Xiaogong Wang

List of Publications by Year in descending order

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101543 114465 4,449 124 36 63 citations g-index h-index papers 125 125 125 4619 docs citations times ranked citing authors all docs

#	Article	IF	Citations
1	Mechanically Tough Largeâ€Area Hierarchical Porous Graphene Films for Highâ€Performance Flexible Supercapacitor Applications. Advanced Materials, 2015, 27, 4469-4475.	21.0	277
2	Photoinduced Deformation of Amphiphilic Azo Polymer Colloidal Spheres. Journal of the American Chemical Society, 2005, 127, 2402-2403.	13.7	264
3	Amphiphilic azo polymers: Molecular engineering, self-assembly and photoresponsive properties. Progress in Polymer Science, 2013, 38, 271-301.	24.7	213
4	Epoxy-Based Nonlinear Optical Polymers from Post Azo Coupling Reaction. Macromolecules, 1997, 30, 219-225.	4.8	172
5	Fabricating Super-Hydrophobic Lotus-Leaf-Like Surfaces through Soft-Lithographic Imprinting. Macromolecular Rapid Communications, 2006, 27, 1859-1864.	3.9	129
6	Micron-sized liquid crystalline elastomer actuators. Soft Matter, 2011, 7, 815-823.	2.7	120
7	Graphene Functionalized with Azo Polymer Brushes: Surfaceâ€Initiated Polymerization and Photoresponsive Properties. Advanced Materials, 2011, 23, 1122-1125.	21.0	116
8	Formation of Photoresponsive Uniform Colloidal Spheres from an Amphiphilic Azobenzene-Containing Random Copolymer. Macromolecules, 2006, 39, 1108-1115.	4.8	110
9	Reversible and Rapid Laser Actuation of Liquid Crystalline Elastomer Micropillars with Inclusion of Gold Nanoparticles. Advanced Functional Materials, 2015, 25, 3022-3032.	14.9	107
10	Azobenzene-Containing Supramolecular Side-Chain Polymer Films for Laser-Induced Surface Relief Gratings. Chemistry of Materials, 2007, 19, 3877-3881.	6.7	105
11	Epoxy-based azo polymers: synthesis, characterization and photoinduced surface-relief-gratings. Polymer, 2002, 43, 7325-7333.	3.8	104
12	Azobenzene-Containing Supramolecular Polymer Films for Laser-Induced Surface Relief Gratings. Chemistry of Materials, 2007, 19, 14-17.	6.7	93
13	Synthesis, Photoresponsive Behavior, and Self-Assembly of Poly(acrylic acid)-Based Azo Polyelectrolytes. Macromolecules, 2001, 34, 8005-8013.	4.8	89
14	Hyperbranched Azo-Polymers Synthesized by Azo-Coupling Reaction of an AB2Monomer and Postpolymerization Modification. Macromolecules, 2005, 38, 8657-8663.	4.8	86
15	Stretching Effect of Linearly Polarized Ar+Laser Single-Beam on Azo Polymer Colloidal Spheres. Langmuir, 2006, 22, 2288-2291.	3.5	84
16	Colloidal Sphere Formation, H-Aggregation, and Photoresponsive Properties of an Amphiphilic Random Copolymer Bearing Branched Azo Side Chains. Macromolecules, 2006, 39, 6590-6598.	4.8	78
17	Fast Photoinduced Large Deformation of Colloidal Spheres from a Novel 4-arm Azobenzene Compound. ACS Applied Materials & Lamp; Interfaces, 2015, 7, 16889-16895.	8.0	74
18	Azo Chromophore-Functionalized Polyelectrolytes. 1. Synthesis, Characterization, and Photoprocessing. Chemistry of Materials, 1998, 10, 1546-1553.	6.7	67

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19	Photofabrication of Two-Dimensional Quasi-Crystal Patterns on UV-Curable Molecular Azo Glass Films. Langmuir, 2008, 24, 2740-2745.	3.5	66
20	Glucose sensing through diffraction grating of hydrogel bearing phenylboronic acid groups. Biosensors and Bioelectronics, 2010, 26, 772-777.	10.1	65
21	Direct 3D printing of a graphene oxide hydrogel for fabrication of a high areal specific capacitance microsupercapacitor. RSC Advances, 2019, 9, 29384-29395.	3.6	64
22	Microstructured Nematic Liquid Crystalline Elastomer Surfaces with Switchable Wetting Properties. Advanced Functional Materials, 2013, 23, 3070-3076.	14.9	63
23	Hollow microspheres of amphiphilic azo homopolymers: self-assembly and photoinduced deformation behavior. Chemical Communications, 2011, 47, 4757.	4.1	57
24	Duplication of Photoinduced Azo Polymer Surface-Relief Gratings through a Soft Lithographic Approach. Langmuir, 2006, 22, 7405-7410.	3 . 5	56
25	Light-responsive wires from side-on liquid crystalline azo polymers. Liquid Crystals, 2009, 36, 1023-1029.	2.2	56
26	A Dynamic Graphene Oxide Network Enables Spray Printing of Colloidal Gels for Highâ€Performance Microâ€Supercapacitors. Advanced Materials, 2019, 31, e1804434.	21.0	54
27	Azobenzene-Containing Liquid Crystal Triblock Copolymers: Synthesis, Characterization, and Self-Assembly Behavior. Macromolecules, 2008, 41, 2459-2466.	4.8	51
28	Synthesis of Aminoazobenzeneâ€Containing Diblock Copolymer and Photoinduced Deformation Behavior of its Micelleâ€Like Aggregates. Macromolecular Rapid Communications, 2007, 28, 2237-2243.	3.9	49
29	Sequentially Adsorbed Electrostatic Multilayers of Branched Side-Chain Polyelectrolytes Bearing Donorâ°'Acceptor Type Azo Chromophores. Macromolecules, 2004, 37, 135-146.	4.8	48
30	A self-assembled macroporous coagulation graphene network with high specific capacitance for supercapacitor applications. Journal of Materials Chemistry A, 2014, 2, 19141-19144.	10.3	48
31	Hierarchical porous graphene film: An ideal material for laser-carving fabrication of flexible micro-supercapacitors with high specific capacitance. Carbon, 2017, 125, 308-317.	10.3	47
32	Heteroaromatic Chromophore Functionalized Epoxy-Based Nonlinear Optical Polymers. Macromolecules, 1998, 31, 4126-4134.	4.8	46
33	Self-Assembled Multilayer Films of Sulfonated Graphene and Polystyrene-Based Diazonium Salt as Photo-Cross-Linkable Supercapacitor Electrodes. Langmuir, 2014, 30, 522-532.	3.5	46
34	Aptamer-functionalized hydrogel diffraction gratings for the human thrombin detection. Chemical Communications, 2013, 49, 5957.	4.1	43
35	Self-Structured Surface Patterns on Epoxy-Based Azo Polymer Films Induced by Laser Light Irradiation. Macromolecules, 2011, 44, 6856-6867.	4.8	39
36	Azo Polymers. Soft and Biological Matter, 2017, , .	0.3	39

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37	Amphiphilic Diblock Copolymers Functionalized with Strong Pushâ 'Pull Azo Chromophores: Synthesis and Multi-Morphological Aggregation. Macromolecules, 2008, 41, 9382-9388.	4.8	38
38	Synthesis of block copolymersvia the combination of RAFT and a macromolecular azo coupling reaction. Polymer Chemistry, 2013, 4, 402-406.	3.9	38
39	Hybrid Colloids Composed of Two Amphiphilic Azo Polymers:  Fabrication, Characterization, and Photoresponsive Properties. Macromolecules, 2007, 40, 6669-6678.	4.8	37
40	Azo Polymer Janus Particles and Their Photoinduced, Symmetry-Breaking Deformation. ACS Macro Letters, 2016, 5, 234-237.	4.8	37
41	Azo Polymer Colloidal Spheres Containing Different Amounts of Functional Groups and Their Photoinduced Deformation Behavior. Langmuir, 2008, 24, 678-682.	3.5	35
42	Diffraction grating of hydrogel functionalized with glucose oxidase for glucose detection. Chemical Communications, 2010, 46, 3872.	4.1	35
43	Low dielectric and thermally stable hybrid ternary composites of hyperbranched and linear polyimides with SiO2. RSC Advances, 2014, 4, 27267.	3.6	34
44	Size-Dependent Light-Driven Effect Observed for Azo Polymer Colloidal Spheres with Different Average Diameters. Langmuir, 2009, 25, 5974-5979.	3.5	33
45	Superhydrophobic lotus-leaf-like surface made from reduced graphene oxide through soft-lithographic duplication. RSC Advances, 2020, 10, 5478-5486.	3.6	33
46	Azo Polymer Microspherical Cap Array:  Soft-Lithographic Fabrication and Photoinduced Shape Deformation Behavior. Langmuir, 2007, 23, 11266-11272.	3.5	31
47	Photoinduced Self-Structured Surface Pattern on a Molecular Azo Glass Film: Structure–Property Relationship and Wavelength Correlation. Langmuir, 2011, 27, 12666-12676.	3.5	30
48	Hydrogel diffraction gratings functionalized with crown ether for heavy metal ion detection. Sensors and Actuators B: Chemical, 2014, 193, 413-419.	7.8	29
49	Self-Structured Surface Patterns on Molecular Azo Glass Films Induced by Laser Light Irradiation. Langmuir, 2010, 26, 6755-6761.	3.5	27
50	Flexible, Highly Durable, and Thermally Stable SWCNT/Polyimide Transparent Electrodes. ACS Applied Materials & Samp; Interfaces, 2015, 7, 20865-20874.	8.0	26
51	A novel hyperbranched polyester functionalized with azo chromophore: synthesis and photoresponsive properties. Polymer Bulletin, 2002, 49, 1-8.	3.3	25
52	Rolling up graphene oxide sheets through solvent-induced self-assembly in dispersions. Nanoscale, 2018, 10, 4113-4122.	5.6	25
53	Title is missing!. Die Makromolekulare Chemie, 1988, 189, 1845-1854.	1.1	24
54	Sensing Diffraction Gratings of Antigenâ€Responsive Hydrogel for Human Immunoglobulinâ€G Detection. Macromolecular Rapid Communications, 2010, 31, 1332-1336.	3.9	24

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55	Epoxy-based polymers functionalized with bisazo chromophores: Synthesis, characterization and photoresponsive behavior. Polymer, 2011, 52, 3344-3356.	3.8	24
56	Influence of chromophoric electron-withdrawing groups on photoinduced deformation of azo polymer colloids. Polymer, 2010, 51, 2879-2886.	3.8	23
57	Three-arm star compounds composed of 1,3,5-tri(azobenzeneethynyl)benzene cores and flexible PEO arms: synthesis, optical functions, hybrid Ormosil gel glasses. Journal of Materials Chemistry C, 2013, 1, 1791.	5.5	23
58	Photoinduced deformation behavior of a series of newly synthesized epoxy-based polymers bearing push–pull azo chromophores. Polymer, 2015, 60, 292-301.	3.8	23
59	Synthesis of Y-shaped amphiphilic copolymers by macromolecular azo coupling reaction. RSC Advances, 2015, 5, 9476-9481.	3.6	23
60	Holographic Recording and Hierarchical Surface Patterning on Periodic Submicrometer Pillar Arrays of Azo Molecular Glass via Polarized Light Irradiation. Advanced Functional Materials, 2018, 28, 1802506.	14.9	22
61	Nunchaku-like molecules containing both an azo chromophore and a biphenylene unit as a new type of high-sensitivity photo-storage material. Journal of Materials Chemistry, 2010, 20, 10680.	6.7	21
62	Photoswitchable aggregation-induced emission polymer containing dithienylethene and tetraphenylethene moieties. RSC Advances, 2016, 6, 12647-12651.	3.6	20
63	Transition of Graphene Oxide from Nanomembrane to Nanoscroll Mediated by Organic Solvent in Dispersion. Chemistry of Materials, 2018, 30, 5951-5960.	6.7	20
64	Fabricating Water-Insoluble Polyelectrolyte into Multilayers with Layer-by-layer Self-assembly. Polymer Bulletin, 2005, 54, 427-433.	3.3	19
65	Highly Sensitive Diffraction Grating of Hydrogels as Sensors for Carbon Dioxide Detection. Industrial & Lamp; Engineering Chemistry Research, 2021, 60, 4639-4649.	3.7	19
66	Photoinduced orientation and cooperative motion of three epoxy-based azo polymers. Polymer Bulletin, 2012, 68, 1731-1746.	3.3	18
67	Diblock copolymers composed of a liquid crystalline azo block and a poly(dimethylsiloxane) block: synthesis, morphology and photoresponsive properties. RSC Advances, 2014, 4, 58386-58396.	3.6	18
68	Hybrid ternary composites of hyperbranched and linear polyimides with SiO ₂ : a research for low dielectric constant and optimized properties. RSC Advances, 2014, 4, 42737-42746.	3.6	18
69	Ultratough cellular films from graphene oxide hydrogel: A way to exploit rigidity and flexibility of two-dimensional honeycomb carbon. Carbon, 2016, 107, 548-556.	10.3	18
70	Formation of Graphene Oxide Nanoscrolls in Organic Solvents: Toward Scalable Device Fabrication. ACS Applied Nano Materials, 2018, 1, 686-697.	5.0	18
71	Ternary composites of linear and hyperbranched polyimides with nanoscale silica for low dielectric constant, high transparency, and high thermal stability. RSC Advances, 2015, 5, 40046-40054.	3.6	16
72	Fractal Structures from Amphiphilic Random Azo Copolymer. Macromolecules, 2011, 44, 8598-8606.	4.8	15

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73	Janus and Strawberry-like Particles from Azo Molecular Glass and Polydimethylsiloxane Oligomer. Langmuir, 2017, 33, 10645-10654.	3.5	15
74	Liquid-crystalline compounds containing both a strong push–pull azo chromophore and a cholesteryl unit as photoresponsive molecular glass materials. Journal of Materials Chemistry C, 2015, 3, 10925-10933.	5.5	14
75	Self-assembly of homopolymers through strong dipole–dipole interaction in their aqueous solutions. Polymer, 2016, 97, 1-10.	3.8	14
76	Synthesis and photoresponsive properties of two liquid crystalline polymers bearing branched azobenzene-containing side chains. Polymer Chemistry, 2013, 4, 5108.	3.9	13
77	Photocleavable amphiphilic diblock copolymer with an azobenzene linkage. RSC Advances, 2016, 6, 57227-57231.	3.6	13
78	Reduced graphene oxide diffraction gratings from duplication of photoinduced azo polymer surface-relief-gratings through soft-lithography. Journal of Materials Chemistry C, 2015, 3, 6224-6231.	5.5	12
79	Highly dispersible ternary composites with high transparency and ultra low dielectric constants based on hyperbranched polyimide with organosilane termini and cross-linked polyimide with silica. RSC Advances, 2015, 5, 98419-98428.	3.6	12
80	Azo Polymer Microspheres with Photoâ€Manipulated Surface and Topographic Structure. Macromolecular Chemistry and Physics, 2016, 217, 765-772.	2,2	12
81	Shaping monodispersed azo molecular glass microspheres using polarized light. Soft Matter, 2018, 14, 5847-5855.	2.7	11
82	Multifunctional Janus Particles Composed of Azo Polymer and Pyrene-Containing Polymer. Langmuir, 2020, 36, 3159-3173.	3.5	11
83	Photoinduced orientation in nunchaku-like azo molecular glass studied by birefringence characterization and FT-IR spectroscopy. Journal of Materials Chemistry, 2012, 22, 7614.	6.7	10
84	Azopyridineâ€Containing Threeâ€arm Star Compounds with Aggregationâ€induced Fluorescence. Chemistry - an Asian Journal, 2018, 13, 2781-2785.	3.3	10
85	Preparation and Characterization of Polyimide/Fluorinated Silicate Nano-hybrid Thin Films with Low Refractive Indices. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2008, 21, 143-150.	0.3	8
86	Fabrication of fluorescent surface relief patterns using AIE polymer through a soft lithographic approach. Journal of Polymer Science, Part B: Polymer Physics, 2016, 54, 1838-1845.	2.1	8
87	Azo Polymer Janus Particles Possessing Photodeformable and Magneticâ€Fieldâ€Responsive Dual Functions. Chemistry - an Asian Journal, 2016, 11, 2130-2134.	3.3	8
88	Microspheres of polyurethanes functionalized with push-pull type azo chromophores and their photoinduced deformation behavior. Polymer, 2017, 111, 229-238.	3.8	8
89	Preparation of temperature-sensitive polymer films by surface photografting techniques. Polymers for Advanced Technologies, 2002, 13, 239-241.	3.2	7
90	Star-shaped molecules containing both azo chromophores and carbazole units as a new type of photoresponsive amorphous material. Journal of Materials Chemistry C, 2013, 1, 3794.	5.5	7

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91	Photodeformable microspheres from an azo molecule containing a 1,4,3,6-dianhydrosorbitol core and cinnamate peripheral groups. RSC Advances, 2016, 6, 64203-64207.	3 . 6	7
92	Asymmetric Morphology Transformation of Azo Molecular Glass Microspheres Induced by Polarized Light. Langmuir, 2019, 35, 15295-15305.	3.5	7
93	Synthesis and electroluminescence properties of a novel poly(paraphenylene vinylene)-based copolymer with tri(ethylene oxide) segments on the backbone. Journal of Applied Polymer Science, 2002, 83, 2195-2200.	2.6	6
94	A novel polyurethane-modified poly(N-isopropylacrylamide) hydrogels. Polymers for Advanced Technologies, 2002, 13, 242-246.	3.2	6
95	Preparation of FePt magnetic nanodot arrays by nanosphere lithography. Science Bulletin, 2007, 52, 1125-1128.	1.7	6
96	Photodeformable Microspheres from Methacrylateâ€Based Azo Homopolymers. Macromolecular Chemistry and Physics, 2017, 218, 1700020.	2.2	6
97	Synthesis and characterization of a novel kind of thermotropic liquid crystalline poly(urea-ester)s based on bis(4?-hydroxyphenyl)-tolyene-2,4-diurea. Journal of Applied Polymer Science, 2001, 82, 577-583.	2.6	5
98	Symmetryâ€Breaking Response of Azo Molecular Glass Microspheres to Interfering Circularly Polarized Light: From Shape Manipulation to 3D Patterning. Advanced Functional Materials, 2019, 29, 1806703.	14.9	5
99	Comparative study of photoinduced surface-relief-gratings on azo polymer and azo molecular glass films. RSC Advances, 2021, 11, 34766-34778.	3.6	5
100	Preparation and Antibacterial Function of Quaternary Ammonium Salts Grafted Cellulose Fiber Initiated by Fe2 +-H2O2Redox. Journal of Macromolecular Science - Pure and Applied Chemistry, 2009, 46, 560-565.	2.2	4
101	Synthesis of Hyperbranched Azo-polymer-grafted Graphene Oxide Hybrid. Chemistry Letters, 2012, 41, 430-431.	1.3	4
102	Distortion and flow of nematics simulated by dissipative particle dynamics. Journal of Chemical Physics, 2014, 140, 184902.	3.0	4
103	Azoâ€Polymer Janus Particles Assembled by Solventâ€Induced Microphase Separation and Their Photoresponsive Behavior. Chemistry - an Asian Journal, 2016, 11, 3443-3448.	3.3	4
104	Steady shear viscosity and oscillatory complex viscosity of poly(p-phenylene terephthalamide) solutions in sulfuric acid. Rheologica Acta, 2016, 55, 257-266.	2.4	4
105	Moiré Polarization Interference Photolithography Based on AZO Molecular Glass Pillar Array for Hierarchical Surface Patterning. Advanced Optical Materials, 2019, 7, 1900846.	7.3	4
106	Epoxy-based azo molecular glasses with four-arm architecture: Preparation, characterization and holographic recording. Chinese Chemical Letters, 2019, 30, 942-948.	9.0	4
107	HOMOLYTIC C â€" H BOND DISSOCIATION ENERGIES OF HTPB BINDER NETWORK. Journal of Theoretical and Computational Chemistry, 2009, 08, 519-528.	1.8	3
108	Coupling of Photoinduced Mass Immigration with Polymer Networks to Produce Nanostructured Materials Capable of Reversibly Creating Arbitrary Deformations. Macromolecular Chemistry and Physics, 2018, 219, 1800113.	2.2	3

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109	Azo Molecular Glass Patterning from Chiral Submicron Pillar Array to Selfâ€Organized Topographic Transition via Irradiation with Circularly Polarized Light. Advanced Optical Materials, 2021, 9, 2100922.	7.3	3
110	Mussel-like Surface Adhesion and Photoinduced Cooperative Deformation of Janus Particles. Langmuir, 2020, 36, 14372-14385.	3.5	3
111	Laserâ€Induced Transitions of Azo Molecular Glass Pillar Arrays: A New Way to Fabricate Periodic Complex Surface Patterns upon Linearly Polarized Radiation. Advanced Optical Materials, 2022, 10, .	7.3	3
112	Photoinduced dichroism and surface-relief-gratings of hyperbranched azo polymers synthesized by azo-coupling reaction. Frontiers of Chemical Engineering in China, 2007, 1, 360-364.	0.6	2
113	Polyimide liquid crystal alignment layers prepared by soft-lithography. Frontiers of Chemistry in China: Selected Publications From Chinese Universities, 2007, 2, 318-321.	0.4	2
114	Effect of dipping solution pH values on electrostatic layer-by-layer self-assembly of side-chain azo polyelectrolyte. Frontiers of Chemistry in China: Selected Publications From Chinese Universities, 2008, 3, 218-223.	0.4	2
115	Directional mass transfer of azo molecular glass microsphere induced by polarized light in aqueous immersion media. RSC Advances, 2021, 11, 15387-15399.	3.6	2
116	Topographical transition of submicron pillar array of azo molecular glass induced by circularly polarized light. Scientific Reports, 2021, 11, 7327.	3.3	2
117	Preparation of azo polyelectrolyte self-assembled multilayers by using N,N-dimethylformamide/H2O mixtures as solvents. Frontiers of Chemistry in China: Selected Publications From Chinese Universities, 2006, 1, 329-333.	0.4	1
118	Azo Polymer Colloidal Spheres: Formation, Two-Dimensional Array, and Photoresponsive Properties. , 0, , 177-213.		1
119	Epoxy-based Polymer Containing Imidazole-type Azo Chromophores for Integrated Waveguide Applications. Journal of Macromolecular Science - Pure and Applied Chemistry, 2010, 47, 1167-1171.	2.2	1
120	Photoinduced mass transfer of azo polymers from micrometer to submillimeter studied by a real-time single particle strategy. Soft Matter, 2020, 16, 9746-9757.	2.7	1
121	Sequence Structure and Thermotropic Liquid Crystalline Properties of Aromatic-Aliphatic Polyesteramides Based on Dimethylbenzidine, Hexamethylene Glycol and p-Terephthalyl Chloride. Polymer Journal, 1998, 30, 123-124.	2.7	0
122	Hyperbranched azo polyurethane synthesized through A2+B3 scheme. Frontiers of Chemical Engineering in China, 2008, 2, 123-126.	0.6	0
123	Fabrication and mechanical properties of single-wall carbon nanotubes and hyperbranched diazonium salt multilayers. Frontiers of Chemical Engineering in China, 2008, 2, 286-290.	0.6	0
124	Triphasic Polymer Particles Assembled via Microphase Separation with Multiple Functions. Langmuir, 2021, 37, 11818-11834.	3.5	0