

# Xuemei Cheng

## List of Publications by Year in descending order

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57  
papers

3,695  
citations

279798

23  
h-index

168389

53  
g-index

57  
all docs

57  
docs citations

57  
times ranked

5241  
citing authors

#	ARTICLE	IF	CITATIONS
1	Dative Epitaxy of Commensurate Monocrystalline Covalent van der Waals Moiré Supercrystal. <i>Advanced Materials</i> , 2022, 34, e2200117.	21.0	20
2	The effect of polymer stiffness on magnetization reversal of magnetorheological elastomers. <i>APL Materials</i> , 2022, 10, 041106.	5.1	3
3	Dynamic Tuning of Viscoelastic Hydrogels with Carbonyl Iron Microparticles Reveals the Rapid Response of Cells to Three-Dimensional Substrate Mechanics. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 20947-20959.	8.0	15
4	Probing exchange bias at the surface of a doped ferrimagnetic insulator. <i>Physical Review Materials</i> , 2021, 5, .	2.4	0
5	Magnetic field tuning of mechanical properties of ultrasoft PDMS-based magnetorheological elastomers for biological applications. <i>Multifunctional Materials</i> , 2021, 4, 035001.	3.7	3
6	Targeting Proteases for Treating COVID-19. <i>Journal of Proteome Research</i> , 2020, 19, 4316-4326.	3.7	68
7	Sono-Assisted Surface Energy Driven Assembly of 2D Materials on Flexible Polymer Substrates: A Green Assembly Method Using Water. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 33458-33464.	8.0	15
8	Tunable and Reversible Substrate Stiffness Reveals a Dynamic Mechanosensitivity of Cardiomyocytes. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 20603-20614.	8.0	58
9	Quantifying chiral exchange interaction for Néel-type skyrmions via Lorentz transmission electron microscopy. <i>Physical Review B</i> , 2019, 99, .	3.2	21
10	Tunable spin-state bistability in a spin crossover molecular complex. <i>Journal of Physics Condensed Matter</i> , 2019, 31, 315401.	1.8	18
11	Tuning the Néel Temperature of Hexagonal Ferrites by Structural Distortion. <i>Physical Review Letters</i> , 2018, 121, 237203.	7.8	29
12	Voltage-controlled interlayer coupling in perpendicularly magnetized magnetic tunnel junctions. <i>Nature Communications</i> , 2017, 8, 15232.	12.8	43
13	Effects of biaxial strain on the improper multiferroicity in $\text{LuFeO}_3$ films studied using the restrained thermal expansion method. <i>Physical Review B</i> , 2017, 95, .	3.2	14
14	Electronic structure and direct observation of ferrimagnetism in multiferroic hexagonal $\text{YbFeO}_3$ . <i>Physical Review B</i> , 2017, 95, .	3.2	17
15	Magnetization Reversal of Three-Dimensional Nickel Anti-Sphere Arrays. <i>IEEE Magnetics Letters</i> , 2017, 8, 1-4.	1.1	3
16	Direct observation of the skyrmion Hall effect. <i>Nature Physics</i> , 2017, 13, 162-169.	16.7	858
17	On the structural origin of the single-ion magnetic anisotropy in $\text{LuFeO}_3$ . <i>Journal of Physics Condensed Matter</i> , 2016, 28, 156001.	1.8	20
18	Isochemical control over structural state and mechanical properties in Pd-based metallic glass by sputter deposition at elevated temperatures. <i>APL Materials</i> , 2016, 4, 086104.	5.1	14

#	ARTICLE	IF	CITATIONS
19	Room temperature ferroelectricity in continuous croconic acid thin films. Applied Physics Letters, 2016, 109, .	3.3	33
20	Quantitatively in Situ Imaging Silver Nanowire Hollowing Kinetics. Nano Letters, 2016, 16, 6555-6559.	9.1	25
21	Thermal stability of hydrogenated amorphous silicon passivation for p-type crystalline silicon. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 91-95.	1.8	10
22	Electronic Properties of a-SiO <sub>2</sub> /HfSiN <sub>2</sub> Stacks for Surface Passivation of P-Type Crystalline Si Wafers. IEEE Journal of Photovoltaics, 2016, 6, 1103-1108.	2.5	7
23	Suppressing unstable deformation of nanocolloidal crystals with atomic layer deposition. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2015, 639, 514-518.	5.6	4
24	Reinforcing nanocolloidal crystals by tuning interparticle bonding via atomic layer deposition. Acta Materialia, 2015, 95, 216-223.	7.9	6
25	A comparison of numerical simulations and analytical theory of the dynamics of interacting magnetic vortices. Journal of Applied Physics, 2015, 117, 123916.	2.5	6
26	Time-resolved photoemission electron microscopy imaging of mode coupling between three interacting magnetic vortices. Applied Physics Letters, 2014, 105, 102408.	3.3	7
27	Temperature controlled tensile testing of individual nanowires. Review of Scientific Instruments, 2014, 85, 013901.	1.3	15
28	Effect of Interfacial Octahedral Behavior in Ultrathin Manganite Films. Nano Letters, 2014, 14, 2509-2514.	9.1	121
29	Structural and electronic origin of the magnetic structures in hexagonal LuFeO <sub>3</sub> . Physical Review B, 2014, 90, 080401.	3.2	38
30	Magnetic Polarization on Y <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> and Pt Magnetotransport Characteristics. Physical Review Letters, 2013, 110, 147207.	7.85	200
31	Room-Temperature Multiferroic Hexagonal LuFeO <sub>3</sub> Films. Physical Review Letters, 2013, 110, 237601.	7.8	195
32	Tuning vortex confinement by magnetic domains in a superconductor/ferromagnet bilayer. Physical Review B, 2013, 87, .	3.2	14
33	Crystal field splitting and optical bandgap of hexagonal LuFeO <sub>3</sub> films. Applied Physics Letters, 2012, 101, .	3.3	51
34	Structure and magnetotransport properties of epitaxial nanocomposite La <sub>0.67</sub> Ca <sub>0.33</sub> MnO <sub>3</sub> :SrTiO <sub>3</sub> thin films grown by a chemical solution approach. Applied Physics Letters, 2012, 100, 082403.	3.3	19
35	Growth diagram and magnetic properties of hexagonal LuFeO <sub>3</sub> /Y <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> thin films. Physical Review B, 2012, 85, .	3.2	25
36	Studies of nanomagnetism using synchrotron-based x-ray photoemission electron microscopy (X-PEEM). Reports on Progress in Physics, 2012, 75, 026501.	20.1	71

#	ARTICLE	IF	CITATIONS
37	Imaging of magnetization dynamics in artificial ferromagnetic nanoscale structures. , 2010, , .		0
38	Polarity reversal of a magnetic vortex core by a unipolar, nonresonant in-plane pulsed magnetic field. Applied Physics Letters, 2009, 94, .	3.3	16
39	Non-linear magnetization dynamics and transient domains in ferromagnetic disks. , 2009, , .		0
40	Nonlinear vortex dynamics and transient domains in ferromagnetic disks. Physical Review B, 2009, 79, .	3.2	28
41	Grain-size stabilization by impurities and effect on stress-coupled grain growth in nanocrystalline Al thin films. Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing, 2008, 483-484, 637-640.	5.6	60
42	The breakdown of the fingerprinting of vortices by hysteresis loops in circular multilayer ring arrays. Applied Physics Letters, 2007, 91, 132501.	3.3	13
43	Asymmetric Domain Nucleation and Unusual Magnetization Reversal in Ultrathin Co Films with Perpendicular Anisotropy. Physical Review Letters, 2007, 98, 117204.	7.8	50
44	Unusual magnetization reversal in [Co <sup>2+</sup> Pt] <sub>4</sub> multilayers with perpendicular anisotropy. Journal of Applied Physics, 2006, 99, 08C905.	2.5	12
45	Magnetic properties of one-dimensional quasiperiodic Co <sup>2+</sup> Pt multilayers. Journal of Applied Physics, 2006, 99, 08C902.	2.5	2
46	The enhancement of vortex pinning in ferromagnet/superconductor bilayers. Physica Status Solidi C: Current Topics in Solid State Physics, 2005, 2, 1650-1655.	0.8	10
47	Electrodeposition of Co <sub>x</sub> Pt <sub>1-x</sub> Thin Films. Journal of the Electrochemical Society, 2005, 152, C27.	2.9	28
48	Origin of pinning enhancement in a ferromagnet-superconductor bilayer. Journal of Applied Physics, 2005, 97, 026105.	2.5	24
49	Antisymmetric Magnetoresistance in Magnetic Multilayers with Perpendicular Anisotropy. Physical Review Letters, 2005, 94, 017203.	7.8	61
50	Deformation Twinning in Nanocrystalline Aluminum. Science, 2003, 300, 1275-1277.	12.6	1,058
51	Magnetic core loss of ultrahigh strength FeCo alloys. Journal of Applied Physics, 2003, 93, 7121-7123.	2.5	18
52	Magnetic properties of epitaxial Mn-doped ZnO thin films. Journal of Applied Physics, 2003, 93, 7876-7878.	2.5	227
53	Normal-incidence SiGe/Si photodetectors with different buffer layers. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 1251.	1.6	5
54	Staircase band gap Si <sub>1-x</sub> Gex/Si photodetectors. Applied Physics Letters, 2000, 77, 1548-1550.	3.3	4

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55	Room-temperature blue luminescence of thermally oxidized Si <sub>1-x</sub> Ge <sub>y</sub> thin films on Si (100) substrates. Applied Physics Letters, 1999, 75, 3333-3335.	3.3	1
56	Influence of growth conditions on the incorporation of substitutional C in Si <sub>1-x</sub> Ge <sub>x</sub> alloy on Si by chemical vapor deposition using C <sub>2</sub> H <sub>4</sub> . Applied Physics A: Materials Science and Processing, 1999, 68, 457-460.	2.3	2
57	Room Temperature Ultraviolet Photoluminescence from 800°C Thermally Oxidized Si <sub>1-x</sub> Ge <sub>y</sub> Thin Films on Si(100) Substrate. Materials Research Society Symposia Proceedings, 1999, 592, 13.	0.1	0