

Jie Xu

List of Publications by Year in descending order

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54
papers

7,770
citations

186265
28
h-index

189892
50
g-index

56
all docs

56
docs citations

56
times ranked

9153
citing authors

#	ARTICLE	IF	CITATIONS
1	Tuning Conjugated Polymer Chain Packing for Stretchable Semiconductors. <i>Advanced Materials</i> , 2022, 34, e2104747.	21.0	47
2	Stretchable Redox-Active Semiconducting Polymers for High-Performance Organic Electrochemical Transistors. <i>Advanced Materials</i> , 2022, 34, e2201178.	21.0	50
3	Hydrogen-Bond-Promoted Planar Conformation, Crystallinity, and Charge Transport in Semiconducting Diazaisoindigo Derivatives. <i>Advanced Materials</i> , 2022, 34, 1270-1278.		5
4	Strain-insensitive intrinsically stretchable transistors and circuits. <i>Nature Electronics</i> , 2021, 4, 143-150.	26.0	170
5	Observation of Stepwise Ultrafast Crystallization Kinetics of Donor-Acceptor Conjugated Polymers and Correlation with Field Effect Mobility. <i>Chemistry of Materials</i> , 2021, 33, 1637-1647.	6.7	17
6	A universal and facile approach for building multifunctional conjugated polymers for human-integrated electronics. <i>Matter</i> , 2021, 4, 3015-3029.	10.0	13
7	Stretchable transistors and functional circuits for human-integrated electronics. <i>Nature Electronics</i> , 2021, 4, 17-29.	26.0	153
8	Metal-Ligand Based Mechanophores Enhance Both Mechanical Robustness and Electronic Performance of Polymer Semiconductors. <i>Advanced Functional Materials</i> , 2021, 31, 2009201.	14.9	30
9	A stretchable and strain-unperturbed pressure sensor for motion interference-free tactile monitoring on skins. <i>Science Advances</i> , 2021, 7, eabi4563.	10.3	136
10	Integrated Resistive-Capacitive Strain Sensors Based on Polymer-Nanoparticle Composites. <i>ACS Applied Nano Materials</i> , 2020, 3, 4357-4366.	5.0	17
11	Multiamorphous Phases in Diketopyrrolopyrrole-Based Conjugated Polymers: From Bulk to Ultrathin Films. <i>Macromolecules</i> , 2020, 53, 4480-4489.	4.8	18
12	Evaporation-induced sintering of liquid metal droplets with biological nanofibrils for flexible conductivity and responsive actuation. <i>Nature Communications</i> , 2019, 10, 3514.	12.8	148
13	Conjugated Carbon Cyclic Nanorings as Additives for Intrinsically Stretchable Semiconducting Polymers. <i>Advanced Materials</i> , 2019, 31, e1903912.	21.0	99
14	Stretchable and Fully Degradable Semiconductors for Transient Electronics. <i>ACS Central Science</i> , 2019, 5, 1884-1891.	11.3	92
15	Glass Transition Phenomenon for Conjugated Polymers. <i>Macromolecular Chemistry and Physics</i> , 2019, 220, 1900062.	2.2	69
16	Characterization of Hydrogen Bonding Formation and Breaking in Semiconducting Polymers under Mechanical Strain. <i>Macromolecules</i> , 2019, 52, 2476-2486.	4.8	54
17	Multi-scale ordering in highly stretchable polymer semiconducting films. <i>Nature Materials</i> , 2019, 18, 594-601.	27.5	251
18	Challenge and Solution of Characterizing Glass Transition Temperature for Conjugated Polymers by Differential Scanning Calorimetry. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2019, 57, 1635-1644.	2.1	27

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19	Skin-Inspired Electronics: An Emerging Paradigm. <i>Accounts of Chemical Research</i> , 2018, 51, 1033-1045.	15.6	407
20	Skin electronics from scalable fabrication of an intrinsically stretchable transistor array. <i>Nature</i> , 2018, 555, 83-88.	27.8	1,588
21	Nanoscale Characterization of Active Doping Concentration in Boron-Doped Individual Si Nanocrystals. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2018, 215, 1800531.	1.8	3
22	Enhancing Molecular Alignment and Charge Transport of Solution-Sheared Semiconducting Polymer Films by the Electrical-Blade Effect. <i>Advanced Electronic Materials</i> , 2018, 4, 1800110.	5.1	27
23	Nonhalogenated Solvent Processable and Printable High-Performance Polymer Semiconductor Enabled by Isomeric Nonconjugated Flexible Linkers. <i>Macromolecules</i> , 2018, 51, 4976-4985.	4.8	68
24	Highly stretchable polymer semiconductor films through the nanoconfinement effect. <i>Science</i> , 2017, 355, 59-64.	12.6	897
25	Effects of Molecular Structure and Packing Order on the Stretchability of Semicrystalline Conjugated Poly(Tetrathienoacene-diketopyrrolopyrrole) Polymers. <i>Advanced Electronic Materials</i> , 2017, 3, 1600311.	5.1	89
26	Giant positive magnetoresistance in half-metallic double-perovskite Sr ₂ CrWO ₆ thin films. <i>Science Advances</i> , 2017, 3, e1701473.	10.3	52
27	Surface potential modeling and reconstruction in Kelvin probe force microscopy. <i>Nanotechnology</i> , 2017, 28, 365705.	2.6	14
28	Microstructure and carrier-transport behaviors of nanocrystalline silicon thin films annealed at various temperatures. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 1675-1679.	1.8	6
29	Combinatorial Study of Temperature-Dependent Nanostructure and Electrical Conduction of Polymer Semiconductors: Even Bimodal Orientation Can Enhance 3D Charge Transport. <i>Advanced Functional Materials</i> , 2016, 26, 4627-4634.	14.9	51
30	Stretchable Self-Healing Polymeric Dielectrics Cross-Linked Through Metal-Ligand Coordination. <i>Journal of the American Chemical Society</i> , 2016, 138, 6020-6027.	13.7	453
31	Inducing Elasticity through Oligo-siloxane Crosslinks for Intrinsically Stretchable Semiconducting Polymers. <i>Advanced Functional Materials</i> , 2016, 26, 7254-7262.	14.9	138
32	Intrinsically stretchable and healable semiconducting polymer for organic transistors. <i>Nature</i> , 2016, 539, 411-415.	27.8	1,030
33	Low-temperature processing of polymer nanoparticles for bioactive composites. <i>Journal of Polymer Science, Part B: Polymer Physics</i> , 2016, 54, 2514-2520.	2.1	8
34	Non-Conjugated Flexible Linkers in Semiconducting Polymers: A Pathway to Improved Processability without Compromising Device Performance. <i>Advanced Electronic Materials</i> , 2016, 2, 1600104.	5.1	65
35	Electronic properties and charge storage effect of amorphous SiN passivated nanocrystalline silicon. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2015, 33, .	1.2	5
36	Effect of Solution Shearing Method on Packing and Disorder of Organic Semiconductor Polymers. <i>Chemistry of Materials</i> , 2015, 27, 2350-2359.	6.7	92

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37	Direct-Current and Alternating-Current Driving Si Quantum Dots-Based Light Emitting Device. IEEE Journal of Selected Topics in Quantum Electronics, 2014, 20, 206-211.	2.9	30
38	Charge transfer of single laser crystallized intrinsic and phosphorus-doped Si-nanocrystals visualized by Kelvin probe force microscopy. Journal of Applied Physics, 2014, 116, 134309.	2.5	8
39	Understanding Polymorphism in Organic Semiconductor Thin Films through Nanoconfinement. Journal of the American Chemical Society, 2014, 136, 17046-17057.	13.7	179
40	Microscopic and macroscopic characterization of the charging effects in SiC/Si nanocrystals/SiC sandwiched structures. Nanotechnology, 2014, 25, 055703.	2.6	10
41	Probing the interfacial molecular packing in TIPS-pentacene organic semiconductors by surface enhanced Raman scattering. Journal of Materials Chemistry C, 2014, 2, 2985-2991.	5.5	27
42	Sensitive Characterization of the Influence of Substrate Interfaces on Supported Thin Films. Macromolecules, 2014, 47, 6365-6372.	4.8	42
43	Effect of Molecular Chain Architecture on Dynamics of Polymer Thin Films Measured by the Ac-Chip Calorimeter. Macromolecules, 2014, 47, 3497-3501.	4.8	16
44	Nanoscale quantification of charge injection and transportation process in Si-nanocrystal based sandwiched structure. Nanoscale, 2013, 5, 9971.	5.6	16
45	Manganese Porphyrin-dsDNA Complex: A Mimicking Enzyme for Highly Efficient Bioanalysis. Analytical Chemistry, 2013, 85, 3374-3379.	6.5	87
46	Solution coating of large-area organic semiconductor thin films with aligned single-crystalline domains. Nature Materials, 2013, 12, 665-671.	27.5	881
47	Thickness Dependence of Glass Transitions Measured by AC-Chip Calorimetry in Films with Controlled Interface. Macromolecules, 2013, 46, 7006-7011.	4.8	18
48	Synthesis and thermal properties of poly(methyl methacrylate)- <i>g</i> -poly(L-lactic acid) copolymer. Journal of Applied Polymer Science, 2013, 107, 3905-3911.	2.6	4
49	Detection of Interchain Proximity and Segmental Motion of Polymer Glass. Macromolecules, 2011, 44, 7445-7450.	4.8	21
50	Experimental verification of a tunable left-handed material by bias magnetic fields. Applied Physics Letters, 2010, 96, .	3.3	27
51	Directivity enhancement of line source radiation by hollow cylinder made of left-handed material. , 2008, , .		1
52	Effect of loss on directivity enhancement of line source radiation by left-handed material. , 2008, , .		1
53	Periodic layered waveguide with negative index of refraction. Applied Physics Letters, 2007, 90, 082506.	3.3	12
54	Effective index of refraction in guide wave mode for ferrite based layered composites under different boundary conditions. , 2006, , .		1