Bin Zhang

List of Publications by Citations

95 papers	3,453 citations	30 h-index	56 g-index
97 ext. papers	3,897 ext. citations	7.7 avg, IF	5.34 L-index

#	Paper	IF	Citations
95	Conjugated-polymer-functionalized graphene oxide: synthesis and nonvolatile rewritable memory effect. *Advanced Materials*, **2010**, 22, 1731-5	24	359
94	Graphene oxide covalently functionalized with zinc phthalocyanine for broadband optical limiting. *Carbon*, **2011**, 49, 1900-1905	10.4	231
93	Graphene and its derivatives: switching ON and OFF. *Chemical Society Reviews*, **2012**, 41, 4688-707	58.5	219
92	Multifunctional polymer-metal nanocomposites via direct chemical reduction by conjugated polymers. *Chemical Society Reviews*, **2014**, 43, 1349-60	58.5	159
91	Bistable electrical switching and electronic memory effect in a solution-processable graphene oxide-donor polymer complex. *Applied Physics Letters*, **2009**, 95, 253301	3.4	106
90	Preparation and Memory Performance of a Nanoaggregated Dispersed Red 1-Functionalized Poly (N-vinylcarbazole) Film via Solution-Phase Self-Assembly. *Advanced Functional Materials*, **2010**, 20, 2916-2922	15.6	102
89	Covalent Functionalization of Black Phosphorus with Conjugated Polymer for Information Storage. *Angewandte Chemie - International Edition*, **2018**, 57, 4543-4548	16.4	99
88	Viologen-inspired functional materials: synthetic strategies and applications. *Journal of Materials Chemistry A*, **2019**, 7, 23337-23360	13	87
87	Polyfluorene-Based Push–Pull Type Functional Materials for Write-Once-Read-Many-Times Memory Devices. *Chemistry of Materials*, **2010**, 22, 4455-4461	9.6	87
86	Graphene and its derivatives for laser protection. *Progress in Materials Science*, **2016**, 84, 118-157	42.2	85
85	Poly(N-vinylcarbazole) chemically modified graphene oxide. *Journal of Polymer Science Part A*, **2010**, 48, 2642-2649	2.5	83
84	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		77
83	Functionalization of reduced graphene oxide nanosheets via stacking interactions with the fluorescent and water-soluble perylene bisimide-containing polymers. *Polymer*, **2011**, 52, 2376-2383	3.9	77
82	Indacenodithiophene: a promising building block for high performance polymer solar cells. *Journal of Materials Chemistry A*, **2017**, 5, 10798-10814	13	73
81	Growing poly(N-vinylcarbazole) from the surface of graphene oxide via RAFT polymerization. *Journal of Polymer Science Part A*, **2011**, 49, 2043-2050	2.5	73
80	Push–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	67
79	Conjugated polymer-grafted reduced graphene oxide for nonvolatile rewritable memory. *Chemistry - A European Journal*, **2011**, 17, 13646-52	4.8	67

78	Nonvolatile rewritable memory effects in graphene oxide functionalized by conjugated polymer containing fluorene and carbazole units. *Chemistry - A European Journal*, **2011**, 17, 10304-11	4.8	62
77	Recent Advances in RAFT Polymerization: Novel Initiation Mechanisms and Optoelectronic Applications. *Polymers*, **2018**, 10,	4.5	58
76	Redox gated polymer memristive processing memory unit. *Nature Communications*, **2019**, 10, 736	17.4	55
75	In situ synthesis and nonvolatile rewritable-memory effect of polyaniline-functionalized graphene oxide. *Chemistry - A European Journal*, **2013**, 19, 6265-73	4.8	49
74	Conjugated polymer covalently modified graphene oxide quantum dots for ternary electronic memory devices. *Nanoscale*, **2017**, 9, 10610-10618	7.7	45
73	Multi-walled carbon nanotubes covalently functionalized with polyhedral oligomeric silsesquioxanes for optical limiting. *Carbon*, **2010**, 48, 1738-1742	10.4	45
72	Tannic acid anchored layer-by-layer covalent deposition of parasin I peptide for antifouling and antimicrobial coatings. *RSC Advances*, **2016**, 6, 14809-14818	3.7	44
71	CO2-triggered fluorescence "turn-on" response of perylene diimide-containing poly(N,N-dimethylaminoethyl methacrylate). *Journal of Materials Chemistry A*, **2013**, 1, 1207-1212	13	42
70	Electrical Bistability and WORM Memory Effects in Donor–Acceptor Polymers Based on Poly(N-vinylcarbazole). *ChemPlusChem*, **2012**, 77, 74-81	2.8	35
69	Solution-processable poly(N-vinylcarbazole)-covalently grafted MoS nanosheets for nonvolatile rewritable memory devices. *Nanoscale*, **2017**, 9, 2449-2456	7.7	34
68	Direct covalent modification of black phosphorus quantum dots with conjugated polymers for information storage. *Nanoscale*, **2019**, 11, 3527-3533	7.7	33
67	Synthesis and strong optical limiting response of graphite oxide covalently functionalized with gallium phthalocyanine. *Nanotechnology*, **2011**, 22, 205704	3.4	32
66	Triphenylamine and quinoline-containing polyfluorene for blue light-emitting diodes. *European Polymer Journal*, **2010**, 46, 997-1003	5.2	32
65	An Environmentally Benign and pH-Sensitive Photocatalyst with Surface-Bound Metalloporphyrin for Heterogeneous Catalysis of Controlled Radical Polymerization. *Macromolecules*, **2018**, 51, 7974-7982	5.5	30
64	Xanthene Dye-Functionalized Conjugated Porous Polymers as Robust and Reusable Photocatalysts for Controlled Radical Polymerization. *Macromolecules*, **2020**, 53, 1550-1556	5.5	29
63	Hyperbranched polycaprolactone-click-poly(N-vinylcaprolactam) amphiphilic copolymers and their applications as temperature-responsive membranes. *Journal of Materials Chemistry B*, **2014**, 2, 814-825	7.3	29
62	High-efficiency bulk heterojunction memory devices fabricated using organometallic halide perovskite:poly(N-vinylcarbazole) blend active layers. *Dalton Transactions*, **2016**, 45, 484-8	4.3	28
61	Covalent Modification of MoS2 with Poly(N-vinylcarbazole) for Solid-State Broadband Optical Limiters. *Chemistry - A European Journal*, **2016**, 22, 4500-7	4.8	27

60	Synthesis and nonvolatile memristive switching effect of a donor–acceptor structured oligomer. *Journal of Materials Chemistry C*, **2015**, 3, 664-673	7.1	26
59	Metalloporphyrin-bound Janus nanocomposites with dual stimuli responsiveness for nanocatalysis in living radical polymerization. *Nanoscale*, **2018**, 10, 19254-19261	7.7	26
58	Dithienopyrrole-/Benzodithiophene-Based Donor–Acceptor Polymers for Memristor. *ChemPlusChem*, **2014**, 79, 1263-1270	2.8	26
57	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	7.3	25
56	Covalent Modification of Graphene Oxide with Poly(N-vinylcarbazole) Containing Pendant Azobenzene Chromophores for Nonvolatile Ternary memories. *Carbon*, **2018**, 134, 500-506	10.4	25
55	BODIPY-based conjugated polymer covalently grafted reduced graphene oxide for flexible nonvolatile memory devices. *Carbon*, **2017**, 116, 713-721	10.4	23
54	Yolk–shell nanorattles encapsulating a movable Au nanocore in electroactive polyaniline shells for flexible memory device. *Journal of Materials Chemistry C*, **2014**, 2, 5189	7.1	23
53	Multiwalled carbon nanotubes covalently functionalized with poly(N-vinylcarbazole) via RAFT polymerization: Synthesis and nonliner optical properties. *Journal of Polymer Science Part A*, **2010**, 48, 3161-3168	2.5	23
52	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	7.1	22
51	Reactive graphene oxide nanosheets: a versatile platform for the fabrication of graphene oxide-biomolecule/polymer nanohybrids. *Macromolecular Rapid Communications*, **2013**, 34, 234-8	4.8	22
50	90% yield production of polymer nano-memristor for in-memory computing. *Nature Communications*, **2021**, 12, 1984	17.4	22
49	Pyrolytically Modified Polyacrylonitrile-Covalently Grafted MoS2 Nanosheets for a Nonvolatile Rewritable Memory Device. *Advanced Electronic Materials*, **2018**, 4, 1700397	6.4	20
48	Fluorescent nanoparticles from self-assembly of β-cyclodextrin-functionalized fluorene copolymers for organic molecule sensing and cell labeling. *Polymer Chemistry*, **2012**, 3, 2444	4.9	20
47	Resistance-Switchable Graphene Oxide–Polymer Nanocomposites for Molecular Electronics. *ChemElectroChem*, **2014**, 1, 514-519	4.3	19
46	Soluble reduced graphene oxide functionalized with conjugated polymer for heterojunction solar cells. *Journal of Polymer Science Part A*, **2012**, 50, 1663-1671	2.5	17
45	Viologen-bridged polyaniline based multifunctional heterofilms for all-solid-state supercapacitors and memory devices. *European Polymer Journal*, **2018**, 98, 125-136	5.2	17
44	Covalent modification of graphene oxide with carbazole groups for laser protection. *Chemistry - A European Journal*, **2015**, 21, 4622-7	4.8	16
43	A highly soluble polyhedral oligomeric silsesquioxane end-capped perylenediimide dye. *New Journal of Chemistry*, **2010**, 34, 1120	3.6	16

42	MoS quantum dots chemically modified with porphyrin for solid-state broadband optical limiters. *Nanoscale*, **2019**, 11, 20449-20455	7.7	16
41	Organophosphorus-based polymer covalently functionalized reduced graphene oxide: In-situ synthesis and nonvolatile memory effect. *Carbon*, **2019**, 141, 758-767	10.4	16
40	Magnetic Janus nanocomposites with iridium(iii) complexes for heterogeneous catalysis of logic controlled RAFT polymerization using multiplexed external switching. *Nanoscale*, **2020**, 12, 7595-7603	7.7	15
39	Viologen-Hypercrosslinked Ionic Porous Polymer Films as Active Layers for Electronic and Energy Storage Devices. *Advanced Materials Interfaces*, **2018**, 5, 1701679	4.6	15
38	Macrocyclic triphenylamine-based push□pull type polymer memristive material: synthesis and characterization. *Journal of Materials Chemistry C*, **2018**, 6, 4023-4029	7.1	15
37	Conjugated polymer covalently modified multiwalled carbon nanotubes for optical limiting. *Journal of Polymer Science Part A*, **2011**, 49, 101-109	2.5	15
36	Recent Progress in Two-Dimensional Nanomaterials for Laser Protection. *Chemistry*, **2019**, 1, 17-43	2.1	14
35	Preparation and unique electrical behaviors of monodispersed hybrid nanorattles of metal nanocores with hairy electroactive polymer shells. *Chemistry - A European Journal*, **2014**, 20, 2723-31	4.8	12
34	Azulene-bridged coordinated framework based quasi-molecular rectifier. *Journal of Materials Chemistry C*, **2017**, 5, 2223-2229	7.1	11
33	Enhanced Antifouling and Anticorrosion Properties of Stainless Steel by Biomimetic Anchoring PEGDMA-Cross-Linking Polycationic Brushes. *Industrial & Engineering Chemistry Research*, **2019**, 58, 7107-7119	3.9	11
32	Covalent Functionalization of Black Phosphorus with Conjugated Polymer for Information Storage. *Angewandte Chemie*, **2018**, 130, 4633-4638	3.6	11
31	Viologen-based conjugated ionic polymer for nonvolatile rewritable memory device. *European Polymer Journal*, **2017**, 94, 222-229	5.2	11
30	Perfluorinated gallium phthalocyanine axially grafted black phosphorus nanosheets for optical limiting. *Journal of Materials Chemistry C*, **2020**, 8, 10197-10203	7.1	11
29	In Situ Synthesis and Characterization of Poly(aryleneethynylene)-Grafted Reduced Graphene Oxide. *Chemistry - A European Journal*, **2016**, 22, 2247-52	4.8	11
28	Donor□cceptor type black phosphorus nanosheets covalently functionalized with a conjugated polymer for laser protection. *Polymer Chemistry*, **2019**, 10, 6003-6009	4.9	11
27	Enabling superior stretchable resistive switching memory via polymer-functionalized graphene oxide nanosheets. *Journal of Materials Chemistry C*, **2019**, 7, 14664-14671	7.1	11
26	Solution-processable black phosphorus nanosheets covalently modified with polyacrylonitrile for nonvolatile resistive random access memory. *Journal of Materials Chemistry C*, **2020**, 8, 1231-1238	7.1	10
25	In-situ growing D-A polymer from the surface of reduced graphene oxide: Synthesis and nonvolatile ternary memory effect. *Carbon*, **2019**, 143, 851-858	10.4	10

24	Synthesis and memory performance of a conjugated polymer with an integrated fluorene, carbazole and oxadiazole backbone. *Polymer Journal*, **2012**, 44, 257-263	2.7	9
23	A donor-acceptor structured conjugated copolymer for flexible memory device. *Organic Electronics*, **2017**, 49, 269-277	3.5	7
22	Self-Assembled Superhelical Structure of Poly(N-vinylcarbazole)-Based Donor–Acceptor Polymer at the Air–Water Interface. *Macromolecules*, **2014**, 47, 373-378	5.5	7
21	Recent Advances in Resistive Switching Materials and Devices: From Memories to Memristors. *Engineered Science*, **2018**,	3.8	7
20	Donor-acceptor type helical polyisocyanide bearing carbazole as the pendant groups for nonvolatile memory effect. *European Polymer Journal*, **2018**, 106, 196-201	5.2	5
19	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	3.7	5
18	MoS2 nanosheets chemically modified with metal phthalocyanine via mussel-inspired chemistry for multifunctional memristive devices. *Journal of Materials Chemistry C*,	7.1	5
17	Precision construction of high-efficiency heterojunction polymer memory devices via electrochemical polymerization. *Organic Electronics*, **2019**, 69, 153-159	3.5	4
16	PEGylated Fluorescent Nanoparticles from One-Pot Atom Transfer Radical Polymerization and “Click Chemistry”. *Polymers*, **2015**, 7, 2119-2130	4.5	4
15	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	2.7	4
14	Ether-linked porphyrin covalent organic framework with broadband optical switch. *IScience*, **2021**, 24, 102526	6.1	4
13	Conjugated polymer covalently modified multi-walled carbon nanotubes for flexible nonvolatile RRAM devices. *European Polymer Journal*, **2021**, 142, 110153	5.2	4
12	Optoelectrical Switching of Nonfullerene Acceptor Y6 and BPQD-Based Bulk Heterojunction Memory Device through Photoelectric Effect. *Advanced Electronic Materials*, **2021**, 7, 2001191	6.4	4
11	Proton-responsive azulene-based conjugated polymer with nonvolatile memory effects. *New Journal of Chemistry*,	3.6	2
10	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	5.1	2
9	Organic and hybrid photoelectroactive polymer for memories and neuromorphic computing **2020**, 223-250		1
8	Polyfluorene-based conjugated polyelectrolyte containing metalloporphyrin for biomimetic memristive devices. *Organic Electronics*, **2022**, 102, 106447	3.5	1
7	Two-dimensional nanomaterials and their derivatives for laser protection. *Wuli Xuebao/Acta Physica Sinica*, **2020**, 69, 184201	0.6	1

6	Intramolecular rotation induced High-Temperature Self-Optimization for polymer memristor devices. *European Polymer Journal*, **2021**, 161, 110814	5.2	1
5	Improving the Long-Term Stability of BPQD-Based Memory Device via Modification with Polyvinylpyrrolidone-Grafted Polydopamine. *Advanced Electronic Materials*,2101057	6.4	1
4	MoS2 nanosheets functionalized with ferrocene-containing polymer via SI-ATRP for memristive devices with multilevel resistive switching. *European Polymer Journal*, **2022**, 111316	5.2	1
3	Donor-acceptor-type poly[chalcogenoviologen--triphenylamine] for synaptic biomimicking and neuromorphic computing.. *IScience*, **2022**, 25, 103640	6.1	0
2	Cyanospirobifluorene-based conjugated polyelectrolytes: Synthesis and tunable nonvolatile information storage performance. *European Polymer Journal*, **2022**, 163, 110940	5.2	0
1	Photoelectric Dual Response Nonvolatile Memory Device Based on Black Phosphorus Quantum Dots and Fullerene Derivative Composite. *Advanced Electronic Materials*, **2022**, 8, 2101143	6.4	