

# Xuemei Cheng

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/799449/publications.pdf>

Version: 2024-02-01

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	Deformation Twinning in Nanocrystalline Aluminum. <i>Science</i> , 2003, 300, 1275-1277.	12.6	1,058
2	Direct observation of the skyrmion Hall effect. <i>Nature Physics</i> , 2017, 13, 162-169.	16.7	858
3	Magnetic properties of epitaxial Mn-doped ZnO thin films. <i>Journal of Applied Physics</i> , 2003, 93, 7876-7878.	2.5	227
4	Pt Magnetic Polarization on $Y_3Fe_{12}O_{19}$ and Magnetotransport Characteristics. <i>Physical Review Letters</i> , 2013, 110, 147207.	7.85	200
5	Room-Temperature Multiferroic Hexagonal $LuFeO_3$ Films. <i>Physical Review Letters</i> . 2013. 110. 237601.	7.8	195
6	Effect of Interfacial Octahedral Behavior in Ultrathin Manganite Films. <i>Nano Letters</i> , 2014, 14, 2509-2514.	9.1	121
7	Studies of nanomagnetism using synchrotron-based x-ray photoemission electron microscopy (X-PEEM). <i>Reports on Progress in Physics</i> , 2012, 75, 026501.	20.1	71
8	Targeting Proteases for Treating COVID-19. <i>Journal of Proteome Research</i> , 2020, 19, 4316-4326.	3.7	68
9	Antisymmetric Magnetoresistance in Magnetic Multilayers with Perpendicular Anisotropy. <i>Physical Review Letters</i> , 2005, 94, 017203.	7.8	61
10	Grain-size stabilization by impurities and effect on stress-coupled grain growth in nanocrystalline Al thin films. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2008, 483-484, 637-640.	5.6	60
11	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
12	Crystal field splitting and optical bandgap of hexagonal $LuFeO_3$ films. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	51
13	Asymmetric Domain Nucleation and Unusual Magnetization Reversal in Ultrathin Co Films with Perpendicular Anisotropy. <i>Physical Review Letters</i> , 2007, 98, 117204.	7.8	50
14	Voltage-controlled interlayer coupling in perpendicularly magnetized magnetic tunnel junctions. <i>Nature Communications</i> , 2017, 8, 15232.	12.8	43
15	Structural and electronic origin of the magnetic structures in hexagonal $LuFeO_3$ . <i>Physical Review B</i> , 2014, 90, .	3.2	38
16	Room temperature ferroelectricity in continuous croconic acid thin films. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	33
17	Tuning the Néel Temperature of Hexagonal Ferrites by Structural Distortion. <i>Physical Review Letters</i> , 2018, 121, 237203.	7.8	29
18	Electrodeposition of $Co_xPt_{1-x}$ Thin Films. <i>Journal of the Electrochemical Society</i> , 2005, 152, C27.	2.9	28

#	ARTICLE	IF	CITATIONS
19	Nonlinear vortex dynamics and transient domains in ferromagnetic disks. Physical Review B, 2009, 79, .	3.2	28
20	Electronic structure and direct observation of ferrimagnetism in multiferroic hexagonal $\text{YbFeO}_3$ . Physical Review B, 2017, 95, .	3.2	27
21	Growth diagram and magnetic properties of hexagonal $\text{LuFeO}_3$ thin films. Physical Review B, 2012, 85, .	3.2	25
22	Quantitatively in Situ Imaging Silver Nanowire Hollowing Kinetics. Nano Letters, 2016, 16, 6555-6559.	9.1	25
23	Origin of pinning enhancement in a ferromagnet-superconductor bilayer. Journal of Applied Physics, 2005, 97, 026105.	2.5	24
24	Quantifying chiral exchange interaction for Néel-type skyrmions via Lorentz transmission electron microscopy. Physical Review B, 2019, 99, .	3.2	21
25	On the structural origin of the single-ion magnetic anisotropy in $\text{LuFeO}_3$ . Journal of Physics Condensed Matter, 2016, 28, 156001.	1.8	20
26	Dative Epitaxy of Commensurate Monocrystalline Covalent van der Waals Moiré Supercrystal. Advanced Materials, 2022, 34, e2200117.	21.0	20
27	Structure and magnetotransport properties of epitaxial nanocomposite $\text{La}_{0.67}\text{Ca}_{0.33}\text{MnO}_3:\text{SrTiO}_3$ thin films grown by a chemical solution approach. Applied Physics Letters, 2012, 100, 082403.	3.3	19
28	Magnetic core loss of ultrahigh strength FeCo alloys. Journal of Applied Physics, 2003, 93, 7121-7123.	2.5	18
29	Tunable spin-state bistability in a spin crossover molecular complex. Journal of Physics Condensed Matter, 2019, 31, 315401.	1.8	18
30	Polarity reversal of a magnetic vortex core by a unipolar, nonresonant in-plane pulsed magnetic field. Applied Physics Letters, 2009, 94, .	3.3	16
31	Temperature controlled tensile testing of individual nanowires. Review of Scientific Instruments, 2014, 85, 013901.	1.3	15
32	Sono-Assisted Surface Energy Driven Assembly of 2D Materials on Flexible Polymer Substrates: A Green Assembly Method Using Water. ACS Applied Materials & Interfaces, 2019, 11, 33458-33464.	8.0	15
33	Dynamic Tuning of Viscoelastic Hydrogels with Carbonyl Iron Microparticles Reveals the Rapid Response of Cells to Three-Dimensional Substrate Mechanics. ACS Applied Materials & Interfaces, 2021, 13, 20947-20959.	8.0	15
34	Tuning vortex confinement by magnetic domains in a superconductor/ferromagnet bilayer. Physical Review B, 2013, 87, .	3.2	14
35	Isochemical control over structural state and mechanical properties in Pd-based metallic glass by sputter deposition at elevated temperatures. APL Materials, 2016, 4, 086104.	5.1	14
36	Effects of biaxial strain on the improper multiferroicity in $\text{LuFeO}_3$ films studied using the restrained thermal expansion method. Physical Review B, 2017, 95, .	3.2	14

#	ARTICLE	IF	CITATIONS
37	The breakdown of the fingerprinting of vortices by hysteresis loops in circular multilayer ring arrays. <i>Applied Physics Letters</i> , 2007, 91, 132501.	3.3	13
38	Unusual magnetization reversal in [Co <sup>2+</sup> Pt] <sub>4</sub> multilayers with perpendicular anisotropy. <i>Journal of Applied Physics</i> , 2006, 99, 08C905.	2.5	12
39	The enhancement of vortex pinning in ferromagnet/superconductor bilayers. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005, 2, 1650-1655.	0.8	10
40	Thermal stability of hydrogenated amorphous silicon passivation for p-type crystalline silicon. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2016, 213, 91-95.	1.8	10
41	Time-resolved photoemission electron microscopy imaging of mode coupling between three interacting magnetic vortices. <i>Applied Physics Letters</i> , 2014, 105, 102408.	3.3	7
42	Electronic Properties of a-SiO <sub>x</sub> and H/SiN Stacks for Surface Passivation of P-Type Crystalline Si Wafers. <i>IEEE Journal of Photovoltaics</i> , 2016, 6, 1103-1108.	2.5	7
43	Reinforcing nanocolloidal crystals by tuning interparticle bonding via atomic layer deposition. <i>Acta Materialia</i> , 2015, 95, 216-223.	7.9	6
44	A comparison of numerical simulations and analytical theory of the dynamics of interacting magnetic vortices. <i>Journal of Applied Physics</i> , 2015, 117, 123916.	2.5	6
45	Normal-incidence SiGe/Si photodetectors with different buffer layers. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000, 18, 1251.	1.6	5
46	Staircase band gap Si <sub>1-x</sub> Ge <sub>x</sub> /Si photodetectors. <i>Applied Physics Letters</i> , 2000, 77, 1548-1550.	3.3	4
47	Suppressing unstable deformation of nanocolloidal crystals with atomic layer deposition. <i>Materials Science &amp; Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2015, 639, 514-518.	5.6	4
48	Magnetization Reversal of Three-Dimensional Nickel Anti-Sphere Arrays. <i>IEEE Magnetics Letters</i> , 2017, 8, 1-4.	1.1	3
49	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
50	The effect of polymer stiffness on magnetization reversal of magnetorheological elastomers. <i>APL Materials</i> , 2022, 10, 041106.	5.1	3
51	Influence of growth conditions on the incorporation of substitutional C in Si <sub>1-x-y</sub> Ge <sub>x</sub> C <sub>y</sub> alloy on Si by chemical vapor deposition using C <sub>2</sub> H <sub>4</sub> . <i>Applied Physics A: Materials Science and Processing</i> , 1999, 68, 457-460.	2.3	2
52	Magnetic properties of one-dimensional quasiperiodic Co <sup>2+</sup> Pt multilayers. <i>Journal of Applied Physics</i> , 2006, 99, 08C902.	2.5	2
53	Room-temperature blue luminescence of thermally oxidized Si <sub>1-x</sub> Ge <sub>y</sub> thin films on Si (100) substrates. <i>Applied Physics Letters</i> , 1999, 75, 3333-3335.	3.3	1
54	Room Temperature Ultraviolet Photoluminescence from 800°C Thermally Oxidized Si <sub>1-x</sub> Ge <sub>y</sub> Thin Films on Si(100) Substrate. <i>Materials Research Society Symposia Proceedings</i> , 1999, 592, 13.	0.1	0

#	ARTICLE	IF	CITATIONS
55	Non-linear magnetization dynamics and transient domains in ferromagnetic disks. , 2009, , .		0
56	Imaging of magnetization dynamics in artificial ferromagnetic nanoscale structures. , 2010, , .		0
57	Probing exchange bias at the surface of a doped ferrimagnetic insulator. Physical Review Materials, 2021, 5, .	2.4	0