0.784314 rgBT /Overloc	3.1	1
102	Conducting polymer nanobiointerfaces for biosensing and cell engineering. , 2010, , .		0