Xike Gao

List of Publications by Year
in descending order

89 papers	4,268 citations	126907 33 h-index	110387 64 g-index
92 all docs	92 docs citations	92 times ranked	4476 citing authors

#	Article	IF	Citations
1	A dithieno[3,2-<i>a</i>:3â€²,2â€²-<i>j</i>][5,6,11,12]chrysene diimide based polymer as an electron transport layer for efficient inverted perovskite solar cells. Journal of Materials Chemistry C, 2022, 10, 2703-2710.	5.5	2
2	Azulenoisoindigo: A building block for Ï€-functional materials with reversible redox behavior and proton responsiveness. Chinese Chemical Letters, 2022, 33, 2147-2150.	9.0	12
3	Atropisomeric Conjugated Diimides: A Class of Thermally Responsive Organic Semiconductors. , 2022, 4, 363-369.		3
4	Incorporation of Electron-Rich Indacenodithiophene Units into the Backbone of 2,6-Azulene-Based Conjugated Polymers for Proton-Responsive Materials and p-Type Polymeric Semiconductors. , 2022, 4, 392-400.		13
5	Design, Synthesis and Properties of Azulene-Based BN-[4]Helicenes^{â€»}. Acta Chimica Sinica, 2022, 80, 29.	1.4	2
6	Azuleneâ€Embedded [<i>n</i>]Helicenes (<i>n</i>=5, 6 and 7). Angewandte Chemie, 2022, 134, .	2.0	14
7	Electron-Deficient Contorted Polycyclic Aromatic Hydrocarbon via One-Pot Annulative Ï€-Extension of Perylene Diimide. Organic Letters, 2022, 24, 2414-2419.	4.6	8
8	Azuleneâ€Embedded [<i>n</i>]Helicenes (<i>n</i>=5, 6 and 7). Angewandte Chemie - International Edition, 2022, 61, .	13.8	46
9	Azulene-Containing Squaraines for Photoacoustic Imaging and Photothermal Therapy. ACS Applied Materials & Interfaces, 2022, 14, 19192-19203.	8.0	20
10	Dipole-improved gating of azulene-based single-molecule transistors. Journal of Materials Chemistry C, 2022, 10, 7803-7809.	5.5	8
11	2,6-Azulene-based Homopolymers: Design, Synthesis, and Application in Proton Exchange Membrane Fuel Cells. ACS Macro Letters, 2022, 11, 680-686.	4.8	8
12	Organic crystalline monolayers for ideal behaviours in organic field-effect transistors. Journal of Materials Chemistry C, 2021, 9, 12057-12062.	5.5	3
13	High-Performance Organic Semiconducting Polymers by a Resonance-Assisted Hydrogen Bonding Approach. Chemistry of Materials, 2021, 33, 580-588.	6.7	31
14	Azulene-Based Ï€-Functional Materials: Design, Synthesis, and Applications. Accounts of Chemical Research, 2021, 54, 1737-1753.	15.6	118
15	Sub-5 nm single crystalline organic pâ€"n heterojunctions. Nature Communications, 2021, 12, 2774.	12.8	39
16	Recent Advances in Molecular Design of Organic Thermoelectric Materials. CCS Chemistry, 2021, 3, 2212-2225.	7.8	26
17	Zwitterionic side chain-modified conjugated polymers with greatly enhanced ambipolar charge-transport mobilities. Chemical Communications, 2021, 57, 11181-11184.	4.1	3
18	Large Ï€-extended donor-acceptor polymers for highly efficient in vivo near-infrared photoacoustic imaging and photothermal tumor therapy. Science China Chemistry, 2021, 64, 2180-2192.	8.2	17

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19	Synthesis and Field-Effect Characteristics of the Chiral Naphthalene Diimide Derivatives. Chinese Journal of Organic Chemistry, 2021, 41, 4400.	1.3	2
20	Azulene-Based BN-Heteroaromatics. Journal of Organic Chemistry, 2020, 85, 70-78.	3.2	57
21	Selenium-containing core-expanded naphthalene diimides for high performance n-type organic semiconductors. Science China Chemistry, 2020, 63, 1182-1190.	8.2	5
22	Azuleneâ€“Pyridine-Fused Heteroaromatics. Journal of the American Chemical Society, 2020, 142, 13598-13605.	13.7	76
23	Flexible Monolayer Molecular Crystalâ€Field Effect Transistors for Ultrasensitive and Selective Detection of Dimethoate. Advanced Electronic Materials, 2020, 6, 2000579.	5.1	22
24	Rhodanine-Bridged Core-Expanded Naphthalene Diimide Derivatives for n-Type Semiconductors. Organic Materials, 2020, 02, 165-172.	2.0	0
25	Enhanced Thermoelectric Performance of nâ€Type Organic Semiconductor via Electric Field Modulated Photoâ€Thermoelectric Effect. Advanced Materials, 2020, 32, e2000273.	21.0	31
26	Monolayer Twoâ€dimensional Molecular Crystals for an Ultrasensitive OFETâ€based Chemical Sensor. Angewandte Chemie, 2020, 132, 4410-4414.	2.0	10
27	Monolayer Twoâ€dimensional Molecular Crystals for an Ultrasensitive OFETâ€based Chemical Sensor. Angewandte Chemie - International Edition, 2020, 59, 4380-4384.	13.8	90
28	Design, Synthesis and Field Effect Characteristics of Diazulene Diimides Bridged by Aromatic Group. Acta Chimica Sinica, 2020, 78, 788.	1.4	13
29	Design, Synthesis and Properties of Indacenodithiophene Derivatives End-Capped with Azulene. Chinese Journal of Organic Chemistry, 2020, 40, 3916.	1.3	3
30	Dithieno[3,2-<i>a</i>:3â€²,2â€²-<i>j</i>][5,6,11,12]chrysene diimides: a versatile electron-deficient building block for polymeric semiconductors. Chemical Communications, 2019, 55, 10234-10237.	4.1	10
31	Incorporation of 1,3-Free-2,6-Connected Azulene Units into the Backbone of Conjugated Polymers: Improving Proton Responsiveness and Electrical Conductivity. ACS Macro Letters, 2019, 8, 1360-1364.	4.8	33
32	Enantiopure <i>versus</i> racemic naphthalene diimide-based n-type organic semiconductors: effect on charge transport. Journal of Materials Chemistry C, 2019, 7, 2659-2665.	5.5	16
33	From Homochiral Assembly to Heterochiral Assembly: A Leap in Charge Transport Properties of Binaphthol-Based Axially Chiral Materials. Langmuir, 2019, 35, 6188-6195.	3.5	6
34	Highly efficient photothermal nanoagent achieved by harvesting energy via excited-state intramolecular motion within nanoparticles. Nature Communications, 2019, 10, 768.	12.8	296
35	6,6â€²-Diaryl-substituted biazulene diimides for solution-processable high-performance n-type organic semiconductors. Materials Chemistry Frontiers, 2018, 2, 975-985.	5.9	47
36	Rational Design of Perylenediimideâ€Substituted Triphenylethylene to Electron Transporting Aggregationâ€Induced Emission Luminogens (AIEgens) with High Mobility and Nearâ€Infrared Emission. Advanced Functional Materials, 2018, 28, 1705609.	14.9	82

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37	An Abnormal 3.7â€...Volt O3â€Type Sodiumâ€Ion Battery Cathode. Angewandte Chemie, 2018, 130, 8310-8315.	2.0	23
38	An Abnormal 3.7â€...Volt O3â€Type Sodiumâ€Ion Battery Cathode. Angewandte Chemie - International Edition, 2018, 57, 8178-8183.	13.8	109
39	Incorporation of 2,6â€Connected Azulene Units into the Backbone of Conjugated Polymers: Towards Highâ€Performance Organic Optoelectronic Materials. Angewandte Chemie, 2018, 130, 1336-1340.	2.0	40
40	Incorporation of 2,6â€Connected Azulene Units into the Backbone of Conjugated Polymers: Towards Highâ€Performance Organic Optoelectronic Materials. Angewandte Chemie - International Edition, 2018, 57, 1322-1326.	13.8	160
41	Effect of Alkylâ€Chain Length on Charge Transport Properties of Organic Semiconductors and Organic Fieldâ€Effect Transistors. Advanced Electronic Materials, 2018, 4, 1800175.	5.1	19
42	New Ï€â€Extended Naphthalene Diimides for Highâ€Performance nâ€Type Organic Semiconductors with NIR Absorption Properties. Asian Journal of Organic Chemistry, 2018, 7, 2279-2284.	2.7	10
43	Core-expanded naphthalenediimide derivatives as non-fullerene electron transport materials for inverted perovskite solar cells. Organic Electronics, 2018, 61, 113-118.	2.6	10
44	Extremely simple phenothiazine molecules with room-temperature phosphorescence for understanding mechanoluminescence excitation process. Science China Chemistry, 2018, 61, 641-642.	8.2	8
45	Design, Synthesis and Properties of 2/6-Aryl Substituted Azulene Derivatives. Chinese Journal of Organic Chemistry, 2018, 38, 2680.	1.3	13
46	A Class of Electron-Transporting Vinylogous Tetrathiafulvalenes Constructed by the Dimerization of Core-Expanded Naphthalenediimides. Organic Letters, 2017, 19, 468-471.	4.6	33
47	Application of Azulene in Constructing Organic Optoelectronic Materials: New Tricks for an Old Dog. ChemPlusChem, 2017, 82, 945-956.	2.8	178
48	Synthesis of largely Ï€-extended naphthalenediimides via Câ€"H activation towards highly soluble and narrow band-gap organic optoelectronic materials. Organic Chemistry Frontiers, 2017, 4, 823-827.	4.5	12
49	Dithieno[3,2-a:3â€²,2â€²-j][5,6,11,12]chrysene diimides and their molecular energy level regulation. Materials Chemistry Frontiers, 2017, 1, 1635-1640.	5.9	11
50	Naphthalene Diimides Endcapped with Ethynylazulene: Molecular Design, Synthesis and Properties. Chinese Journal of Organic Chemistry, 2017, 37, 711.	1.3	21
51	Biazulene diimides: a new building block for organic electronic materials. Chemical Science, 2016, 7, 6701-6705.	7.4	103
52	nâ€Channel Organic Transistors Processed from Halogenâ€Free Solvents: Solvent Effect on Thinâ€Film Morphology and Charge Transport. Chinese Journal of Chemistry, 2016, 34, 689-695.	4.9	4
53	Scanning Kelvin Probe Microscopy Investigation of the Role of Minority Carriers on the Switching Characteristics of Organic Fieldâ€Effect Transistors. Advanced Materials, 2016, 28, 4713-4719.	21.0	34
54	Incorporation of benzothiadiazole into the backbone of 1,2,5,6-naphthalenediimide based copolymers, enabling much improved film crystallinity and charge carrier mobility. Polymer Chemistry, 2016, 7, 573-579.	3.9	28

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55	Synthesis of monolateral and bilateral sulfur-heterocycle fused naphthalene diimides (NDIs) from monobromo and dibromo NDIs. Organic Chemistry Frontiers, 2015, 2, 372-377.	4.5	11
56	High mobility organic semiconductors for field-effect transistors. Science China Chemistry, 2015, 58, 947-968.	8.2	129
57	Modulated Thermoelectric Properties of Organic Semiconductors Using Fieldâ€Effect Transistors. Advanced Functional Materials, 2015, 25, 3004-3012.	14.9	94
58	Tuning the Charge Transport Property of Naphthalene Diimide Derivatives by Changing the Substituted Position of Fluorine Atom on Molecular Backbone. Chinese Journal of Chemistry, 2014, 32, 1057-1064.	4.9	9
59	Development of n-type organic semiconductors for thin film transistors: a viewpoint of molecular design. Journal of Materials Chemistry C, 2014, 2, 3099-3117.	5.5	238
60	Naphthalenediimides Fused with 2-(1,3-Dithiol-2-ylidene)acetonitrile: Strong Electron-Deficient Building Blocks for High-Performance n-Type Polymeric Semiconductors. ACS Macro Letters, 2014, 3, 1174-1177.	4.8	39
61	Phase Transitions and Anisotropic Thermal Expansion in High Mobility Coreâ€expanded Naphthalene Diimide Thin Film Transistors. Advanced Functional Materials, 2014, 24, 7211-7220.	14.9	22
62	High-performance n-channel field effect transistors based on solution-processed dicyanomethylene-substituted tetrathienoquinoid. RSC Advances, 2014, 4, 16939-16943.	3.6	13
63	A solution-processable dicyano-substituted quinoidal oligothiophene for air-stable ambipolar organic field-effect transistors. Journal of Materials Chemistry C, 2013, 1, 5128.	5.5	21
64	New Coreâ€Expanded Naphthalene Diimides for nâ€Channel Organic Thin Film Transistors. Chinese Journal of Chemistry, 2013, 31, 1428-1438.	4.9	12
65	1,2,5,6-Naphthalenediimide Based Donorâ€“Acceptor Copolymers Designed from Isomer Chemistry for Organic Semiconducting Materials. Macromolecules, 2013, 46, 7705-7714.	4.8	56
66	Organic Electronics: Ultrathin Film Organic Transistors: Precise Control of Semiconductor Thickness via Spinâ€Coating (Adv. Mater. 10/2013). Advanced Materials, 2013, 25, 1370-1370.	21.0	5
67	A facile synthesis of 2,3,6,7-tetrabromonaphthalene diimides toward new Ï€-extended naphthalene diimides. Tetrahedron Letters, 2013, 54, 2271-2273.	1.4	24
68	Thieno[3,4-c]pyrrole-4,6-dione Containing Copolymers for High Performance Field-Effect Transistors. Macromolecules, 2013, 46, 3887-3894.	4.8	68
69	Critical Role of Alkyl Chain Branching of Organic Semiconductors in Enabling Solution-Processed N-Channel Organic Thin-Film Transistors with Mobility of up to 3.50 cm² V^{â€“1} s^{â€“1}. Journal of the American Chemical Society, 2013, 135, 2338-2349.	13.7	379
70	High-performance n-type organic thin-film phototransistors based on a core-expanded naphthalene diimide. Applied Physics Letters, 2013, 103, .	3.3	27
71	Alkyl Chain Orientations in Dicyanomethyleneâ€Substituted 2,5â€Di(thiophenâ€2â€yl)thienoâ€[3,2â€b]thienoquinoid: Impact on Solidâ€State and Thinâ€Film Transistor Performance. Advanced Functional Materials, 2013, 23, 2277-2284.	14.9	56
72	One-Pot Synthesis of Core-Expanded Naphthalene Diimides: Enabling <i>N</i>-Substituent Modulation for Diverse n-Type Organic Materials. Organic Letters, 2012, 14, 292-295.	4.6	63

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73	Synthesis and Physicochemical Properties of Strong Electron Acceptor 14,14,15,15â€Tetracyanoâ€6,13â€pentacenequinodimethane (TCPQ) Diimide. European Journal of Organic Chemistry, 2012, 2012, 6136-6139.	2.4	5
74	New ladderâ€type conjugated polymer with broad absorption, high thermal stability, and low band gap. Journal of Polymer Science Part A, 2012, 50, 4272-4276.	2.3	8
75	High performance organic thin film transistor based on pentacene derivative: 6,13-dichloropentacene. Journal of Materials Chemistry, 2012, 22, 10496.	6.7	33
76	Core-Expanded Naphthalene Diimides Fused with Sulfur Heterocycles and End-Capped with Electron-Withdrawing Groups for Air-Stable Solution-Processed n-Channel Organic Thin Film Transistors. Chemistry of Materials, 2011, 23, 1204-1215.	6.7	147
77	Dicyanomethylene-Substituted Fused Tetrathienoquinoid for High-Performance, Ambient-Stable, Solution-Processable n-Channel Organic Thin-Film Transistors.. Chemistry of Materials, 2011, 23, 3138-3140.	6.7	105
78	Core-Expanded Naphthalene Diimides Fused with 2-(1,3-Dithiol-2-Ylidene)Malonitrile Groups for High-Performance, Ambient-Stable, Solution-Processed n-Channel Organic Thin Film Transistors. Journal of the American Chemical Society, 2010, 132, 3697-3699.	13.7	274
79	Linking polythiophene chains with vinyleneâ€bridges: A way to improve charge transport in polymer fieldâ€effect transistors. Journal of Polymer Science Part A, 2009, 47, 1381-1392.	2.3	11
80	A non-planar pentaphenylbenzene functionalized benzo[2,1,3]thiadiazole derivative as a novel red molecular emitter for non-doped organic light-emitting diodes. Journal of Materials Chemistry, 2008, 18, 2709.	6.7	30
81	Anthra[2,3-<i>b</i>]benzo[<i>d</i>]thiophene: An Air-Stable Asymmetric Organic Semiconductor with High Mobility at Room Temperature. Chemistry of Materials, 2008, 20, 4188-4190.	6.7	65
82	Synthesis and properties of fluorene or carbazole-based and dicyanovinyl-capped n-type organic semiconductors. Journal of Materials Chemistry, 2008, 18, 1131.	6.7	42
83	Novel copolymers incorporating dithieno[3,2-b:2â€²,3â€²-d]thiophene moieties for air-stable and high performance organic field-effect transistors. Journal of Materials Chemistry, 2008, 18, 3426.	6.7	49
84	Organic field-effect transistors based on tetrathiafulvalene derivatives. Pure and Applied Chemistry, 2008, 80, 2405-2423.	1.9	20
85	Linear benzene-fused bis(tetrathiafulvalene) compounds for solution processed organic field-effect transistors. Journal of Materials Chemistry, 2007, 17, 736-743.	6.7	51
86	Highly efficient blue electrophosphorescent devices with a new series of host materials: polyphenylene-dendronized oxadiazole derivatives. Journal of Materials Chemistry, 2007, 17, 3788.	6.7	28
87	First Synthesis of 2,3,6,7-Tetrabromonaphthalene Diimide. Organic Letters, 2007, 9, 3917-3920.	4.6	93
88	A facile synthesis of linear benzene-fused bis(tetrathiafulvalene) compounds and their application for organic field-effect transistors. Chemical Communications, 2006, , 2750.	4.1	45
89	Achieve Better Performance of Inverted Perovskite Solar Cells by Using the Fluorinated Polymer as the Electron Transporting Layer. ACS Applied Energy Materials, 0, , .	5.1	2