Shi-Li Zhang

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Surfactant-free starch-graphene composite films as simultaneous oxygen and water vapour barriers. Npj 2D Materials and Applications, 2022, 6, .	7.9	4
2	Highly Conductive Films by Rapid Photonic Annealing of Inkjet Printable Starchâ€“Graphene Ink. Advanced Materials Interfaces, 2022, 9, 2101884.	3.7	4
3	Docking and Activity of DNA Polymerase on Solid-State Nanopores. ACS Sensors, 2022, , .	7.8	1
4	On current blockade upon analyte translocation in nanopores. Journal of Applied Physics, 2021, 129, .	2.5	7
5	Influence of substrate-induced thermal stress on the superconducting properties of V3Si thin films. Journal of Applied Physics, 2021, 129, .	2.5	3
6	Surfactant-Free Stabilization of Aqueous Graphene Dispersions Using Starch as a Dispersing Agent. ACS Omega, 2021, 6, 12050-12062.	3.5	8
7	Superconducting V3Si for quantum circuit applications. Microelectronic Engineering, 2021, 244-246, 111570.	2.4	2
8	Ultrathin Solar Cells Based on Atomic Layer Deposition of Cubic versus Orthorhombic Tin Monosulfide. ACS Applied Energy Materials, 2021, 4, 8085-8097.	5.1	2
9	Deep Learning of Nanopore Sensing Signals Using a Bi-Path Network. ACS Nano, 2021, 15, 14419-14429.	14.6	8
10	Fundamentals and potentials of solid-state nanopores: a review. Journal Physics D: Applied Physics, 2021, 54, 023001.	2.8	18
11	A Guide to Signal Processing Algorithms for Nanopore Sensors. ACS Sensors, 2021, 6, 3536-3555.	7.8	36
12	Self-Limited Formation of Bowl-Shaped Nanopores for Directional DNA Translocation. ACS Nano, 2021, 15, 17938-17946.	14.6	4
13	Effects of Substrate Bias on Low-Frequency Noise in Lateral Bipolar Transistors Fabricated on Silicon-on-Insulator Substrate. IEEE Electron Device Letters, 2020, 41, 4-7.	3.9	3
14	A Nanopore Array of Individual Addressability Enabled by Integrating Microfluidics and a Multiplexer. IEEE Sensors Journal, 2020, 20, 1558-1563.	4.7	6
15	Rapid Four-Point Sweeping Method to Investigate Hysteresis of MoS₂ FET. IEEE Electron Device Letters, 2020, 41, 1356-1359.	3.9	3
16	Visualization of DNA Translocation and Clogging Using Photoluminescent-Free Silicon Nanopore Arrays. , 2020, , .		0
17	High thermoelectric power factor of <i>p</i>-type amorphous silicon thin films dispersed with ultrafine silicon nanocrystals. Journal of Applied Physics, 2020, 127, .	2.5	10
18	On Induced Surface Charge in Solid-State Nanopores. Langmuir, 2020, 36, 8874-8882.	3.5	23

#	ARTICLE	IF	CITATIONS
19	Mechanism and Kinetics of Lipid Bilayer Formation in Solid-State Nanopores. Langmuir, 2020, 36, 1446-1453.	3.5	4
20	Dynamics of DNA Clogging in Hafnium Oxide Nanopores. Journal of Physical Chemistry B, 2020, 124, 11573-11583.	2.6	4
21	On Rectification of Ionic Current in Nanopores. Analytical Chemistry, 2019, 91, 14597-14604.	6.5	35
22	Low-Noise Schottky Junction Trigate Silicon Nanowire Field-Effect Transistor for Charge Sensing. IEEE Transactions on Electron Devices, 2019, 66, 3994-4000.	3.0	5
23	Nanoparticle Localization on Solid-State Nanopores Via Electrophoretic Force. , 2019, , .		1
24	Rectification of protein translocation in truncated pyramidal nanopores. Nature Nanotechnology, 2019, 14, 1056-1062.	31.5	46
25	Dramatically Enhanced Broadband Photodetection by Dual Inversion Layers and Fowlerâ€“Nordheim Tunneling. ACS Nano, 2019, 13, 2289-2297.	14.6	11
26	Autogenic analyte translocation in nanopores. Nano Energy, 2019, 60, 503-509.	16.0	9
27	Device Noise Reduction for Silicon Nanowire Field-Effect-Transistor Based Sensors by Using a Schottky Junction Gate. ACS Sensors, 2019, 4, 427-433.	7.8	18
28	Improving the morphological stability of nickel germanide by tantalum and tungsten additions. Applied Physics Letters, 2018, 112, 103102.	3.3	5
29	Zeroâ€Depth Interfacial Nanopore Capillaries. Advanced Materials, 2018, 30, 1703602.	21.0	15
30	Highly conductive ultrathin Co films by high-power impulse magnetron sputtering. Applied Physics Letters, 2018, 112, .	3.3	15
31	Group Behavior of Nanoparticles Translocating Multiple Nanopores. Analytical Chemistry, 2018, 90, 13483-13490.	6.5	13
32	Competing Mechanisms for Photocurrent Induced at the Monolayerâ€“Multilayer Graphene Junction. Small, 2018, 14, e1800691.	10.0	13
33	Protein Sensing Beyond the Debye Length Using Graphene Field-Effect Transistors. IEEE Sensors Journal, 2018, 18, 6497-6503.	4.7	23
34	Extending the Spectral Responsivity of MoS₂ Phototransistors by Incorporating Upâ€Conversion Microcrystals. Advanced Optical Materials, 2018, 6, 1800660.	7.3	25
35	Nanoarrays on Passivated Aluminum Surface for Site-Specific Immobilization of Biomolecules. ACS Applied Bio Materials, 2018, 1, 125-135.	4.6	3
36	Formation of nickel germanides from Ni layers with thickness below 10â€‰nm. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2017, 35, 020602.	1.2	4

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37	Generalized Noise Study of Solid-State Nanopores at Low Frequencies. ACS Sensors, 2017, 2, 300-307.	7.8	57
38	Minimizing sputter-induced damage during deposition of WS2 onto graphene. Applied Physics Letters, 2017, 110, .	3.3	8
39	Understanding the microwave annealing of silicon. AIP Advances, 2017, 7, .	1.3	22
40	Stretchable Thermoelectric Generators Metallized with Liquid Alloy. ACS Applied Materials & Interfaces, 2017, 9, 15791-15797.	8.0	72
41	Biomimetic supercontainers for size-selective electrochemical sensing of molecular ions. Scientific Reports, 2017, 7, 45786.	3.3	3
42	On Monolayer Formation of Pyrenebutyric Acid on Graphene. Langmuir, 2017, 33, 3588-3593.	3.5	39
43	Physical Model for Rapid and Accurate Determination of Nanopore Size via Conductance Measurement. ACS Sensors, 2017, 2, 1523-1530.	7.8	28
44	Microwave Annealing as a Low Thermal Budget Technique for ZnO Thin-Film Transistors Fabricated Using Atomic Layer Deposition. IEEE Electron Device Letters, 2017, 38, 1390-1393.	3.9	12
45	Correlation of Low-Frequency Noise to the Dynamic Properties of the Sensing Surface in Electrolytes. ACS Sensors, 2017, 2, 1160-1166.	7.8	5
46	A real-time Raman spectroscopy study of the dynamics of laser-thinning of MoS2 flakes to monolayers. AIP Advances, 2017, 7, .	1.3	16
47	Schottky Barrier Height Tuning via the Dopant Segregation Technique through Low-Temperature Microwave Annealing. Materials, 2016, 9, 315.	2.9	2
48	Mechanically Stretchable and Electrically Insulating Thermal Elastomer Composite by Liquid Alloy Droplet Embedment. Scientific Reports, 2016, 5, 18257.	3.3	109
49	Direct assessment of solidâ€“liquid interface noise in ion sensing using a differential method. Applied Physics Letters, 2016, 108, .	3.3	12
50	Thickness Considerations of Two-Dimensional Layered Semiconductors for Transistor Applications. Scientific Reports, 2016, 6, 29615.	3.3	57
51	Defect formation in graphene during low-energy ion bombardment. APL Materials, 2016, 4, .	5.1	68
52	On nanopore DNA sequencing by signal and noise analysis of ionic current. Nanotechnology, 2016, 27, 215502.	2.6	17
53	Accelerating Gas Adsorption on 3D Percolating Carbon Nanotubes. Scientific Reports, 2016, 6, 21313.	3.3	11
54	Ultra-sensitive and responsive capacitive humidity sensor based on graphene oxide. , 2015, , .		4

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55	A two-in-one process for reliable graphene transistors processed with photo-lithography. Applied Physics Letters, 2015, 107, .	3.3	19
56	Investigation of resistivity dependent microwave annealing on Si substrates. , 2015, , .		0
57	Crystallization of amorphous silicon on glass substrate by microwave annealing for thin-film-transistor applications. , 2015, , .		0
58	Schottky barrier height tuning via nickel silicide as diffusion source dopant segregation scheme with microwave annealing. , 2015, , .		0
59	Thermal elastomer composites for soft transducers. , 2015, , .		0
60	Photothermoelectric and photovoltaic effects both present in MoS2. Scientific Reports, 2015, 5, 7938.	3.3	92
61	On Valence-Band Splitting in Layered MoS₂. ACS Nano, 2015, 9, 8514-8519.	14.6	65
62	Interaction of bipolaron with the H2O/O2 redox couple causes current hysteresis in organic thin-film transistors. Nature Communications, 2014, 5, 3185.	12.8	30
63	An ion-gated bipolar amplifier for ion sensing with enhanced signal and improved noise performance. Applied Physics Letters, 2014, 105, .	3.3	10
64	Graphene as a Diffusion Barrier in Galinstan-Solid Metal Contacts. IEEE Transactions on Electron Devices, 2014, 61, 2996-3000.	3.0	33
65	Ultra-shallow junctions formed using microwave annealing. Applied Physics Letters, 2013, 102, .	3.3	30
66	Ultra-low frequency P(VDF-TrFE) piezoelectric energy harvester on flexible substrate. , 2013, , .		0
67	Novel Zn-Doped ${m Al}_{2}{m O}_{3}$ Charge Storage Medium for Light-Erasable Inâ€"Gaâ€"Znâ€"O TFT Memory. IEEE Electron Device Letters, 2013, 34, 1008-1010.	3.9	34
68	Unique UV-Erasable In-Ga-Zn-O TFT Memory With Self-Assembled Pt Nanocrystals. IEEE Electron Device Letters, 2013, 34, 1011-1013.	3.9	35
69	Crystallization of NiSi_{<i>x</i>} in a Body-Centered Cubic Structure during Solid-State Reaction between an Ultrathin Ni Film and Si(001) Substrate at 150â€"350 Â°C. Crystal Growth and Design, 2013, 13, 1801-1806.	3.0	7
70	Influence of Carbon Nanotubes on Thermal Stability of Water-Dispersible Nanofibrillar Polyaniline/Nanotube Composite. Materials, 2012, 5, 327-335.	2.9	3
71	Characterization of Ni(Si,Ge) films on epitaxial SiGe(100) formed by microwave annealing. Applied Physics Letters, 2012, 101, 092101.	3.3	28
72	A graphene field-effect capacitor sensor in electrolyte. Applied Physics Letters, 2012, 101, .	3.3	28

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73	Mobility Extraction for Nanotube TFTs. IEEE Electron Device Letters, 2011, 32, 913-915.	3.9	14
74	On Gate Capacitance of Nanotube Networks. IEEE Electron Device Letters, 2011, 32, 641-643.	3.9	8
75	Thermal Stability and Dopant Segregation for Schottky Diodes With Ultrathin Epitaxial $hbox{NiSi}_{2 - y}$. IEEE Electron Device Letters, 2011, 32, 1029-1031.	3.9	10
76	Evaluation of DC and AC performance of junctionless MOSFETs in the presence of variability. , 2011, , .		9
77	Ink-jet printed thin-film transistors with carbon nanotube channels shaped in long strips. Journal of Applied Physics, 2011, 109, 084915.	2.5	20
78	On Different Process Schemes for MOSFETs With a Controllable NiSi-Based Metallic Source/Drain. IEEE Transactions on Electron Devices, 2011, 58, 1898-1906.	3.0	19
79	A generalized 3ï‰ method for extraction of thermal conductivity in thin films. Journal of Applied Physics, 2011, 109, 063502.	2.5	13
80	Gate coupling and carrier distribution in silicon nanowire/nanoribbon transistors operated in electrolyte. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, .	2.1	4
81	Surface-energy triggered phase formation and epitaxy in nanometer-thick Ni1â^'xPtx silicide films. Applied Physics Letters, 2010, 96, .	3.3	51
82	Charge-Injection-Induced Time Decay in Carbon Nanotube Network-Based FETs. IEEE Electron Device Letters, 2010, 31, 1098-1100.	3.9	6
83	A two-terminal silicon nanoribbon field-effect pH sensor. Applied Physics Letters, 2010, 97, 264102.	3.3	6
84	Conductivity exponents in stick percolation. Physical Review E, 2010, 81, 021120.	2.1	49
85	Exploitation of a self-limiting process for reproducible formation of ultrathin Ni1â^'xPtx silicide films. Applied Physics Letters, 2010, 97, 252108.	3.3	19
86	Understanding doping effects in biosensing using carbon nanotube network field-effect transistors. Physical Review B, 2009, 79, .	3.2	6
87	Finite-size scaling in stick percolation. Physical Review E, 2009, 80, 040104.	2.1	115
88	Photo-Activated Interaction Between P3HT and Single-Walled Carbon Nanotubes Studied by Means of Field-Effect Response. IEEE Electron Device Letters, 2009, 30, 1302-1304.	3.9	3
89	A Comparative Study of Two Different Schemes to Dopant Segregation at NiSi/Si and PtSi/Si Interfaces for Schottky Barrier Height Lowering. IEEE Transactions on Electron Devices, 2008, 55, 396-403.	3.0	98
90	Improved electrical performance of carbon nanotube thin film transistors by utilizing composite networks. Applied Physics Letters, 2008, 92, .	3.3	13

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91	Schottky-Barrier Height Tuning by Means of Ion Implantation Into Preformed Silicide Films Followed by Drive-In Anneal. IEEE Electron Device Letters, 2007, 28, 565-568.	3.9	100
92	Metal Silicides in CMOS Technology: Past, Present, and Future Trends. Critical Reviews in Solid State and Materials Sciences, 2003, 28, 1-129.	12.3	323
93	Effects of low-temperature water vapor annealing of strained SiGe surface-channel pMOSFETs with high-Îº dielectric. , 0, , .		0