

# Xiangnan Sun

## List of Publications by Year in descending order

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68  
papers

3,382  
citations

136885

32  
h-index

143943

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69  
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69  
docs citations

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times ranked

5176  
citing authors

#	ARTICLE	IF	CITATIONS
1	Ternary NiCo <sub>2</sub> P Nanowires as pH-Universal Electrocatalysts for Highly Efficient Hydrogen Evolution Reaction. <i>Advanced Materials</i> , 2017, 29, 1605502.	11.1	544
2	Multibit Storage of Organic Thin-Film Field-Effect Transistors. <i>Advanced Materials</i> , 2009, 21, 1954-1959.	11.1	178
3	Inkjet Printing High-Resolution, Large-Area Graphene Patterns by Coffee-Ring Lithography. <i>Advanced Materials</i> , 2012, 24, 436-440.	11.1	154
4	Engineering of the dielectric-semiconductor interface in organic field-effect transistors. <i>Journal of Materials Chemistry</i> , 2010, 20, 2599.	6.7	153
5	A molecular spin-photovoltaic device. <i>Science</i> , 2017, 357, 677-680.	6.0	147
6	Recent advances in PM6:Y6-based organic solar cells. <i>Materials Chemistry Frontiers</i> , 2021, 5, 3257-3280.	3.2	138
7	Recent Advances in Molecular Spintronics: Multifunctional Spintronic Devices. <i>Advanced Materials</i> , 2019, 31, e1805355.	11.1	96
8	Large-area, flexible imaging arrays constructed by light-charge organic memories. <i>Scientific Reports</i> , 2013, 3, 1080.	1.6	92
9	Electron Complementation-Induced Co Phosphide for Efficient Overall Water Splitting. <i>Advanced Energy Materials</i> , 2021, 11, 2101758.	10.2	92
10	Improvements in Stability and Performance of N,N'-Dialkyl Perylene Diimide-Based n-Type Thin-Film Transistors. <i>Advanced Materials</i> , 2009, 21, 1631-1635.	11.1	90
11	Diketopyrrolopyrrole-Based $\pi$ -Conjugated Copolymer Containing 1,2-Unsubstituted Quinquephenyl Unit: A Promising Material Exhibiting High Hole-Mobility for Organic Thin-Film Transistors. <i>Chemistry of Materials</i> , 2012, 24, 4350-4356.	3.2	85
12	Molecular Engineering of A Copolymers Based on 4,8-Bis(4-chlorothiophen-2-yl)benzo[1,2-b:4,5-b']dithiophene (BDT-T-Cl) for High-Performance Fullerene-Free Organic Solar Cells. <i>Macromolecules</i> , 2019, 52, 6227-6233.	2.2	83
13	Active Morphology Control for Concomitant Long Distance Spin Transport and Photoresponse in a Single Organic Device. <i>Advanced Materials</i> , 2016, 28, 2609-2615.	11.1	77
14	Room-temperature air-stable spin transport in bathocuproine-based spin valves. <i>Nature Communications</i> , 2013, 4, .	5.8	74
15	Interfacial Heterogeneity of Surface Energy in Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2011, 23, 1009-1014.	11.1	60
16	Quinoxaline-Containing Nonfullerene Small-Molecule Acceptors with a Linear A <sub>2</sub> -A <sub>1</sub> -D-A <sub>1</sub> -A <sub>2</sub> Skeleton for Poly(3-hexylthiophene)-Based Organic Solar Cells. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 10254-10261.	4.0	60
17	Single-Crystal Microribbons of an Indolo[3,2-b]carbazole Derivative by Solution-Phase Self-Assembly with Novel Mechanical, Electrical, and Optical Properties. <i>Advanced Materials</i> , 2008, 20, 4835-4839.	11.1	58
18	Gate-Controlled Energy Barrier at a Graphene/Molecular Semiconductor Junction. <i>Advanced Functional Materials</i> , 2015, 25, 2972-2979.	7.8	58

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19	Morphology Optimization for the Fabrication of High Mobility Thin-Film Transistors. <i>Advanced Materials</i> , 2011, 23, 3128-3133.	11.1	55
20	Solvent-Assisted Re-annealing of Polymer Films for Solution-Processable Organic Field-Effect Transistors. <i>Advanced Materials</i> , 2010, 22, 1273-1277.	11.1	54
21	Field dependent and high light sensitive organic phototransistors based on linear asymmetric organic semiconductor. <i>Applied Physics Letters</i> , 2009, 94, 143303.	1.5	48
22	Top-Gate Organic Thin-Film Transistors Constructed by a General Lamination Approach. <i>Advanced Materials</i> , 2010, 22, 3537-3541.	11.1	47
23	18.4% efficiency achieved by the cathode interface engineering in non-fullerene polymer solar cells. <i>Nano Today</i> , 2021, 41, 101289.	6.2	47
24	Spin Transport in Organic Molecules. <i>Frontiers in Chemistry</i> , 2019, 7, 428.	1.8	44
25	How reliable are Hanle measurements in metals in a three-terminal geometry?. <i>Applied Physics Letters</i> , 2013, 102, .	1.5	43
26	Side chain engineering of quinoxaline-based small molecular nonfullerene acceptors for high-performance poly(3-hexylthiophene)-based organic solar cells. <i>Science China Chemistry</i> , 2020, 63, 254-264.	4.2	42
27	Determination of energy level alignment at metal/molecule interfaces by in-device electrical spectroscopy. <i>Nature Communications</i> , 2014, 5, 4161.	5.8	40
28	Effects of Oxygen Atoms Introduced at Different Positions of Non-Fullerene Acceptors in the Performance of Organic Solar Cells with Poly(3-hexylthiophene). <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 1094-1102.	4.0	39
29	Energy Level Alignment at Metal/Solution-Processed Organic Semiconductor Interfaces. <i>Advanced Materials</i> , 2017, 29, 1606901.	11.1	37
30	Constructing High-Performance All-Small-Molecule Ternary Solar Cells with the Same Third Component but Different Mechanisms for Fullerene and Non-Fullerene Systems. <i>Advanced Energy Materials</i> , 2019, 9, 1900190.	10.2	37
31	Effect of dielectric layers on device stability of pentacene-based field-effect transistors. <i>Physical Chemistry Chemical Physics</i> , 2009, 11, 7268.	1.3	34
32	Flexible semi-transparent organic spin valve based on bathocuproine. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	33
33	A Fe-Ni <sub>5</sub> P <sub>4</sub> /Fe-Ni <sub>2</sub> P heterojunction electrocatalyst for highly efficient solar-to-hydrogen generation. <i>Journal of Materials Chemistry A</i> , 2021, 9, 1221-1229.	5.2	33
34	Novel Butterfly-Shaped Fused Heteroacenes: Synthesis, Properties, and Device Performance of Solution-Processed Field-Effect Transistors. <i>Organic Letters</i> , 2012, 14, 4382-4385.	2.4	32
35	Regioregular narrow bandgap copolymer with strong aggregation ability for high-performance semitransparent photovoltaics. <i>Nano Energy</i> , 2021, 86, 106098.	8.2	31
36	Spin doping using transition metal phthalocyanine molecules. <i>Nature Communications</i> , 2016, 7, 13751.	5.8	30

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37	Modulating the Symmetry of Benzodithiophene by Molecular Tailoring for the Application in Naphthalene Diimide-Based n-Type Photovoltaic Polymers. <i>Solar Rrl</i> , 2018, 2, 1700230.	3.1	28
38	The effect of alkyl chain branching positions on the electron mobility and photovoltaic performance of naphthodithiophene diimide (NDTI)-based polymers. <i>Science China Chemistry</i> , 2019, 62, 1649-1655.	4.2	28
39	The Application of Organic Semiconductor Materials in Spintronics. <i>Frontiers in Chemistry</i> , 2020, 8, 589207.	1.8	28
40	An electron-conducting pyrene-fused phenazinothiadiazole. <i>Chemical Communications</i> , 2015, 51, 10754-10757.	2.2	27
41	Nitrogen-doping induces tunable magnetism in ReS <sub>2</sub> . <i>Npj 2D Materials and Applications</i> , 2018, 2, .	3.9	27
42	Carbohydrate-Universal electrolyzer for energy-saving hydrogen production with Co <sub>3</sub> FePx@NF as bifunctional electrocatalysts. <i>Applied Catalysis B: Environmental</i> , 2020, 263, 118109.	10.8	27
43	Hexathienoacene: Synthesis, Characterization, and Thin-Film Transistors. <i>Chemistry - an Asian Journal</i> , 2010, 5, 1550-1554.	1.7	24
44	Bisthiadiazole-Fused Tetraazapentacenequinone: An Air-Stable Solution-Processable n-Type Organic Semiconductor. <i>Organic Letters</i> , 2015, 17, 5902-5905.	2.4	24
45	Organic solar cells based on small molecule donor and polymer acceptor. <i>Chinese Chemical Letters</i> , 2022, 33, 123-132.	4.8	20
46	Synthesis and characterization of phenanthrocarbazole-diketopyrrolopyrrole copolymer for high-performance field-effect transistors. <i>Journal of Polymer Science Part A</i> , 2013, 51, 2208-2215.	2.5	18
47	Bis(triisopropylsilylethynyl)-substituted pyrene-fused tetraazaheptacene: synthesis and properties. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 11616-11619.	1.3	18
48	Selective Crystallization of Organic Semiconductors for High Performance Organic Field-Effect Transistors. <i>Chemistry of Materials</i> , 2009, 21, 4873-4879.	3.2	16
49	The prospects of organic semiconductor single crystals for spintronic applications. <i>Journal of Materials Chemistry C</i> , 2022, 10, 2507-2515.	2.7	14
50	Novel nanofiber-enhanced SPEEK proton-exchange membranes with high conductivity and stability. <i>Polymer</i> , 2020, 210, 123016.	1.8	12
51	Linking polythiophene chains with vinylene bridges: A way to improve charge transport in polymer field-effect transistors. <i>Journal of Polymer Science Part A</i> , 2009, 47, 1381-1392.	2.5	11
52	Flexible semi-transparent organic transistors and circuits based on easily prepared polyphenyleneoxide dielectric. <i>Organic Electronics</i> , 2019, 69, 308-312.	1.4	11
53	Frequency driven inversion of tunnel magnetoimpedance and observation of positive tunnel magnetocapacitance in magnetic tunnel junctions. <i>Applied Physics Letters</i> , 2016, 109, 052401.	1.5	10
54	Enhancing the performances of all-small-molecule ternary organic solar cells via achieving optimized morphology and 3D charge pathways. <i>Chinese Chemical Letters</i> , 2021, 32, 2904-2908.	4.8	10

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55	Preparation and assessment of reliable organic spin valves. <i>Organic Electronics</i> , 2021, 99, 106311.	1.4	9
56	Reliable determination of the Cu/n-Si Schottky barrier height by using in-device hot-electron spectroscopy. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	8
57	Advantage of arch-shaped structure on transistor performances over linear-shaped structure in dibenzothienopyrrole semiconductors. <i>Organic Electronics</i> , 2018, 61, 78-86.	1.4	8
58	Organic Semiconductors for Room-Temperature Spin Valves. , 2022, 4, 805-814.		8
59	Quantitative Analysis of the Role of the First Layer in p- and n-Type Organic Field-Effect Transistors with Graphene Electrodes. <i>Advanced Materials</i> , 2012, 24, 1471-1475.	11.1	7
60	Charge carrier mobility and electronic properties of Al(O <sub>p</sub> ) <sub>3</sub> : impact of excimer formation. <i>Beilstein Journal of Nanotechnology</i> , 2015, 6, 1107-1115.	1.5	7
61	Synthesis and Characterization of a 2,4,6-Tri(2-thienyl)pyridine-Based Conjugated Polymer for OFET Applications. <i>Macromolecular Chemistry and Physics</i> , 2012, 213, 917-923.	1.1	4
62	Electron Complementation-Induced Co Phosphide for Efficient Overall Water Splitting (Adv.) <i>Tj ETQq0,0 rgBT /Overlock</i>	10.2	4
63	Hot electron spectroscopy: A novel method to study molecular semiconductor. <i>Organic Electronics</i> , 2021, 94, 106164.	1.4	3
64	Electron-deficient TVT unit-based A polymer donor for high-efficiency thick-film OSCs. <i>Nanotechnology</i> , 2022, 33, 065401.	1.3	3
65	A novel energy level detector for molecular semiconductors. <i>Physical Chemistry Chemical Physics</i> , 2022, 24, 2717-2728.	1.3	2
66	Spintronic study based on molecular spin valves. <i>Chinese Science Bulletin</i> , 2018, 63, 3689-3696.	0.4	1
67	Ethylenediamine-Functionalized Carbon Nanotubes and Nylon-6 Composites. <i>Advanced Materials Research</i> , 2011, 287-290, 462-466.	0.3	0
68	Organic Thin-Film Transistors: Interfacial Heterogeneity of Surface Energy in Organic Field-Effect Transistors (Adv. Mater. 8/2011). <i>Advanced Materials</i> , 2011, 23, 1008-1008.	11.1	0