

# Yangjun Xia

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1675309/publications.pdf>

Version: 2024-02-01

65  
papers

1,511  
citations

279798

23  
h-index

330143

37  
g-index

65  
all docs

65  
docs citations

65  
times ranked

1089  
citing authors

#	ARTICLE	IF	CITATIONS
1	Two Compatible Acceptors as an Alloy Model with a Halogen-Free Solvent for Efficient Ternary Polymer Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2022, 14, 9386-9397.	8.0	46
2	Effect of fluorine atoms on the dielectric constants, optoelectronic properties and charge carrier kinetic characteristics of indacenodithieno[3,2-b]thiophene based non-fullerene acceptors for efficient organic solar cells. <i>Solar Energy</i> , 2022, 236, 206-214.	6.1	6
3	A New Alcohol-Soluble Polymer PFN-ID as Cathode Interlayer to Optimize Performance of Conventional Polymer Solar Cells by Increasing Electron Mobility. <i>Energy Technology</i> , 2022, 10, .	3.8	30
4	p-nitrophenol-terminated alkyl side chain substituted polymer as high dielectric constant polymer additive enables efficient organic solar cells. <i>Optical Materials</i> , 2022, 127, 112347.	3.6	1
5	Non-Halogenated Polymer Donor-Based Organic Solar Cells with a Nearly 15% Efficiency Enabled by a Classic Ternary Strategy. <i>ACS Applied Energy Materials</i> , 2021, 4, 1774-1783.	5.1	47
6	Multistep Functional Embellishment for p-ZnTe as a Cathode to Boost the Faraday Efficiency of Nitrogen Conversion. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 8129-8137.	8.0	4
7	Significantly Boosting Efficiency of Polymer Solar Cells by Employing a Nontoxic Halogen-Free Additive. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 11117-11124.	8.0	54
8	An alcohol-soluble small molecule as efficient cathode interfacial layer materials for polymer solar cells. <i>Optical Materials</i> , 2021, 113, 110909.	3.6	32
9	Twisted Alkylthiothienyl Flanks and Extended Conjugation Length Synergistically Enhanced Photovoltaic Performance by Boosting Dielectric Constant and Carriers Kinetic Characteristics. <i>Macromolecular Chemistry and Physics</i> , 2021, 222, 2100030.	2.2	5
10	Enhance the efficiency of polymer solar cells through regulating phase segregation and improving charge transport via non-toxic halogen-free additive. <i>Solar Energy</i> , 2021, 218, 375-382.	6.1	26
11	Improved Photovoltaic Performance of Polymer Solar Cells via a Volatile and Nonhalogen Additive to Optimize Crystallinity. <i>ACS Applied Energy Materials</i> , 2021, 4, 7129-7137.	5.1	17
12	Ternary solar cells via ternary polymer donors and third component PC71BM to optimize morphology with 13.15% efficiency. <i>Solar Energy</i> , 2021, 222, 18-26.	6.1	37
13	Ultrafast Kinetics Investigation of a Fluorinated-Benzothiadiazole Polymer with an Increased Excited State Transition Dipole Moment Applied in Organic Solar Cells. <i>ACS Applied Energy Materials</i> , 2021, 4, 9627-9638.	5.1	14
14	Enhancement Efficiency of Organic Photovoltaic Cells via Green Solvents and Nontoxic Halogen-Free Additives. <i>Advanced Sustainable Systems</i> , 2021, 5, 2100235.	5.3	10
15	Effect of fluorine atoms on optoelectronic, aggregation and dielectric constants of 2,1,3-benzothiadiazole-based alternating conjugated polymers. <i>Dyes and Pigments</i> , 2021, 193, 109486.	3.7	18
16	Photodynamic Investigation on the Synergistic Effects of Aromatic Side Chains with Alkylthio Substituents in Nonfullerene Organic Solar Cells. <i>ACS Applied Energy Materials</i> , 2021, 4, 9913-9922.	5.1	1
17	Impact of fluorination on photovoltaic performance in high thermo- and photo-stability perylene diimide-based nonfullerene small molecular acceptors. <i>Optical Materials</i> , 2021, 121, 111593.	3.6	7
18	Construction of effective organic solar cell using phenanthroline derivatives as cathode interface layer. <i>Optical Materials</i> , 2021, 122, 111647.	3.6	10

#	ARTICLE	IF	CITATIONS
19	Impact of alkyl side chain on the photostability and optoelectronic properties of indacenodithieno[3,2-b]thiophene- <i>alt</i> -naphtho[1,2-c:5,6-c']bis[1,2,5]thiadiazole medium bandgap copolymers. <i>Polymer International</i> , 2020, 69, 192-205.	3.1	11
20	Non-toxic green food additive enables efficient polymer solar cells through adjusting the phase composition distribution and boosting charge transport. <i>Journal of Materials Chemistry C</i> , 2020, 8, 2483-2490.	5.5	51
21	Efficient inverted organic solar cells with a thin natural biomaterial l-Arginine as electron transport layer. <i>Solar Energy</i> , 2020, 196, 168-176.	6.1	51
22	Simultaneously enhancing the dielectric constant, photo-response and deepening HOMO levels of benzo[1,2-b;4,5-b']dithiophene derivatives-based conjugated polymers. <i>Dyes and Pigments</i> , 2020, 177, 108263.	3.7	5
23	Enhanced organic photovoltaic performance through promoting crystallinity of photoactive layer and conductivity of hole-transporting layer by V2O5 doped PEDOT:PSS hole-transporting layers. <i>Solar Energy</i> , 2020, 211, 1102-1109.	6.1	40
24	Insights into Excitonic Dynamics of Terpolymer-Based High-Efficiency Nonfullerene Polymer Solar Cells: Enhancing the Yield of Charge Separation States. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 8475-8484.	8.0	62
25	Self-doping n-type polymer as a cathode interface layer enables efficient organic solar cells by increasing built-in electric field and boosting interface contact. <i>Journal of Materials Chemistry C</i> , 2019, 7, 11152-11159.	5.5	87
26	An Alcohol-Soluble Polymer Electron Transport Layer Based on Perylene Diimide Derivatives for Polymer Solar Cells. <i>IEEE Journal of Photovoltaics</i> , 2019, 9, 1678-1685.	2.5	34
27	Synthesis and Photovoltaic Effect of Electron-Withdrawing Units for Low Band Gap Conjugated Polymers Bearing Bi(thienylenevinylene) Side Chains. <i>Polymers</i> , 2019, 11, 1461.	4.5	3
28	Systematically investigating the influence of inserting alkylthiophene spacers on the aggregation, photo-stability and optoelectronic properties of copolymers from dithieno[2,3-d:2',3'-d']benzo[1,2-b:4,5-b']dithiophene and benzothiadiazole derivatives. <i>Polymer Chemistry</i> , 2019, 10, 972-982.	3.9	10
29	Enhanced Organic Photovoltaic Performance through Modulating Vertical Composition Distribution and Promoting Crystallinity of the Photoactive Layer by Diphenyl Sulfide Additives. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 7022-7029.	8.0	79
30	The comprehensive utilization of the synergistic effect of fullerene and non-fullerene acceptors to achieve highly efficient polymer solar cells. <i>Journal of Materials Chemistry A</i> , 2019, 7, 15841-15850.	10.3	118
31	Impact of linker positions for thieno[3,2-b]thiophene in wide band gap benzo[1,2-b:4,5-b']dithiophene-based photovoltaic polymers. <i>Journal of Materials Research</i> , 2019, 34, 2057-2066.	2.6	2
32	Effect of Flank Rotation on the Photovoltaic Properties of Dithieno[2,3-d:2',3'-d']benzo[1,2-b:4,5-b']dithiophene-Based Narrow Band Gap Copolymers. <i>Polymers</i> , 2019, 11, 239.	4.0	6
33	Synthesis and photovoltaic investigation of dithieno[2,3-a:3'-a']benzo[1,2-b:3,4-b':5,6-b']trithiophene-based conjugated polymer with an enlarged $\pi$ -conjugated system. <i>Polymers for Advanced Technologies</i> , 2019, 30, 1290-1302.	3.2	2
34	Enhanced Photovoltaic Performance in D- $\pi$ -A Copolymers Containing Triisopropylsilyl ethynyl-Substituted Dithienobenzodithiophene by Modulating the Electron-Deficient Units. <i>Polymers</i> , 2019, 11, 12.	4.5	28
35	Solution-processible Cd-doped ZnO nanoparticles as an electron transport layer to achieve high performance polymer solar cells through improve conductivity and light transmittance. <i>Molecular Crystals and Liquid Crystals</i> , 2019, 692, 74-82.	0.9	9
36	High-performance all-polymer solar cells based on fluorinated naphthalene diimide acceptor polymers with fine-tuned crystallinity and enhanced dielectric constants. <i>Nano Energy</i> , 2018, 45, 368-379.	16.0	101

#	ARTICLE	IF	CITATIONS
37	Medium band gap conjugated polymers from thienoacene derivatives and pentacyclic aromatic lactam as promising alternatives of poly(3-hexylthiophene) in photovoltaic application. Journal of Polymer Science Part A, 2018, 56, 85-95.	2.3	30
38	Enhanced efficiency of ternary organic solar cells by doping a polymer material in P3HT:PC <sub>61</sub> BM. Polymers for Advanced Technologies, 2018, 29, 914-920.	3.2	8
39	In Situ Growth of Metal Sulfide Nanocrystals in Poly(3-hexylthiophene): [6,6]-Phenyl C61-Butyric Acid Methyl Ester Films for Inverted Hybrid Solar Cells with Enhanced Photocurrent. Nanoscale Research Letters, 2018, 13, 184.	5.7	8
40	Enhanced efficiency of polymer solar cells through synergistic optimization of mobility and tuning donor alloys by adding high-mobility conjugated polymers. Journal of Materials Chemistry C, 2018, 6, 11015-11022.	5.5	87
41	An eco-friendly water-soluble fluorene-based polyelectrolyte as interfacial layer for efficient inverted polymer solar cells. Polymers for Advanced Technologies, 2018, 29, 2237-2244.	3.2	0
42	Effects of alkyl side chain length of low bandgap naphtho[1,2-a:5,6-c]bis[1,2,5]thiadiazole-based copolymers on the optoelectronic properties of polymer solar cells. Journal of Polymer Science Part A, 2018, 56, 2059-2071.	2.3	20
43	36% Enhanced Efficiency of Ternary Organic Solar Cells by Doping a NT-Based Polymer as an Electron-Cascade Donor. Polymers, 2018, 10, 703.	4.5	9
44	Boosting Up Performance of Inverted Photovoltaic Cells from Bis(alkylthien-2-yl)dithieno[2,3-d:2',3'-d']benzo[1,2-b:4,5-b']dithiophene-Based Copolymers by Advantageous Vertical Phase Separation. ACS Applied Materials & Interfaces, 2017, 9, 10937-10945.	8.0	25
45	Large branched alkylthienyl bridged naphtho[1,2-a:5,6-c]bis[1,2,5]thiadiazole-containing low bandgap copolymers: Synthesis and photovoltaic application. Journal of Macromolecular Science - Pure and Applied Chemistry, 2017, 54, 176-185.	2.2	22
46	Effect of alkylthiophene spacers and fluorine on the optoelectronic properties of 5,10-bis(dialkylthien-2-yl)dithieno[2,3-d:2',3'-d']benzo[1,2-b:4,5-b']dithiophene-alt-benzothiadiazole derivative copolymers. RSC Advances, 2017, 7, 22845-22854.	3.6	22
47	Naphtho[1,2-c:5,6-c']bis[1,2,5]thiadiazole-based conjugated polymers consisting of oligothiophenes for efficient polymer solar cells. Polymer, 2017, 121, 183-195.	3.8	40
48	Efficiency boost significantly of ternary organic solar cells by doping low bandgap polymer. Molecular Crystals and Liquid Crystals, 2017, 650, 117-124.	0.9	1
49	Wide bandgap conjugated polymers based on bithiophene and benzotriazole for bulk heterojunction solar cells: Thiophene versus thieno[3,2-b]thiophene as $\pi$ -conjugated spacers. Journal of Macromolecular Science - Pure and Applied Chemistry, 2017, 54, 565-574.	2.2	5
50	Benzo[1,2-b:4,5-b']dithiophene-based conjugated polyelectrolyte for the cathode modification of inverted polymer solar cells. Journal of Macromolecular Science - Pure and Applied Chemistry, 2016, 53, 290-296.	2.2	5
51	A two-dimension medium band gap conjugated polymer based on 5,10-bis(alkylthien-2-yl)dithieno[3,2-d:3',2'-d']benzo[1,2-b:4,5-b']dithiophene: Synthesis and photovoltaic application. Journal of Macromolecular Science - Pure and Applied Chemistry, 2016, 53, 538-545.	2.2	7
52	Dithieno[2,3-d:2',3'-d']naphtho[2,1-b:3,4-b']dithiophene based medium bandgap conjugated polymers for photovoltaic applications. Journal of Applied Polymer Science, 2016, 133, .	2.6	1
53	Synthesis of Alternating Low-Bandgap Conjugated Polymers Based on Dithieno[2,3-a:2',3'-a']naphtho[1,2-a:3,4-a']dithiophene and Enhancement of Photovoltaic Properties with Solvent Additives. Macromolecular Chemistry and Physics, 2015, 216, 733-741.	2.2	3
54	Synthesis of dithieno[2,3-d:2',3'-d']benzo[1,2-b:4,5-b']dithiophene -alt-isoindigo conjugated polymer and enhancement of photovoltaic property with diphenyl sulfide additives. Journal of Polymer Research, 2015, 22, 1.	2.4	12

#	ARTICLE	IF	CITATIONS
55	An alkylthieno-2-yl flanked dithieno[2,3-d:2',3'-d']benzo[1,2-b:4,5-b']dithiophene-based low band gap conjugated polymer for high performance photovoltaic solar cells. RSC Advances, 2015, 5, 12879-12885.	3.6	24
56	Synthesis of modified benzothiadiazole-thiophene-cored acceptor and carbazole/indolocarbazole alternating conjugated polymers and their photovoltaic applications. Polymer Bulletin, 2015, 72, 565-581.	3.3	11
57	Synthesis of $\pi$ -Extended Dithienobenzodithiophene-Containing Medium Bandgap Copolymers and Their Photovoltaic Application. Journal of Macromolecular Science - Pure and Applied Chemistry, 2015, 52, 934-941.	2.2	11
58	Synthesis and characterization of alternating and random conjugated polymers derived from dithieno[2,3-d:2',3'-d']benzo[1,2-b:4,5-b']dithiophene and 2,1,3-benzothiadiazole derivatives. Polymer 2.7 Journal, 2015, 47, 803-809.		8
59	Dithieno[2,3-d:2',3'-d']naphtho[1,2-b:3,4-b']dithiophene – a novel electron-rich building block for low band gap conjugated polymers. Journal of Materials Chemistry C, 2014, 2, 1601.	5.5	17
60	Synthetically controlling the optoelectronic properties of dithieno[2,3-d:2',3'-d']benzo[1,2-b:4,5-b']dithiophene-alt-diketopyrrolopyrrole-conjugated polymers for efficient solar cells. Journal of Materials Chemistry A, 2014, 2, 15316-15325.	10.3	46
61	Synthesis and characterization of alternating copolymers derived from indeno[1,2-b:3,4-b']fluorene for blue light-emitting diodes. Journal of Applied Polymer Science, 2012, 125, 1409-1417.	2.6	3
62	Synthesis and photovoltaic properties of alternating conjugated polymers derived from indolo[3,2-b]carbazole and thiophene/thieno[3,2-b]thiophene-cored benzoselenadiazole. Polymer Science - Series A, 2011, 53, 469-479.	1.0	4
63	Alternating narrow band gap copolymers derived from indeno[1,2-b:3,4-b']fluorene and thiophene-cored thieno[3,4-b:4,5-b']pyrazine derivatives” Synthesis, characterization and comparative studies of photochemical stability. Journal of Polymer Science Part A, 2011, 49, 2969-2979.	2.3	6
64	Synthesis and Photovoltaic Properties of Alternating Conjugated Polymers Derived from Indeno[1,2-b:3,4-b']fluorene and Bithiophene or Thieno[3,2-b:4,5-b']thiophene-Cored Benzothiadiazole. Macromolecular Chemistry and Physics, 2011, 212, 1193-1201.	2.2	12
65	Synthesis and characterization of green to orange electroluminescent copolymers derived from fluorene and 2,3-dimethylnaphthalopyrazine. Polymer Science - Series B, 2010, 52, 614-620.	0.8	0