

Wei Li

List of Publications by Year in descending order

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papers

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citations

623734

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4204
citing authors

#	ARTICLE	IF	CITATIONS
1	Controllable resistive switching of STO:Ag/SiO ₂ -based memristor synapse for neuromorphic computing. Journal of Materials Science and Technology, 2022, 97, 254-263.	10.7	41
2	Mimicking Neuroplasticity via Ion Migration in van der Waals Layered Copper Indium Thiophosphate. Advanced Materials, 2022, 34, e2104676.	21.0	46
3	A Modified SiO ₂ -Based Memristor with Reliable Switching and Multifunctional Synaptic Behaviors. Journal of Physical Chemistry Letters, 2022, 13, 884-893.	4.6	14
4	Artificial synapse arrays based on SiO _x /TiO _x memristive crossbar with high uniformity for neuromorphic computing. Applied Physics Letters, 2022, 120, .	3.3	7
5	Nanostructured Materials and Architectures for Advanced Optoelectronic Synaptic Devices. Advanced Functional Materials, 2022, 32, .	14.9	45
6	Multifunctional Analog Resistance Switching of Si ₃ N ₄ -Based Memristors through Migration of Ag ⁺ Ions and Formation of Si-Dangling Bonds. Journal of Physical Chemistry Letters, 2022, 13, 5101-5108.	4.6	6
7	Photoelectronic synaptic performance of SiO _y /a-Si _{1-x} Ru _x bilayer based memristors. , 2021, , .		1
8	Optically stimulated synaptic devices based on silicon-tin alloyed thin film. , 2021, , .		0
9	Color-Recognizing Si-Based Photonic Synapse for Artificial Visual System. Advanced Intelligent Systems, 2020, 2, 2000107.	6.1	21
10	Coexistence of Digital and Analog Resistive Switching Behaviours in Ag/CuAlO ₂ /TiO ₂ /p ⁺⁺ -Si Memristor. Journal of Physics: Conference Series, 2020, 1637, 012053.	0.4	3
11	Analog Switching and Artificial Synaptic Behavior of Ag/SiO _x :Ag/TiO _x /p ⁺⁺ -Si Memristor Device. Nanoscale Research Letters, 2020, 15, 30.	5.7	65
12	Bi-Polar Synaptic Behavior of Pt/SiO _x :Ag/TiO _x /p ⁺⁺ -Si Memristor. Materials Science Forum, 2020, 984, 104-109.	0.3	0
13	Synaptic learning and memory functions in SiO ₂ :Ag/TiO ₂ based memristor devices. Journal Physics D: Applied Physics, 2020, 53, 175102.	2.8	16
14	Memristive Behaviour of Ag-doped-HfO ₂ Thin Films Prepared by Magnetron Sputtering. Journal of Physics: Conference Series, 2020, 1637, 012024.	0.4	0
15	Structural Variation and Its Influence on the 1/f Noise of a-Si _{1-x} Ru _x Thin Films Embedded with Nanocrystals. Chinese Physics Letters, 2019, 36, 028101.	3.3	0
16	Inhomogeneous crystallization of a-Si thin films irradiated by femtosecond laser. Journal of Raman Spectroscopy, 2019, 50, 793-801.	2.5	7
17	A novel design of a-Si based memristor with optical readout functionality utilizing silicon prism. , 2019, , .		0
18	An Artificial Bio-Synapse Based on Ag/a-Si:Ag/a-Si/X Memristors With Different Bottom Electrode X. IOP Conference Series: Materials Science and Engineering, 2018, 452, 042160.	0.6	0

#	ARTICLE	IF	CITATIONS
19	Enhanced near-infrared absorber: two-step fabricated structured black silicon and its device application. <i>Nanoscale Research Letters</i> , 2018, 13, 316.	5.7	9
20	Low-Dimensional Materials and State-of-the-Art Architectures for Infrared Photodetection. <i>Sensors</i> , 2018, 18, 4163.	3.8	19
21	Broadband optoelectronic synaptic devices based on silicon nanocrystals for neuromorphic computing. <i>Nano Energy</i> , 2018, 52, 422-430.	16.0	150
22	Structural and optoelectronic properties of a-Si:H: A new analysis based on spectroscopic ellipsometry. <i>Vacuum</i> , 2017, 146, 409-421.	3.5	1
23	Comparison of different etching methods on the morphology and semiconductor characters of black silicon. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 250, 012015.	0.6	3
24	Structural and Optoelectronic Properties of a-SiOx: Ag Films Used for Ag/SiOx/p-Si Memristor. <i>IOP Conference Series: Materials Science and Engineering</i> , 2017, 250, 012027.	0.6	0
25	The Enhanced Light Absorptance and Device Application of Nanostructured Black Silicon Fabricated by Metal-assisted Chemical Etching. <i>Nanoscale Research Letters</i> , 2016, 11, 322.	5.7	27
26	The realization of optical switching generated from the combination of Ag/a-Si/p-Si memristor and silicon waveguide. <i>Proceedings of SPIE</i> , 2016, , .	0.8	0
27	The relation of structure and dispersion to amorphous silicon silver thin films. <i>Materials Letters</i> , 2016, 185, 5-8.	2.6	7
28	Improvement of metal-semiconductor contact on silicon microstructured surface by electroless nickel technique. <i>Proceedings of SPIE</i> , 2016, , .	0.8	0
29	Band engineering of amorphous silicon ruthenium thin film and its near-infrared absorption enhancement combined with nano-holes pattern on back surface of silicon substrate. <i>Applied Surface Science</i> , 2016, 384, 487-491.	6.1	4
30	Raman analysis of amorphous silicon ruthenium thin films embedded with nanocrystals. <i>Journal of Raman Spectroscopy</i> , 2015, 46, 619-623.	2.5	11
31	Polarization-sensitive broadband photodetector using a black phosphorus vertical p-n junction. <i>Nature Nanotechnology</i> , 2015, 10, 707-713.	31.5	1,007
32	Performance enhancement of amorphous indium-zinc-oxide thin film transistors by microwave annealing. <i>Applied Surface Science</i> , 2015, 357, 1915-1919.	6.1	10
33	Structural variation and electrical properties of amorphous silicon ruthenium thin films embedded with nanocrystals. <i>Materials Letters</i> , 2015, 143, 80-83.	2.6	6
34	Enhancement of c-Si surface passivation quality by increasing in situ H2 flow rate. <i>Materials Letters</i> , 2015, 161, 175-177.	2.6	10
35	Contact resistance improvement using interfacial silver nanoparticles in amorphous indium-zinc-oxide thin film transistors. <i>Applied Physics Letters</i> , 2014, 105, .	3.3	12
36	Metamaterial Perfect Absorber Based Hot Electron Photodetection. <i>Nano Letters</i> , 2014, 14, 3510-3514.	9.1	591

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37	Black silicon with self-cleaning surface prepared by wetting processes. <i>Nanoscale Research Letters</i> , 2013, 8, 351.	5.7	33
38	Investigation of nanocrystallization of a-Si _{1-x} G _x :H thin films diluted with argon in the PECVD system. <i>Journal of Non-Crystalline Solids</i> , 2013, 365, 37-41.	3.1	9
39	Dispersion model for optical constants of a-Si:H. <i>Physica B: Condensed Matter</i> , 2013, 431, 120-126.	2.7	7
40	Structural evolution and electronic properties of phosphorus-doped hydrogenated amorphous silicon thin films deposited by PECVD. <i>Science China Technological Sciences</i> , 2013, 56, 103-108.	4.0	4
41	Microwave irradiation induced structural evolution of a-Si:H thin film before crystallization. <i>Materials Letters</i> , 2013, 100, 156-158.	2.6	4
42	Boron-doped nanocrystalline silicon germanium thin films for uncooled infrared bolometer applications. <i>Infrared Physics and Technology</i> , 2013, 58, 32-35.	2.9	12
43	Effect of gas temperature on the structural and optoelectronic properties of a-Si:H thin films deposited by PECVD. <i>Surface and Coatings Technology</i> , 2013, 214, 131-137.	4.8	8
44	New paramagnetic centre and high conductivity in a-Si _{1-x} Ru _x :H thin films. <i>Journal Physics D: Applied Physics</i> , 2013, 46, 475107.	2.8	3
45	New Paramagnetic Center and High Conductivity in a-Si _{1-x} Ru _x :H Thin Films. <i>Materials Research Society Symposia Proceedings</i> , 2013, 1617, 57-62.	0.1	0
46	Structure and electronic states in a-Si:H thin films. <i>Journal of Materials Science</i> , 2012, 47, 5121-5127.	3.7	4
47	Hydrogen bonding in hydrogenated amorphous silicon thin films prepared at different precursor gas temperatures with undiluted silane. <i>Science China Technological Sciences</i> , 2011, 54, 2310-2314.	4.0	3
48	Origins of 1/f noise in nanostructure inclusion polymorphous silicon films. <i>Nanoscale Research Letters</i> , 2011, 6, 281.	5.7	30
49	Raman characterization of the structural evolution in amorphous and partially nanocrystalline hydrogenated silicon thin films prepared by PECVD. <i>Journal of Raman Spectroscopy</i> , 2011, 42, 415-421.	2.5	71
50	Structural evolution and optical characterization in argon diluted Si:H thin films obtained by plasma enhanced chemical vapor deposition. <i>Central South University</i> , 2010, 17, 1163-1171.	0.5	0
51	Raman and ellipsometric characterization of hydrogenated amorphous silicon thin films. <i>Science in China Series D: Earth Sciences</i> , 2009, 52, 339-343.	0.9	4
52	Noise in boron doped amorphous/microcrystallization silicon films. <i>Applied Surface Science</i> , 2008, 254, 3274-3276.	6.1	5
53	Influence of microcrystallization on noise in boron-doped silicon film. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2007, 204, 4292-4297.	1.8	3
54	Effect on Resistive Switching by Inserting TiO ₂ Thin Layer in SiO ₂ : Ag-Based Memristor. <i>Materials Science Forum</i> , 0, 984, 97-103.	0.3	2