Bin Zhang

List of Publications by Year
in descending order

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96 papers	4,319 citations	117453 34 h-index	114278 63 g-index
97 all docs	97 docs citations	97 times ranked	5302 citing authors

#	Article	IF	Citations
1	Conjugatedâ€Polymerâ€Functionalized Graphene Oxide: Synthesis and Nonvolatile Rewritable Memory Effect. Advanced Materials, 2010, 22, 1731-1735.	11.1	400
2	Graphene and its derivatives: switching ON and OFF. Chemical Society Reviews, 2012, 41, 4688.	18.7	257
3	Graphene oxide covalently functionalized with zinc phthalocyanine for broadband optical limiting. Carbon, 2011, 49, 1900-1905.	5.4	255
4	Viologen-inspired functional materials: synthetic strategies and applications. Journal of Materials Chemistry A, 2019, 7, 23337-23360.	5.2	186
5	Multifunctional polymerâ€“metal nanocomposites via direct chemical reduction by conjugated polymers. Chemical Society Reviews, 2014, 43, 1349-1360.	18.7	184
6	Graphene and its derivatives for laser protection. Progress in Materials Science, 2016, 84, 118-157.	16.0	128
7	Covalent Functionalization of Black Phosphorus with Conjugated Polymer for Information Storage. Angewandte Chemie - International Edition, 2018, 57, 4543-4548.	7.2	122
8	Bistable electrical switching and electronic memory effect in a solution-processable graphene oxide-donor polymer complex. Applied Physics Letters, 2009, 95, .	1.5	118
9	Preparation and Memory Performance of a Nanoaggregated Dispersed Red 1â€Functionalized Poly(Nâ€vinylcarbazole) Film via Solutionâ€Phase Selfâ€Assembly. Advanced Functional Materials, 2010, 20, 2916-2922.	7.8	112
10	Redox gated polymer memristive processing memory unit. Nature Communications, 2019, 10, 736.	5.8	99
11	Polyfluorene-Based Pushâ^'Pull Type Functional Materials for Write-Once-Read-Many-Times Memory Devices. Chemistry of Materials, 2010, 22, 4455-4461.	3.2	89
12	Functionalization of reduced graphene oxide nanosheets via stacking interactions with the fluorescent and water-soluble perylene bisimide-containing polymers. Polymer, 2011, 52, 2376-2383.	1.8	89
13	Poly(Nâ€vinylcarbazole) chemically modified graphene oxide. Journal of Polymer Science Part A, 2010, 48, 2642-2649.	2.5	88
14	90% yield production of polymer nano-memristor for in-memory computing. Nature Communications, 2021, 12, 1984.	5.8	87
15	Indacenodithiophene: a promising building block for high performance polymer solar cells. Journal of Materials Chemistry A, 2017, 5, 10798-10814.	5.2	85
16	Electrical conductivity switching and memory effects in poly(N-vinylcarbazole) derivatives with pendant azobenzene chromophores and terminal electron acceptor moieties. Journal of Materials Chemistry, 2011, 21, 6027.	6.7	81
17	Recent Advances in RAFT Polymerization: Novel Initiation Mechanisms and Optoelectronic Applications. Polymers, 2018, 10, 318.	2.0	79
18	Growing poly(Nâ€vinylcarbazole) from the surface of graphene oxide via RAFT polymerization. Journal of Polymer Science Part A, 2011, 49, 2043-2050.	2.5	76

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19	Conjugated Polymerâ€Grafted Reduced Graphene Oxide for Nonvolatile Rewritable Memory. Chemistry - A European Journal, 2011, 17, 13646-13652.	1.7	72
20	Pushâ€“Pull archetype of reduced graphene oxide functionalized with polyfluorene for nonvolatile rewritable memory. Journal of Polymer Science Part A, 2012, 50, 378-387.	2.5	71
21	Nonvolatile Rewritable Memory Effects in Graphene Oxide Functionalized by Conjugated Polymer Containing Fluorene and Carbazole Units. Chemistry - A European Journal, 2011, 17, 10304-10311.	1.7	69
22	In Situ Synthesis and Nonvolatile Rewritableâ€Memory Effect of Polyanilineâ€Functionalized Graphene Oxide. Chemistry - A European Journal, 2013, 19, 6265-6273.	1.7	55
23	Tannic acid anchored layer-by-layer covalent deposition of parasin I peptide for antifouling and antimicrobial coatings. RSC Advances, 2016, 6, 14809-14818.	1.7	53
24	Conjugated polymer covalently modified graphene oxide quantum dots for ternary electronic memory devices. Nanoscale, 2017, 9, 10610-10618.	2.8	53
25	Multi-walled carbon nanotubes covalently functionalized with polyhedral oligomeric silsesquioxanes for optical limiting. Carbon, 2010, 48, 1738-1742.	5.4	48
26	An Environmentally Benign and pH-Sensitive Photocatalyst with Surface-Bound Metalloporphyrin for Heterogeneous Catalysis of Controlled Radical Polymerization. Macromolecules, 2018, 51, 7974-7982.	2.2	47
27	Xanthene Dye-Functionalized Conjugated Porous Polymers as Robust and Reusable Photocatalysts for Controlled Radical Polymerization. Macromolecules, 2020, 53, 1550-1556.	2.2	47
28	CO₂-triggered fluorescence â€œturn-onâ€•response of perylene diimide-containing poly(N,N-dimethylaminoethyl methacrylate). Journal of Materials Chemistry A, 2013, 1, 1207-1212.	5.2	44
29	Solution-processable poly(N-vinylcarbazole)-covalently grafted MoS₂nanosheets for nonvolatile rewritable memory devices. Nanoscale, 2017, 9, 2449-2456.	2.8	44
30	Direct covalent modification of black phosphorus quantum dots with conjugated polymers for information storage. Nanoscale, 2019, 11, 3527-3533.	2.8	40
31	Electrical Bistability and WORM Memory Effects in Donorâ€“Acceptor Polymers Based on Poly(Nâ€vinylcarbazole). ChemPlusChem, 2012, 77, 74-81.	1.3	37
32	Synthesis and strong optical limiting response of graphite oxide covalently functionalized with gallium phthalocyanine. Nanotechnology, 2011, 22, 205704.	1.3	36
33	High-efficiency bulk heterojunction memory devices fabricated using organometallic halide perovskite:poly(N-vinylcarbazole) blend active layers. Dalton Transactions, 2016, 45, 484-488.	1.6	36
34	Covalent Modification of Graphene Oxide with Poly(N-vinylcarbazole) Containing Pendant Azobenzene Chromophores for Nonvolatile Ternary memories. Carbon, 2018, 134, 500-506.	5.4	36
35	Covalent Modification of MoS₂ with Poly(Nâ€vinylcarbazole) for Solidâ€State Broadband Optical Limiters. Chemistry - A European Journal, 2016, 22, 4500-4507.	1.7	35
36	MoS₂quantum dots chemically modified with porphyrin for solid-state broadband optical limiters. Nanoscale, 2019, 11, 20449-20455.	2.8	35

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37	Triphenylamine and quinoline-containing polyfluorene for blue light-emitting diodes. European Polymer Journal, 2010, 46, 997-1003.	2.6	34
38	Metalloporphyrin-bound Janus nanocomposites with dual stimuli responsiveness for nanocatalysis in living radical polymerization. Nanoscale, 2018, 10, 19254-19261.	2.8	34
39	Progress in the therapeutic applications of polymer-decorated black phosphorus and black phosphorus analog nanomaterials in biomedicine. Journal of Materials Chemistry B, 2020, 8, 7076-7120.	2.9	34
40	Hyperbranched polycaprolactone-click-poly(N-vinylcaprolactam) amphiphilic copolymers and their applications as temperature-responsive membranes. Journal of Materials Chemistry B, 2014, 2, 814-825.	2.9	31
41	Fabrication and nonlinear optical characterization of fluorinated zinc phthalocyanine covalently modified black phosphorus/PMMA films using the nanosecond Z-scan technique. Journal of Materials Chemistry C, 2019, 7, 10789-10794.	2.7	30
42	Synthesis and nonvolatile memristive switching effect of a donorâ€“acceptor structured oligomer. Journal of Materials Chemistry C, 2015, 3, 664-673.	2.7	29
43	Viologen-bridged polyaniline based multifunctional heterofilms for all-solid-state supercapacitors and memory devices. European Polymer Journal, 2018, 98, 125-136.	2.6	29
44	Perfluorinated gallium phthalocyanine axially grafted black phosphorus nanosheets for optical limiting. Journal of Materials Chemistry C, 2020, 8, 10197-10203.	2.7	28
45	Dithienopyrroleâ€Benzodithiopheneâ€Based Donorâ€“Acceptor Polymers for Memristor. ChemPlusChem, 2014, 79, 1263-1270.	1.3	27
46	Viologenâ€Hypercrosslinked Ionic Porous Polymer Films as Active Layers for Electronic and Energy Storage Devices. Advanced Materials Interfaces, 2018, 5, 1701679.	1.9	27
47	BODIPY-based conjugated polymer covalently grafted reduced graphene oxide for flexible nonvolatile memory devices. Carbon, 2017, 116, 713-721.	5.4	26
48	Multiwalled carbon nanotubes covalently functionalized with poly(Nâ€vinylcarbazole) via RAFT polymerization: Synthesis and nonliner optical properties. Journal of Polymer Science Part A, 2010, 48, 3161-3168.	2.5	25
49	Pyrolytically Modified Polyacrylonitrileâ€Covalently Grafted MoS₂ Nanosheets for a Nonvolatile Rewritable Memory Device. Advanced Electronic Materials, 2018, 4, 1700397.	2.6	25
50	Magnetic Janus nanocomposites with iridium(<scp>iii</scp>) complexes for heterogeneous catalysis of logic controlled RAFT polymerization using multiplexed external switching. Nanoscale, 2020, 12, 7595-7603.	2.8	25
51	Yolkâ€“shell nanorattles encapsulating a movable Au nanocore in electroactive polyaniline shells for flexible memory device. Journal of Materials Chemistry C, 2014, 2, 5189.	2.7	24
52	Enhanced Antifouling and Anticorrosion Properties of Stainless Steel by Biomimetic Anchoring PEGDMA-Cross-Linking Polycationic Brushes. Industrial & Engineering Chemistry Research, 2019, 58, 7107-7119.	1.8	23
53	Reactive Graphene Oxide Nanosheets: A Versatile Platform for the Fabrication of Graphene Oxideâ€“Biomolecule/Polymer Nanohybrids. Macromolecular Rapid Communications, 2013, 34, 234-238.	2.0	22
54	Recent Progress in Two-Dimensional Nanomaterials for Laser Protection. Chemistry, 2019, 1, 17-43.	0.9	22

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55	Resistance-Switchable Graphene Oxide-Polymer Nanocomposites for Molecular Electronics. ChemElectroChem, 2014, 1, 514-519.	1.7	21
56	Organophosphorus-based polymer covalently functionalized reduced graphene oxide: In-situ synthesis and nonvolatile memory effect. Carbon, 2019, 141, 758-767.	5.4	21
57	Ether-linked porphyrin covalent organic framework with broadband optical switch. IScience, 2021, 24, 102526.	1.9	21
58	Fluorescent nanoparticles from self-assembly of Î²-cyclodextrin-functionalized fluorene copolymers for organic molecule sensing and cell labeling. Polymer Chemistry, 2012, 3, 2444.	1.9	20
59	Covalent Modification of Graphene Oxide with Carbazole Groups for Laser Protection. Chemistry - A European Journal, 2015, 21, 4622-4627.	1.7	20
60	Soluble reduced graphene oxide functionalized with conjugated polymer for heterojunction solar cells. Journal of Polymer Science Part A, 2012, 50, 1663-1671.	2.5	18
61	Macrocyclic triphenylamine-based pushâ€“pull type polymer memristive material: synthesis and characterization. Journal of Materials Chemistry C, 2018, 6, 4023-4029.	2.7	18
62	Enabling superior stretchable resistive switching memory via polymer-functionalized graphene oxide nanosheets. Journal of Materials Chemistry C, 2019, 7, 14664-14671.	2.7	18
63	A highly soluble polyhedral oligomeric silsesquioxane end-capped perylenediimide dye. New Journal of Chemistry, 2010, 34, 1120.	1.4	16
64	Conjugated polymer covalently modified multiwalled carbon nanotubes for optical limiting. Journal of Polymer Science Part A, 2011, 49, 101-109.	2.5	16
65	Viologen-based conjugated ionic polymer for nonvolatile rewritable memory device. European Polymer Journal, 2017, 94, 222-229.	2.6	16
66	In Situ Synthesis and Characterization of Poly(aryleneethynylene)â€Grafted Reduced Graphene Oxide. Chemistry - A European Journal, 2016, 22, 2247-2252.	1.7	14
67	Recent Advances in Resistive Switching Materials and Devices: From Memories to Memristors. Engineered Science, 2018, , .	1.2	14
68	Preparation and Unique Electrical Behaviors of Monodispersed Hybrid Nanorattles of Metal Nanocores with Hairy Electroactive Polymer Shells. Chemistry - A European Journal, 2014, 20, 2723-2731.	1.7	13
69	Azulene-bridged coordinated framework based quasi-molecular rectifier. Journal of Materials Chemistry C, 2017, 5, 2223-2229.	2.7	13
70	In-situ growing D-A polymer from the surface of reduced graphene oxide: Synthesis and nonvolatile ternary memory effect. Carbon, 2019, 143, 851-858.	5.4	13
71	Solution-processable black phosphorus nanosheets covalently modified with polyacrylonitrile for nonvolatile resistive random access memory. Journal of Materials Chemistry C, 2020, 8, 1231-1238.	2.7	13
72	Covalent Functionalization of Black Phosphorus with Conjugated Polymer for Information Storage. Angewandte Chemie, 2018, 130, 4633-4638.	1.6	11

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73	Donorâ€“acceptor type black phosphorus nanosheets covalently functionalized with a conjugated polymer for laser protection. Polymer Chemistry, 2019, 10, 6003-6009.	1.9	11
74	Synthesis and memory performance of a conjugated polymer with an integrated fluorene, carbazole and oxadiazole backbone. Polymer Journal, 2012, 44, 257-263.	1.3	9
75	Self-Assembled Superhelical Structure of Poly(N-vinylcarbazole)-Based Donorâ€“Acceptor Polymer at the Airâ€“Water Interface. Macromolecules, 2014, 47, 373-378.	2.2	9
76	Conjugated polymer covalently modified multi-walled carbon nanotubes for flexible nonvolatile RRAM devices. European Polymer Journal, 2021, 142, 110153.	2.6	9
77	A donor-acceptor structured conjugated copolymer for flexible memory device. Organic Electronics, 2017, 49, 269-277.	1.4	8
78	MoS₂ nanosheets chemically modified with metal phthalocyanine via mussel-inspired chemistry for multifunctional memristive devices. Journal of Materials Chemistry C, 2021, 9, 6930-6936.	2.7	8
79	Donor-acceptor-type poly[chalcogenoviologen-alt-triphenylamine] for synaptic biomimicking and neuromorphic computing. IScience, 2022, 25, 103640.	1.9	8
80	Synthesis and tunable electrical behavior of polyfluorene functionalized with triphenylamine and (3-methyl-1-imidazolium-yl)hexyl side chains. RSC Advances, 2016, 6, 51732-51737.	1.7	7
81	Optoelectrical Switching of Nonfullerene Acceptor Y6 and BPQDâ€Based Bulk Heterojunction Memory Device through Photoelectric Effect. Advanced Electronic Materials, 2021, 7, 2001191.	2.6	7
82	Cyanospirobifluorene-based conjugated polyelectrolytes: Synthesis and tunable nonvolatile information storage performance. European Polymer Journal, 2022, 163, 110940.	2.6	6
83	MoS2 nanosheets functionalized with ferrocene-containing polymer via SI-ATRP for memristive devices with multilevel resistive switching. European Polymer Journal, 2022, 174, 111316.	2.6	6
84	PEGylated Fluorescent Nanoparticles from One-Pot Atom Transfer Radical Polymerization and â€œClick Chemistryâ€. Polymers, 2015, 7, 2119-2130.	2.0	5
85	Donor-acceptor type helical polyisocyanide bearing carbazole as the pendant groups for nonvolatile memory effect. European Polymer Journal, 2018, 106, 196-201.	2.6	5
86	Precision construction of high-efficiency heterojunction polymer memory devices via electrochemical polymerization. Organic Electronics, 2019, 69, 153-159.	1.4	5
87	In Situ Preparation and Unique Electrical Behaviors of Gold@Hollow Polyaniline Nanospheres through Recovery of Gold from Simulated e-Waste. Bulletin of the Chemical Society of Japan, 2020, 93, 373-378.	2.0	5
88	Synthesis and photovoltaic properties of conjugated copolymers containing cyclopentadithiophene and two different electron-deficient moieties in the polymer backbone. Journal of Polymer Research, 2015, 22, 1.	1.2	4
89	Intramolecular rotation induced High-Temperature Self-Optimization for polymer memristor devices. European Polymer Journal, 2021, 161, 110814.	2.6	4
90	Two-dimensional nanomaterials and their derivatives for laser protection. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 184201.	0.2	4

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91	Organic and hybrid photoelectroactive polymer for memories and neuromorphic computing. , 2020, , 223-250.		3
92	Proton-responsive azulene-based conjugated polymer with nonvolatile memory effects. New Journal of Chemistry, 0, , .	1.4	3
93	Polyfluorene-based conjugated polyelectrolyte containing metalloporphyrin for biomimetic memristive devices. Organic Electronics, 2022, 102, 106447.	1.4	3
94	Improving the Longâ€Term Stability of BPQDâ€Based Memory Device via Modification with Polyvinylpyrrolidoneâ€Grafted Polydopamine. Advanced Electronic Materials, 0, , 2101057.	2.6	3
95	Photoelectric Dual Response Nonvolatile Memory Device Based on Black Phosphorus Quantum Dots and Fullerene Derivative Composite. Advanced Electronic Materials, 2022, 8, .	2.6	2
96	Bulk Heterojunction Optoelectrical Switching Devices Fabricated Using Nonfullerene Acceptor Y6: Aggregation-Induced Emission Polymer Blend Active Layers. Bulletin of the Chemical Society of Japan, 2021, 94, 2718-2726.	2.0	1