Han-Ying Li

List of Publications by Year
in descending order

95 papers	5,294 citations	81900 39 h-index	85541 71 g-index
98 all docs	98 docs citations	98 times ranked	6621 citing authors

#	Article	IF	Citations
1	Over 17% efficiency ternary organic solar cells enabled by two non-fullerene acceptors working in an alloy-like model. Energy and Environmental Science, 2020, 13, 635-645.	30.8	636
2	High-Mobility Field-Effect Transistors from Large-Area Solution-Grown Aligned C₆₀ Single Crystals. Journal of the American Chemical Society, 2012, 134, 2760-2765.	13.7	481
3	Visualizing the 3D Internal Structure of Calcite Single Crystals Grown in Agarose Hydrogels. Science, 2009, 326, 1244-1247.	12.6	257
4	Crystal Growth of Calcium Carbonate in Hydrogels as a Model of Biomineralization. Advanced Functional Materials, 2012, 22, 2891-2914.	14.9	188
5	Self-Healing Electronic Materials for a Smart and Sustainable Future. ACS Applied Materials & Interfaces, 2018, 10, 15331-15345.	8.0	170
6	Polydopamine-Coated Porous Substrates as a Platform for Mineralized Î²-FeOOH Nanorods with Photocatalysis under Sunlight. ACS Applied Materials & Interfaces, 2015, 7, 11567-11574.	8.0	150
7	Highâ€Performance Transistors and Complementary Inverters Based on Solutionâ€Grown Aligned Organic Singleâ€Crystals. Advanced Materials, 2012, 24, 2588-2591.	21.0	129
8	Stable Bimetallic Polyphthalocyanine Covalent Organic Frameworks as Superior Electrocatalysts. Journal of the American Chemical Society, 2021, 143, 18052-18060.	13.7	127
9	Calcite Growth in Hydrogels: Assessing the Mechanism of Polymerâ€Network Incorporation into Single Crystals. Advanced Materials, 2009, 21, 470-473.	21.0	125
10	Câ€“H activation: making diketopyrrolopyrrole derivatives easily accessible. Journal of Materials Chemistry A, 2013, 1, 2795.	10.3	118
11	Solutionâ€Grown Organic Singleâ€Crystalline pâ€n Junctions with Ambipolar Charge Transport. Advanced Materials, 2013, 25, 5762-5766.	21.0	112
12	Piperazine-Linked Covalent Organic Frameworks with High Electrical Conductivity. Journal of the American Chemical Society, 2022, 144, 2873-2878.	13.7	106
13	Hydrogels Coupled with Self-Assembled Monolayers:Â An in Vitro Matrix To Study Calcite Biomineralization. Journal of the American Chemical Society, 2007, 129, 5480-5483.	13.7	104
14	Calcite Prisms from Mollusk Shells (Atrina Rigida): Swissâ€cheeseâ€like Organicâ€“Inorganic Singleâ€crystal Composites. Advanced Functional Materials, 2011, 21, 2028-2034.	14.9	104
15	A facile room-temperature chemical reduction method to TiO2@CdS core/sheath heterostructure nanowires. Journal of Materials Chemistry, 2004, 14, 1203.	6.7	101
16	Design of a versatile interconnecting layer for highly efficient series-connected polymer tandem solar cells. Energy and Environmental Science, 2015, 8, 1712-1718.	30.8	101
17	4,5,9,10â€Pyrene Diimides: A Family of Aromatic Diimides Exhibiting High Electron Mobility and Twoâ€Photon Excited Emission. Angewandte Chemie - International Edition, 2017, 56, 13031-13035.	13.8	86
18	Low temperature solution processed planar heterojunction perovskite solar cells with a CdSe nanocrystal as an electron transport/extraction layer. Journal of Materials Chemistry C, 2014, 2, 9087-9090.	5.5	85

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19	Preparation of Singleâ€Crystalline Heterojunctions for Organic Electronics. Advanced Materials, 2017, 29, 1606101.	21.0	82
20	Visibleâ€Light Ultrasensitive Solutionâ€Prepared Layered Organicâ€“Inorganic Hybrid Perovskite Fieldâ€Effect Transistor. Advanced Optical Materials, 2017, 5, 1600539.	7.3	78
21	Functionalizing Single Crystals: Incorporation of Nanoparticles Inside Gelâ€Grown Calcite Crystals. Angewandte Chemie - International Edition, 2014, 53, 4127-4131.	13.8	69
22	Solutionâ€Grown Organic Singleâ€Crystalline Donorâ€“Acceptor Heterojunctions for Photovoltaics. Angewandte Chemie - International Edition, 2015, 54, 956-960.	13.8	65
23	Boosting the electron mobility of solution-grown organic single crystals via reducing the amount of polar solvent residues. Materials Horizons, 2016, 3, 119-123.	12.2	64
24	Porous calcite single crystals grown from a hydrogel medium. CrystEngComm, 2007, 9, 1153.	2.6	63
25	Overestimation of Carrier Mobility in Organic Thin Film Transistors Due to Unaccounted Fringe Currents. ACS Applied Electronic Materials, 2019, 1, 379-388.	4.3	63
26	Conductive Metallophthalocyanine Framework Films with High Carrier Mobility as Efficient Chemiresistors. Angewandte Chemie - International Edition, 2021, 60, 10806-10813.	13.8	63
27	Electron acceptors with varied linkages between perylene diimide and benzotrithiophene for efficient fullerene-free solar cells. Journal of Materials Chemistry A, 2017, 5, 9396-9401.	10.3	60
28	Ambipolar charge transport of TIPS-pentacene single-crystals grown from non-polar solvents. Materials Horizons, 2015, 2, 344-349.	12.2	59
29	Highly Efficient Guanidiniumâ€Based Quasi 2D Perovskite Solar Cells via a Twoâ€Step Postâ€Treatment Process. Small Methods, 2019, 3, 1900375.	8.6	59
30	Symmetry Breaking in Side Chains Leading to Mixed Orientations and Improved Charge Transport in Isoindigo-alt-Bithiophene Based Polymer Thin Films. ACS Applied Materials & Interfaces, 2017, 9, 25426-25433.	8.0	58
31	Toward high-mobility organic field-effect transistors: Control of molecular packing and large-area fabrication of single-crystal-based devices. MRS Bulletin, 2013, 38, 34-42.	3.5	57
32	Nanoparticles Incorporated inside Single-Crystals: Enhanced Fluorescent Properties. Chemistry of Materials, 2016, 28, 7537-7543.	6.7	52
33	Perovskite/Organic Bulkâ€Heterojunction Integrated Ultrasensitive Broadband Photodetectors with High Nearâ€Infrared External Quantum Efficiency over 70%. Small, 2018, 14, e1802349.	10.0	52
34	Single-crystalline lead halide perovskite arrays for solar cells. Journal of Materials Chemistry A, 2016, 4, 1214-1217.	10.3	49
35	Interfacing Solutionâ€Grown C₆₀ and (3â€Pyrrolinium)(CdCl₃) Single Crystals for Highâ€Mobility Transistorâ€Based Memory Devices. Advanced Materials, 2015, 27, 4476-4480.	21.0	48
36	Key progresses of MOE key laboratory of macromolecular synthesis and functionalization in 2020. Chinese Chemical Letters, 2022, 33, 1650-1658.	9.0	47

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37	Solution-grown aligned C60 single-crystals for field-effect transistors. Journal of Materials Chemistry C, 2014, 2, 3617.	5.5	46
38	Extended Ladderâ€Type Benzo[k]tetrapheneâ€Derived Oligomers. Angewandte Chemie - International Edition, 2017, 56, 13727-13731.	13.8	46
39	Solutionâ€Grown Organic Singleâ€Crystal Fieldâ€Effect Transistors with Ultrahigh Response to Visibleâ€Blind and Deep UV Signals. Advanced Electronic Materials, 2015, 1, 1500136.	5.1	39
40	Key progresses of MOE key laboratory of macromolecular synthesis and functionalization in 2021. Chinese Chemical Letters, 2023, 34, 107592.	9.0	35
41	Microfluidic fabrication of cholesteric liquid crystal coreâ€“shell structures toward magnetically transportable microlasers. Lab on A Chip, 2016, 16, 1206-1213.	6.0	34
42	Emerging materials for circularly polarized light detection. Journal of Materials Chemistry C, 2022, 10, 2400-2410.	5.5	34
43	Gel incorporation inside of organic single crystals grown in agarose hydrogels. CrystEngComm, 2011, 13, 1060-1062.	2.6	32
44	Alignment and patterning of organic single crystals for field-effect transistors. Chinese Chemical Letters, 2016, 27, 1421-1428.	9.0	32
45	Organic Heterojunctions Formed by Interfacing Two Single Crystals from a Mixed Solution. Journal of the American Chemical Society, 2019, 141, 10007-10015.	13.7	31
46	Bulk-Heterojunction with Long-Range Ordering: C₆₀ Single-Crystal with Incorporated Conjugated Polymer Networks. Journal of the American Chemical Society, 2020, 142, 1630-1635.	13.7	30
47	Thioether- and sulfone-functionalized dibenzopentalenes as n-channel semiconductors for organic field-effect transistors. Journal of Materials Chemistry C, 2018, 6, 5420-5426.	5.5	29
48	4,5,9,10â€Pyrene Diimides: A Family of Aromatic Diimides Exhibiting High Electron Mobility and Twoâ€Photon Excited Emission. Angewandte Chemie, 2017, 129, 13211-13215.	2.0	27
49	Poly(vinyl alcohol)-Encapsulated Hydrophilic Carbon Black Nanoparticles Free from Aggregation. Macromolecular Rapid Communications, 2003, 24, 715-717.	3.9	23
50	Complementary Semiconducting Polymer Blends: Influence of Side Chains of Matrix Polymers. Macromolecules, 2017, 50, 6202-6209.	4.8	23
51	A periâ€Xanthenoxanthene Centered Columnarâ€Stacking Organic Semiconductor for Efficient, Photothermally Stable Perovskite Solar Cells. Chemistry - A European Journal, 2019, 25, 945-948.	3.3	21
52	Large-scale fabrication of field-effect transistors based on solution-grown organic single crystals. Science Bulletin, 2015, 60, 1122-1127.	9.0	20
53	Long-range ordering of composites for organic electronics: TIPS-pentacene single crystals with incorporated nano-fibers. Chinese Chemical Letters, 2017, 28, 2121-2124.	9.0	20
54	Lateral Polymer Photodetectors Using Silver Nanoparticles Promoted PffBT4T-2OD:PC61BM Composite. ACS Photonics, 2018, 5, 4650-4659.	6.6	20

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55	The degree of crystallinity exhibiting a spatial distribution in polymer films. European Polymer Journal, 2018, 107, 303-307.	5.4	20
56	Gel-incorporated PbS and PbI2 single-crystals. Chinese Chemical Letters, 2015, 26, 504-508.	9.0	19
57	Solution-grown aligned crystals of diketopyrrolopyrroles (DPP)-based small molecules: Rough surfaces and relatively low charge mobility. Chinese Chemical Letters, 2016, 27, 523-526.	9.0	19
58	Effect of Solvent-Assisted Nanoscaled Organo-Gels on Morphology and Performance of Organic Solar Cells. Journal of Physical Chemistry C, 2012, 116, 16893-16900.	3.1	18
59	Gel network incorporation into single-crystals: effects of gel structures and crystalâ€“gel interaction. CrystEngComm, 2014, 16, 6901.	2.6	18
60	Design of charge transporting grids for efficient ITO-free flexible up-scaled organic photovoltaics. Materials Chemistry Frontiers, 2017, 1, 304-309.	5.9	18
61	Communicating Two States in Perovskite Revealed by Time-Resolved Photoluminescence Spectroscopy. Scientific Reports, 2018, 8, 16482.	3.3	18
62	Polymer single crystal dielectrics for organic field-effect transistors. Polymer, 2018, 137, 255-260.	3.8	17
63	Scaling Up Principles for Solution-Processed Organic Single-Crystalline Heterojunctions. Chemistry of Materials, 2021, 33, 19-38.	6.7	17
64	Crystallization from a Droplet: Single-Crystalline Arrays and Heterojunctions for Organic Electronics. Accounts of Chemical Research, 2021, 54, 4498-4507.	15.6	17
65	A well-designed polymer as a three-in-one multifunctional binder for high-performance lithiumâ€“sulfur batteries. Journal of Materials Chemistry A, 2021, 9, 2970-2979.	10.3	16
66	Incorporating polymers within a singleâ€crystal: From heterogeneous structure to multiple functions. Journal of Polymer Science, 2022, 60, 1151-1173.	3.8	16
67	Low Cost Universal Highâ€k Dielectric for Solution Processing and Thermal Evaporation Organic Transistors. Advanced Materials Interfaces, 2014, 1, 1300119.	3.7	15
68	Functional delivery vehicle of organic nanoparticles in inorganic crystals. Chinese Chemical Letters, 2019, 30, 2351-2354.	9.0	15
69	Patterning the Internal Structure of Single Crystals by Gel Incorporation. Journal of Physical Chemistry C, 2019, 123, 13147-13153.	3.1	15
70	Electron transport in solution-grown TIPS-pentacene single crystals: Effects of gate dielectrics and polar impurities. Chinese Chemical Letters, 2016, 27, 1781-1787.	9.0	14
71	Constructing bulk-contact inside single crystals of organic semiconductors through gel incorporation. CrystEngComm, 2016, 18, 800-806.	2.6	14
72	Extended Ladderâ€Type Benzo[k]tetrapheneâ€Derived Oligomers. Angewandte Chemie, 2017, 129, 13915-13919.	2.0	13

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73	Electron transport at the interface of organic semiconductors and hydroxyl-containing dielectrics. Journal of Materials Chemistry C, 2018, 6, 12001-12005.	5.5	13
74	Visualizing the toughening origins of gel-grown calcite single-crystal composites. Chinese Chemical Letters, 2018, 29, 1666-1670.	9.0	12
75	Controllable Anion Doping of Electron Acceptors for High-Efficiency Organic Solar Cells. ACS Energy Letters, 2022, 7, 1764-1773.	17.4	12
76	Solutionâ€Grown Organic Singleâ€Crystalline Donorâ€“Acceptor Heterojunctions for Photovoltaics. Angewandte Chemie, 2015, 127, 970-974.	2.0	11
77	PbI₂ band gap engineering by gel incorporation. Materials Chemistry Frontiers, 2018, 2, 362-368.	5.9	11
78	Ultrafast Electron Transfer Before Singlet Fission and Slow Triplet State Electron Transfer in Pentacene Single Crystal/C60 Heterostructure. Journal of Physical Chemistry A, 2020, 124, 4185-4192.	2.5	11
79	Synthetic polymer/singleâ€crystal composite. Polymers for Advanced Technologies, 2014, 25, 1189-1194.	3.2	10
80	Zoneâ€Annealingâ€Assisted Solventâ€Free Processing of Complementary Semiconducting Polymer Blends for Organic Fieldâ€Effect Transistors. Advanced Electronic Materials, 2018, 4, 1700414.	5.1	9
81	Incorporation of fluorescent microgels inside calcite single crystals. Giant, 2020, 3, 100023.	5.1	9
82	PbI₂â€“TiO₂ Bulk Heterojunctions with Long-Range Ordering for X-ray Detectors. Journal of Physical Chemistry Letters, 2021, 12, 11176-11181.	4.6	9
83	Shape change of calcite single crystals to accommodate interfacial curvature: Crystallization in presence of Mg 2+ ions and agarose gel-networks. Chinese Chemical Letters, 2017, 28, 857-862.	9.0	8
84	Enhanced performance of field-effect transistors based on C60 single crystals with conjugated polyelectrolyte. Science China Chemistry, 2017, 60, 490-496.	8.2	8
85	Conductive Metallophthalocyanine Framework Films with High Carrier Mobility as Efficient Chemiresistors. Angewandte Chemie, 2021, 133, 10901-10908.	2.0	8
86	Texture Induced by Molecular Weight Dispersity: Polymorphism within Poly(L-lactic acid) Spherulites. Chinese Journal of Polymer Science (English Edition), 2020, 38, 1365-1373.	3.8	7
87	Gel network incorporation into single crystals grown by decomplexation method. CrystEngComm, 2015, 17, 8113-8118.	2.6	6
88	Assessing the synergy effect of additive and matrix on single-crystal growth: Morphological revolution resulted from gel-mediated enhancement on CIT-calcite interaction. Chinese Chemical Letters, 2018, 29, 1296-1300.	9.0	6
89	Bending TIPS-pentacene single crystals: from morphology to transistor performance. Journal of Materials Chemistry C, 2021, 9, 5621-5627.	5.5	6
90	Isotropically Dyed Single Crystals Produced via Gel-Incorporation. , 2022, 4, 1207-1213.		6

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91	Crystal growth and characterization of fluorinated perylene diimides. Chemical Research in Chinese Universities, 2014, 30, 63-67.	2.6	4
92	Single-crystal dielectrics for organic field-effect transistors. Journal of Materials Chemistry C, 2022, 10, 4985-4998.	5.5	4
93	Hydrogels: Crystal Growth of Calcium Carbonate in Hydrogels as a Model of Biomineralization (Adv.) Tj ETQq1 1 0.784314 rgBT /Over	14.9	2
94	Effect of Aromatic Solvents Residuals on Electron Mobility of Organic Single Crystals. Advanced Electronic Materials, 0, , 2200158.	5.1	2
95	Stretchable Semiconducting Composite Films Fabricated via Blending Polythiophene with an Elastomer Bearing Pendant Dopant. ACS Applied Polymer Materials, 2021, 3, 3114-3124.	4.4	1