

Haijun Fan

List of Publications by Citations

Source: <https://exaly.com/author-pdf/5378080/haijun-fan-publications-by-citations.pdf>

Version: 2024-04-23

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

108
papers

4,564
citations

35
h-index

65
g-index

112
ext. papers

5,326
ext. citations

11
avg, IF

6.13
L-index

#	Paper	IF	Citations
108	High-efficiency small-molecule ternary solar cells with a hierarchical morphology enabled by synergizing fullerene and non-fullerene acceptors. <i>Nature Energy</i> , 2018 , 3, 952-959	62.3	453
107	A Thieno[3,4-b]thiophene-Based Non-fullerene Electron Acceptor for High-Performance Bulk-Heterojunction Organic Solar Cells. <i>Journal of the American Chemical Society</i> , 2016 , 138, 15523-15526	16.4	269
106	Efficient Semitransparent Solar Cells with High NIR Responsiveness Enabled by a Small-Bandgap Electron Acceptor. <i>Advanced Materials</i> , 2017 , 29, 1606574	24	224
105	Subtle Molecular Tailoring Induces Significant Morphology Optimization Enabling over 16% Efficiency Organic Solar Cells with Efficient Charge Generation. <i>Advanced Materials</i> , 2020 , 32, e1906324	24	203
104	A Twisted Thieno[3,4-b]thiophene-Based Electron Acceptor Featuring a 14- π -Electron Indenoindene Core for High-Performance Organic Photovoltaics. <i>Advanced Materials</i> , 2017 , 29, 1704510	24	177
103	Electron transfer through rigid organic molecular wires enhanced by electronic and electron-vibration coupling. <i>Nature Chemistry</i> , 2014 , 6, 899-905	17.6	160
102	Design of a New Fused-Ring Electron Acceptor with Excellent Compatibility to Wide-Bandgap Polymer Donors for High-Performance Organic Photovoltaics. <i>Advanced Materials</i> , 2018 , 30, e1800403	24	152
101	Organic Solar Cells with 18% Efficiency Enabled by an Alloy Acceptor: A Two-in-One Strategy. <i>Advanced Materials</i> , 2021 , 33, e2100830	24	136
100	Two-dimensional β -expanded quinoidal terthiophenes terminated with dicyanomethylenes as n-type semiconductors for high-performance organic thin-film transistors. <i>Journal of the American Chemical Society</i> , 2014 , 136, 16176-84	16.4	132
99	n-Type Molecular Photovoltaic Materials: Design Strategies and Device Applications. <i>Journal of the American Chemical Society</i> , 2020 , 142, 11613-11628	16.4	130
98	Thieno[3,4-b]thiophene-Based Novel Small-Molecule Optoelectronic Materials. <i>Accounts of Chemical Research</i> , 2017 , 50, 1342-1350	24.3	113
97	Air- and heat-stable planar tri-p-quinodimethane with distinct biradical characteristics. <i>Journal of the American Chemical Society</i> , 2011 , 133, 16342-5	16.4	109
96	Low bandgap β -conjugated copolymers based on fused thiophenes and benzothiadiazole: Synthesis and structure-property relationship study. <i>Journal of Polymer Science Part A</i> , 2009 , 47, 5498-5508	2.5	97
95	13.7% Efficiency Small-Molecule Solar Cells Enabled by a Combination of Material and Morphology Optimization. <i>Advanced Materials</i> , 2019 , 31, e1904283	24	85
94	Carbon-bridged oligo(p-phenylenevinylene)s for photostable and broadly tunable, solution-processable thin film organic lasers. <i>Nature Communications</i> , 2015 , 6, 8458	17.4	82
93	Carbon-bridged oligo(phenylenevinylene)s: stable β -systems with high responsiveness to doping and excitation. <i>Journal of the American Chemical Society</i> , 2012 , 134, 19254-9	16.4	79
92	Pursuing High-Mobility n-Type Organic Semiconductors by Combination of "Molecule-Framework" and "Side-Chain" Engineering. <i>Advanced Materials</i> , 2016 , 28, 8456-8462	24	78

91	Modular synthesis of 1H-indenes, dihydro-s-indacene, and diindenoindacene--a carbon-bridged p-phenylenevinylene congener. <i>Journal of the American Chemical Society</i> , 2009 , 131, 13596-7	16.4	77
90	Efficient Solution-Processed n-Type Small-Molecule Thermoelectric Materials Achieved by Precisely Regulating Energy Level of Organic Dopants. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 28795-28807	16.4	63
89	Air-Stable n-Type Thermoelectric Materials Enabled by Organic Diradicaloids. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 4958-4962	16.4	61
88	A Copolymer of Benzodithiophene with TIPS Side Chains for Enhanced Photovoltaic Performance. <i>Macromolecules</i> , 2011 , 44, 9173-9179	5.5	57
87	Efficiency enhancement in small molecule bulk heterojunction organic solar cells via additive. <i>Applied Physics Letters</i> , 2010 , 97, 133302	3.4	56
86	Accurate Determination of the Minimum HOMO Offset for Efficient Charge Generation using Organic Semiconducting Alloys. <i>Advanced Energy Materials</i> , 2020 , 10, 1903298	21.8	56
85	A wide-bandgap D π A copolymer donor based on a chlorine substituted acceptor unit for high performance polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 14070-14078	13	51
84	Multifaceted Regioregular Oligo(thieno[3,4-b]thiophene)s Enabled by Tunable Quinoidization and Reduced Energy Band Gap. <i>Journal of the American Chemical Society</i> , 2015 , 137, 10357-66	16.4	47
83	New sensitizers for dye-sensitized solar cells featuring a carbon-bridged phenylenevinylene. <i>Chemical Communications</i> , 2013 , 49, 582-4	5.8	46
82	Diaceno[a,e]pentalenes from homoannulations of o-alkynylaryliodides utilizing a unique Pd(OAc) ₂ /n-Bu ₄ NOAc catalytic combination. <i>Organic Letters</i> , 2014 , 16, 4924-7	6.2	44
81	Isomery-Dependent Miscibility Enables High-Performance All-Small-Molecule Solar Cells. <i>Small</i> , 2019 , 15, e1804271	11	43
80	Revealing the Critical Role of the HOMO Alignment on Maximizing Current Extraction and Suppressing Energy Loss in Organic Solar Cells. <i>Science</i> , 2019 , 19, 883-893	6.1	42
79	Developing Quinoidal Fluorophores with Unusually Strong Red/Near-Infrared Emission. <i>Journal of the American Chemical Society</i> , 2015 , 137, 11294-302	16.4	42
78	Soluble dithienothiophene polymers: Effect of link pattern. <i>Journal of Polymer Science Part A</i> , 2009 , 47, 2843-2852	2.5	41
77	Planarization, fusion, and strain of carbon-bridged phenylenevinylene oligomers enhance electron and charge conjugation: a dissectional vibrational Raman study. <i>Journal of the American Chemical Society</i> , 2015 , 137, 3834-43	16.4	39
76	Development of small-molecule materials for high-performance organic solar cells. <i>Science China Chemistry</i> , 2015 , 58, 922-936	7.9	37
75	Diaceno[a,e]pentalenes: An Excellent Molecular Platform for High-Performance Organic Semiconductors. <i>Chemistry - A European Journal</i> , 2015 , 21, 17016-22	4.8	36
74	Synthesis and photovoltaic properties of copolymers of carbazole and thiophene with conjugated side chain containing acceptor end groups. <i>Polymer Chemistry</i> , 2011 , 2, 1678	4.9	36

73	Poly(3-hexylthiophene)-based non-fullerene solar cells achieve high photovoltaic performance with small energy loss. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 16573-16579	13	35
72	Dithienosilole-based non-fullerene acceptors for efficient organic photovoltaics. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 4266-4270	13	34
71	Low-bandgap thieno[3,4-c]pyrrole-4,6-dione-polymers for high-performance solar cells with significantly enhanced photocurrents. <i>Journal of Materials Chemistry A</i> , 2015 , 3, 11194-11198	13	33
70	Bis-Silicon-Bridged Stilbene: A Core for Small-Molecule Electron Acceptor for High-Performance Organic Solar Cells. <i>Chemistry of Materials</i> , 2018 , 30, 587-591	9.6	33
69	Photophysical Properties of Intramolecular Charge Transfer in a Tribranched Donor-Acceptor Chromophore. <i>ChemPhysChem</i> , 2015 , 16, 2357-65	3.2	33
68	Copolymers of fluorene and thiophene with conjugated side chain for polymer solar cells: Effect of pendant acceptors. <i>Journal of Polymer Science Part A</i> , 2011 , 49, 1462-1470	2.5	33
67	An electron-rich 2-alkylthieno[3,4-b]thiophene building block with excellent electronic and morphological tunability for high-performance small-molecule solar cells. <i>Journal of Materials Chemistry A</i> , 2016 , 4, 17354-17362	13	32
66	New X-shaped oligothiophenes for solution-processed solar cells. <i>Journal of Materials Chemistry</i> , 2011 , 21, 9667		31
65	An Efficient and Color-Tunable Solution-Processed Organic Thin-Film Laser with a Polymeric Top-Layer Resonator. <i>Advanced Optical Materials</i> , 2017 , 5, 1700238	8.1	30
64	High-Performance Polymer Solar Cells Achieved by Introducing Side-Chain Heteroatom on Small-Molecule Electron Acceptor. <i>Macromolecular Rapid Communications</i> , 2019 , 40, e1800393	4.8	29
63	A two-dimensional halogenated thiophene side-chain strategy for balancing Voc and Jsc and improving efficiency of non-fullerene small molecule acceptor-based organic solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 20274-20284	13	27
62	Stable Cross-Conjugated Tetrathiophene Diradical. <i>Angewandte Chemie - International Edition</i> , 2019 , 58, 11291-11295	16.4	26
61	Synthesis and photovoltaic properties of DA copolymers of benzodithiophene and naphtho[2,3-c]thiophene-4,9-dione. <i>Polymer Chemistry</i> , 2012 , 3, 99-104	4.9	25
60	One-pot synthesis of electron-acceptor composite enables efficient fullerene-free ternary organic solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 22519-22525	13	25
59	Cathode interfacial layer-free all small-molecule solar cells with efficiency over 12%. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 15944-15950	13	24
58	Thiazolothiazole-containing polythiophenes with low HOMO level and high hole mobility for polymer solar cells. <i>Journal of Polymer Science Part A</i> , 2011 , 49, 4875-4885	2.5	24
57	Carbon-Bridged 1,2-Bis(2-thienyl)ethylene: An Extremely Electron Rich Dithiophene Building Block Enabling Electron Acceptors with Absorption above 1000 nm for Highly Sensitive NIR Photodetectors. <i>Journal of the American Chemical Society</i> , 2021 , 143, 4281-4289	16.4	24
56	Ullmann-Type Intramolecular C-O Reaction Toward Thieno[3,2-b]furan Derivatives with up to Six Fused Rings. <i>Journal of Organic Chemistry</i> , 2017 , 82, 10920-10927	4.2	23

55	A Designed Ladder-Type Heteroarene Benzodi(Thienopyran) for High-Performance Fullerene-Free Organic Solar Cells. <i>Solar Rrl</i> , 2017 , 1, 1700165	7.1	23
54	n-Type Quinoidal Oligothiophene-Based Semiconductors for Thin-Film Transistors and Thermoelectrics. <i>Advanced Functional Materials</i> , 2020 , 30, 2000765	15.6	22
53	Insight into thin-film stacking modes of expanded quinoidal molecules on charge transport property via side-chain engineering. <i>Journal of Materials Chemistry C</i> , 2017 , 5, 1935-1943	7.1	20
52	1,3-Bis(thieno[3,4-b]thiophen-6-yl)-4H-thieno[3,4-c]pyrrole-4,6(5H)-dione-Based Small-Molecule Donor for Efficient Solution-Processed Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2017 , 9, 6213-6219	9.5	19
51	Low-Bandgap Small-Molecule Donor Material Containing Thieno[3,4-b]thiophene Moiety for High-Performance Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 3661-8	9.5	19
50	Evolved phase separation toward balanced charge transport and high efficiency in polymer solar cells. <i>ACS Applied Materials & Interfaces</i> , 2011 , 3, 3646-53	9.5	19
49	Synthesis and photovoltaic properties of copolymers based on bithiophene and bithiazole. <i>Journal of Polymer Science Part A</i> , 2011 , 49, 2746-2754	2.5	19
48	Star-shaped magnesium tetraethynylporphyrin bearing four peripheral electron-accepting diketopyrrolopyrrole functionalities for organic solar cells. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 4072-4083	13	17
47	Amine-Amine Electronic Coupling through a Dibenzo[a,e]pentalene Bridge. <i>Organic Letters</i> , 2016 , 18, 256-9	6.2	17
46	Spatial Distribution Recast for Organic Bulk Heterojunctions for High-Performance All-Inorganic Perovskite/Organic Integrated Solar Cells. <i>Advanced Energy Materials</i> , 2020 , 10, 2000851	21.8	16
45	Isomeric indacenedibenzothiophenes: synthesis, photoelectric properties and ambipolar semiconductivity. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 5202-5206	7.1	16
44	Design and synthesis of medium-bandgap small-molecule electron acceptors for efficient tandem solar cells. <i>Journal of Materials Chemistry A</i> , 2018 , 6, 13588-13592	13	16
43	A large-bandgap small-molecule electron acceptor utilizing a new indacenodibenzothiophene core for organic solar cells. <i>Materials Chemistry Frontiers</i> , 2018 , 2, 136-142	7.8	15
42	Applying the heteroatom effect of chalcogen for high-performance small-molecule solar cells. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 3425-3433	13	13
41	Carbon-Bridged Phenylene-Vinylens: On the Common Diradicaloid Origin of Their Photonic and Chemical Properties. <i>Journal of Physical Chemistry C</i> , 2017 , 121, 23141-23148	3.8	13
40	Electric Field Facilitating Hole Transfer in Non-Fullerene Organic Solar Cells with a Negative HOMO Offset. <i>Journal of Physical Chemistry C</i> , 2020 , 124, 15132-15139	3.8	12
39	A thieno[3,4-b]thiophene linker enables a low-bandgap fluorene-cored molecular acceptor for efficient non-fullerene solar cells. <i>Materials Chemistry Frontiers</i> , 2018 , 2, 760-767	7.8	12
38	Design of All-Fused-Ring Electron Acceptors with High Thermal, Chemical, and Photochemical Stability for Organic Photovoltaics. <i>CCS Chemistry</i> , 2021 , 3, 1070-1080	7.2	12

37	Small bandgap non-fullerene acceptor enables efficient PTB7-Th solar cell with near 0 eV HOMO offset. <i>Journal of Energy Chemistry</i> , 2021 , 52, 60-66	12	12
36	Conjugation-Curtailing of Benzodithionopyran-Cored Molecular Acceptor Enables Efficient Air-Processed Small Molecule Solar Cells. <i>Small</i> , 2019 , 15, e1902656	11	11
35	Marcus Hole Transfer Governs Charge Generation and Device Operation in Nonfullerene Organic Solar Cells. <i>ACS Energy Letters</i> , 2021 , 6, 2971-2981	20.1	11
34	Fast construction of dianthraceno[a,e]pentalenes for OPV applications. <i>Organic Chemistry Frontiers</i> , 2017 , 4, 711-716	5.2	10
33	Air-Stable n-Type Thermoelectric Materials Enabled by Organic Diradicaloids. <i>Angewandte Chemie</i> , 2019 , 131, 5012-5016	3.6	10
32	High-Performance Inverted Polymer Solar Cells with Zirconium Acetylacetonate Buffer Layers. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 33856-33862	9.5	10
31	Thieno[3,4-c]pyrrole-4,6-dione Oligothiophenes Have Two Crossed Paths for Electron Delocalization. <i>Chemistry - A European Journal</i> , 2018 , 24, 13523-13534	4.8	10
30	One-pot synthesis and property study on thieno[3,2-]furan compounds.. <i>RSC Advances</i> , 2019 , 9, 7123-7127	3.7	9
29	A benzo[1,2-d:4,5-d']bisthiazole-based wide-bandgap copolymer semiconductor for efficient fullerene-free organic solar cells with a small energy loss of 0.50 eV. <i>Journal of Materials Chemistry A</i> , 2019 , 7, 5234-5238	13	9
28	Radically Tunable n-Type Organic Semiconductor via Polymorph Control. <i>Chemistry of Materials</i> , 2021 , 33, 2466-2477	9.6	9
27	PCE11-based polymer solar cells with high efficiency over 13% achieved by room-temperature processing. <i>Journal of Materials Chemistry A</i> , 2020 , 8, 8661-8668	13	9
26	Theory-Guided Material Design Enabling High-Performance Multifunctional Semitransparent Organic Photovoltaics without Optical Modulations.. <i>Advanced Materials</i> , 2022 , e2200337	24	8
25	A 2-(trifluoromethyl)thieno[3,4-b]thiophene-based small-molecule electron acceptor for polymer solar cell application. <i>Dyes and Pigments</i> , 2018 , 155, 179-185	4.6	7
24	Design of a Quinoidal Thieno[3,4-b]thiophene-Diketopyrrolopyrrole-Based Small Molecule as n-Type Semiconductor. <i>Chemistry - an Asian Journal</i> , 2019 , 14, 1717-1722	4.5	7
23	Thermal-assisted Voc increase in an indenoindene-based non-fullerene solar system. <i>Dyes and Pigments</i> , 2019 , 165, 18-24	4.6	6
22	A thieno[3,4-b]thiophene-based small-molecule donor with a extended dithienobenzodithiophene core for efficient solution-processed organic solar cells. <i>Materials Chemistry Frontiers</i> , 2017 , 1, 2349-2355	7.8	6
21	Modulating Structure Ordering via Side-Chain Engineering of Thieno[3,4-]thiophene-Based Electron Acceptors for Efficient Organic Solar Cells with Reduced Energy Losses. <i>ACS Applied Materials & Interfaces</i> , 2019 , 11, 35193-35200	9.5	5
20	Boosted photovoltaic performance of indenothiophene-based molecular acceptor via fusing a thiophene. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 630-636	7.1	5

19	Facile Modification of a Noncovalently Fused-Ring Electron Acceptor Enables Efficient Organic Solar Cells. <i>ACS Applied Materials & Interfaces</i> , 2021 , 13, 45806-45814	9.5	5
18	Near-Infrared All-Fused-Ring Nonfullerene Acceptors Achieving an Optimal Efficiency-Cost-Stability Balancing in Organic Solar Cells. <i>CCS Chemistry</i> ,1-33	7.2	4
17	Effect of Benzene Rings Incorporation on Photovoltaic Performance of Indacenodithiophene-cored Molecular Acceptors. <i>Chinese Journal of Chemistry</i> , 2018 , 36, 306-310	4.9	3
16	Steric-Hindrance Modulation toward High-Performance 1,3-Bis(thieno[3,4-b]thiophen-6-yl)-4H-thieno[3,4-c]pyrrole-4,6(5H)-dione-Based Polymer Solar Cells with Enhanced Open-Circuit Voltage. <i>Advanced Electronic Materials</i> , 2017 , 3, 1700213	6.4	3
15	High-Performance Ternary Organic Solar Cells Enabled by Combining Fullerene and Nonfullerene Electron Acceptors. <i>Organic Materials</i> , 2019 , 01, 030-037	1.9	3
14	ADDA type non-fullerene acceptors based on the benzotriazole (BTA) unfused core for organic solar cells. <i>New Journal of Chemistry</i> , 2021 , 45, 12802-12807	3.6	3
13	Oxygen heterocycle-fused indacenodithiophenebithiophene enables an efficient non-fullerene molecular acceptor. <i>Journal of Materials Chemistry C</i> , 2019 , 7, 15344-15349	7.1	2
12	Design of All-Fused-Ring Nonfullerene Acceptor for Highly Sensitive Self-Powered Near-Infrared Organic Photodetectors882-890		2
11	Organic Photovoltaics Integrated with Thermoelectric Generator Achieving Low Critical Temperature Difference and Efficient Energy Conversion. <i>Advanced Functional Materials</i> , 2022 , 32, 2109410	15.6	2
10	Efficient NDT small molecule solar cells with high fill factor using pendant group engineering. <i>Journal of Materials Chemistry C</i> , 2020 , 8, 7561-7566	7.1	1
9	Regulation of excitation transitions by molecular design endowing full-color-tunable emissions with unexpected high quantum yields for bioimaging application. <i>Science China Chemistry</i> , 2018 , 61, 4184-426	7.9	1
8	Synthesis and characterizations of poly(4-alkylthiazole vinylene). <i>Journal of Applied Polymer Science</i> , 2012 , 124, 847-854	2.9	1
7	Vacuum-deposited organic solar cells utilizing a low-bandgap non-fullerene acceptor. <i>Journal of Materials Chemistry C</i> ,	7.1	1
6	Manipulating the Crystalline Morphology in the Nonfullerene Acceptor Mixture to Improve the Carrier Transport and Suppress the Energetic Disorder. <i>Small Science</i> ,2100092		1
5	Seeing Is Believing: A Wavy N-heteroarene with 20 Six-Membered Rings Linearly Annulated in a Row. <i>CCS Chemistry</i> ,1-14	7.2	0
4	Fine-Tuning Active Layer Morphology via Modification of Both Side Chains and Terminal Groups toward High-Performance Organic Solar Cells. <i>Energy Technology</i> , 2022 , 10, 2100912	3.5	0
3	Stable Cross-Conjugated Tetrathiophene Diradical. <i>Angewandte Chemie</i> , 2019 , 131, 11413	3.6	
2	Organic Electronics: Pursuing High-Mobility n-Type Organic Semiconductors by Combination of Molecule-Framework and Side-Chain Engineering (Adv. Mater. 38/2016). <i>Advanced Materials</i> , 2016 , 28, 8455-8455	24	

1 p-Type Molecular Photovoltaic Materials **2022**, 77-119