Yen-Ju Cheng

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7554392/publications.pdf

Version: 2024-02-01

55 papers	6,714 citations	147726 31 h-index	161767 54 g-index
55 all docs	55 docs citations	55 times ranked	7259 citing authors

#	Article	IF	Citations
1	Synthesis of Conjugated Polymers for Organic Solar Cell Applications. Chemical Reviews, 2009, 109, 5868-5923.	23.0	3,739
2	Donorâ€“acceptor conjugated polymers based on multifused ladder-type arenes for organic solar cells. Chemical Society Reviews, 2015, 44, 1113-1154.	18.7	543
3	Applications of functional fullerene materials in polymer solar cells. Energy and Environmental Science, 2014, 7, 1866.	15.6	174
4	Combination of Molecular, Morphological, and Interfacial Engineering to Achieve Highly Efficient and Stable Plastic Solar Cells. Advanced Materials, 2012, 24, 549-553.	11.1	155
5	Morphological Stabilization by In Situ Polymerization of Fullerene Derivatives Leading to Efficient, Thermally Stable Organic Photovoltaics. Advanced Functional Materials, 2011, 21, 1723-1732.	7.8	153
6	Donorâ€“acceptor polymers based on multi-fused heptacyclic structures: synthesis, characterization and photovoltaic applications. Chemical Communications, 2010, 46, 3259.	2.2	116
7	Carbazole-Based Ladder-Type Heptacylic Arene with Aliphatic Side Chains Leading to Enhanced Efficiency of Organic Photovoltaics. Chemistry of Materials, 2011, 23, 2361-2369.	3.2	111
8	Synthesis of a New Ladder-Type Benzodi(cyclopentadithiophene) Arene with Forced Planarization Leading to an Enhanced Efficiency of Organic Photovoltaics. Chemistry of Materials, 2012, 24, 3964-3971.	3.2	97
9	Supramolecular Selfâ€Assembled Dendritic Nonlinear Optical Chromophores: Fineâ€Tuning of Areneâ€“Perfluoroarene Interactions for Ultralarge Electroâ€Optic Activity and Enhanced Thermal Stability. Advanced Materials, 2009, 21, 1976-1981.	11.1	96
10	Dithienocarbazoleâ€Based Ladderâ€Type Heptacyclic Arenes with Silicon, Carbon, and Nitrogen Bridges: Synthesis, Molecular Properties, Fieldâ€Effect Transistors, and Photovoltaic Applications. Advanced Functional Materials, 2012, 22, 1711-1722.	7.8	92
11	Di(4-methylphenyl)methano-C₆₀ Bis-Adduct for Efficient and Stable Organic Photovoltaics with Enhanced Open-Circuit Voltage. Chemistry of Materials, 2011, 23, 4056-4062.	3.2	90
12	New Angular-Shaped and Isomerically Pure Anthradithiophene with Lateral Aliphatic Side Chains for Conjugated Polymers: Synthesis, Characterization, and Implications for Solution-Prossessed Organic Field-Effect Transistors and Photovoltaics. Chemistry of Materials, 2012, 24, 2391-2399.	3.2	72
13	New Thieno[3,2-b]thiophene-Based Acceptor: Tuning Acceptor Strength of Ladder-Type N-Type Materials to Simultaneously Achieve Enhanced V_{oc} and J_{sc} of Nonfullerene Solar Cells. ACS Energy Letters, 2018, 3, 1722-1729.	8.8	61
14	Synthesis of a 4,9-Didodecyl Angular-Shaped Naphthodiselenophene Building Block To Achieve High-Mobility Transistors. Chemistry of Materials, 2016, 28, 5121-5130.	3.2	60
15	A New Pentacyclic Indacenodiselenophene Arene and Its Donorâ€“Acceptor Copolymers for Solution-Processable Polymer Solar Cells and Transistors: Synthesis, Characterization, and Investigation of Alkyl/Alkoxy Side-Chain Effect. Macromolecules, 2013, 46, 7715-7726.	2.2	59
16	Ladder-Type Nonacyclic Structure Consisting of Alternate Thiophene and Benzene Units for Efficient Conventional and Inverted Organic Photovoltaics. Chemistry of Materials, 2011, 23, 5068-5075.	3.2	58
17	Thieno[3,2-b]pyrrolo Donor Fused with Benzothiadiazolo, Benzoselenadiazolo and Quinoxalino Acceptors: Synthesis, Characterization, and Molecular Properties. Organic Letters, 2011, 13, 5484-5487.	2.4	57
18	Angularâ€Shaped 4,9â€Dialkyl Î±â€and Î²â€Naphthodithiopheneâ€Based Donorâ€“Acceptor Copolymers: Investigation of Isomeric Structural Effects on Molecular Properties and Performance of Fieldâ€Effect Transistors and Photovoltaics. Advanced Functional Materials, 2015, 25, 6131-6143.	7.8	49

#	Article	IF	Citations
19	Diindenothieno[2,3-b]thiophene arene for efficient organic photovoltaics with an extra high open-circuit voltage of 1.14 ev. Chemical Communications, 2012, 48, 3203.	2.2	47
20	Synthesis and Molecular Properties of Four Isomeric Dialkylated Angular-Shaped Naphthodithiophenes. Organic Letters, 2013, 15, 5338-5341.	2.4	47
21	Morphological Stabilization by Supramolecular Perfluorophenylâ€C₆₀ Interactions Leading to Efficient and Thermally Stable Organic Photovoltaics. Advanced Functional Materials, 2014, 24, 1418-1429.	7.8	47
22	Side-chain modulation of dithienofluorene-based copolymers to achieve high field-effect mobilities. Chemical Science, 2017, 8, 2942-2951.	3.7	46
23	Selenophene-Incorporated Quaterchalcogenophene-Based Donorâ€“Acceptor Copolymers To Achieve Efficient Solar Cells with J_{sc} Exceeding 20 mA/cm². Chemistry of Materials, 2017, 29, 10045-10052.	3.2	44
24	Haptacyclic Carbazole-Based Ladder-Type Nonfullerene Acceptor with Side-Chain Optimization for Efficient Organic Photovoltaics. ACS Applied Materials & Interfaces, 2017, 9, 42035-42042.	4.0	43
25	Exciplex Electroluminescence Induced by Cross-Linked Hole-Transporting Materials for White Light Polymer Light-Emitting Diodes. Macromolecules, 2011, 44, 5968-5976.	2.2	42
26	Angular-Shaped 4,9-Dialkylnaphthodithiophene-Based Octacyclic Ladder-Type Non-Fullerene Acceptors for High Efficiency Ternary-Blend Organic Photovoltaics. Chemistry of Materials, 2018, 30, 4968-4977.	3.2	39
27	Synthesis of Poly(3-hexylthiophene), Poly(3-hexylselenophene), and Poly(3-hexylselenophene-alt-3-hexylthiophene) by Direct Câ€“H Arylation Polymerization via N-Heterocyclic Carbene Palladium Catalysts. Macromolecules, 2015, 48, 2978-2988.	2.2	37
28	Highly Efficient Inverted D:A1:A2 Ternary Blend Organic Photovoltaics Combining a Ladder-type Non-Fullerene Acceptor and a Fullerene Acceptor. ACS Applied Materials & Interfaces, 2017, 9, 24797-24803.	4.0	36
29	Isomerically Pure Benzothiophene-Incorporated Acceptor: Achieving Improved V_{oc} and J_{sc} of Nonfullerene Organic Solar Cells via End Group Manipulation. ACS Applied Materials & Interfaces, 2019, 11, 33179-33187.	4.0	36
30	A crosslinked fullerene matrix doped with an ionic fullerene as a cathodic buffer layer toward high-performance and thermally stable polymer and organic metallohalide perovskite solar cells. Journal of Materials Chemistry A, 2015, 3, 20382-20388.	5.2	35
31	Isomeric effect of fluorene-based fused-ring electron acceptors to achieve high-efficiency organic solar cells. Journal of Materials Chemistry A, 2020, 8, 5315-5322.	5.2	33
32	Nonâ€Volatile Perfluorophenylâ€Based Additive for Enhanced Efficiency and Thermal Stability of Nonfullerene Organic Solar Cells via Supramolecular Fluorinated Interactions. Advanced Energy Materials, 2022, 12, .	10.2	33
33	Angular-Shaped 4,9-Dialkylnaphthodithiophene-Based Donorâ€“Acceptor Copolymers for Efficient Polymer Solar Cells and High-Mobility Field-Effect Transistors. Macromolecules, 2015, 48, 2030-2038.	2.2	30
34	Cross-linked Triarylamine-Based Hole-Transporting Layer for Solution-Processed PEDOT:PSS-Free Inverted Perovskite Solar Cells. ACS Applied Materials & Interfaces, 2018, 10, 21466-21471.	4.0	29
35	Triarylamine-based crosslinked hole-transporting material with an ionic dopant for high-performance PEDOT:PSS-free polymer solar cells. Journal of Materials Chemistry C, 2015, 3, 6158-6165.	2.7	24
36	Bispentafluorophenyl-Containing Additive: Enhancing Efficiency and Morphological Stability of Polymer Solar Cells via Hand-Grabbing-Like Supramolecular Pentafluorophenylâ€“Fullerene Interactions. ACS Applied Materials & Interfaces, 2017, 9, 43861-43870.	4.0	24

#	Article	IF	Citations
37	Thiopheneâ€“Vinyleneâ€“Thiophene-Based Donorâ€“Acceptor Copolymers with Acetylene-Inserted Branched Alkyl Side Chains To Achieve High Field-Effect Mobilities. Chemistry of Materials, 2018, 30, 7611-7622.	3.2	24
38	Mg Doped CuCrO2 as Efficient Hole Transport Layers for Organic and Perovskite Solar Cells. Nanomaterials, 2019, 9, 1311.	1.9	24
39	Angular-Shaped 4,10-Dialkylanthradiselenophene and Its Donorâ€“Acceptor Conjugated Polymers: Synthesis, Physical, Transistor, and Photovoltaic Properties. Macromolecules, 2015, 48, 6994-7006.	2.2	22
40	Synthesis and Supramolecular Assembly of Pentacyclic Dithienofluorene and Diselenophenofluorene Derivatives. Organic Letters, 2014, 16, 936-939.	2.4	21
41	Synthesis and side-chain isomeric effect of 4,9-/5,10-dialkylated-Î²-angular-shaped naphthodithiophenes-based donorâ€“acceptor copolymers for polymer solar cells and field-effect transistors. Polymer Chemistry, 2017, 8, 2334-2345.	1.9	20
42	Naphthobisthiadiazole-Based Selenophene-Incorporated Quarterchalcogenophene Copolymers for Field-Effect Transistors and Polymer Solar Cells. ACS Applied Materials & Interfaces, 2019, 11, 11674-11683.	4.0	17
43	Synthesis of side-chain regioregular and main-chain alternating poly(bichalcogenophene)s and an ABC-type periodic poly(terchalcogenophene). Chemical Science, 2020, 11, 3836-3844.	3.7	17
44	Forced coplanarity of dithienofluorene-based non-fullerene acceptors to achieve high-efficiency organic solar cells. Journal of Materials Chemistry A, 2019, 7, 17947-17953.	5.2	16
45	Synthesis and Molecular Properties of Two Isomeric Dialkylated Tetrathienonaphthalenes. Organic Letters, 2016, 18, 368-371.	2.4	15
46	Synthesis of unsymmetrical benzotrichalcogenophenes by N-heterocyclic carbeneâ€“palladium-catalyzed intramolecular direct C3-arylation of chalcogenophenes. Chemical Communications, 2018, 54, 1517-1520.	2.2	15
47	2-Dimensional cross-shaped tetrathienonaphthalene-based ladder-type acceptor for high-efficiency organic solar cells. Journal of Materials Chemistry A, 2020, 8, 12141-12148.	5.2	14
48	Alcohol-Soluble Zwitterionic 4-(Dimethyl(pyridin-2-yl)ammonio)butane-1-sulfonate Small Molecule as a Cathode Modifier for Nonfullerene Acceptor-Based Organic Solar Cells. ACS Applied Materials & Interfaces, 2021, 13, 10222-10230.	4.0	13
49	Coordinationâ€Induced Defects Elimination of SnO₂ Nanoparticles via a Small Electrolyte Molecule for Highâ€Performance Inverted Organic Solar Cells. Advanced Optical Materials, 2022, 10, .	3.6	12
50	Pd(II)-Catalyzed Direct Dehydrogenative Mono- and Diolefination of Selenophenes. Organic Letters, 2020, 22, 2318-2322.	2.4	11
51	Two-Dimensional Tetrathienonaphthalenes-Based Donorâ€“Acceptor Copolymers: Synthesis, Isomeric Effect, and Organic Field-Effect Transistors. Macromolecules, 2020, 53, 7740-7748.	2.2	7
52	Probing Defect States in Organic Polymers and Bulk Heterojunctions Using Surface Photovoltage Spectroscopy. Journal of Physical Chemistry C, 2019, 123, 10795-10801.	1.5	5
53	Synthesis of Ring-Locked Tetracyclic Dithienocyclopentapyrans and Dibenzocyclopentapyran via 1,5-Hydride Shift and Copper-Catalyzed Câ€“O Bond Formation for Nonfullerene Acceptors. Organic Letters, 2021, 23, 1692-1697.	2.4	4
54	Regio- and stereo-selective [4+4] photodimerization of angular-shaped dialkyltetracenedithiophene. Chemical Communications, 2019, 55, 381-384.	2.2	3

#	Article	IF	Citations
55	Palladiumâ€Catalyzed Direct Crossâ€Dehydrogenative Alkynylation of Selenophenes. Advanced Synthesis and Catalysis, 2021, 363, 4526.	2.1	0