

Siwei Liu

List of Publications by Year in descending order

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100
papers

12,467
citations

31902

53
h-index

32761

100
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102
all docs

102
docs citations

102
times ranked

8551
citing authors

#	ARTICLE	IF	CITATIONS
1	Recent advances in organic thermally activated delayed fluorescence materials. <i>Chemical Society Reviews</i> , 2017, 46, 915-1016.	18.7	1,815
2	Recent advances in organic mechanofluorochromic materials. <i>Chemical Society Reviews</i> , 2012, 41, 3878.	18.7	1,575
3	Recent advances in mechanochromic luminescent metal complexes. <i>Journal of Materials Chemistry C</i> , 2013, 1, 3376.	2.7	570
4	Intermolecular Electronic Coupling of Organic Units for Efficient Persistent Room-Temperature Phosphorescence. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2181-2185.	7.2	548
5	White-Light Emission Strategy of a Single Organic Compound with Aggregation-Induced Emission and Delayed Fluorescence Properties. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 7181-7184.	7.2	427
6	An Organic Molecule with Asymmetric Structure Exhibiting Aggregation-Induced Emission, Delayed Fluorescence, and Mechanoluminescence. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 874-878.	7.2	378
7	Recent advances in mechano-responsive luminescence of tetraphenylethylene derivatives with aggregation-induced emission properties. <i>Materials Chemistry Frontiers</i> , 2018, 2, 861-890.	3.2	339
8	Linearly Tunable Emission Colors Obtained from a Fluorescent-Phosphorescent Dual-Emission Compound by Mechanical Stimuli. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 6270-6273.	7.2	315
9	Piezofluorochromism of an Aggregation-Induced Emission Compound Derived from Tetraphenylethylene. <i>Chemistry - an Asian Journal</i> , 2011, 6, 808-811.	1.7	294
10	Very bright mechanoluminescence and remarkable mechanochromism using a tetraphenylethene derivative with aggregation-induced emission. <i>Chemical Science</i> , 2015, 6, 3236-3241.	3.7	281
11	End-group effects of piezofluorochromic aggregation-induced enhanced emission compounds containing distyrylanthracene. <i>Journal of Materials Chemistry</i> , 2012, 22, 18505.	6.7	273
12	Triphenylethylene carbazole derivatives as a new class of AIE materials with strong blue light emission and high glass transition temperature. <i>Journal of Materials Chemistry</i> , 2009, 19, 5541.	6.7	213
13	Achieving remarkable mechanochromism and white-light emission with thermally activated delayed fluorescence through the molecular heredity principle. <i>Chemical Science</i> , 2016, 7, 2201-2206.	3.7	210
14	Aggregation-induced emission enhancement compounds containing triphenylamine-anthrylenevinylene and tetraphenylethene moieties. <i>Journal of Materials Chemistry</i> , 2011, 21, 3760.	6.7	170
15	White-light emission from a single heavy atom-free molecule with room temperature phosphorescence, mechanochromism and thermochromism. <i>Chemical Science</i> , 2017, 8, 1909-1914.	3.7	168
16	A new ligand and its complex with multi-stimuli-responsive and aggregation-induced emission effects. <i>Chemical Communications</i> , 2011, 47, 11080.	2.2	166
17	An AIE-active luminophore with tunable and remarkable fluorescence switching based on the piezo and protonation-deprotonation control. <i>Chemical Communications</i> , 2014, 50, 7374-7377.	2.2	161
18	Synthesis and properties of novel aggregation-induced emission compounds with combined tetraphenylethylene and dicarbazolyl triphenylethylene moieties. <i>Journal of Materials Chemistry</i> , 2011, 21, 1788-1796.	6.7	157

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19	Intermolecular Electronic Coupling of Organic Units for Efficient Persistent Room-Temperature Phosphorescence. <i>Angewandte Chemie</i> , 2016, 128, 2221-2225.	1.6	156
20	Piezofluorochromic and Aggregation-Induced-Emission Compounds Containing Triphenylethylene and Tetraphenylethylene Moieties. <i>Chemistry - an Asian Journal</i> , 2011, 6, 1470-1478.	1.7	150
21	Metal-free organic dyes derived from triphenylethylene for dye-sensitized solar cells: tuning of the performance by phenothiazine and carbazole. <i>Journal of Materials Chemistry</i> , 2012, 22, 8994.	6.7	150
22	A Bulk Dielectric Polymer Film with Intrinsic Ultralow Dielectric Constant and Outstanding Comprehensive Properties. <i>Chemistry of Materials</i> , 2015, 27, 6543-6549.	3.2	131
23	Polyimide nanocomposites with boron nitride-coated multi-walled carbon nanotubes for enhanced thermal conductivity and electrical insulation. <i>Journal of Materials Chemistry A</i> , 2014, 2, 20958-20965.	5.2	130
24	An aggregation-induced emission luminophore with multi-stimuli single- and two-photon fluorescence switching and large two-photon absorption cross section. <i>Chemical Communications</i> , 2013, 49, 273-275.	2.2	126
25	Achieving very bright mechanoluminescence from purely organic luminophores with aggregation-induced emission by crystal design. <i>Chemical Science</i> , 2016, 7, 5307-5312.	3.7	125
26	Cross-linkable aggregation induced emission dye based red fluorescent organic nanoparticles and their cell imaging applications. <i>Polymer Chemistry</i> , 2013, 4, 5060.	1.9	124
27	High-Performance Functional Polyimides Containing Rigid Nonplanar Conjugated Triphenylethylene Moieties. <i>Chemistry of Materials</i> , 2012, 24, 1212-1222.	3.2	122
28	Facile preparation and cell imaging applications of fluorescent organic nanoparticles that combine AIE dye and ring-opening polymerization. <i>Polymer Chemistry</i> , 2014, 5, 318-322.	1.9	115
29	Intrinsic low dielectric constant polyimides: relationship between molecular structure and dielectric properties. <i>Journal of Materials Chemistry C</i> , 2017, 5, 12807-12815.	2.7	110
30	The HOF structures of nitrotetraphenylethene derivatives provide new insights into the nature of AIE and a way to design mechanoluminescent materials. <i>Chemical Science</i> , 2017, 8, 1163-1168.	3.7	110
31	A multi-sensing fluorescent compound derived from cyanoacrylic acid. <i>Journal of Materials Chemistry</i> , 2010, 20, 292-298.	6.7	101
32	Achieving Dual-Emissive and Time-Dependent Evolutive Organic Afterglow by Bridging Molecules with Weak Intermolecular Hydrogen Bonding. <i>Advanced Optical Materials</i> , 2019, 7, 1801593.	3.6	101
33	Piezofluorochromism and morphology of a new aggregation-induced emission compound derived from tetraphenylethylene and carbazole. <i>New Journal of Chemistry</i> , 2012, 36, 685-693.	1.4	100
34	Mechano-induced persistent room-temperature phosphorescence from purely organic molecules. <i>Chemical Science</i> , 2018, 9, 3782-3787.	3.7	97
35	New aggregation-induced emission enhancement materials combined triarylamine and dicarbazolyl triphenylethylene moieties. <i>Journal of Materials Chemistry</i> , 2010, 20, 6103.	6.7	95
36	Combined aggregation induced emission (AIE), photochromism and photoresponsive wettability in simple dichloro-substituted triphenylethylene derivatives. <i>Chemical Science</i> , 2016, 7, 5302-5306.	3.7	95

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37	Facile Strategy for Intrinsic Low- κ Dielectric Polymers: Molecular Design Based on Secondary Relaxation Behavior. <i>Macromolecules</i> , 2019, 52, 4601-4609.	2.2	91
38	A novel method for preparing AIE dye based cross-linked fluorescent polymeric nanoparticles for cell imaging. <i>Polymer Chemistry</i> , 2014, 5, 683-688.	1.9	90
39	High-Tg carbazole derivatives as a new class of aggregation-induced emission enhancement materials. <i>Journal of Materials Chemistry</i> , 2010, 20, 7352.	6.7	88
40	Hydrogen-Bonding-Assisted Intermolecular Charge Transfer: A New Strategy to Design Single-Component White-Light-Emitting Materials. <i>Advanced Functional Materials</i> , 2017, 27, 1703918.	7.8	84
41	A pH-responsive polymer based on dynamic imine bonds as a drug delivery material with pseudo target release behavior. <i>Polymer Chemistry</i> , 2018, 9, 878-884.	1.9	84
42	White-Light Emission Strategy of a Single Organic Compound with Aggregation-Induced Emission and Delayed Fluorescence Properties. <i>Angewandte Chemie</i> , 2015, 127, 7287-7290.	1.6	83
43	Synthesis and properties of highly organosoluble and low dielectric constant polyimides containing non-polar bulky triphenyl methane moiety. <i>Reactive and Functional Polymers</i> , 2016, 108, 71-77.	2.0	79
44	Synthesis of novel triazine charring agent and its effect in intumescent flame-retardant polypropylene. <i>Journal of Applied Polymer Science</i> , 2012, 123, 3208-3216.	1.3	77
45	Deep-blue luminescent compound that emits efficiently both in solution and solid state with considerable blue-shift upon aggregation. <i>Journal of Materials Chemistry C</i> , 2014, 2, 1068-1075.	2.7	61
46	Exceptionally thermostable and soluble aromatic polyimides with special characteristics: intrinsic ultralow dielectric constant, static random access memory behaviors, transparency and fluorescence. <i>Materials Chemistry Frontiers</i> , 2017, 1, 326-337.	3.2	61
47	Thermally conductive, insulated polyimide nanocomposites by AlO(OH)-coated MWCNTs. <i>Journal of Materials Chemistry</i> , 2011, 21, 14563.	6.7	58
48	Amphiphilic Polymer-Mediated Aggregation-Induced Emission Nanoparticles for Highly Sensitive Organophosphorus Pesticide Biosensing. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 32689-32696.	4.0	58
49	Novel biocompatible cross-linked fluorescent polymeric nanoparticles based on an AIE monomer. <i>Journal of Materials Chemistry C</i> , 2014, 2, 816-820.	2.7	56
50	A new approach to switchable photochromic materials by combining photochromism and piezochromism together in an AIE-active molecule. <i>Materials Chemistry Frontiers</i> , 2017, 1, 1900-1904.	3.2	56
51	Synthesis and properties of high-performance functional polyimides containing rigid nonplanar conjugated tetraphenylethylene moieties. <i>Journal of Polymer Science Part A</i> , 2013, 51, 1302-1314.	2.5	54
52	Flexible and highly fluorescent aromatic polyimide: design, synthesis, properties, and mechanism. <i>Journal of Materials Chemistry C</i> , 2016, 4, 10509-10517.	2.7	51
53	Simple fluorescent probe derived from tetraphenylethylene and benzoquinone for instantaneous biothiol detection. <i>Analytical Methods</i> , 2012, 4, 3338.	1.3	49
54	Fluorescence-enhanced organogelators with mesomorphic and piezofluoro-chromic properties based on tetraphenylethylene and gallic acid derivatives. <i>Dyes and Pigments</i> , 2014, 101, 74-84.	2.0	47

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55	Instrument-free and visual detection of organophosphorus pesticide using a smartphone by coupling aggregation-induced emission nanoparticle and two-dimension MnO ₂ nanoflake. <i>Biosensors and Bioelectronics</i> , 2020, 170, 112668.	5.3	46
56	Modified halloysite nanotube filled polyimide composites for film capacitors: high dielectric constant, low dielectric loss and excellent heat resistance. <i>RSC Advances</i> , 2018, 8, 10522-10531.	1.7	43
57	Effect of polyphenyl-substituted ethylene end-capped groups in metal-free organic dyes on performance of dye-sensitized solar cells. <i>RSC Advances</i> , 2012, 2, 7788.	1.7	40
58	Intrinsic high- <i>k</i> low-loss dielectric polyimides containing ortho-position aromatic nitrile moieties: reconsideration on Clausius-Mossotti equation. <i>Polymer Chemistry</i> , 2021, 12, 2481-2489.	1.9	40
59	Synergistic effects of 4A zeolite on the flame retardant properties and thermal stability of a novel halogen-free PP/IFR composite. <i>Polymers for Advanced Technologies</i> , 2013, 24, 478-486.	1.6	39
60	The Preparations and Water Vapor Barrier Properties of Polyimide Films Containing Amide Moieties. <i>Polymers</i> , 2017, 9, 677.	2.0	38
61	Achieving tunable dual-emissive and high-contrast mechanochromic materials by manipulating steric hindrance effects. <i>Journal of Materials Chemistry C</i> , 2019, 7, 3300-3305.	2.7	38
62	Aggregation-induced emission luminogen@manganese dioxide core-shell nanomaterial-based paper analytical device for equipment-free and visual detection of organophosphorus pesticide. <i>Journal of Hazardous Materials</i> , 2021, 413, 125306.	6.5	36
63	A novel ultrasound-sensitive mechanofluorochromic AIE-compound with remarkable blue-shifting and enhanced emission. <i>Journal of Materials Chemistry C</i> , 2014, 2, 5812-5817.	2.7	35
64	Rigid Polyimides with Thermally Activated Delayed Fluorescence for Polymer Light-Emitting Diodes with High External Quantum Efficiency up to 21%. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 7220-7226.	7.2	34
65	Flexible Multifunctional Aromatic Polyimide Film: Highly Efficient Photoluminescence, Resistive Switching Characteristic, and Electroluminescence. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 11430-11435.	4.0	33
66	Achieving Bright Mechanoluminescence in a Hydrogen-Bonded Organic Framework by Polar Molecular Rotor Incorporation. <i>CCS Chemistry</i> , 2022, 4, 1643-1653.	4.6	32
67	Multi-functional polyimides containing tetraphenyl fluorene moieties: fluorescence and resistive switching behaviors. <i>Journal of Materials Chemistry C</i> , 2017, 5, 6457-6466.	2.7	27
68	Phase stability and melting behavior of the $\hat{1}\pm$ and $\hat{1}^3$ phases of nylon 6. <i>Journal of Applied Polymer Science</i> , 2011, 120, 1885-1891.	1.3	26
69	New Strategy for Controlled Release of Drugs. Potential Pinpoint Targeting with Multiresponsive Tetraaniline Diblock Polymer Vesicles: Site-Directed Burst Release with Voltage. <i>ACS Applied Materials & Interfaces</i> , 2014, 6, 1470-1480.	4.0	25
70	Hydrogen bonding-assisted loosely packed crystals of a diaminomaleonitrile-modified tetraphenylethene compound and their photo- and mechano-responsive properties. <i>Journal of Materials Chemistry C</i> , 2017, 5, 11867-11872.	2.7	25
71	Fabricating high thermal conductivity rGO/polyimide nanocomposite films via a freeze-drying approach. <i>RSC Advances</i> , 2018, 8, 22169-22176.	1.7	24
72	Ultrahigh thermal and electric conductive graphite films prepared by g-C ₃ N ₄ catalyzed graphitization of polyimide films. <i>Chemical Engineering Journal</i> , 2022, 430, 132530.	6.6	24

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73	A facile approach to surface modification on versatile substrates for biological applications. <i>Journal of Materials Chemistry</i> , 2012, 22, 17159.	6.7	23
74	Achievement of persistent and efficient organic room-temperature phosphorescence with temperature-response by adjusting the proportion of excited-state configurations in coupled molecules. <i>Journal of Materials Chemistry C</i> , 2019, 7, 8250-8254.	2.7	20
75	Preserving High-Efficiency Luminescence Characteristics of an Aggregation-Induced Emission-Active Fluorophore in Thermostable Amorphous Polymers. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 34198-34207.	4.0	20
76	Underwater bonding strength of marine mussel-inspired polymers containing DOPA-like units with amino groups. <i>RSC Advances</i> , 2012, 2, 8919.	1.7	19
77	An oxidation-induced fluorescence turn-on approach for non-luminescent flexible polyimide films. <i>Journal of Materials Chemistry C</i> , 2017, 5, 8545-8552.	2.7	19
78	Improving Dielectric Properties and Thermostability of $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ /Polyimide Composites by Employing Surface Hydroxylated $\text{CaCu}_3\text{Ti}_4\text{O}_{12}$ Particles. <i>ACS Applied Polymer Materials</i> , 2019, 1, 1263-1271.	2.0	19
79	Metal Oxide CrO_x as a Promising Bilayer Electron Transport Material for Enhancing the Performance Stability of Planar Perovskite Solar Cells. <i>Solar Rrl</i> , 2018, 2, 1700245.	3.1	16
80	A simplified approach to achieve gecko-mimic nano-structural adhesives by a simple polymer. <i>International Journal of Adhesion and Adhesives</i> , 2011, 31, 583-586.	1.4	12
81	Synthesis and Characterization of Functional ABA Block Polymer Containing Aniline Trimer. <i>Chemistry Letters</i> , 2009, 38, 840-841.	0.7	10
82	Transparent Flexible Ultra-Low Permeability Encapsulation Film: Fusible Glass Fired on Heat-Resistant Polyimide Membrane. <i>Advanced Materials Interfaces</i> , 2020, 7, 2001170.	1.9	10
83	Pseudo target release behavior of simvastatin through pH-responsive polymer based on dynamic imine bonds: Promotes rapid proliferation of osteoblasts. <i>Materials Science and Engineering C</i> , 2020, 113, 110979.	3.8	10
84	Achieving white-light emission in a single-component polymer with halogen-assisted interaction. <i>Science China Chemistry</i> , 2021, 64, 467-477.	4.2	10
85	Nonvolatile electrical switching behavior and mechanism of functional polyimides bearing a pyrrole unit: influence of different side groups. <i>RSC Advances</i> , 2016, 6, 52798-52809.	1.7	9
86	New Dopa- AlE Compound Used as Fluorescence Sensor Material: Specificity and Quantification for $\text{Cu}(\text{II})$. <i>Chinese Journal of Chemistry</i> , 2017, 35, 335-340.	2.6	9
87	Synthesis and Characterization of Polyureas from Aniline Trimer with TDI, MDI and HDI as pH Sensitive Materials. <i>Chinese Journal of Chemistry</i> , 2011, 29, 1036-1040.	2.6	8
88	Environment-friendly silicone sealants by self-catalytic cross-linking reaction of β -aminomethyl triethoxysilanes. <i>Polymer Engineering and Science</i> , 2011, 51, 1033-1040.	1.5	7
89	Rigid Polyimides with Thermally Activated Delayed Fluorescence for Polymer Light-Emitting Diodes with High External Quantum Efficiency up to 21%. <i>Angewandte Chemie</i> , 2021, 133, 7296-7302.	1.6	6
90	Synthesis and characterization of novel optically active poly(ester-imide)s with high T_g and good thermal stability. <i>Polymers for Advanced Technologies</i> , 2013, 24, 807-813.	1.6	5

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91	Temperature-Induced Transformation from Large Compound Vesicles to Wormlike Aggregates by ABC Triblock Copolymer. Chinese Journal of Chemistry, 2015, 33, 1338-1346.	2.6	5
92	Preparation of Nacre-Like Polyimide/Montmorillonite Composite Films with Excellent Water Vapor Barrier Properties by Gravity-Induced Deposition. Advanced Materials Interfaces, 2021, 8, 2001786.	1.9	5
93	Reinforcing and toughening on poly(ether imide) by a novel thermo tropic liquid crystalline poly(ester-imide-ketone) with low content. Polymer Engineering and Science, 2009, 49, 2046-2053.	1.5	3
94	Simple Method to Fabricate an Biocompatible Antibacterial Surface on a Versatile Substrate through an Antiadhesion Approach. Chemistry Letters, 2012, 41, 1655-1657.	0.7	3
95	Functional polyimides based on diamine containing diarylethylene moieties and their photochromic mechanism studies. Polymer Chemistry, 2020, 11, 6701-6707.	1.9	3
96	Accelerated Curing Speed of Ethyl α -Cyanocrylate by Polymer with Catecholamine Groups. Chinese Journal of Chemistry, 2012, 30, 2275-2280.	2.6	2
97	Synthesis of Novel Glycidol Copolymers with Pendant Alkene and Hydroxyl Groups. Chinese Journal of Chemistry, 2013, 31, 1315-1320.	2.6	2
98	All Polyimide-Mixed Matrix Membranes for High Performance Gas Separation. Polymers, 2021, 13, 1329.	2.0	2
99	Metal Oxide CrOx as a Promising Bilayer Electron Transport Material for Enhancing the Performance Stability of Planar Perovskite Solar Cells (Solar RRL 6 th 2018). Solar Rrl, 2018, 2, 17700176.	3.1	0
100	Background noise analysis and improvement for the water vapor and oxygen transmission rate test of free-standing films. Review of Scientific Instruments, 2021, 92, 025124.	0.6	0