Luping Yu

List of Publications by Year in Descending Order

96 papers	10,099 citations	37 h-index	99 g-index
99 ext. papers	10,839 ext. citations	10.3 avg, IF	6.34 L-index

#	Paper	IF	Citations
96	Synergy between Photoluminescence and Charge Transport Achieved by Finely Tuning Polymeric Backbones for Efficient Light-Emitting Transistor. *Journal of the American Chemical Society*, **2021**, 143, 5239-5246	16.4	7
95	The Role of the Core Attachment Positioning in Triggering Intramolecular Singlet Exciton Fission in Perylene Diimide Tetramers. *Journal of Physical Chemistry B*, **2021**, 125, 5114-5131	3.4	3
94	Highly Emissive Semi-Ladder-Type Copolymers, Aggregation State, and Solution-Processed Organic Light-Emitting Transistor. *Chemistry of Materials*, **2020**, 32, 4672-4680	9.6	10
93	Finely Designed P3HT-Based Fully Conjugated Graft Polymer: Optical Measurements, Morphology, and the Faraday Effect. *ACS Applied Materials & Interfaces*, **2020**, 12, 30856-30861	9.5	1
92	BODIPY-Containing Polymers with Ultralow Band Gaps and Ambipolar Charge Mobilities. *Macromolecules*, **2020**, 53, 2014-2020	5.5	9
91	Photophysical implications of ring fusion, linker length, and twisting angle in a series of perylenediimide-thienoacene dimers. *Chemical Science*, **2020**, 11, 7133-7143	9.4	3
90	Photoinduced cationic polycondensation in solid state towards ultralow band gap conjugated polymers. *Journal of Materials Chemistry C*, **2020**, 8, 7026-7033	7.1	6
89	Design of High-Performance Organic Light-Emitting Transistors. *ACS Omega*, **2020**, 5, 68-74	3.9	16
88	Molecular Control of Charge Carrier and Seebeck Coefficient in Hybrid Two-Dimensional Nanoparticle Superlattices. *Journal of Physical Chemistry C*, **2020**, 124, 17-24	3.8	2
87	Intra-molecular Charge Transfer and Electron Delocalization in Non-fullerene Organic Solar Cells. *ACS Applied Materials & Interfaces*, **2018**, 10, 10043-10052	9.5	20
86	Synthesis of Alternating Donor–Acceptor Ladder-Type Molecules and Investigation of Their Multiple Charge-Transfer Pathways. *Angewandte Chemie*, **2018**, 130, 6552-6558	3.6	7
85	Synthesis of Alternating Donor-Acceptor Ladder-Type Molecules and Investigation of Their Multiple Charge-Transfer Pathways. *Angewandte Chemie - International Edition*, **2018**, 57, 6442-6448	16.4	32
84	Enhancement in Open-Circuit Voltage in Organic Solar Cells by Using Ladder-Type Nonfullerene Acceptors. *ACS Applied Materials & Interfaces*, **2018**, 10, 13528-13533	9.5	24
83	High Performance Ternary Organic Solar Cells due to Favored Interfacial Connection by a Non-Fullerene Electron Acceptor with Cross-Like Molecular Geometry. *Journal of Physical Chemistry C*, **2018**, 122, 11305-11311	3.8	15
82	Molecular Design towards Controlling Charge Transport. *Chemistry - A European Journal*, **2018**, 24, 17180–17187	4.8	7
81	Charge Transfer and Aggregation Effects on the Performance of Planar vs Twisted Nonfullerene Acceptor Isomers for Organic Solar Cells. *Chemistry of Materials*, **2018**, 30, 4263-4276	9.6	29
80	Frontispiece: Synthesis of Alternating Donor–Acceptor Ladder-Type Molecules and Investigation of Their Multiple Charge-Transfer Pathways. *Angewandte Chemie - International Edition*, **2018**, 57,	16.4	1

79	An Electromechanical Approach to Understanding Binding Configurations in Single-Molecule Devices. *Nano Letters*, **2018**, 18, 6638-6644	11.5	15
78	Investigations of Thienoacene Molecules for Classical and Entangled Two-Photon Absorption. *Journal of Physical Chemistry A*, **2018**, 122, 8167-8182	2.8	14
77	Exploration of Syntheses and Functions of Higher Ladder-type π-Conjugated Heteroacenes. *CheM*, **2018**, 4, 2538-2570	16.2	54
76	Inhomogeneity of the Ultrafast Excited State Dynamics in Organic Photovoltaic Materials Measured at Nanoscale. *Journal of Physical Chemistry C*, **2018**, 122, 22201-22209	3.8	5
75	Propeller-Shaped Acceptors for High-Performance Non-Fullerene Solar Cells: Importance of the Rigidity of Molecular Geometry. *Chemistry of Materials*, **2017**, 29, 1127-1133	9.6	77
74	A Single-Molecular AND Gate Operated with Two Orthogonal Switching Mechanisms. *Advanced Materials*, **2017**, 29, 1701248	24	33
73	Morphological characterization of fullerene and fullerene-free organic photovoltaics by combined real and reciprocal space techniques. *Journal of Materials Research*, **2017**, 32, 1921-1934	2.5	18
72	Molecular Rectification Tuned by Through-Space Gating Effect. *Nano Letters*, **2017**, 17, 308-312	11.5	43
71	Two Photon Absorption Study of Low-Bandgap, Fully Conjugated Perylene Diimide-Thienoacene-Perylene Diimide Ladder-Type Molecules. *Chemistry of Materials*, **2017**, 29, 6726-6732	9.6	47
70	Beyond Molecular Wires: Design Molecular Electronic Functions Based on Dipolar Effect. *Accounts of Chemical Research*, **2016**, 49, 1852-63	24.3	47
69	Donor–Acceptor Porous Conjugated Polymers for Photocatalytic Hydrogen Production: The Importance of Acceptor Comonomer. *Macromolecules*, **2016**, 49, 6903-6909	5.5	96
68	Rational Design of Porous Conjugated Polymers and Roles of Residual Palladium for Photocatalytic Hydrogen Production. *Journal of the American Chemical Society*, **2016**, 138, 7681-6	16.4	302
67	Proton-triggered switch based on a molecular transistor with edge-on gate. *Chemical Science*, **2016**, 7, 3137-3141	9.4	34
66	Electron Acceptors Based on α-Substituted Perylene Diimide (PDI) for Organic Solar Cells. *Chemistry of Materials*, **2016**, 28, 1139-1146	9.6	165
65	Synthesis of Ladder-Type Thienoacenes and Their Electronic and Optical Properties. *Journal of the American Chemical Society*, **2016**, 138, 868-75	16.4	68
64	Photocatalysts Based on Cobalt-Chelating Conjugated Polymers for Hydrogen Evolution from Water. *Chemistry of Materials*, **2016**, 28, 5394-5399	9.6	67
63	Controlled Self-Assembly of Cyclophane Amphiphiles: From 1D Nanofibers to Ultrathin 2D Topological Structures. *Macromolecules*, **2016**, 49, 5172-5178	5.5	7
62	Covalently Bound Clusters of Alpha-Substituted PDI-Rival Electron Acceptors to Fullerene for Organic Solar Cells. *Journal of the American Chemical Society*, **2016**, 138, 7248-51	16.4	346

61	Photophysical and Morphological Implications of Single-Strand Conjugated Polymer Folding in Solution. *Chemistry of Materials*, **2016**, 28, 2814-2822	9.6	61
60	Exceptional Single-Molecule Transport Properties of Ladder-Type Heteroacene Molecular Wires. *Journal of the American Chemical Society*, **2016**, 138, 10630-5	16.4	63
59	Recent Advances in Bulk Heterojunction Polymer Solar Cells. *Chemical Reviews*, **2015**, 115, 12666-731	68.1	1994
58	Effect of acceptor strength on optical and electronic properties in conjugated polymers for solar applications. *Journal of the American Chemical Society*, **2015**, 137, 5759-69	16.4	31
57	Wide bandgap OPV polymers based on pyridinonedithiophene unit with efficiency >5. *Chemical Science*, **2015**, 6, 4860-4866	9.4	30
56	High-performance ternary blend polymer solar cells involving both energy transfer and hole relay processes. *Nature Communications*, **2015**, 6, 7327	17.4	383
55	Mechanistic Studies of Effect of Dispersity on the Photovoltaic Performance of PTB7 Polymer Solar Cells. *Chemistry of Materials*, **2015**, 27, 537-543	9.6	68
54	Solution Phase Exciton Diffusion Dynamics of a Charge-Transfer Copolymer PTB7 and a Homopolymer P3HT. *Journal of Physical Chemistry B*, **2015**, 119, 7447-56	3.4	17
53	Optical, Electrical, and Magnetic Studies of Organic Solar Cells Based on Low Bandgap Copolymer with Spin Radical Additives. *Advanced Functional Materials*, **2015**, 25, 1895-1902	15.6	39
52	Edge-on gating effect in molecular wires. *Nano Letters*, **2015**, 15, 958-62	11.5	28
51	Roles of Quinoidal Character and Regioregularity in Determining the Optoelectronic and Photovoltaic Properties of Conjugated Copolymers. *Macromolecules*, **2014**, 47, 6252-6259	5.5	37
50	Ternary blend polymer solar cells with enhanced power conversion efficiency. *Nature Photonics*, **2014**, 8, 716-722	33.9	538
49	Synthesis and Search for Design Principles of New Electron Accepting Polymers for All-Polymer Solar Cells. *Chemistry of Materials*, **2014**, 26, 3450-3459	9.6	98
48	Effects of Exciton Polarity in Charge-Transfer Polymer/PCBM Bulk Heterojunction Films. *Journal of Physical Chemistry Letters*, **2014**, 5, 1856-63	6.4	30
47	Visualization of hierarchical nanodomains in polymer/fullerene bulk heterojunction solar cells. *Microscopy and Microanalysis*, **2014**, 20, 1507-13	0.5	10
46	Organic Photovoltaics: Photovoltaic Function and Exciton/Charge Transfer Dynamics in a Highly Efficient Semiconducting Copolymer (Adv. Funct. Mater. 1/2014). *Advanced Functional Materials*, **2014**, 24, 2-2	15.6	
45	Photovoltaic Function and Exciton/Charge Transfer Dynamics in a Highly Efficient Semiconducting Copolymer. *Advanced Functional Materials*, **2014**, 24, 10-26	15.6	128
44	How to design low bandgap polymers for highly efficient organic solar cells. *Materials Today*, **2014**, 17, 11-15	21.8	184

43	Tuning the Polarizability in Donor Polymers with a Thiophenesaccharin Unit for Organic Photovoltaic Applications. *Advanced Functional Materials*, **2014**, 24, 3432-3437	15.6	27
42	Polyselenopheno[3,4-]selenophene for Highly Efficient Bulk Heterojunction Solar Cells.. *ACS Macro Letters*, **2012**, 1, 361-365	6.6	115
41	Transport properties of a single-molecule diode. *ACS Nano*, **2012**, 6, 4931-9	16.7	124
40	Nanoporous Porphyrin Polymers for Gas Storage and Separation. *Macromolecules*, **2012**, 45, 7413-7419	5.5	92
39	Incremental optimization in donor polymers for bulk heterojunction organic solar cells exhibiting high performance. *Journal of Polymer Science, Part B: Polymer Physics*, **2012**, 50, 1057-1070	2.6	29
38	Overcoming efficiency challenges in organic solar cells: rational development of conjugated polymers. *Energy and Environmental Science*, **2012**, 5, 8158	35.4	182
37	Mediating Solar Cell Performance by Controlling the Internal Dipole Change in Organic Photovoltaic Polymers. *Macromolecules*, **2012**, 45, 6390-6395	5.5	115
36	Intramolecular hydrogen bonding assisted charge transport through single rectifying molecule. *Langmuir*, **2011**, 27, 2084-7	4	13
35	Are we there yet? Design of better conjugated polymers for polymer solar cells. *Journal of Materials Chemistry*, **2011**, 21, 18934		142
34	Dipolar and electronic effects on charge transport through single transition metal complexes. *Science China Chemistry*, **2011**, 54, 410-414	7.9	7
33	Length-dependent self-assembly of oligothiophene derivatives in thin films. *Journal of Materials Research*, **2011**, 26, 296-305	2.5	3
32	Disposable organic fluorescence biosensor for water pollution monitoring.. *Materials Research Society Symposia Proceedings*, **2011**, 1358, 50301		
31	Nanoporous Polyporphyrin as Adsorbent for Hydrogen Storage. *Macromolecules*, **2010**, 43, 3325-3330	5.5	81
30	Development of Semiconducting Polymers for Solar Energy Harvesting. *Polymer Reviews*, **2010**, 50, 454-473	14	101
29	Polymer solar cells with enhanced open-circuit voltage and efficiency. *Nature Photonics*, **2009**, 3, 649-653	33.9	2870
28	Structure and dynamics correlations of photoinduced charge separation in rigid conjugated linear donor–acceptor dyads towards photovoltaic applications. *New Journal of Chemistry*, **2009**, 33, 1497	3.6	22
27	Conjugated block copolymers and co-oligomers: from supramolecular assembly to molecular electronics. *Journal of Materials Chemistry*, **2007**, 17, 2183		73
26	Structural Evolution and Alignment of Cylinder-Forming PS-b-PEP Thin Films in Confinement Studied by Time-Lapse Atomic Force Microscopy. *Materials Research Society Symposia Proceedings*, **2004**, 854, U11.17.1		

25	Fine-tuning photorefractive properties of monolithic molecular materials. *Applied Physics Letters*, **2003**, 82, 3385-3387	3.4	13
24	Synthesis of Amphiphilic Conjugated Diblock Oligomers as Molecular Diodes. *Angewandte Chemie*, **2002**, 114, 3750-3753	3.6	20
23	Synthesis of amphiphilic conjugated diblock oligomers as molecular diodes. *Angewandte Chemie - International Edition*, **2002**, 41, 3598-601; 3514	16.4	122
22	Synthesis and Structure/Property Correlation of Fully Functionalized Photorefractive Polymers. *Macromolecules*, **2002**, 35, 4636-4645	5.5	35
21	Chemoselective Immobilization of Gold Nanoparticles onto Self-Assembled Monolayers. *Langmuir*, **2002**, 18, 311-313	4	55
20	Lessons learned from research on photorefractive polymers and molecular materials. *Journal of Polymer Science Part A*, **2001**, 39, 2557-2564	2.5	15
19	Efficient molecular photorefractive materials based on methine dyes. *Applied Physics Letters*, **2001**, 78, 700-702	3.4	30
18	PICOSECOND OPTICAL LIMITING PERFORMANCE OF A NOVEL PPV-ZnPc CONJUGATED POLYMER. *Journal of Nonlinear Optical Physics and Materials*, **2000**, 09, 289-296	0.8	2
17	Conjugated Polymers Containing Mixed-Ligand Ruthenium(II) Complexes. Synthesis, Characterization, and Investigation of Photoconductive Properties. *Journal of the American Chemical Society*, **2000**, 122, 11806-11811	16.4	62
16	Novel Photorefractive Materials Based on Multifunctional Organic Glasses. *ACS Symposium Series*, **1999**, 226-236	0.4	1
15	Progress in Fully Functionalized Photorefractive Materials. *Materials Research Society Symposia Proceedings*, **1999**, 597, 203		
14	A Multifunctional Photorefractive Material Showing High Optical Gain and Diffraction Efficiency. *Advanced Materials*, **1998**, 10, 927-931	24	19
13	Effect of a local electric field on photogeneration efficiency in a photorefractive polymer. *Applied Physics Letters*, **1998**, 73, 2546-2548	3.4	5
12	Synthesis of Thioester End-Functionalized Poly(ε-caprolactone) and Its Application in Chemoselective Ligation. *ACS Symposium Series*, **1998**, 92-104	0.4	
11	Investigation of the Liquid Crystalline-Isotropic Phase Transition in Oligo(phenylenevinylene) with Alkyl Side Chains. *Macromolecules*, **1997**, 30, 6274-6279	5.5	7
10	Synthesis and Characterization of Diblock Copolymers Containing Oligothiophenes with Defined Regiospecificity and Molecular Weights. *Macromolecules*, **1996**, 29, 7329-7334	5.5	68
9	Multifunctional Polymers Exhibiting Photorefractive Effects. *Accounts of Chemical Research*, **1996**, 29, 13-21	24.3	90
8	Hybridized approach to new polymers exhibiting large photorefractivity. *Applied Physics Letters*, **1996**, 69, 4002-4004	3.4	24

7	Novel second-order nonlinear optical, aromatic, and aliphatic polyimides exhibiting high-temperature stability. *Applied Physics Letters*, **1995**, 66, 1050-1052	3.4	20
6	Conjugated photorefractive polymer. *Applied Physics Letters*, **1994**, 64, 2489-2491	3.4	22
5	Rational Designs of Multifunctional Polymers-Conjugated Photorefractive Polymers. *Materials Research Society Symposia Proceedings*, **1993**, 328, 63		1
4	Conjugated, Liquid Crystalline Polymers. *Angewandte Chemie International Edition in English*, **1993**, 32, 1345-1347		29
3	Ladder polymers: recent developments in syntheses, characterization, and potential applications as electronic and optical materials. *Chemistry of Materials*, **1990**, 2, 649-659	9.6	98
2	Conjugated Block Copolymers and Cooligomers21-38		1
1	Low Bandgap Polymers1-31		