

Padraic Shafer

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2090027/publications.pdf>

Version: 2024-02-01

97
papers

6,916
citations

109137

35
h-index

58464

82
g-index

100
all docs

100
docs citations

100
times ranked

8075
citing authors

#	ARTICLE	IF	CITATIONS
1	Above-bandgap voltages from ferroelectric photovoltaic devices. Nature Nanotechnology, 2010, 5, 143-147.	15.6	1,496
2	Observation of polar vortices in oxide superlattices. Nature, 2016, 530, 198-201.	13.7	682
3	Enhanced ferroelectricity in ultrathin films grown directly on silicon. Nature, 2020, 580, 478-482.	13.7	486
4	Electric Field-Induced Magnetization Switching in Epitaxial Columnar Nanostructures. Nano Letters, 2005, 5, 1793-1796.	4.5	426
5	Observation of room-temperature polar skyrmions. Nature, 2019, 568, 368-372.	13.7	417
6	Domain Engineering for Enhanced Ferroelectric Properties of Epitaxial (001) BiFeO Thin Films. Advanced Materials, 2009, 21, 817-823.	11.1	277
7	Strain-Induced Polarization Rotation in Epitaxial (001) BiFeO_3 Thin Films. Physical Review Letters, 2008, 101, 107602.	2.9	221
8	Nanoscale Control of Domain Architectures in BiFeO_3 Thin Films. Nano Letters, 2009, 9, 1726-1730.	4.5	210
9	Patterning-Induced Ferromagnetism of Fe_3GeTe_2 van der Waals Materials beyond Room Temperature. Nano Letters, 2018, 18, 5974-5980.	4.5	177
10	Emergent chirality in the electric polarization texture of titanate superlattices. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 915-920.	3.3	121
11	Polarization switching in epitaxial BiFeO_3 films. Applied Physics Letters, 2005, 87, 252902.	1.5	118
12	Superconductivity in a quintuple-layer square-planar nickelate. Nature Materials, 2022, 21, 160-164.	13.3	117
13	Strain Control of Domain-Wall Stability in Epitaxial $\text{BiFeO}_3(110)$ Films. Physical Review Letters, 2007, 99, 217601.	2.9	109
14	Ultrathin ferroic $\text{HfO}_2/\text{ZrO}_2$ superlattice gate stack for advanced transistors. Nature, 2022, 604, 65-71.	13.7	108
15	Ferroelectric domain structure in epitaxial BiFeO_3 films. Applied Physics Letters, 2005, 87, 182912.	1.5	107
16	Epitaxial (001) BiFeO_3 membranes with substantially reduced fatigue and leakage. Applied Physics Letters, 2008, 92, 062910.	1.5	107
17	Tuning Perpendicular Magnetic Anisotropy by Oxygen Octahedral Rotations in BiFeO_3		

#	ARTICLE	IF	CITATIONS
19	Creation of skyrmions in van der Waals ferromagnet Fe ₃ GeTe ₂ on (Co/Pd) superlattice. <i>Science Advances</i> , 2020, 6, .	4.7	89
20	Coexistence of Low Damping and Strong Magnetoelastic Coupling in Epitaxial Spinel Ferrite Thin Films. <i>Advanced Materials</i> , 2017, 29, 1701130.	11.1	71
21	Emergent ferroelectricity in subnanometer binary oxide films on silicon. <i>Science</i> , 2022, 376, 648-652.	6.0	65
22	Exchange-biasing topological charges by antiferromagnetism. <i>Nature Communications</i> , 2018, 9, 2767.	5.8	61
23	Tunable room-temperature ferromagnetism in Co-doped two-dimensional van der Waals ZnO. <i>Nature Communications</i> , 2021, 12, 3952.	5.8	54
24	Direct Detection of Pure ac Spin Current by X-Ray Pump-Probe Measurements. <i>Physical Review Letters</i> , 2016, 117, 076602.	2.9	52
25	Evidence of a magnetic transition in atomically thin Cr ₂ TiC ₂ T _x MXene. <i>Nanoscale Horizons</i> , 2020, 5, 1557-1565.	4.1	51
26	Femtosecond X-ray magnetic circular dichroism absorption spectroscopy at an X-ray free electron laser. <i>Review of Scientific Instruments</i> , 2016, 87, 033110.	0.6	50
27	Ultralow Damping in Nanometer-Thick Epitaxial Spinel Ferrite Thin Films. <i>Nano Letters</i> , 2018, 18, 4273-4278.	4.5	48
28	Coherent Transfer of Spin Angular Momentum by Evanescent Spin Waves within Antiferromagnetic NiO. <i>Physical Review Letters</i> , 2020, 124, 217201.	2.9	47
29	Correlation-driven eightfold magnetic anisotropy in a two-dimensional oxide monolayer. <i>Science Advances</i> , 2020, 6, eaay0114.	4.7	43
30	Complex strain evolution of polar and magnetic order in multiferroic BiFeO ₃ thin films. <i>Nature Communications</i> , 2018, 9, 3764.	5.8	40
31	Exploring interfacial exchange coupling and sublattice effect in heavy metal/ferrimagnetic insulator heterostructures using Hall measurements, x-ray magnetic circular dichroism, and neutron reflectometry. <i>Physical Review B</i> , 2019, 99, .	1.1	39
32	Gd-doped BaSnO ₃ : A transparent conducting oxide with localized magnetic moments. <i>Applied Physics Letters</i> , 2016, 108, 042106.	1.5	38
33	Anomalous orbital structure in a spinel-perovskite interface. <i>Npj Quantum Materials</i> , 2016, 1, .	1.8	36
34	A new era in ferroelectrics. <i>APL Materials</i> , 2020, 8, .	2.2	36
35	Phase-resolved x-ray ferromagnetic resonance measurements of spin pumping in spin valve structures. <i>Physical Review B</i> , 2013, 87, .	1.1	35
36	Emergent electric field control of phase transformation in oxide superlattices. <i>Nature Communications</i> , 2020, 11, 902.	5.8	35

#	ARTICLE	IF	CITATIONS
37	Planar electrode piezoelectric force microscopy to study electric polarization switching in BiFeO ₃ . Applied Physics Letters, 2007, 90, 202909.	1.5	34
38	Phase-resolved x-ray ferromagnetic resonance measurements in fluorescence yield. Journal of Applied Physics, 2011, 109, .	1.1	34
39	Interfacial charge-transfer Mott state in iridate nickelate superlattices. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19863-19868.	3.3	31
40	Distinguishing electronic contributions of surface and sub-surface transition metal atoms in Ti-based MXenes. 2D Materials, 2020, 7, 025015.	2.0	31
41	Coherent ac spin current transmission across an antiferromagnetic CoO insulator. Nature Communications, 2019, 10, 5265.	5.8	29
42	Synthesis and electronic properties of Ruddlesden-Popper strontium iridate epitaxial thin films stabilized by control of growth kinetics. Physical Review Materials, 2017, 1, .	0.9	26
43	Magnetic Interactions at the Nanoscale in Trilayer Titanates. Physical Review Letters, 2016, 116, 076802.	2.9	23
44	Disentangled Cooperative Orderings in Artificial Rare-Earth Nickelates. Physical Review Letters, 2018, 120, 156801.	2.9	23
45	Decoupling Carrier Concentration and Electron-Phonon Coupling in Oxide Heterostructures Observed with Resonant Inelastic X-Ray Scattering. Physical Review Letters, 2018, 121, 236802.	2.9	22
46	Femtosecond X-ray induced changes of the electronic and magnetic response of solids from electron redistribution. Nature Communications, 2019, 10, 5289.	5.8	22
47	Evolution of charge order topology across a magnetic phase transition in cuprate superconductors. Nature Physics, 2019, 15, 335-340.	6.5	21
48	Termination switching of antiferromagnetic proximity effect in topological insulator. Science Advances, 2020, 6, eaaz8463.	4.7	20
49	Anomalous Electronic Anisotropy Triggered by Ferroelastic Coupling in Multiferroic Heterostructures. Advanced Materials, 2016, 28, 876-883.	11.1	19
50	Charge order and antiferromagnetism in epitaxial ultrathin films of EuNiO_3 . Physical Review B, 2015, 92, .	1.8	18
51	Interface Fe magnetic moment enhancement in MgO/Fe/MgO trilayers. Applied Physics Letters, 2015, 107, 092404.	1.5	14
52	Structure and magnetism of Fe-doped BaSnO ₃ thin films. AIP Advances, 2017, 7, .	0.6	14
53	Dependence of spin pumping and spin transfer torque upon Ni_{81}Ta thickness in $\text{Ni}_{81}\text{Ta}/\text{MgO}/\text{Pt}$ junctions. Physical Review B, 2017, 96, .	1.1	12
54	Element- and Time-Resolved Measurements of Spin Dynamics Using X-ray Detected Ferromagnetic Resonance. Synchrotron Radiation News, 2020, 33, 12-19.	0.2	12

#	ARTICLE	IF	CITATIONS
55	Tunable Magnetoelastic Effects in Voltage-Controlled Exchange-Coupled Composite Multiferroic Microstructures. ACS Applied Materials & Interfaces, 2020, 12, 6752-6760.	4.0	12
56	The role of iron in magnetic damping of Mg(Al,Fe)2O4 spinel ferrite thin films. Applied Physics Letters, 2020, 116, .	1.5	12
57	Influence of a Dy overlayer on the precessional dynamics of a ferromagnetic thin film. Applied Physics Letters, 2013, 102, 062418.	1.5	11
58	Magnetism and electronic structure of YTiO3 thin films. Applied Physics Letters, 2015, 107, .	1.5	11
59	Magnetism and transport in transparent high-mobility BaSnO_3 films doped with La, Pr, Nd, and Gd. Physical Review Materials, 2019, 3, .	1.1	11
60	Emergent Magnetic State in (111)-Oriented Quasi-Two-Dimensional Spinel Oxides. Nano Letters, 2019, 19, 8381-8387.	4.5	10
61	Strain-Induced Anion-Site Occupancy in Perovskite Oxyfluoride Films. Chemistry of Materials, 2021, 33, 1811-1820.	3.2	10
62	Strain-Induced Orbital Contributions to Oxygen Electrocatalysis in Transition-Metal Perovskites. Advanced Energy Materials, 2021, 11, 2102175.	10.2	9
63	Phase engineering of rare earth nickelates by digital synthesis. Applied Physics Letters, 2018, 113, 081602.	1.5	8
64	Damping Enhancement in Coherent Ferrite-Insulating-Paramagnet Bilayers. Physical Review Applied, 2019, 12, .	1.5	8
65	Emergent behavior of LaNiO3 in short-periodic nickelate superlattices. APL Materials, 2020, 8, .	2.2	8
66	Cation- and lattice-site-selective magnetic depth profiles of ultrathin Fe_3O_4 (001) films. Physical Review B, 2020, 102, .	1.1	8
67	State-resolved ultrafast charge and spin dynamics in [Co/Pd] multilayers. Applied Physics Letters, 2022, 120, .	1.5	8
68	Orbital configuration in CaTiO3 films on NdGaO3. Applied Physics Letters, 2016, 109, .	1.5	7
69	Inverted orbital polarization in strained correlated oxide films. Physical Review B, 2018, 98, .	1.1	7
70	Modification of magnetocrystalline anisotropy via ion-implantation. AIP Advances, 2020, 10, .	0.6	7
71	Cation and anion topotactic transformations in cobaltite thin films leading to Ruddlesden-Popper phases. Physical Review Materials, 2021, 5, .	0.9	7
72	Synthesis and electronic properties of $\text{Nd}_3\text{Ni}_2\text{O}_7$ Ruddlesden-Popper nickelate thin films. Physical Review Materials, 2022, 6, .	0.9	7

#	ARTICLE	IF	CITATIONS
73	Chiral structures of electric polarization vectors quantified by X-ray resonant scattering. Nature Communications, 2022, 13, 1769.	5.8	6
74	Electronic properties of ultra-thin YCrO3 films. Applied Physics Letters, 2018, 112, .	1.5	5
75	Anomalous orbital structure in two-dimensional titanium dichalcogenides. Scientific Reports, 2019, 9, 1896.	1.6	5
76	Element-Specific Detection of Sub-Nanosecond Spin-Transfer Torque in a Nanomagnet Ensemble. Nano Letters, 2020, 20, 7828-7834.	4.5	5
77	Optically and Microwave-Induced Magnetization Precession in [Co/Pt]/NiFe Exchange Springs. ACS Applied Materials & Interfaces, 2020, 12, 52116-52124.	4.0	5
78	The exceedingly strong two-dimensional ferromagnetism in bi-atomic layer SrRuO3 with a critical conduction transition. Nano Research, 2022, 15, 7584-7589.	5.8	5
79	Interplay of structure and charge order revealed by quantum oscillations in thin films of $\text{Pr}_{2-x}\text{Ce}_x\text{O}_4$. Physical Review B, 2019, 100, .	1.1	4
80	Orientation-dependent stabilization of $\text{MgCr}_4\text{O}_{10}$ spinel thin films. Physical Review B, 2020, 102, .	1.1	4
81	Direct Evidence of the Competing Nature between Electronic and Lattice Breathing Order in Rare-Earth Nickelates. Physical Review Letters, 2020, 124, 127601.	2.9	4
82	Canted standing spin-wave modes of permalloy thin films observed by ferromagnetic resonance. New Journal of Physics, 2021, 23, 023017.	1.2	4
83	Proximate Quantum Spin Liquid on Designer Lattice. Nano Letters, 2021, 21, 2010-2017.	4.5	4
84	Electronic and magnetic phenomena at the interface of LaAlO3 and Ru doped SrTiO3. Applied Physics Letters, 2015, 107, 241603.	1.5	3
85	Emergent long-range magnetic order in ultrathin (111)-oriented LaNiO3 films. Npj Quantum Materials, 2021, 6, .	1.8	3
86	Unconventional crystal-field splitting in noncentrosymmetric BaTiO_3 thin films. Physical Review Materials, 2020, 4, .	1.1	3
87	Experimental realization of linearly polarized x-ray detected ferromagnetic resonance. New Journal of Physics, 2022, 24, 013030.	1.2	3
88	As ⁵⁺ Se Pentagonal Linkers to Induce Chirality and Polarity in Mixed-Valent Fe ⁴⁺ Se Tetrahedral Chains Resulting in Hidden Magnetic Ordering. Journal of the American Chemical Society, 2022, 144, 11283-11295.	6.6	3
89	Independence of the spin current from the Néel vector orientation in antiferromagnet CoO. Physical Review B, 2020, 101, .	1.1	2
90	Determining the Oxygen Stoichiometry of Cobaltite Thin Films. Chemistry of Materials, 2022, 34, 2076-2084.	3.2	2

#	ARTICLE	IF	CITATIONS
91	Interface Magnetization Phenomena in Epitaxial Thin Fe ₃ O ₄ /Co _x Fe _{3-x} O ₄ Bilayers. Journal of Physical Chemistry C, 2021, 125, 23327-23337.	1.5	1
92	Cationic Ordering and Its Influence on the Magnetic Properties of Co-Rich Cobalt Ferrite Thin Films Prepared by Reactive Solid Phase Epitaxy on Nb-Doped SrTiO ₃ (001). Materials, 2022, 15, 46.	1.3	1
93	X-ray Dichroism. Synchrotron Radiation News, 2020, 33, 2-3.	0.2	0
94	Probing Electronic and Magnetic Transitions of Short Periodic Nickelate Superlattices Using Synchrotron X-rays. Synchrotron Radiation News, 2020, 33, 25-29.	0.2	0
95	Search for $Q = \frac{1}{4} 0$ Order near a Forbidden Bragg Position in Bi _{2.1} Sr _{1.9} CaCu ₂ O _{8+x} with Resonant Soft X-ray Scattering. Journal of the Physical Society of Japan, 2021, 90, 111007.	0.7	0
96	Magnetic moments and spin structure in single-phase B20 Co _{1+x} Si _{1-x} (x = 0.043). Journal of Applied Physics, 2022, 131, .	1.1	0
97	Spin canting of Ni/CoO/Fe films grown on curved MgO(0 0 1) substrate. Journal of Magnetism and Magnetic Materials, 2022, 561, 169668.	1.0	0