Ruomeng Huang

List of Publications by Year
in descending order

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54	980	430442	500791
papers	citations	18	28
		h-index	g-index

54	54	54	1222
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Highly Selective Chemical Vapor Deposition of Tin Diselenide Thin Films onto Patterned Substrates via Single Source Diselenoether Precursors. Chemistry of Materials, 2012, 24, 4442-4449.	3.2	64
2	Poly(N-isopropylacrylamide) based thin microgel films for use in cell culture applications. Scientific Reports, 2020, 10, 6126.	1.6	59
3	Nonpolar resistive switching in Cu/SiC/Au non-volatile resistive memory devices. Applied Physics Letters, 2014, 104, .	1.5	46
4	Chemical vapour deposition of antimony chalcogenides with positional and orientational control: precursor design and substrate selectivity. Journal of Materials Chemistry C, 2015, 3, 423-430.	2.7	46
5	Artificial neural network enabled accurate geometrical design and optimisation of thermoelectric generator. Applied Energy, 2022, 305, 117800.	5.1	46
6	Tin(<scp>iv</scp>) chalcogenoether complexes as single source precursors for the chemical vapour deposition of SnE₂ and SnE (E = S, Se) thin films. Dalton Transactions, 2018, 47, 2628-2637.	1.6	45
7	Non-aqueous electrodeposition of p-block metals and metalloids from halometallate salts. RSC Advances, 2013, 3, 15645.	1.7	43
8	Telluroether and Selenoether Complexes as Single Source Reagents for Low Pressure Chemical Vapor Deposition of Crystalline Ga₂Te₃ and Ga₂Se₃ Thin Films. Chemistry of Materials, 2013, 25, 1829-1836.	3.2	37
9	Accurate inverse design of Fabryâ€“Perot-cavity-based color filters far beyond sRGB via a bidirectional artificial neural network. Photonics Research, 2021, 9, B236.	3.4	35
10	Controlling the nanostructure of bismuth telluride by selective chemical vapour deposition from a single source precursor. Journal of Materials Chemistry A, 2014, 2, 4865.	5.2	31
11	Compliance-Free ZrO2/ZrO2â€‰â^'â€‰x /ZrO2 Resistive Memory with Controllable Interfacial Multistate Switching Behaviour. Nanoscale Research Letters, 2017, 12, 384.	3.1	31
12	Area Selective Growth of Titanium Diselenide Thin Films into Micropatterned Substrates by Low-Pressure Chemical Vapor Deposition. Chemistry of Materials, 2013, 25, 4719-4724.	3.2	29
13	Non-aqueous electrodeposition of functional semiconducting metal chalcogenides: Ge₂Sb₂Te₅ phase change memory. Materials Horizons, 2015, 2, 420-426.	6.4	28
14	Resistive switching of Cu/SiC/Au memory devices with a high ON/OFF ratio. Solid-State Electronics, 2014, 94, 98-102.	0.8	27
15	Forming-free resistive switching of tunable ZnO films grown by atomic layer deposition. Microelectronic Engineering, 2016, 161, 7-12.	1.1	26
16	Selection by current compliance of negative and positive bipolar resistive switching behaviour in ZrO_{2â^'x}/ZrO₂bilayer memory. Journal Physics D: Applied Physics, 2017, 50, 175101.	1.3	21
17	Amorphous SiC based non-volatile resistive memories with ultrahigh ON/OFF ratios. Microelectronic Engineering, 2014, 119, 61-64.	1.1	20
18	Dynamic cable ratings for smarter grids. , 2013, , .		19

#	Article	IF	Citations
19	Switching kinetics of SiC resistive memory for harsh environments. AIP Advances, 2015, 5, 077121.	0.6	19
20	Contact resistance measurement of Ge₂Sb₂Te₅phase change material to TiN electrode by spacer etched nanowire. Semiconductor Science and Technology, 2014, 29, 095003.	1.0	17
21	Thermoelectric Properties of Bismuth Telluride Thin Films Electrodeposited from a Nonaqueous Solution. ACS Omega, 2020, 5, 14679-14688.	1.6	16
22	Backâ€Endâ€ofâ€Line SiCâ€Based Memristor for Resistive Memory and Artificial Synapse. Advanced Electronic Materials, 2022, 8, .	2.6	16
23	Nanoscale arrays of antimony telluride single crystals by selective chemical vapor deposition. Scientific Reports, 2016, 6, 27593.	1.6	15
24	Fermi Level Tuning of ZnO Films Through Supercycled Atomic Layer Deposition. Nanoscale Research Letters, 2017, 12, 541.	3.1	15
25	Compositionally tunable ternary Bi₂(Se_{1â^'x}Te_x)₃ and (Bi_{1â^'y}Sb_y)₂Te₃ thin films via low pressure chemical vapour deposition. Journal of Materials Chemistry C, 2018, 6, 7734-7739.	2.7	15
26	Towards a 3D GeSbTe phase change memory with integrated selector by non-aqueous electrodeposition. Faraday Discussions, 2019, 213, 339-355.	1.6	14
27	Inverse design of structural color: finding multiple solutions via conditional generative adversarial networks. Nanophotonics, 2022, 11, 3057-3069.	2.9	14
28	Thioether complexes of WSCl₄, WOCl₄ and WSCl₃ and evaluation of thiochloride complexes as CVD precursors for WS₂ thin films. Dalton Transactions, 2020, 49, 2496-2504.	1.6	13
29	Phase-Change Memory Properties of Electrodeposited Ge-Sb-Te Thin Film. Nanoscale Research Letters, 2015, 10, 432.	3.1	12
30	Conductive-bridge memory cells based on a nanoporous electrodeposited GeSbTe alloy. Nanotechnology, 2019, 30, 025202.	1.3	12
31	Phase-Change Memory by GeSbTe Electrodeposition in Crossbar Arrays. ACS Applied Electronic Materials, 2021, 3, 3610-3618.	2.0	12
32	Total Dose Hardness of <formula formulatype="inline"> <tex Notation="TeX">${m TiN}/{m HfO}_{m x}/{m TiN}$</tex></formula> Resistive Random Access Memory. IEEE Transactions on Nuclear Science, 2014, 61, 2991-2996.	1.2	11
33	Back-end-of-line a-SiOxCy:H dielectrics for resistive memory. AIP Advances, 2018, 8, .	0.6	10
34	Improved thermoelectric performance of Bi2Se3 alloyed Bi2Te3 thin films via low pressure chemical vapour deposition. Journal of Alloys and Compounds, 2020, 848, 156523.	2.8	10
35	Electrodeposition of a Functional Solid State Memory Material: Germanium Antimony Telluride from a Non-Aqueous Plating Bath. Journal of the Electrochemical Society, 2018, 165, D557-D567.	1.3	9
36	Selective Chemical Vapor Deposition Approach for Sb₂Te₃ Thin Film Micro-thermoelectric Generators. ACS Applied Energy Materials, 2020, 3, 5840-5846.	2.5	9

#	Article	IF	Citations
37	Electrodeposition of GeSbTe-Based Resistive Switching Memory in Crossbar Arrays. Journal of Physical Chemistry C, 2021, 125, 26247-26255.	1.5	9
38	Mathematical model and optimization of a thin-film thermoelectric generator. JPhys Energy, 2020, 2, 014001.	2.3	8
39	[Ge(TeⁿBu)₄] â€“ a single source precursor for the chemical vapour deposition of germanium telluride thin films. Dalton Transactions, 2019, 48, 117-124.	1.6	7
40	Low temperature CVD of thermoelectric SnTe thin films from the single source precursor, [ⁿBu₃Sn(TeⁿBu)]. Dalton Transactions, 2021, 50, 998-1006.	1.6	7
41	Low-Pressure CVD of GeE (E = Te, Se, S) Thin Films from Alkylgermanium Chalcogenolate Precursors and Effect of Deposition Temperature on the Thermoelectric Performance of GeTe. ACS Applied Materials & Interfaces, 2021, 13, 47773-47783.	4.0	7
42	AC-assisted deposition of aggregate free silica films with vertical pore structure. Nanoscale, 2022, 14, 5404-5411.	2.8	7
43	Low Pressure Chemical Vapour Deposition of Crystalline Ga2Te3 and Ga2Se3 Thin Films from Single Source Precursors Using Telluroether and Selenoether Complexes. Physics Procedia, 2013, 46, 142-148.	1.2	6
44	Active counter electrode in a-SiC electrochemical metallization memory. Journal Physics D: Applied Physics, 2017, 50, 325102.	1.3	6
45	Electrodeposition of Crystalline HgTe from a Non-Aqueous Plating Bath. Journal of the Electrochemical Society, 2018, 165, D802-D807.	1.3	5
46	ⁿBu₂Sn(SⁿBu)₂ and ⁿBu₃SnEⁿBu (E = S or Se) â€“ effective single source precursors for the CVD of SnS and SnSe thermoelectric thin films. Materials Advances, 0, , .	2.6	5
47	Tungsten(<scp>vi</scp>) selenide tetrachloride, WSeCl₄ â€“ synthesis, properties, coordination complexes and application of [WSeCl₄(SeⁿBu₂)] for CVD growth of WSe₂ thin films. Dalton Transactions, 2022, 51, 2400-2412.	1.6	5
48	The effect of atomic layer deposition temperature on switching properties of HfOx resistive RAM devices. , 2014, , .		4
49	Amorphous SiC resistive memory with embedded Cu nanoparticles. Microelectronic Engineering, 2017, 174, 1-5.	1.1	4
50	Use of day-ahead load forecasting for predicted cable rating. , 2014, , .		3
51	Effect of Stoichiometry of TiN Electrode on the Switching Behavior of TiN/HfOx/TiN Structures for Resistive RAM. Materials Research Society Symposia Proceedings, 2014, 1631, 1.	0.1	3
52	Confining the growth of mesoporous silica films into nanospaces: towards surface nanopatterning. Nanoscale Advances, 0, , .	2.2	2
53	A novel top-down fabrication process for Ge<inf>2</inf>Sb<inf>2</inf>Te<inf>5</inf> phase change material nanowires. , 2013, , .		0
54	Cable tunnel thermal rating prediction using support vector regression. , 2014, , .		0