

Zhongwei An

List of Publications by Year in descending order

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107
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1688
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#	ARTICLE	IF	CITATIONS
1	High birefringence nematic liquid crystals containing both thieno[3,2- <i>b</i>]thiophene core and acetylene bond. <i>Liquid Crystals</i> , 2022, 49, 845-854.	2.2	4
2	New multi-fluorinated benzofuran liquid crystals with large dielectric anisotropy and improved solubility. <i>Liquid Crystals</i> , 2022, 49, 1753-1762.	2.2	2
3	New block poly(ether sulfone) based anion exchange membranes with rigid side-chains and high-density quaternary ammonium groups for fuel cell application. <i>Polymer Chemistry</i> , 2022, 13, 4395-4405.	3.9	7
4	Imidazole-Functionalized Multiquaternary Side-Chain Polyethersulfone Anion-Exchange Membrane for Fuel Cell Applications. <i>ACS Applied Energy Materials</i> , 2022, 5, 10023-10033.	5.1	9
5	Synthesis and properties of fluorinated terphenyl liquid crystals utilizing 5,6-dihydro-4 <i>H</i> -cyclopenta[<i>b</i>]thiophene as core unit. <i>Journal of Molecular Structure</i> , 2022, 1267, 133612.	3.6	3
6	Synthesis and properties of novel 6,7-dihydrocyclopenta[5,6- <i>b</i>]benzofuran-based liquid crystal compounds. <i>Liquid Crystals</i> , 2021, 48, 190-200.	2.2	5
7	Benzoxazole-based nematic liquid crystals containing ethynyl and two lateral fluorine atoms with large birefringence. <i>Liquid Crystals</i> , 2021, 48, 157-167.	2.2	6
8	5,6-Difluorobenzofuran: a new core for the design of liquid crystal compound with large dielectric anisotropy and broad nematic range. <i>Liquid Crystals</i> , 2021, 48, 273-280.	2.2	10
9	Quinoxaline-based semi-interpenetrating polymer network of sulfonated poly(arylene ether)s and sulfonated polyimides as proton exchange membranes. <i>Polymer Bulletin</i> , 2021, 78, 4333-4354.	3.3	6
10	Synthesis and properties of 5,6-dihydro-4 <i>H</i> -cyclopenta[<i>b</i>]thiophene-based nematic liquid crystals: A new access to mesogens with high birefringence and large dielectric anisotropy. <i>Journal of Molecular Liquids</i> , 2021, 327, 114827.	4.9	12
11	Organic double "A sensitizers based on 2,2-(2,2-diphenylethene-1,1-diyl)dithiophene: "conjugation fragment effect on the photovoltaic properties. <i>Materials Advances</i> , 2021, 2, 6641-6646.	5.4	0
12	Synthesis and properties of isothiocyanate liquid crystals containing cyclohexene unit. <i>Liquid Crystals</i> , 2021, 48, 1392-1401.	2.2	5
13	Highly Active Hollow RhCu Nanoboxes toward Ethylene Glycol Electrooxidation. <i>Small</i> , 2021, 17, e2006534.	10.0	48
14	Low dielectric loss and good miscibility of the tolane liquid crystals by tuning their lateral substituents. <i>Journal of Molecular Liquids</i> , 2021, 325, 115236.	4.9	9
15	Introduction of 5,6-dihydro-4 <i>H</i> -cyclopenta[<i>b</i>]thiophene core unit into phenyl-tolane: Expanding the mesophase range and increasing the birefringence and dielectric anisotropy of liquid crystal. <i>Liquid Crystals</i> , 2021, 48, 1650-1659.	2.2	6
16	The effect of benzoxazole unit on the properties of cyclic thiourea functionalized triphenylamine dye sensitizers. <i>Dyes and Pigments</i> , 2021, 187, 109093.	3.7	6
17	Synthesis and properties of benzoxazole-terminated mesogenic compounds containing tolane with high birefringence and large dielectric anisotropy. <i>Liquid Crystals</i> , 2021, 48, 1978-1991.	2.2	9
18	Effect of "conjugation units on the liquid crystal and photovoltaic performance of heterocyclic pyridine-based compounds. <i>Liquid Crystals</i> , 2021, 48, 2178-2187.	2.2	10

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19	Effect of the Spatial Configuration of Donors on the Photovoltaic Performance of Double Dâ€œA Organic Dyes. ACS Applied Materials & Interfaces, 2021, 13, 40648-40655.	8.0	13
20	Acid@base co-sensitization strategy for highly efficient dye-sensitized solar cells. Optical Materials, 2021, 121, 111528.	3.6	10
21	Effect of Extending the Conjugation of Dye Molecules on the Efficiency and Stability of Dye-Sensitized Solar Cells. ACS Omega, 2021, 6, 30069-30077.	3.5	8
22	In situ conversion of iron sulfide (FeS) to iron oxyhydroxide (γ -FeOOH) on N, S co-doped porous carbon nanosheets: An efficient electrocatalyst for the oxygen reduction reaction and zinc-air batteries. Journal of Colloid and Interface Science, 2020, 558, 323-333.	9.4	34
23	Benzoxazole-terminated liquid crystals with high birefringence and large dielectric anisotropy. Liquid Crystals, 2020, 47, 1274-1280.	2.2	24
24	Preparation and properties of 1-methyl-1 <i>H</i> -benzimidazole-based mesogenic compounds incorporating ethynyl moiety. Liquid Crystals, 2020, 47, 1281-1290.	2.2	7
25	Evaluation of mesomorphic and thermal stabilities for terminal epoxy liquid crystals. Journal of Molecular Liquids, 2020, 317, 113955.	4.9	2
26	New negative dielectric anisotropy liquid crystals based on benzofuran core. Liquid Crystals, 2020, 47, 2313-2322.	2.2	4
27	Synthesis and properties of benzoxazole-based liquid crystals containing ethynyl group. Liquid Crystals, 2020, 47, 1719-1728.	2.2	6
28	Improved mesomorphic behaviour and large birefringence of fluorinated liquid crystals containing ethynyl and 1-methyl-1 <i>H</i> -benzimidazole moieties. Liquid Crystals, 2020, 47, 1264-1273.	2.2	9
29	N,F-Codoped Carbon Nanocages: An Efficient Electrocatalyst for Hydrogen Peroxide Electroproduction in Alkaline and Acidic Solutions. ACS Sustainable Chemistry and Engineering, 2020, 8, 2883-2891.	6.7	72
30	Dissecting terminal fluorinated regulator of liquid crystals for fine-tuning intermolecular interaction and molecular configuration. Journal of Molecular Liquids, 2020, 310, 113225.	4.9	12
31	Mesomorphic properties improved via lateral fluorine substituent on benzoxazole-terminated mesogenic compounds. Liquid Crystals, 2020, 47, 1555-1568.	2.2	6
32	Increasing the negative dielectric anisotropy of liquid crystals by fluorination of the terminal ethyl chain. Liquid Crystals, 2020, 47, 2268-2275.	2.2	2
33	Preparation and mesomorphic properties of 1-methyl-1 <i>H</i> -benzimidazole-based compounds. Liquid Crystals, 2019, 46, 131-137.	2.2	5
34	Synthesis and mesomorphic properties of benzoxazole derivatives with lateral multifluoro substituents. Liquid Crystals, 2019, 46, 59-66.	2.2	17
35	The effect of intermolecular actions on the mesomorphic properties of alkenoxy biphenyl-based liquid crystals. Journal of Molecular Liquids, 2019, 296, 111880.	4.9	7
36	0.2 V Electrolysis Voltage-Driven Alkaline Hydrogen Production with Nitrogen-Doped Carbon Nanobowl-Supported Ultrafine Rh Nanoparticles of 1.4 nm. ACS Applied Materials & Interfaces, 2019, 11, 35039-35049.	8.0	27

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37	59â€4: Fastâ€response polarization volume gratings for AR/VR displays. Digest of Technical Papers SID International Symposium, 2019, 50, 838-841.	0.3	1
38	The effect of terminal epoxy modification on the mesomorphic and thermal stability of biphenyl ester liquid crystals. Liquid Crystals, 2019, 46, 2149-2158.	2.2	10
39	Grapheneâ€Encapsulated Co₉S₈ Nanoparticles on N,Sâ€Codoped Carbon Nanotubes: An Efficient Bifunctional Oxygen Electrocatalyst. ChemSusChem, 2019, 12, 3390-3400.	6.8	43
40	Multistimuliâ€Responsive Selfâ€Organized Liquid Crystal Bragg Gratings. Advanced Optical Materials, 2019, 7, 1900101.	7.3	56
41	High-frame-rate liquid crystal phase modulator for augmented reality displays. Liquid Crystals, 2019, 46, 309-315.	2.2	18
42	Effect of the thieno[3,4-c]pyrrole-4,6-dione on properties of the cyclic thiourea triphenylamine sensitizers. Dyes and Pigments, 2019, 161, 197-204.	3.7	2
43	Interface self-assembly preparation of multi-element doped carbon nanobowls with high electrocatalysis activity for oxygen reduction reaction. Journal of Colloid and Interface Science, 2019, 533, 569-577.	9.4	8
44	Unclogging electron-transporting channels via self-assembly for improving light harvesting and stability of dye-sensitized solar cells. Electrochimica Acta, 2019, 299, 518-530.	5.2	10
45	Synthesis and study the liquid crystalline properties of compounds containing benzoxazole core and terminal vinyl group. Liquid Crystals, 2019, 46, 797-805.	2.2	15
46	Synthesis and mesomorphic properties of the nematic mesophase benzoxazole derivatives with big twist angle of difluoro-biphenyl unit. Liquid Crystals, 2019, 46, 1013-1023.	2.2	15
47	Syntheses of new diluents for medium birefringence liquid crystals materials. Liquid Crystals, 2019, 46, 700-707.	2.2	5
48	Investigation of terminal olefine in the isothiocyanatotolane liquid crystals with alkoxy end group. Liquid Crystals, 2018, 45, 1498-1507.	2.2	13
49	New isothiocyanato liquid crystals containing thieno[3,2- <i>b</i> / <i>i</i>]thiophene central core. Liquid Crystals, 2018, 45, 1294-1302.	2.2	19
50	Block poly(arylene ether sulfone) copolymers tethering aromatic side-chain quaternary ammonium as anion exchange membranes. Polymer Chemistry, 2018, 9, 699-711.	3.9	46
51	N-doped carbon nanocages: Bifunctional electrocatalysts for the oxygen reduction and evolution reactions. Nano Research, 2018, 11, 1905-1916.	10.4	73
52	The effect of intermolecular actions on the nematic phase range of tolane-liquid crystals. Liquid Crystals, 2018, 45, 783-792.	2.2	12
53	The effect of phenyl ring on the physical properties of liquid crystals containing 4-pyridyl terminal group. Liquid Crystals, 2018, 45, 1825-1833.	2.2	12
54	Investigation of 4-pyridyl liquid crystals on the photovoltaic performance and stability of dye sensitized solar cells by the co-sensitization. Dyes and Pigments, 2018, 159, 527-532.	3.7	13

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55	Fe/N Codoped Carbon Nanocages with Single-Atom Feature as Efficient Oxygen Reduction Reaction Electrocatalyst. <i>ACS Applied Energy Materials</i> , 2018, 1, 4982-4990.	5.1	38
56	High-Birefringence Liquid Crystal for Phase-Only Spatial Light Modulators. <i>Digest of Technical Papers SID International Symposium</i> , 2018, 49, 674-677.	0.3	0
57	The effect of locations of triple bond at terphenyl skeleton on the properties of isothiocyanate liquid crystals. <i>Liquid Crystals</i> , 2017, 44, 1374-1383.	2.2	18
58	The effect of furan linkers on the properties of cyclic thiourea functionalized triphenylamine dye sensitizers. <i>Dyes and Pigments</i> , 2017, 139, 772-778.	3.7	13
59	Lateral substituent effects on UV stability of high-birefringence liquid crystals with the diaryl-diacetylene core: DFT/TD-DFT study. <i>Liquid Crystals</i> , 2017, 44, 1515-1524.	2.2	56
60	Cross-linked poly(arylene ether sulfone)s with side-chain aromatic benzyltrimethyl ammonium for anion-exchange membranes. <i>Polymer Bulletin</i> , 2017, 74, 4329-4348.	3.3	3
61	Facile synthesis and the properties of novel cardo poly(arylene ether sulfone)s with pendent cycloaminium side chains as anion exchange membranes. <i>Polymer Chemistry</i> , 2017, 8, 4207-4219.	3.9	45
62	Poly(arylene ether sulfone) bearing multiple benzyl-type quaternary ammonium pendants: preparation, stability and conductivity. <i>RSC Advances</i> , 2017, 7, 30770-30783.	3.6	8
63	Preparation and characterisation of laterally monofluorinated mesogenic benzimidazole-based compounds. <i>Liquid Crystals</i> , 2017, 44, 1678-1685.	2.2	15
64	New terphenyl liquid crystals terminated by 2-chloro-3,3,3-trifluoropropenyl group. <i>Liquid Crystals</i> , 2017, 44, 1646-1652.	2.2	7
65	Preparation and properties of laterally multifluorinated benzoxazole-based nematic mesogens. <i>Liquid Crystals</i> , 2017, 44, 1686-1694.	2.2	12
66	Synthesis and properties of allyloxy-based tolane liquid crystals with high negative dielectric anisotropy. <i>Liquid Crystals</i> , 2017, 44, 2184-2191.	2.2	23
67	New isothiocyanatotolane liquid crystals with terminal but-3-enyl substitute. <i>Liquid Crystals</i> , 2017, 44, 833-842.	2.2	13
68	High electrocapacitive performance of bowl-like monodispersed porous carbon nanoparticles prepared with an interfacial self-assembly process. <i>Journal of Colloid and Interface Science</i> , 2017, 496, 35-43.	9.4	18
69	Study on dye-loading mode on TiO ₂ films and impact of co-sensitizers on highly efficient co-sensitized solar cells. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 3962-3969.	2.2	7
70	Nematic mesophase enhanced via lateral monofluorine substitution on benzoxazole-liquid crystals. <i>Liquid Crystals</i> , 2016, 43, 1341-1350.	2.2	24
71	Low mid-infrared absorption tolane liquid crystals terminated by 2,2-difluorovinyl: synthesis, characterization and properties. <i>Journal of Materials Chemistry C</i> , 2016, 4, 4939-4945.	5.5	32
72	Facile preparation of TiO ₂ nanocrystals inserted in monodispersed mesoporous SiO ₂ nanospheres for enhanced photocatalytic activity. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 13161-13170.	2.2	4

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73	Improving UV stability of tolane-liquid crystals in photonic applications by the ortho fluorine substitution. <i>Optical Materials Express</i> , 2016, 6, 97.	3.0	33
74	Improved nematic mesophase stability of benzoxazole-liquid crystals via modification of inter-ring twist angle of biphenyl unit. <i>Liquid Crystals</i> , 2016, 43, 1397-1407.	2.2	36
75	High performance liquid crystals for vehicle displays. <i>Optical Materials Express</i> , 2016, 6, 717.	3.0	40
76	Synthesis and physical properties of tolane liquid crystals containing 2,3-difluorophenylene and terminated by a tetrahydropyran moiety. <i>Liquid Crystals</i> , 2016, 43, 564-572.	2.2	18
77	Synthesis and properties of difluoromethyleneoxy-bridged liquid crystals terminated by 2,2-difluorovinyloxy group. <i>Liquid Crystals</i> , 2015, 42, 383-389.	2.2	5
78	The effect of lateral fluorination on the properties of phenyl-tolane liquid crystals. <i>Liquid Crystals</i> , 2015, 42, 397-403.	2.2	28
79	Cyclic thiourea functionalized dyes with binary π -linkers: Influence of different π -conjugation segments on the performance of dye-sensitized solar cells. <i>Dyes and Pigments</i> , 2015, 116, 146-154.	3.7	25
80	The effect of cyclic thiourea functionalization and β -dialkylbithiophene linker on the performance of triphenylamine dyes. <i>Journal of Molecular Structure</i> , 2015, 1094, 195-202.	3.6	5
81	Synthesis and evaluation of simple molecule as a co-adsorbent dye for highly efficient co-sensitized solar cells. <i>Dyes and Pigments</i> , 2015, 120, 85-92.	3.7	16
82	Synthesis and Characterization of Mesogenic Compounds Possessing Bithiophene and Benzoxazole Units. <i>Molecular Crystals and Liquid Crystals</i> , 2015, 608, 25-37.	0.9	2
83	Dielectric and optical anisotropy enhanced by 1,3-dioxolane terminal substitution on tolane-liquid crystals. <i>Journal of Materials Chemistry C</i> , 2015, 3, 8706-8711.	5.5	48
84	Tolane liquid crystals bearing fluorinated terminal group and their mid-wave infrared properties. <i>Liquid Crystals</i> , 2014, 41, 1696-1702.	2.2	30
85	Synthesis and characterisation of benzoxazole-based liquid crystals possessing 3,5-difluorophenyl unit. <i>Liquid Crystals</i> , 2014, 41, 1455-1464.	2.2	20
86	Synthesis and properties of mesogenic laterally fluorinated compounds containing benzoxazole unit. <i>Liquid Crystals</i> , 2014, 41, 1042-1056.	2.2	18
87	Highly fluorinated liquid crystals with wide nematic phase interval and good solubility. <i>Liquid Crystals</i> , 2014, 41, 1783-1790.	2.2	25
88	Approach to tune short-circuit current and open-circuit voltage of dye-sensitized solar cells: π -linker modification and photoanode selection. <i>RSC Advances</i> , 2014, 4, 42252-42259.	3.6	26
89	One-Pot Microwave-Assisted Synthesis of Benzopyrano[2,3- <i>b</i>]pyrazole Derivatives. <i>Journal of Heterocyclic Chemistry</i> , 2014, 51, 1210-1214.	2.6	2
90	New Mesogenic Compounds Containing a Terminal-Substituted Benzoxazole Unit. <i>Molecular Crystals and Liquid Crystals</i> , 2014, 592, 44-62.	0.9	8

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91	Highly Efficient Dye-sensitized Solar Cells by Co-sensitization of Organic Dyes and Co-adsorbent Chenodeoxycholic Acid. Chinese Journal of Chemistry, 2014, 32, 474-478.	4.9	10
92	Co-sensitization of N719 with an Organic Dye for Dye-sensitized Solar Cells Application. Bulletin of the Korean Chemical Society, 2014, 35, 1449-1454.	1.9	30
93	Synthesis and properties of substituted benzoxazole-terminated liquid crystals. Liquid Crystals, 2013, 40, 197-215.	2.2	33
94	Fluorine substituted thiophene-quinoxalinecopolymer to reduce the HOMO level and increase the dielectric constant for high open-circuit voltage organic solar cells. Journal of Materials Chemistry C, 2013, 1, 630-637.	5.5	101
95	Cyclic Thiourea/Urea Functionalized Triphenylamine-Based Dyes for High-Performance Dye-Sensitized Solar Cells. Organic Letters, 2013, 15, 1456-1459.	4.6	55
96	Synthesis and mesomorphic properties of 2-(4-alkoxybiphenyl-4-yl)-1H-benzimidazole derivatives. Liquid Crystals, 2013, 40, 396-410.	2.2	24
97	Synthesis and mesomorphic properties of but-3-enyl-based fluorinated biphenyl liquid crystals. Liquid Crystals, 2012, 39, 457-465.	2.2	23
98	Synthesis, mesomorphic and gelation properties of 7-alkoxycoumarin-3-carbonyl hydrazine. Liquid Crystals, 2012, 39, 1393-1401.	2.2	19
99	Synthesis and properties of allyloxy-based biphenyl liquid crystals with multiple lateral fluoro substituents. Liquid Crystals, 2012, 39, 957-963.	2.2	11
100	Covalently and ionically crosslinked sulfonated poly(arylene ether sulfone)s bearing quinoxaline crosslinkages as proton exchange membranes. Journal of Applied Polymer Science, 2012, 124, E278.	2.6	8
101	Covalently and ionically crosslinked sulfonated poly(arylene ether ketone)s as proton exchange membranes. Polymer Bulletin, 2012, 68, 1369-1386.	3.3	12
102	Synthesis and mesomorphic properties of 7-alkoxybezopyrano[2,3-c]pyrazol-3-one. Liquid Crystals, 2010, 37, 1549-1557.	2.2	24
103	Pervaporation Separation and Catalysis Activity of Novel Zirconium Silicalite-1 Zeolite Membrane. Chinese Journal of Chemistry, 2009, 27, 1692-1696.	4.9	4
104	Synthesis and the effect of 2,3-difluoro substitution on the properties of diarylacetylene terminated by an allyloxy group. Liquid Crystals, 0, , 1-10.	2.2	3
105	Improved mesophase stability of benzoxazole derivatives via dipole moment modification. Liquid Crystals, 0, , 1-11.	2.2	4
106	Preparation and properties of lateral monofluoro-substituted benzoxazole-based mesogenic compounds. Liquid Crystals, 0, , 1-9.	2.2	2
107	Efficient Bifunctional Oxygen Electrocatalysts for Rechargeable Zinc-Air Battery: Fe ₃ O ₄ /N-C Nanoflowers Derived from Aromatic Polyamide. ChemCatChem, 0, , .	3.7	4