

# Xiaozhong Zhang

## List of Publications by Year in descending order

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430843

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501174

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58  
docs citations

58  
times ranked

1123  
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanostructure of Calcium Silicate Hydrate Gels in Cement Paste. Journal of the American Ceramic Society, 2000, 83, 2600-2604.	3.8	86
2	Geometrical enhancement of low-field magnetoresistance in silicon. Nature, 2011, 477, 304-307.	27.8	82
3	Semiconducting amorphous carbon thin films for transparent conducting electrodes. Carbon, 2014, 76, 64-70.	10.3	62
4	Electric and Light Dual-Gate Tunable MoS <sub>2</sub> Memtransistor. ACS Applied Materials & Interfaces, 2019, 11, 43344-43350.	8.0	51
5	Spatially Resolved Ferroelectric Domain-Switching-Controlled Magnetism in Co <sub>40</sub> Fe <sub>40</sub> B <sub>20</sub> /Pb(Mg <sub>1/3</sub> Nb <sub>2/3</sub> ) <sub>0.7</sub> B <sub>0.3</sub> O <sub>3</sub> Multiferroic Heterostructure. ACS Applied Materials & Interfaces, 2017, 9, 2642-2649.	8.3	40
6	Reconfigurable Magnetic Logic Combined with Nonvolatile Memory Writing. Advanced Materials, 2017, 29, 1605027.	21.0	35
7	Emulation of Learning and Memory Behaviors by Memristor Based on Ag Migration on 2D MoS <sub>2</sub> Surface. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1900104.	1.8	33
8	Resistive switching behavior in diamond-like carbon films grown by pulsed laser deposition for resistance switching random access memory application. Journal of Applied Physics, 2012, 111, 084501.	2.5	31
9	Silicon-Based Current-Controlled Reconfigurable Magnetoresistance Logic Combined with Non-Volatile Memory. Advanced Functional Materials, 2015, 25, 158-166.	14.9	30
10	A bias voltage dependent positive magnetoresistance in Co <sup>1-x</sup> /Si heterostructure. Applied Physics Letters, 2009, 95, 022503.	3.3	28
11	Electro- and magneto-transport properties of amorphous carbon films doped with iron. Diamond and Related Materials, 2011, 20, 26-30.	3.9	27
12	Photoconductivity of iron doped amorphous carbon films on n-type silicon substrates. Applied Physics Letters, 2009, 95, 022105.	3.3	25
13	Negative magnetoresistance in undoped semiconducting amorphous carbon films. Journal of Applied Physics, 2014, 115, .	2.5	24
14	Quantum magnetic phase transition in square-octagon lattice. Scientific Reports, 2015, 4, 6918.	3.3	24
15	Magnetotransport properties of undoped amorphous carbon films. Carbon, 2013, 59, 278-282.	10.3	23
16	Extremely Large Magnetoresistance at Low Magnetic Field by Coupling the Nonlinear Transport Effect and the Anomalous Hall Effect. Advanced Materials, 2016, 28, 2760-2764.	21.0	23
17	Atomic-scale study of topological vortex-like domain pattern in multiferroic hexagonal manganites. Applied Physics Letters, 2013, 103, 032901.	3.3	19
18	Angular magnetoresistance in semiconducting undoped amorphous carbon thin films. Journal of Applied Physics, 2015, 117, .	2.5	19

#	ARTICLE	IF	CITATIONS
19	Structure dependent negative magnetoresistance of amorphous carbon thin films. <i>Diamond and Related Materials</i> , 2017, 72, 108-113.	3.9	17
20	Transparent magnetic semiconductor with embedded metallic glass nano-granules. <i>Materials and Design</i> , 2017, 132, 208-214.	7.0	16
21	Enhanced low field magnetoresistance in germanium and silicon-diode combined device at room temperature. <i>Applied Physics Letters</i> , 2014, 105, 193508.	3.3	15
22	Magnetoresistance sign change in iron-doped amorphous carbon films at low temperatures. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 215002.	2.8	14
23	Electric field induced sp <sup>3</sup> -to-sp <sup>2</sup> conversion and nonlinear electron transport in iron-doped diamond-like carbon thin film. <i>Journal of Applied Physics</i> , 2010, 107, .	2.5	13
24	Angle dependent magnetotransport in transfer-free amorphous carbon thin films. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 415005.	2.8	13
25	Large magnetoresistance of amorphous carbon films. <i>Carbon</i> , 2017, 122, 122-127.	10.3	12
26	Pressure dependence of phase transition in undoped LaMnO <sub>3</sub> . <i>Physica C: Superconductivity and Its Applications</i> , 2002, 371, 330-338.	1.2	10
27	Diode assisted giant positive magnetoresistance in n-type GaAs at room temperature. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	10
28	Structure dependent negative and positive magnetoresistance of amorphous carbon films. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	10
29	Resistance transition assisted geometry enhanced magnetoresistance in semiconductors. <i>Journal of Applied Physics</i> , 2015, 117, 17A302.	2.5	9
30	Speed enhancement of magnetic logic-memory device by insulator-to-metal transition. <i>Applied Physics Letters</i> , 2020, 117, .	3.3	7
31	Atomistic simulation of dynamical and defect properties of multiferroic hexagonal YMnO <sub>3</sub> . <i>Science China: Physics, Mechanics and Astronomy</i> , 2011, 54, 836-840.	5.1	6
32	Magnetic field controlled hybrid semiconductor and resistive switching device for non-volatile memory applications. <i>AIP Advances</i> , 2019, 9, .	1.3	6
33	Condition of the ratchet effect of a magnetic domain wall motion under an asymmetric potential energy. <i>Journal of Applied Physics</i> , 2012, 111, 07D301.	2.5	5
34	Electric and magnetic properties of magnetic (CoFeTaB)(100 <sup>o</sup> x)Ox films. <i>Journal of Applied Physics</i> , 2017, 122, .	2.5	5
35	Study of giant magnetoresistance and giant electroresistance of carbon based thin film. <i>Rare Metals</i> , 2006, 25, 617-620.	7.1	4
36	Structure and magneto-electrical properties of Fe-C films prepared by magnetron sputtering. <i>Science China: Physics, Mechanics and Astronomy</i> , 2012, 55, 1594-1598.	5.1	4

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37	Large Magnetoresistance in Silicon at Room Temperature Induced by Onsite Coulomb Interaction. <i>Advanced Electronic Materials</i> , 2017, 3, 1700186.	5.1	4
38	Thermal stability of NDR-assisted anomalous Hall effect based magnetic device. <i>Journal of Applied Physics</i> , 2019, 125, 203901.	2.5	4
39	Magnetic logic based on diode-assisted magnetoresistance. <i>AIP Advances</i> , 2017, 7, .	1.3	3
40	Regulation of electrical and magnetic properties in amorphous CoFeTaBO films. <i>Thin Solid Films</i> , 2019, 669, 114-119.	1.8	3
41	Electric control of magnetization in an amorphous Co $\epsilon$ Fe $\epsilon$ Ta $\epsilon$ B $\epsilon$ O film by resistive switching. <i>Physical Chemistry Chemical Physics</i> , 2020, 22, 8672-8678.	2.8	3
42	The dependence of barrier heights of a-C: Fe/n-Si heterojunctions on film-depositing temperatures. <i>Journal of Applied Physics</i> , 2011, 109, 103706.	2.5	2
43	Magnetic properties and magnetoresistance of Co $\times$ Cl $\hat{~}$ $\times$ granular films prepared by magnetron sputtering. <i>Science China: Physics, Mechanics and Astronomy</i> , 2011, 54, 1218-1222.	5.1	2
44	Photovoltaic and photoconductivity characteristics of (a-C:Fe)/Al <sub>2</sub> O <sub>3</sub> /Si structure. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 625-627.	0.8	2
45	Diode and inhomogeneity assisted extremely large magnetoresistance in silicon. <i>Applied Physics Letters</i> , 2017, 111, 042406.	3.3	2
46	Magnetization of Co-Fe-Ta-B-O Amorphous Thin Films*. <i>Chinese Physics Letters</i> , 2019, 36, 077502.	3.3	2
47	Nonvolatile magnetic half adder combined with memory writing. <i>Applied Physics Letters</i> , 2021, 118, .	3.3	2
48	Positive and Negative Magnetoresistance of a-C:Fe/Si Heterojunctions. <i>IEEE Transactions on Magnetics</i> , 2009, 45, 3488-3490.	2.1	1
49	Anomalous magnetotransport in LaMn $\hat{~}$ $\times$ Te $\times$ O <sub>3</sub> . <i>Science in China Series G: Physics, Mechanics and Astronomy</i> , 2009, 52, 987-992.	0.2	1
50	LOW-FIELD INHOMOGENEITY-INDUCED MAGNETORESISTANCE IN SILICON. <i>Spin</i> , 2012, 02, 1250002.	1.3	1
51	Basic Logic Operations Achieved in a Single 2D WSe <sub>2</sub> Transistor by Surface-Charge-Transfer Doping. <i>ACS Applied Electronic Materials</i> , 2021, 3, 5059-5065.	4.3	1
52	Ultrafast and Ultralow $\epsilon$ Power Voltage $\epsilon$ Dominated Magnetic Logic. <i>Advanced Intelligent Systems</i> , 2022, 4, .	6.1	1
53	A Carbon Based Spintronic Material Fe $\epsilon$ Si Structure. <i>Journal of Nanoscience and Nanotechnology</i> , 2011, 11, 2583-2587.	0.9	0
54	Multifunctional Spintronic Material $\{m\text{ Fe}\}_{m\text{ x}}\{-m\text{ C}\}_{1-m\text{ x}}\}/\{m\text{ Si}\}$ . <i>IEEE Transactions on Magnetics</i> , 2011, 47, 3474-3477.	2.1	0

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55	Room-temperature magnetoresistance in a-C:Co/Si system. Science China: Physics, Mechanics and Astronomy, 2011, 54, 1213-1217.	5.1	0
56	Experiments and simulations on the magnetization of transparent Co-Fe-Ta-B-O heteroamorphous films. AIP Advances, 2020, 10, 025037.	1.3	0
57	Nonvolatile Magnetic Memory Combined With AND/NAND Boolean Logic Gates Based on Geometry-Controlled Magnetization Switching. IEEE Magnetics Letters, 2021, 12, 1-5.	1.1	0
58	Magnetic Full Adder Based on Negative Differential Resistance-Enhanced Anomalous Hall Effect. IEEE Magnetics Letters, 2022, 13, 1-5.	1.1	0