Sheng Bi

List of Publications by Year
in descending order

57 papers	1,316 citations	331670 21 h-index	395702 33 g-index
57 all docs	57 docs citations	57 times ranked	910 citing authors

#	Article	IF	Citations
1	Self-assembly diketopyrrolopyrrole-based materials and polymer blend with enhanced crystal alignment and property for organic field-effect transistors. Organic Electronics, 2019, 65, 96-99.	2.6	68
2	Nanoparticles for organic electronics applications. Materials Research Express, 2020, 7, 012004.	1.6	61
3	Highly enhanced performance of integrated piezo photo-transistor with dual inverted OLED gate and nanowire array channel. Nano Energy, 2019, 66, 104101.	16.0	55
4	Silver nanowire networks with preparations and applications: a review. Journal of Materials Science: Materials in Electronics, 2020, 31, 15669-15696.	2.2	54
5	Temperature gradient controlled crystal growth from TIPS pentacene-poly(Î±-methyl styrene) blends for improving performance of organic thin film transistors. Organic Electronics, 2016, 32, 195-199.	2.6	52
6	Performance of OLED under mechanical strain: a review. Journal of Materials Science: Materials in Electronics, 2020, 31, 20688-20729.	2.2	52
7	Solution-grown small-molecule organic semiconductor with enhanced crystal alignment and areal coverage for organic thin film transistors. AIP Advances, 2015, 5, .	1.3	48
8	Piezoelectricity in monolayer MXene for nanogenerators and piezotronics. Nano Energy, 2021, 90, 106528.	16.0	43
9	A high-performance bionic pressure memory device based on piezo-OLED and piezo-memristor as luminescence-fish neuromorphic tactile system. Nano Energy, 2020, 77, 105120.	16.0	41
10	High-Performance and Reliable Silver Nanotube Networks for Efficient and Large-Scale Transparent Electromagnetic Interference Shielding. ACS Applied Materials & Interfaces, 2021, 13, 15525-15535.	8.0	41
11	Air-stable solution-processed n-channel organic thin film transistors with polymer-enhanced morphology. Applied Physics Letters, 2015, 106, .	3.3	40
12	Single-Layer MoS₂ Mechanical Resonant Piezo-Sensors with High Mass Sensitivity. ACS Applied Materials & Interfaces, 2020, 12, 41991-41998.	8.0	39
13	Conjugated Polymer Controlled Morphology and Charge Transport of Small-Molecule Organic Semiconductors. Scientific Reports, 2020, 10, 4344.	3.3	39
14	Hyaline and stretchable haptic interfaces based on serpentine-shaped silver nanofiber networks. Nano Energy, 2020, 73, 104782.	16.0	37
15	Layer-dependent anisotropic frictional behavior in two-dimensional monolayer hybrid perovskite/ITO layered heterojunctions. Physical Chemistry Chemical Physics, 2019, 21, 2540-2546.	2.8	31
16	High Performance Vertical Resonant Photo-Effect-Transistor with an All-Around OLED-Gate for Ultra-Electromagnetic Stability. ACS Nano, 2019, 13, 8425-8432.	14.6	27
17	Simple and Lowâ€Cost Plasmonic Fiberâ€Optic Probe as SERS and Biosensing Platform. Advanced Optical Materials, 2019, 7, 1900337.	7.3	26
18	Reciprocated suppression of polymer crystallization toward improved solid polymer electrolytes: Higher ion conductivity and tunable mechanical properties. Journal of Polymer Science, Part B: Polymer Physics, 2015, 53, 1450-1457.	2.1	24

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19	High Performance and Efficiency Resonant Photo-Effect-Transistor by Near-Field Nano-Strip-Controlled Organic Light Emitting Diode Gate. Journal of Physical Chemistry Letters, 2020, 11, 6526-6534.	4.6	24
20	Effect of Donor-Acceptor Vertical Composition Profile on Performance of Organic Bulk Heterojunction Solar Cells. Scientific Reports, 2018, 8, 9574.	3.3	23
21	Self-assembly crystal microribbons with nucleation additive for high-performance organic thin film transistors. Japanese Journal of Applied Physics, 2019, 58, 061009.	1.5	23
22	Ultra-low misorientation angle in small-molecule semiconductor/polyethylene oxide blends for organic thin film transistors. Journal of Polymer Research, 2020, 27, 1.	2.4	23
23	Long-range crystal alignment with polymer additive for organic thin film transistors. Journal of Polymer Research, 2019, 26, 1.	2.4	22
24	Manipulate organic crystal morphology and charge transport. Organic Electronics, 2022, 103, 106448.	2.6	21
25	Small-molecule additives for organic thin film transistors. Journal of Materials Science: Materials in Electronics, 2019, 30, 20899-20913.	2.2	20
26	Development and current situation of flexible and transparent EM shielding materials. Journal of Materials Science: Materials in Electronics, 2021, 32, 25603-25630.	2.2	20
27	Poly(Î±-methylstyrene) polymer and small-molecule semiconductor blend with reduced crystal misorientation for organic thin film transistors. Journal of Materials Science: Materials in Electronics, 2019, 30, 14335-14343.	2.2	19
28	Effect of Polymer Molecular Weight on Morphology and Charge Transport of Small-Molecular Organic Semiconductors. Electronic Materials Letters, 2020, 16, 441-450.	2.2	19
29	Recent progress in multifunctional hydrogel-based supercapacitors. Journal of Science: Advanced Materials and Devices, 2021, 6, 338-350.	3.1	19
30	Paper-like Foldable Nanowave Circuit with Ultralarge Curvature and Ultrahigh Stability. ACS Applied Materials & Interfaces, 2019, 11, 43368-43375.	8.0	18
31	Nanoscale alignment of semiconductor crystals for high-fidelity organic electronics applications. Applied Nanoscience (Switzerland), 2021, 11, 787-795.	3.1	18
32	Size-dependent Youngâ€™s modulus in ZnO nanowires with strong surface atomic bonds. Nanotechnology, 2018, 29, 125702.	2.6	17
33	Phase segregation controlled semiconductor crystallization for organic thin film transistors. Journal of Science: Advanced Materials and Devices, 2020, 5, 151-163.	3.1	17
34	A facile and novel route to improve TIPS pentacene based organic thin film transistor performance with elastomer. Synthetic Metals, 2020, 262, 116337.	3.9	17
35	Photo-Triggered Logic Circuits Assembled on Integrated Illuminants and Resonant Nanowires. ACS Applied Materials & Interfaces, 2020, 12, 46501-46508.	8.0	17
36	Monolayer MXene Nanoelectromechanical Piezoâ€Resonators with 0.2 Zeptogram Mass Resolution. Advanced Science, 2022, 9, .	11.2	17

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37	Highâ€Dynamicâ€Range Pressure Mapping Interactions by Dual Piezoâ€Phototronic Transistor with Piezoâ€Nanowire Channels and Piezoâ€OLED Gates. Advanced Functional Materials, 2020, 30, 2004724.	14.9	14
38	Tailoring the molecular weight of polymer additives for organic semiconductors. Materials Advances, 2022, 3, 1953-1973.	5.4	14
39	Atomic Layer Dependence of Shear Modulus in a Two-Dimensional Single-Crystal Organicâ€“Inorganic Hybrid Perovskite. Journal of Physical Chemistry C, 2019, 123, 15251-15257.	3.1	13
40	Ultra-High-Responsivity Vertical Nanowire-based Phototransistor under Standing-Wave Plasmon Mode Interaction Induced by Near-Field Circular OLED. Journal of Physical Chemistry Letters, 2020, 11, 3947-3954.	4.6	13
41	Polyacrylate polymer assisted crystallization: Improved charge transport and performance consistency for solution-processable small-molecule semiconductor based organic thin film transistors. Journal of Science: Advanced Materials and Devices, 2019, 4, 467-472.	3.1	12
42	Recent advances in MXene-based force sensors: a mini-review. RSC Advances, 2021, 11, 19169-19184.	3.6	12
43	Recent mechanical processing techniques of two-dimensional layered materials: A review. Journal of Science: Advanced Materials and Devices, 2021, 6, 135-152.	3.1	11
44	Efficient small molecule photovoltaic donor based on 2,3-diphenyl-substituted quinoxaline core for solution-processed organic solar cells. RSC Advances, 2017, 7, 23779-23786.	3.6	9
45	Phase segregation effect on TIPS pentacene crystallization and morphology for organic thin film transistors. Journal of Materials Science: Materials in Electronics, 2020, 31, 4503-4510.	2.2	9
46	Crystal growth of small-molecule organic semiconductors with nucleation additive. Current Applied Physics, 2021, 21, 107-115.	2.4	9
47	Dynamic photonic perovskite light-emitting diodes with post-treatment-enhanced crystallization as writable and wipeable inscribers. Nanoscale Advances, 2021, 3, 6659-6668.	4.6	9
48	Large-Dimensional Organic Semiconductor Crystals with Poly(butyl acrylate) Polymer for Solution-Processed Organic Thin Film Transistors. Electronic Materials Letters, 2021, 17, 33-42.	2.2	8
49	Performance enhancement by vertical morphology alteration of the active layer in organic solar cells. RSC Advances, 2018, 8, 6519-6526.	3.6	7
50	Polyferrocenylsilane Semicrystalline Polymer Additive for Solution-Processed p-Channel Organic Thin Film Transistors. Polymers, 2021, 13, 402.	4.5	7
51	Tuning charge transport in organic semiconductors with nanoparticles and hexamethyldisilazane. Journal of Nanoparticle Research, 2021, 23, 1.	1.9	7
52	Poly(butyl acrylate) polymer enhanced phase segregation and morphology of organic semiconductor for solutionâ€processed thin film transistors. Journal of Applied Polymer Science, 2021, 138, 50654.	2.6	7
53	A color-tunable and high-effective organic light-emitting diode device with forward-inverse structure as intelligent lighting display. Journal of Materials Science: Materials in Electronics, 2021, 32, 22309-22318.	2.2	6
54	High-performance fully-stretchable solid-state lithium-ion battery with a nanowire-network configuration and crosslinked hydrogel. Journal of Materials Chemistry A, 2022, 10, 11562-11573.	10.3	6

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55	Silver Nanotube Networks with Ultrahigh Strain Limit as Reliable Flexible Transparent Electrode and Tactile Sensor. Advanced Engineering Materials, 2022, 24, 2100832.	3.5	5
56	Poly(Î±-methyl styrene) polymer additive for organic thin film transistors. Journal of Materials Science: Materials in Electronics, 2022, 33, 1101-1122.	2.2	3
57	Nearâ€Infrared to Visible Light Converter by Integrating Graphene Transistor into Perovskite Quantum Dot Light Emitting Diodes. Advanced Materials Technologies, 2022, 7, .	5.8	3