Ming Xu

List of Publications by Year
in descending order

90 papers	4,552 citations	136740 32 h-index	106150 65 g-index
91 all docs	91 docs citations	91 times ranked	4865 citing authors

#	Article	IF	Citations
1	Neural network potential for Zrâ€“Rh system by machine learning. Journal of Physics Condensed Matter, 2022, 34, 075402.	0.7	6
2	Ultrafast and stable phase transition realized in MoTe₂-based memristive devices. Materials Horizons, 2022, 9, 1036-1044.	6.4	9
3	A fungal microRNAâ€like RNA subverts host immunity and facilitates pathogen infection by silencing two host receptorâ€like kinase genes. New Phytologist, 2022, 233, 2503-2519.	3.5	19
4	Designing Conductiveâ€Bridge Phaseâ€Change Memory to Enable Ultralow Programming Power. Advanced Science, 2022, 9, e2103478.	5.6	26
5	Deep machine learning unravels the structural origin of midâ€gap states in chalcogenide glass for highâ€density memory integration. InformaÄnÃ-MateriÃ¡ly, 2022, 4, .	8.5	34
6	Artificial Synapses Based on WSe₂ Homojunction via Vacancy Migration. ACS Applied Materials & Interfaces, 2022, 14, 21141-21149.	4.0	12
7	How arsenic makes amorphous GeSe a robust chalcogenide glass for advanced memory integration. Scripta Materialia, 2022, 218, 114834.	2.6	17
8	10 MA cm^{â˜'2} current density in nanoscale conductive bridge threshold switching selector via densely localized cation sources. Journal of Materials Chemistry C, 2021, 9, 14799-14807.	2.7	3
9	Characterizations of electronic and optical properties of Sb-based phase-change material stabilized by alloying Cr. Applied Physics Letters, 2021, 118, .	1.5	7
10	Reducing alcohol and/or cocaine-induced reward and toxicity via an epidermal stem cell-based gene delivery platform. Molecular Psychiatry, 2021, 26, 5266-5276.	4.1	5
11	An autophagy-related protein Becn2 regulates cocaine reward behaviors in the dopaminergic system. Science Advances, 2021, 7, .	4.7	9
12	Three Resistance States Achieved by Nanocrystalline Decomposition in Geâ€Caâ€Sb Compound for Multilevel Phase Change Memory. Advanced Electronic Materials, 2021, 7, 2100164.	2.6	16
13	Lowâ€Power Memristive Logic Device Enabled by Controllable Oxidation of 2D HfSe₂ for Inâ€Memory Computing. Advanced Science, 2021, 8, e2005038.	5.6	47
14	Metavalent Bonding in Crystalline Solids: How Does It Collapse?. Advanced Materials, 2021, 33, e2102356.	11.1	65
15	Structural features of chalcogenide glass SiTe: An ovonic threshold switching material. APL Materials, 2021, 9, .	2.2	12
16	Superconducting Phase Induced by a Local Structure Transition in Amorphous <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Sb</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow> under High Pressure. Physical Review Letters, 2021, 127, 127002.	2.9	13
17	Structure, bonding nature and transition dynamics of amorphous Te. Scripta Materialia, 2021, 202, 114011.	2.6	15
18	Ultrafast crystallization mechanism of amorphous Ge15Sb85 unraveled by pressure-driven simulations. Acta Materialia, 2021, 216, 117123.	3.8	13

#	Article	IF	Citations
19	Resistance Drift Suppression Utilizing GeTe/Sb₂Te₃ Superlatticeâ€Like Phaseâ€Change Materials. Advanced Electronic Materials, 2020, 6, 1900781.	2.6	27
20	Raman spectroscopy and lattice dynamical stability study of 2D ferromagnetic semiconductor Cr2Ge2Te6 under high pressure. Journal of Alloys and Compounds, 2020, 819, 153368.	2.8	14
21	Suppressed resistance drift from short range order of amorphous GeTe ultrathin films. Applied Physics Letters, 2020, 117, .	1.5	17
22	Terahertz Nanoimaging and Nanospectroscopy of Chalcogenide Phase-Change Materials. ACS Photonics, 2020, 7, 3499-3506.	3.2	29
23	Recent Advances on Neuromorphic Devices Based on Chalcogenide Phaseâ€Change Materials. Advanced Functional Materials, 2020, 30, 2003419.	7.8	144
24	Unique 2Dâ€“3D Structure Transformations in Trichalcogenide CrSiTe₃ under High Pressure. Journal of Physical Chemistry C, 2020, 124, 15600-15606.	1.5	15
25	Large Optical Anisotropy in Two-Dimensional Perovskite [CH(NH₂)₂][C(NH₂)₃]PbI₄ with Corrugated Inorganic Layers. Nano Letters, 2020, 20, 2339-2347.	4.5	40
26	Adaptive regulation of virulence genes by microRNAâ€like RNAs in Valsa mali. New Phytologist, 2020, 227, 899-913.	3.5	27
27	â€œStickierâ€•Surface Sb₂Te₃ Templates Enable Fast Memory Switching of Phase Change Material GeSb₂Te₄ with Growth-Dominated Crystallization. ACS Applied Materials & Interfaces, 2020, 12, 33397-33407.	4.0	53
28	Synergic Effect in a New Electrocatalyst Ni₂SbTe₂ for Oxygen Reduction Reaction. Journal of Physical Chemistry C, 2020, 124, 3671-3680.	1.5	11
29	Polyamorphism in K₂Sb₈Se₁₃ for multi-level phase-change memory. Journal of Materials Chemistry C, 2020, 8, 6364-6369.	2.7	14
30	Coexistence of Digital and Analog Resistive Switching With Low Operation Voltage in Oxygen-Gradient HfO_x Memristors. IEEE Electron Device Letters, 2019, 40, 1068-1071.	2.2	32
31	Promising photocatalysts with high carrier mobility for water splitting in monolayer Ge2P4S2 and Ge2As4S2. International Journal of Hydrogen Energy, 2019, 44, 21536-21545.	3.8	16
32	Understanding CrGeTe₃: an abnormal phase change material with inverse resistance and density contrast. Journal of Materials Chemistry C, 2019, 7, 9025-9030.	2.7	28
33	BaAs3: a narrow gap 2D semiconductor with vacancy-induced semiconductorâ€“metal transition from first principles. Journal of Materials Science, 2019, 54, 12676-12687.	1.7	3
34	Ultra-Low Program Current and Multilevel Phase Change Memory for High-Density Storage Achieved by a Low-Current SET Pre-Operation. IEEE Electron Device Letters, 2019, 40, 1595-1598.	2.2	12
35	KTlO: a metal shrouded 2D semiconductor with high carrier mobility and tunable magnetism. Nanoscale, 2019, 11, 1131-1139.	2.8	50
36	Stabilizing amorphous Sb by adding alien seeds for durable memory materials. Physical Chemistry Chemical Physics, 2019, 21, 4494-4500.	1.3	31

#	Article	IF	Citations
37	Two-dimensional silicon chalcogenides with high carrier mobility for photocatalytic water splitting. Journal of Materials Science, 2019, 54, 11485-11496.	1.7	30
38	Pressure-Induced Structural Phase Transition and a Special Amorphization Phase of Two-Dimensional Ferromagnetic Semiconductor Cr₂Ge₂Te₆. Journal of Physical Chemistry C, 2019, 123, 13885-13891.	1.5	35
39	Strong interface scattering induced low thermal conductivity in Bi-based GeTe/Bi2Te3 superlattice-like materials. RSC Advances, 2019, 9, 9457-9461.	1.7	3
40	Local structure origin of ultrafast crystallization driven by high-fidelity octahedral clusters in amorphous Sc0.2Sb2Te3. Applied Physics Letters, 2019, 114, .	1.5	20
41	Pressure-induced electronic anomaly and multiband superconductivity in the doped topological insulator <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">N</mml:mi><mml:msub><mml:mi mathvariant="normal">b</mml:mi><mml:mi>x</mml:mi></mml:msub><mml:mi mathvariant="normal">B</mml:mi><mml:msub><mml:mi mathvariant="normal">i</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:mi mathvariant="normal">S	1.1	7
42	Genome-edited skin epidermal stem cells protect mice from cocaine-seeking behaviour and cocaine overdose. Nature Biomedical Engineering, 2019, 3, 105-113.	11.6	20
43	The Structure of Phaseâ€Change Chalcogenides and Their Highâ€Pressure Behavior. Physica Status Solidi - Rapid Research Letters, 2019, 13, 1800506.	1.2	23
44	Dual-Layer Selector With Excellent Performance for Cross-Point Memory Applications. IEEE Electron Device Letters, 2018, 39, 496-499.	2.2	33
45	Evolution of short- and medium-range order in the melt-quenching amorphization of Ge₂Sb₂Te₅. Journal of Materials Chemistry C, 2018, 6, 5001-5011.	2.7	38
46	Gold fillings unravel the vacancy role in the phase transition of GeTe. Applied Physics Letters, 2018, 112, 071902.	1.5	10
47	Structural signature and transition dynamics of Sb₂Te₃ melt upon fast cooling. Physical Chemistry Chemical Physics, 2018, 20, 11768-11775.	1.3	33
48	GGA-1/2 self-energy correction for accurate band structure calculations: the case of resistive switching oxides. Journal of Physics Communications, 2018, 2, 105005.	0.5	70
49	Increasing the Atomic Packing Efficiency of Phaseâ€Change Memory Glass to Reduce the Density Change upon Crystallization. Advanced Electronic Materials, 2018, 4, 1800127.	2.6	17
50	Pressure-induced isostructural phase transition and charge transfer in superconducting FeSe. Journal of Alloys and Compounds, 2018, 767, 811-819.	2.8	19
51	Structural disorder in the high-temperature cubic phase of GeTe. RSC Advances, 2018, 8, 17435-17442.	1.7	12
52	Variations of Local Motifs around Ge Atoms in Amorphous GeTe Ultrathin Films. Journal of Physical Chemistry C, 2017, 121, 1122-1128.	1.5	7
53	Impact of Pressure on the Resonant Bonding in Chalcogenides. Journal of Physical Chemistry C, 2017, 121, 25447-25454.	1.5	25
54	Manipulation of dangling bonds of interfacial states coupled in GeTe-rich GeTe/Sb2Te3 superlattices. Scientific Reports, 2017, 7, 17353.	1.6	3

#	Article	IF	Citations
55	Color printing enabled by phase change materials on paper substrate. AIP Advances, 2017, 7, .	0.6	7
56	Reversing the Resistivity Contrast in the Phaseâ€Change Memory Material GeSb₂Te₄ Using High Pressure. Advanced Electronic Materials, 2015, 1, 1500240.	2.6	19
57	Disorder Control in Crystalline GeSb₂Te₄ Using High Pressure. Advanced Science, 2015, 2, 1500117.	5.6	36
58	Dopamine D1 and D3 receptors mediate reconsolidation of cocaine memories in mouse models of drug self-administration. Neuroscience, 2014, 278, 154-164.	1.1	19
59	How fragility makes phase-change data storage robust: insights from ab initio simulations. Scientific Reports, 2014, 4, 6529.	1.6	66
60	Dopamine D3 receptors regulate reconsolidation of cocaine memory. Neuroscience, 2013, 241, 32-40.	1.1	19
61	Mechanisms of Li<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mrow /><mml:mo>+</mml:mo></mml:msup></mml:math>transport in garnet-type cubic Li<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow><mml:mn>3</mml:mn><mml:mo>+</mml:mo><mml:mi>x</mml:mi></mml:mrow></mml:msub></mml:math>La<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mrow /></mml:msub></mml:math>	1.1	141
62	Exploring Mechanisms Underlying Extinction of Cue-Elicited Cocaine Seeking. Current Neuropharmacology, 2011, 9, 8-11.	1.4	5
63	Dopamine D1 and N-methyl-d-aspartate receptors and extracellular signal-regulated kinase mediate neuronal morphological changes induced by repeated cocaine administration. Neuroscience, 2010, 168, 48-60.	1.1	57
64	Studies of the electronic and optical properties of BaMxO1â^'x (M=S, Se, Te) using first-principle calculations. Optics Communications, 2009, 282, 48-52.	1.0	3
65	câ€Fos Is an Intracellular Regulator of Cocaineâ€Induced Longâ€Term Changes. Annals of the New York Academy of Sciences, 2008, 1139, 1-9.	1.8	17
66	Fos regulates neuronal activity in the nucleus accumbens. Neuroscience Letters, 2008, 448, 157-160.	1.0	6
67	Lack of Self-Administration of Cocaine in Dopamine D₁Receptor Knock-Out Mice. Journal of Neuroscience, 2007, 27, 13140-13150.	1.7	155
68	Dopamine D₁ and D₃ receptors oppositely regulate NMDAâ€•and cocaineâ€induced MAPK signaling via NMDA receptor phosphorylation. Journal of Neurochemistry, 2007, 103, 840-848.	2.1	54
69	Optical properties of cubic Ti3N4, Zr3N4, and Hf3N4. Applied Physics Letters, 2006, 89, 151908.	1.5	103
70	Opposite Regulation of Cocaine-Induced Intracellular Signaling and Gene Expression by Dopamine D1 and D3 Receptors. Annals of the New York Academy of Sciences, 2006, 1074, 1-12.	1.8	22
71	Theoretical investigation of the electronic and optical properties of pseudocubic Si3P4, Ge3P4 and Sn3P4. Optics Express, 2006, 14, 710.	1.7	10
72	TGF-Î²2 inhibits AKT activation and FGF-2-induced corneal endothelial cell proliferation. Experimental Cell Research, 2006, 312, 3631-3640.	1.2	34

#	Article	IF	Citations
73	c-Fos Facilitates the Acquisition and Extinction of Cocaine-Induced Persistent Changes. Journal of Neuroscience, 2006, 26, 13287-13296.	1.7	137
74	Repeated Cocaine Administration Induces Gene Expression Changes through the Dopamine D1 Receptors. Neuropsychopharmacology, 2005, 30, 1443-1454.	2.8	82
75	Cocaine-Induced Intracellular Signaling and Gene Expression Are Oppositely Regulated by the Dopamine D1 and D3 Receptors. Journal of Neuroscience, 2004, 24, 3344-3354.	1.7	202
76	Molecular genetic probing of dopamine receptors in drug addiction. Current Opinion in Drug Discovery & Development, 2004, 7, 703-8.	1.9	4
77	The dopamine D1 receptor is a critical mediator for cocaine-induced gene expression. Journal of Neurochemistry, 2002, 82, 1453-1464.	2.1	113
78	c-fos regulates neuronal excitability and survival. Nature Genetics, 2002, 30, 416-420.	9.4	263
79	Toward a Molecular Understanding of Psychostimulant Actions Using Genetically Engineered Dopamine Receptor Knockout Mice as Model Systems. Journal of Addictive Diseases, 2001, 20, 7-18.	0.8	76
80	DNA fragmentation in apoptosis. Cell Research, 2000, 10, 205-211.	5.7	235
81	Probing the Role of the Dopamine D1 Receptor in Psychostimulant Addiction. Annals of the New York Academy of Sciences, 2000, 914, 13-21.	1.8	13
82	Behavioral responses to cocaine and amphetamine administration in mice lacking the dopamine D1 receptor. Brain Research, 2000, 852, 198-207.	1.1	142
83	Transforming activity of receptor tyrosine kinase Tyro3 is mediated, at least in part, by the PI3 kinase-signaling pathway. Blood, 2000, 95, 633-638.	0.6	52
84	Paradoxical Locomotor Behavior of Dopamine D1 Receptor Transgenic Mice. Experimental Neurology, 1999, 157, 169-179.	2.0	31
85	Unraveling Dopamine D3Receptor Function in Response to Psychostimulants Using a Genetic Approacha. Annals of the New York Academy of Sciences, 1998, 844, 27-39.	1.8	14
86	Dopamine D3 Receptor Mutant Mice Exhibit Increased Behavioral Sensitivity to Concurrent Stimulation of D1 and D2 Receptors. Neuron, 1997, 19, 837-848.	3.8	306
87	Elimination of cocaine-induced hyperactivity and dopamine-mediated neurophysiological effects in dopamine D1 receptor mutant mice. Cell, 1994, 79, 945-955.	13.5	323
88	Dopamine D1 receptor mutant mice are deficient in striatal expression of dynorphin and in dopamine-mediated behavioral responses. Cell, 1994, 79, 729-742.	13.5	474
89	Unraveling the structural and bonding nature of antimony sesquichalcogenide glass for electronic and photonic applications. Journal of Materials Chemistry C, 0, , .	2.7	15
90	A Genetically Modified Skin Graft for Treating Alcohol Use Disorder and/or Polysubstance Abuse With Cocaine. Advances in Drug and Alcohol Research, 0, 11, .	2.5	0