

Hui Huang

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5316277/publications.pdf>

Version: 2024-02-01

111
papers

5,740
citations

87723

38
h-index

79541

73
g-index

114
all docs

114
docs citations

114
times ranked

5237
citing authors

#	ARTICLE	IF	CITATIONS
1	Simple Nonfused Ring Electron Acceptors with Noncovalently Conformational Locks for Low-Cost and High-Performance Organic Solar Cells Enabled by End-Group Engineering. <i>Advanced Functional Materials</i> , 2022, 32, 2108861.	7.8	84
2	Efficient room temperature catalytic synthesis of alternating conjugated copolymers via C-S bond activation. <i>Nature Communications</i> , 2022, 13, 144.	5.8	21
3	Achieving Efficient NIR Type-II Photosensitizers for Photodynamic/Photothermal Therapy upon Regulating Chalcogen Elements. <i>Advanced Materials</i> , 2022, 34, e2108146.	11.1	116
4	Defect-Free Alternating Conjugated Polymers Enabled by Room-Temperature Stille Polymerization. <i>Angewandte Chemie - International Edition</i> , 2022, 61, .	7.2	15
5	Clean synthetic approaches toward small-molecule organic electronics. , 2022, , 95-143.		0
6	High-Performance All-Small-Molecule Organic Solar Cells Enabled by Regioisomerization of Noncovalently Conformational Locks. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	34
7	A Method for Increasing the Bandwidth of Rogowski Coils Without Changing Their Size. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-10.	2.4	7
8	Design and Optimization Methods of the Header of HDI PCB Rogowski Current Sensors. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2022, 71, 1-10.	2.4	1
9	Ti ₃ C ₂ T _x MXene/RAN van der Waals Heterostructure-Based Flexible Transparent NIR Photodetector Array for 1024 Pixel Image Sensing Application. <i>Advanced Materials Technologies</i> , 2022, 7, .	3.0	17
10	Air Stable Chalcogen-Doped Rubicenes with Diradical Character. <i>CCS Chemistry</i> , 2022, 4, 3669-3676.	4.6	11
11	Defect-Free Alternating Conjugated Polymers Enabled by Room-Temperature Stille Polymerization (<i>Angew. Chem.</i> 16/2022). <i>Angewandte Chemie</i> , 2022, 134, .	1.6	0
12	A New Noncovalently Fused Ring Electron Acceptor Based on 3,7-Dialkyloxybenzo[1,2-b:4,5-b']dithiophene for Low-Cost and High-Performance Organic Solar Cells. <i>Macromolecular Rapid Communications</i> , 2022, 43, e2200085.	2.0	5
13	Low-cost polymer acceptors with noncovalently fused-ring backbones for efficient all-polymer solar cells. <i>Science China Chemistry</i> , 2022, 65, 926-933.	4.2	22
14	The Aryl Sulfide Synthesis via Sulfide Transfer. <i>Chemistry - A European Journal</i> , 2022, , e202200869.	1.7	1
15	Binary Organic Solar Cells Breaking 19% via Manipulating the Vertical Component Distribution. <i>Advanced Materials</i> , 2022, 34, .	11.1	384
16	Synthetic Routes for Heteroatom-Containing Alkylated/Arylated Polycyclic Aromatic Hydrocarbons. <i>Angewandte Chemie</i> , 2021, 133, 2960-2964.	1.6	6
17	Crystallization Kinetics Modulation of FASn ₃ Films with Pre-nucleation Clusters for Efficient Lead-Free Perovskite Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 3693-3698.	7.2	80
18	Crystallization Kinetics Modulation of FASn ₃ Films with Pre-nucleation Clusters for Efficient Lead-Free Perovskite Solar Cells. <i>Angewandte Chemie</i> , 2021, 133, 3737-3742.	1.6	20

#	ARTICLE	IF	CITATIONS
19	An A-D-A ² -D-A type unfused nonfullerene acceptor for organic solar cells with approaching 14% efficiency. <i>Science China Chemistry</i> , 2021, 64, 228-231.	4.2	115
20	Acceptor-acceptor-type conjugated polymer semiconductors. <i>Journal of Energy Chemistry</i> , 2021, 59, 364-387.	7.1	28
21	Synthetic Routes for Heteroatom-Containing Alkylated/Arylated Polycyclic Aromatic Hydrocarbons. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 2924-2928.	7.2	14
22	A universal method for constructing high efficiency organic solar cells with stacked structures. <i>Energy and Environmental Science</i> , 2021, 14, 2314-2321.	15.6	75
23	High-Performance Noncovalently Fused-Ring Electron Acceptors for Organic Solar Cells Enabled by Noncovalent Intramolecular Interactions and End-Group Engineering. <i>Angewandte Chemie</i> , 2021, 133, 12583-12589.	1.6	31
24	Low-frequency performance of openable flexible double-loop Rogowski coil. <i>IET Science, Measurement and Technology</i> , 2021, 15, 578-587.	0.9	1
25	Enhancing Photovoltaic Performances of Naphthalene-Based Unfused-Ring Electron Acceptors upon Regioisomerization. <i>Solar Rrl</i> , 2021, 5, 2100094.	3.1	21
26	High-Performance Noncovalently Fused-Ring Electron Acceptors for Organic Solar Cells Enabled by Noncovalent Intramolecular Interactions and End-Group Engineering. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 12475-12481.	7.2	155
27	Side-Chain Engineering for Enhancing the Molecular Rigidity and Photovoltaic Performance of Noncovalently Fused-Ring Electron Acceptors. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 17720-17725.	7.2	113
28	Side-Chain Engineering for Enhancing the Molecular Rigidity and Photovoltaic Performance of Noncovalently Fused-Ring Electron Acceptors. <i>Angewandte Chemie</i> , 2021, 133, 17861-17866.	1.6	10
29	Self-powered flexible artificial synapse for near-infrared light detection. <i>Cell Reports Physical Science</i> , 2021, 2, 100507.	2.8	19
30	Enhancing the Photovoltaic Performance of Triplet Acceptors Enabled by Side-Chain Engineering. <i>Solar Rrl</i> , 2021, 5, 2100522.	3.1	12
31	Self-Powered Organic Photodetectors with High Detectivity for Near Infrared Light Detection Enabled by Dark Current Reduction. <i>Advanced Functional Materials</i> , 2021, 31, 2106326.	7.8	70
32	Optoelectronic properties and aggregation effects on the performance of planar versus contorted pyrene-cored perylene-diimide dimers for organic solar cells. <i>Dyes and Pigments</i> , 2020, 173, 107976.	2.0	8
33	Flexible Short-Wave Infrared Image Sensors Enabled by High-Performance Polymeric Photodetectors. <i>Macromolecules</i> , 2020, 53, 10636-10643.	2.2	42
34	Frontispiece: Perylene Diimide-Based Conjugated Polymers for All-Polymer Solar Cells. <i>Chemistry - A European Journal</i> , 2020, 26, .	1.7	0
35	Tobin Marks TM 75th birthday. A celebration of a career devoted to materials chemistry. <i>Journal of Materials Chemistry C</i> , 2020, 8, 14979-14982.	2.7	0
36	Precisely Tuning Photothermal and Photodynamic Effects of Polymeric Nanoparticles by Controlled Copolymerization. <i>Angewandte Chemie</i> , 2020, 132, 12856-12861.	1.6	7

#	ARTICLE	IF	CITATIONS
37	Triplet Acceptors with a D _{3h} Structure and Twisted Conformation for Efficient Organic Solar Cells. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 15043-15049.	7.2	77
38	Triplet Acceptors with a D _{3h} Structure and Twisted Conformation for Efficient Organic Solar Cells. <i>Angewandte Chemie</i> , 2020, 132, 15153-15159.	1.6	11
39	Ultra-stable tellurium-doped carbon quantum dots for cell protection and near-infrared photodynamic application. <i>Science Bulletin</i> , 2020, 65, 1580-1586.	4.3	17
40	Effect of Frequency on the Linearity of Double-Layer and Single-Layer Rogowski Coils. <i>IEEE Sensors Journal</i> , 2020, 20, 9910-9918.	2.4	8
41	Perylene Diimide-Based Conjugated Polymers for All-Polymer Solar Cells. <i>Chemistry - A European Journal</i> , 2020, 26, 12510-12522.	1.7	29
42	Achieving High-Performance Photothermal and Photodynamic Effects upon Combining D _{3h} Structure and Nonplanar Conformation. <i>Small</i> , 2020, 16, e2000909.	5.2	56
43	S π -Cl intramolecular interaction: An efficient strategy to improve power conversion efficiency of organic solar cells. <i>Dyes and Pigments</i> , 2020, 179, 108416.	2.0	11
44	Precisely Tuning Photothermal and Photodynamic Effects of Polymeric Nanoparticles by Controlled Copolymerization. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 12756-12761.	7.2	50
45	Thermoelectric Properties of Nano-grained Mooihoekite Cu ₉ Fe ₉ S ₁₆ . <i>Zeitschrift Fur Anorganische Und Allgemeine Chemie</i> , 2020, 646, 1116-1121.	0.6	11
46	Toward Achieving Single-Molecule White Electroluminescence from Dual Emission of Fluorescence and Phosphorescence. <i>Chemistry of Materials</i> , 2020, 32, 4038-4044.	3.2	57
47	Aromatic imide/amide-based organic small-molecule emitters for organic light-emitting diodes. <i>Materials Chemistry Frontiers</i> , 2020, 4, 1554-1568.	3.2	39
48	Microwave-Assisted Classic Ullmann C-C Coupling Polymerization for Acceptor-Acceptor Homopolymers. <i>Polymers</i> , 2019, 11, 1741.	2.0	3
49	Modeling and Analyzing the Mutual Inductance of Rogowski Coils of Arbitrary Skeleton. <i>Sensors</i> , 2019, 19, 3397.	2.1	8
50	Combination of noncovalent conformational locks and side chain engineering to tune the crystallinity of nonfullerene acceptors for high-performance P3HT based organic solar cells. <i>Materials Chemistry Frontiers</i> , 2019, 3, 64-69.	3.2	24
51	AMPK mediates the neurotoxicity of iron oxide nanoparticles retained in mitochondria or lysosomes. <i>Metallomics</i> , 2019, 11, 1200-1206.	1.0	9
52	The Synthesis and Optoelectronic Applications for Tellurophene-Based Small Molecules and Polymers. <i>ChemPhysChem</i> , 2019, 20, 2600-2607.	1.0	17
53	Thiophene: An eco-friendly solvent for organic solar cells. <i>Dyes and Pigments</i> , 2019, 168, 36-41.	2.0	8
54	Triplet Tellurophene-Based Semiconducting Polymer Nanoparticles for Near-Infrared-Mediated Cancer Theranostics. <i>ACS Applied Materials & Interfaces</i> , 2019, 11, 17884-17893.	4.0	27

#	ARTICLE	IF	CITATIONS
55	Benzotriazole-Based p-Type Polymers with Thieno[3,2- <i>b</i>]thiophene π -Bridges and Fluorine Substituents To Realize High V_{OC} . ACS Applied Polymer Materials, 2019, 1, 906-913.	2.0	26
56	Significant enhancement of responsivity of organic photodetectors upon molecular engineering. Journal of Materials Chemistry C, 2019, 7, 5739-5747.	2.7	28
57	Sulfur vs. tellurium: the heteroatom effects on the nonfullerene acceptors. Science China Chemistry, 2019, 62, 897-903.	4.2	10
58	Converting Thioether Waste into Organic Semiconductors by Carbon-Sulfur Bond Activation. Angewandte Chemie, 2019, 131, 5098-5102.	1.6	1
59	Converting Thioether Waste into Organic Semiconductors by Carbon-Sulfur Bond Activation. Angewandte Chemie - International Edition, 2019, 58, 5044-5048.	7.2	12
60	Mutual Inductance Between Arbitrary Conductor and Rogowski Coil With Circular Skeleton and Gap Compensation. IEEE Sensors Journal, 2019, 19, 4106-4114.	2.4	12
61	Simultaneous Enhancement of Three Parameters of P3HT-Based Organic Solar Cells with One Oxygen Atom. Advanced Energy Materials, 2019, 9, 1803012.	10.2	54
62	Simply tuning the electron deficient units to achieve P and N-type conjugated polymers for organic solar cells. Dyes and Pigments, 2019, 162, 728-733.	2.0	1
63	Uncommon Aggregation-Induced Emission Molecular Materials with Highly Planar Conformations. Advanced Optical Materials, 2018, 6, 1701394.	3.6	37
64	Significant Enhancement of Photothermal and Photoacoustic Efficiencies for Semiconducting Polymer Nanoparticles through Simply Molecular Engineering. Advanced Functional Materials, 2018, 28, 1800135.	7.8	68
65	A Highly Planar Nonfullerene Acceptor with Multiple Noncovalent Conformational Locks for Efficient Organic Solar Cells. Small Methods, 2018, 2, 1700330.	4.6	35
66	Tellurophene-Based Random Copolymers for High Responsivity and Detectivity Photodetectors. ACS Applied Materials & Interfaces, 2018, 10, 1917-1924.	4.0	23
67	Triplet Tellurophene-Based Acceptors for Organic Solar Cells. Angewandte Chemie, 2018, 130, 1108-1114.	1.6	26
68	Triplet Tellurophene-Based Acceptors for Organic Solar Cells. Angewandte Chemie - International Edition, 2018, 57, 1096-1102.	7.2	125
69	Noncovalent conformational locks in organic semiconductors. Science China Chemistry, 2018, 61, 1359-1367.	4.2	60
70	Tellurophene-based metal-organic framework nanosheets for high-performance organic solar cells. Journal of Power Sources, 2018, 401, 13-19.	4.0	44
71	Iris-Like Acceptor with Most PDI Units for Organic Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 28812-28818.	4.0	32
72	One-Pot Catalytic Cleavage of C=C Double Bonds by Pd Catalysts at Room Temperature. Inorganic Chemistry, 2018, 57, 9266-9273.	1.9	5

#	ARTICLE	IF	CITATIONS
73	Ternary blend polymer solar cells with two non-fullerene acceptors as acceptor alloy. <i>Dyes and Pigments</i> , 2017, 141, 388-393.	2.0	17
74	Halogenated conjugated molecules for ambipolar field-effect transistors and non-fullerene organic solar cells. <i>Materials Chemistry Frontiers</i> , 2017, 1, 1389-1395.	3.2	173
75	Significantly improving the efficiency of polymer solar cells through incorporating noncovalent conformational locks. <i>Materials Chemistry Frontiers</i> , 2017, 1, 1317-1323.	3.2	17
76	Fine-tuning solid state packing and significantly improving photovoltaic performance of conjugated polymers through side chain engineering via random polymerization. <i>Journal of Materials Chemistry A</i> , 2017, 5, 5585-5593.	5.2	20
77	Achieving High Performance Ternary Organic Solar Cells through Tuning Acceptor Alloy. <i>Advanced Materials</i> , 2017, 29, 1603154.	11.1	171
78	Recent advances in organic ternary solar cells. <i>Journal of Materials Chemistry A</i> , 2017, 5, 11501-11517.	5.2	106
79	The influence of numbers of subunits on the photovoltaic performance of non-fullerene acceptors. <i>Synthetic Metals</i> , 2017, 231, 19-24.	2.1	4
80	PEDOT:PSS Assisted Exfoliation and Functionalization of 2D Nanosheets for High Performance Organic Solar Cells. <i>Advanced Functional Materials</i> , 2017, 27, 1701622.	7.8	46
81	Noncovalent Se-As-O Conformational Locks for Constructing High Performing Optoelectronic Conjugated Polymers. <i>Advanced Materials</i> , 2017, 29, 1606025.	11.1	84
82	High Performing Ternary Solar Cells through Förster Resonance Energy Transfer between Nonfullerene Acceptors. <i>ACS Applied Materials & Interfaces</i> , 2017, 9, 26928-26936.	4.0	44
83	Tuning V_{oc} for high performance organic ternary solar cells with non-fullerene acceptor alloys. <i>Journal of Materials Chemistry A</i> , 2017, 5, 19697-19702.	5.2	94
84	Significant enhancement of photovoltaic performance through introducing N conformational locks. <i>Journal of Materials Chemistry A</i> , 2017, 5, 21674-21678.	5.2	87
85	Wide bandgap small molecular acceptors for low energy loss organic solar cells. <i>Journal of Materials Chemistry C</i> , 2017, 5, 12591-12596.	2.7	39
86	Organic and Polymeric Semiconductors Enhanced by Noncovalent Conformational Locks. <i>Chemical Reviews</i> , 2017, 117, 10291-10318.	23.0	575
87	Hydrolytic cleavage of both CS ₂ carbon-sulfur bonds by multinuclear Pd(II) complexes at room temperature. <i>Nature Chemistry</i> , 2017, 9, 188-193.	6.6	57
88	A Wave Splitter with Simple Structure Based on Biaxial Anisotropic Medium. <i>International Journal of Antennas and Propagation</i> , 2017, 2017, 1-7.	0.7	1
89	Achieving high performance non-fullerene organic solar cells through tuning the numbers of electron deficient building blocks of molecular acceptors. <i>Journal of Power Sources</i> , 2016, 324, 538-546.	4.0	38
90	Tellurophene-Based N-type Copolymers for Photovoltaic Applications. <i>ACS Applied Materials & Interfaces</i> , 2016, 8, 34620-34629.	4.0	35

#	ARTICLE	IF	CITATIONS
91	MoS ₂ Quantum Dots with a Tunable Work Function for High-Performance Organic Solar Cells. ACS Applied Materials & Interfaces, 2016, 8, 26916-26923.	4.0	77
92	High-Performance All-Polymer Photoresponse Devices Based on Acceptor-Conjugated Polymers. Advanced Functional Materials, 2016, 26, 6306-6315.	7.8	88
93	Improved efficiency of ternary the blend polymer solar cells by doping a narrow band gap polymer material. Science China: Physics, Mechanics and Astronomy, 2015, 58, 1-5.	2.0	1
94	Doping a D-A structural polymer based on benzodithiophene and triazoloquinoxaline for efficiency improvement of ternary solar cells. Electronic Materials Letters, 2015, 11, 236-240.	1.0	8
95	Efficiency Enhancement in Polymer Solar Cells With a Polar Small Molecule Both at Interface and in the Bulk Heterojunction Layer. IEEE Journal of Photovoltaics, 2015, 5, 1408-1413.	1.5	5
96	Ultrathin Anode Buffer Layer for Enhancing Performance of Polymer Solar Cells. International Journal of Photoenergy, 2014, 2014, 1-6.	1.4	7
97	Alkoxy-Functionalized Thienyl-Vinylene Polymers for Field-Effect Transistors and All-Polymer Solar Cells. Advanced Functional Materials, 2014, 24, 2782-2793.	7.8	83
98	Morphology-Performance Relationships in High-Efficiency All-Polymer Solar Cells. Advanced Energy Materials, 2014, 4, 1300785.	10.2	227
99	The effect of DIO additive on performance improvement of polymer solar cells. Science Bulletin, 2014, 59, 3227-3231.	1.7	7
100	Performance of Preconditioned Nonstationary Methods for Electromagnetic Scattering From One Dimensional Dielectric Rough Surfaces. IEEE Transactions on Antennas and Propagation, 2014, 62, 5362-5365.	3.1	1
101	Fused Thiophene Semiconductors: Crystal Structure-Film Microstructure Transistor Performance Correlations. Advanced Functional Materials, 2013, 23, 3850-3865.	7.8	34
102	Goos-Hänchen Lateral Displacements at the Interface between Isotropic and Gyroelectric Media. International Journal of Antennas and Propagation, 2013, 2013, 1-6.	0.7	4
103	Anthracenedicarboximide-based semiconductors for air-stable, n-channel organic thin-film transistors: materials design, synthesis, and structural characterization. Journal of Materials Chemistry, 2012, 22, 4459-4472.	6.7	51
104	Combining Electron-Neutral Building Blocks with Intramolecular Conformational Locks-Affords Stable, High-Mobility P- and N-Channel Polymer Semiconductors. Journal of the American Chemical Society, 2012, 134, 10966-10973.	6.6	220
105	Influence of Thiol Self-Assembled Monolayer Processing on Bottom-Contact Thin-Film Transistors Based on n-Type Organic Semiconductors. Advanced Functional Materials, 2012, 22, 1856-1869.	7.8	84
106	Versatile π -Conjugated Disubstituted Tetrathienoacene Semiconductors for High Performance Organic Thin-Film Transistors. Advanced Functional Materials, 2012, 22, 48-60.	7.8	82
107	Very Large Silacyclic Substituent Effects on Response in Silole-Based Polymer Transistors. Chemistry of Materials, 2011, 23, 2185-2200.	3.2	38
108	Positively and negatively large Goos-Hänchen lateral displacements from a symmetric gyrotropic slab. Applied Physics A: Materials Science and Processing, 2009, 94, 917-922.	1.1	10

#	ARTICLE	IF	CITATIONS
109	Design, Synthesis, and Characterization of Ladder-Type Molecules and Polymers. Air-Stable, Solution-Processable <i>n</i> -Channel and Ambipolar Semiconductors for Thin-Film Transistors via Experiment and Theory. <i>Journal of the American Chemical Society</i> , 2009, 131, 5586-5608.	6.6	481
110	Quasi-Steady-State Rotor EMF-Oriented Vector Control of Doubly Fed Winding Induction Generators for Wind-Energy Generation. <i>Electric Power Components and Systems</i> , 2006, 34, 1201-1211.	1.0	11
111	Defect-Free Alternating Conjugated Polymers Enabled by Room-Temperature Stille Polymerization. <i>Angewandte Chemie</i> , 0, , .	1.6	0