

# Baogen Shen

## List of Publications by Year in descending order

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94  
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citations

279798

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265206

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95  
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times ranked

2336  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Centrosymmetric Hexagonal Magnet with Superstable Biskyrmion Magnetic Nanodomains in a Wide Temperature Range of 100–340 K. <i>Advanced Materials</i> , 2016, 28, 6887-6893.	21.0	209
2	Observation of Various and Spontaneous Magnetic Skyrmionic Bubbles at Room Temperature in a Frustrated Kagome Magnet with Uniaxial Magnetic Anisotropy. <i>Advanced Materials</i> , 2017, 29, 1701144.	21.0	189
3	High-Mobility Spin-Polarized Two-Dimensional Electron Gases at $\text{EuO}/\text{KTaO}_3$ Interfaces. <i>Physical Review Letters</i> , 2018, 121, 116803.	7.8	79
4	Giant rotating magnetocaloric effect induced by highly texturing in polycrystalline DyNiSi compound. <i>Scientific Reports</i> , 2015, 5, 11929.	3.3	72
5	Highly Mobile Two-Dimensional Electron Gases with a Strong Gating Effect at the Amorphous $\text{LaAlO}_3/\text{KTaO}_3$ Interface. <i>ACS Applied Materials &amp; Interfaces</i> , 2017, 9, 36456-36461.	8.0	69
6	Manipulating Ce Valence in RE <sub>2</sub> Fe <sub>14</sub> B Tetragonal Compounds by La-Ce Co-doping: Resultant Crystallographic and Magnetic Anomaly. <i>Scientific Reports</i> , 2016, 6, 30194.	3.3	65
7	Real-Space Observation of Nonvolatile Zero-Field Biskyrmion Lattice Generation in MnNiGa Magnet. <i>Nano Letters</i> , 2017, 17, 7075-7079.	9.1	64
8	Symmetry mismatch-driven perpendicular magnetic anisotropy for perovskite/brownmillerite heterostructures. <i>Nature Communications</i> , 2018, 9, 1923.	12.8	63
9	Realization of zero-field skyrmions with high-density via electromagnetic manipulation in Pt/Co/Ta multilayers. <i>Applied Physics Letters</i> , 2017, 111, .	3.3	57
10	Bipolar Resistance Switching in Fully Transparent ZnO:Mg-Based Devices. <i>Applied Physics Express</i> , 2009, 2, 101602.	2.4	55
11	Spontaneous (Anti)meron Chains in the Domain Walls of van der Waals Ferromagnetic $\text{Fe}_5\text{GeTe}_2$ . <i>Advanced Materials</i> , 2020, 32, e2005228.	21.0	53
12	Localized spin-orbit polaron in magnetic Weyl semimetal $\text{Co}_3\text{Sn}_2\text{S}_2$ . <i>Nature Communications</i> , 2020, 11, 5613.	12.8	53
13	Unusual Electric and Optical Tuning of $\text{KTaO}_3$ -Based Two-Dimensional Electron Gases with 5d Orbitals. <i>ACS Nano</i> , 2019, 13, 609-615.	14.6	52
14	Local Disorder-Induced Elevation of Intrinsic Anomalous Hall Conductance in an Electron-Doped Magnetic Weyl Semimetal. <i>Physical Review Letters</i> , 2020, 125, 086602.	7.8	45
15	Enhanced mechanical properties and large magnetocaloric effects in bonded La(Fe, Si) <sub>13</sub> -based magnetic refrigeration materials. <i>Applied Physics Letters</i> , 2014, 104, .	3.3	44
16	33% Giant Anomalous Hall Current Driven by Both Intrinsic and Extrinsic Contributions in Magnetic Weyl Semimetal $\text{Co}_3\text{Sn}_2\text{S}_2$ . <i>Advanced Functional Materials</i> , 2020, 30, 2000830.	14.9	44
17	Electric Control of the Hall effect in Pt/Bi <sub>0.9</sub> La <sub>0.1</sub> FeO <sub>3</sub> bilayers. <i>Scientific Reports</i> , 2016, 6, 20330.	3.3	34
18	On the anisotropies of magnetization and electronic transport of magnetic Weyl semimetal $\text{Co}_3\text{Sn}_2\text{S}_2$ . <i>Applied Physics Letters</i> , 2019, 115, 212403.	3.3	31

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19	Thermal Spin Injection and Inverse Edelstein Effect of the Two-Dimensional Electron Gas at EuO <sub>3</sub> /KTaO <sub>3</sub> Interfaces. Nano Letters, 2019, 19, 1605-1612.	9.1	30
20	Effects of interstitial H and/or C atoms on the magnetic and magnetocaloric properties of La(Fe, <sub>1-x</sub> Ti <sub>x</sub> ) <sub>2</sub> Si <sub>2</sub> . Applied Physics Letters, 2019, 114, .	5.1	28
21	Diluted Oxide Interfaces with Tunable Ground States. Advanced Materials, 2019, 31, e1805970.	21.0	28
22	Low-field formation of room-temperature biskyrmions in centrosymmetric MnPdGa magnet. Applied Physics Letters, 2019, 114, .	3.3	27
23	Critical dependence of magnetostructural coupling and magnetocaloric effect on particle size in Mn-Fe-Ni-Ge compounds. Scientific Reports, 2016, 6, 20993.	3.3	26
24	Magnetic Skyrmions in a Hall Balance with Interfacial Canted Magnetizations. Advanced Materials, 2020, 32, e1907452.	21.0	26
25	Large magnetocaloric effect in Er <sub>12</sub> Co <sub>7</sub> compound and the enhancement of $\Delta T_{FWHM}$ by Ho-substitution. Journal of Alloys and Compounds, 2016, 680, 617-622.	5.5	24
26	First order reversal curve diagrams of perpendicular magnetic anisotropy films. Journal of Applied Physics, 2009, 106, 103901.	2.5	23
27	Spontaneous Topological Magnetic Transitions in NdCo <sub>5</sub> Rare-Earth Magnets. Advanced Materials, 2021, 33, e2103751.	21.0	23
28	Effects of Co addition on magnetic properties and nanocrystallization in amorphous Fe <sub>84</sub> Zr <sub>3.5</sub> Nb <sub>3.5</sub> B <sub>8</sub> Cu <sub>1</sub> alloy. Journal of Applied Physics, 1999, 86, 6301-6304.	2.5	22
29	In situ observation of magnetic vortex manipulation by external fields in amorphous CeFeB ribbon. Acta Materialia, 2017, 140, 465-471.	7.9	22
30	Magnetic two-dimensional electron gases with high Curie temperatures at LaAlO <sub>3</sub> /SrTiO <sub>3</sub> interfaces. Physical Review B, 2018, 97, .	12.2	22
31	Relaxation Dynamics of Zero-Field Skyrmions over a Wide Temperature Range. Nano Letters, 2018, 18, 7777-7783.	9.1	22
32	Negative Thermal Expansion in the Materials With Giant Magnetocaloric Effect. Frontiers in Chemistry, 2018, 6, 438.	3.6	22
33	Magnetic Anisotropy Controlled by Distinct Interfacial Lattice Distortions at the La <sub>1-x</sub> Sr <sub>x</sub> CoO <sub>3</sub> /La <sub>2/3</sub> Sr <sub>1/3</sub> MnO <sub>3</sub> Interfaces. ACS Applied Materials & Interfaces, 2018, 10, 40951-40957.	8.0	19
34	Structural and Magnetic Properties of LaCoO <sub>3</sub> /SrTiO <sub>3</sub> Multilayers. ACS Applied Materials & Interfaces, 2016, 8, 18328-18333.	8.0	19
35	Cone-spiral magnetic ordering dominated lattice distortion and giant negative thermal expansion in Fe-doped MnNiGe compounds. Materials Horizons, 2020, 7, 804-810.	12.2	19
36	Manipulation of topological spin configuration via tailoring thickness in van der Waals ferromagnetic Fe <sub>5</sub> Si <sub>3</sub> . Physical Review B, 2022, 105, .	3.2	19

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37	Structure and uniaxial magnetocrystalline anisotropy of intermetallic compounds $\text{La}_2\text{Co}_{17}\text{A}^{\sim}\text{xTi}_x$ . Applied Physics Letters, 1997, 71, 1869-1871.	3.3	17
38	Tuning the Two-Dimensional Electron Gas at Oxide Interfaces with $\text{Ti}^{\ominus}\text{O}$ Configurations: Evidence from X-ray Photoelectron Spectroscopy. ACS Applied Materials & Interfaces, 2018, 10, 1434-1439.	8.0	15
39	Tuning the Magnetic Anisotropy of $\text{La}_2/3\text{Sr}_{1/3}\text{MnO}_3$ by Controlling the Structure of $\text{SrCoO}_x$ in the Corresponding Bilayers Using Ionic-Liquid Gating. Physical Review Applied, 2019, 12, .	3.8	15
40	Electric Tuning of Magnetic Anisotropy and Exchange Bias of $\text{La}_{0.8}\text{Sr}_{0.2}\text{CoO}_3/\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$ Bilayer Films. Physical Review Applied, 2020, 14, .	3.8	14
41	Theoretical investigation of magnetic anisotropy at the $\langle \text{mml:math} \text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \text{mathvariant}=\text{"normal"} \rangle \text{L} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \text{mathvariant}=\text{"normal"} \rangle \text{a} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 0.5 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \text{mathvariant}=\text{"normal"} \rangle \text{S} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \text{mathvariant}=\text{"normal"} \rangle \text{r} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 0.5 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{Mn} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \text{mathvariant}=\text{"normal"} \rangle \text{O}$ configurations. Physical Review Applied, 2020, 14, .	3.2	13
42	Laser pulse induced efficient terahertz emission from Co/Al heterostructures. Physical Review B, 2020, 102, .	3.2	13
43	Strong anisotropy and its electric tuning for brownmillerite $\langle \text{mml:math} \text{xmlns:mml}=\text{"http://www.w3.org/1998/Math/MathML"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{SrCo} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \text{mathvariant}=\text{"normal"} \rangle \text{O} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 2.5 \langle \text{mml:mn} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle$ films with different crystal orientations. Physical Review Materials, 2019, 3, .	2.4	13
44	Antiferromagnetic interlayer coupling and thus induced distinct spin texture for the $[\text{LaMnO}_3/\text{LaCoO}_3]_5$ superlattices. Nanoscale, 2017, 9, 3476-3484.	5.6	12
45	Structure evolution and entropy change of temperature and magnetic field induced magneto-structural transition in $\text{Mn}_{1.1}\text{Fe}_{0.9}\text{P}_{0.76}\text{Ge}_{0.24}$ . Journal of Applied Physics, 2013, 113, .	2.5	11
46	Perpendicular magnetic anisotropy in $\text{La}_{1-x}\text{Sr}_x\text{CoO}_{2.5+\delta}/\text{La}_{2/3}\text{Sr}_{1/3}\text{MnO}_3/\text{La}_{1-x}\text{Sr}_x\text{CoO}_{2.5+\delta}$ trilayers ( $x=0.05\text{--}0.5$ ). Physical Review B, 2019, 100, .	3.2	11
47	Enhanced Performance of $T_{ad}$ upon Frequent Alternating Magnetic Fields in FeRh Alloys by Introducing Second Phases. ACS Applied Materials & Interfaces, 2022, 14, 18293-18301.	8.0	11
48	Structure and magnetic properties of low-temperature phase Mn-Bi nanosheets with ultra-high coercivity and significant anisotropy. Journal of Applied Physics, 2014, 115, 17A742.	2.5	10
49	Large Low-Field Magnetoresistance (LFMR) Effect in Free-Standing $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3$ Films. ACS Applied Materials & Interfaces, 2021, 13, 28442-28450.	8.0	10
50	Field-Free Magnetization Switching Driven by Spin-Orbit Torque in $\text{L}_{1-x}\text{Fe}_x\text{CrPt}$ Single Layer. Advanced Functional Materials, 2022, 32, .	14.9	10
51	Magnetic transition behavior and large topological Hall effect in hexagonal $\text{Mn}_2\text{Fe}_{1+x}\text{Sn}$ ( $x=0\text{--}0.1$ ) magnet. Applied Physics Letters, 2020, 117, .	3.3	9
52	Field-free topological behavior in the magnetic domain wall of ferrimagnetic GdFeCo. Nature Communications, 2021, 12, 5604.	12.8	9
53	Zero-field skyrmions generated via premartensitic transition in $\text{Ni}_{50}\text{Mn}_{35.2}\text{In}_{14.8}$ alloy. Physical Review Materials, 2018, 2, .	2.4	9
54	The magnetization behavior and magnetic viscosity of $\text{Sm}(\text{Co},\text{Fe},\text{Cu},\text{Zr})_2$ ribbons with different temperature dependence of coercivity. Journal of Applied Physics, 2010, 107, 09A707.	2.5	8

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55	Microstructures and magnetic properties of Co-substituted Ce <sup>2+</sup> /Fe <sup>2+</sup> /B amorphous alloys. Journal of Alloys and Compounds, 2020, 820, 153098.	5.5	8
56	Infinite-layer/perovskite oxide heterostructure-induced high-spin states in SrCuO <sub>2</sub> /SrRuO <sub>3</sub> bilayer films. Materials Horizons, 2021, 8, 3468-3476.	12.2	8
57	Influence of film thickness on the physical properties of manganite heterojunctions. Journal of Applied Physics, 2011, 109, .	2.5	7
58	Large magnetocaloric effect in metamagnetic HoPdAl. Science China Technological Sciences, 2012, 55, 445-450.	4.0	7
59	Evidence for lattice-polarization-enhanced field effects at the SrTiO <sub>3</sub> -based heterointerface. Scientific Reports, 2016, 6, 22418.	3.3	7
60	Spontaneous nanometric magnetic bubbles with various topologies in spin-reoriented La <sup>1-x</sup> Sr <sub>x</sub> MnO <sub>3</sub> . Applied Physics Letters, 2018, 113, .	3.3	7
61	Long-Range Magnetic Order in Oxide Quantum Wells Hosting Two-Dimensional Electron Gases. ACS Applied Materials & Interfaces, 2020, 12, 28775-28782.	8.0	7
62	Spontaneous magnetic bubbles and large topological Hall effect in Mn <sub>3-x</sub> Fe <sub>x</sub> Sn compound. Scripta Materialia, 2020, 187, 268-273.	5.2	7
63	Exploration of nontrivial topological domain structures in the equilibrium state of magnetic nanodisks. Journal of Materials Science, 2021, 56, 4677-4685.	3.7	7
64	Reversible colossal barocaloric effect dominated by disordering of organic chains in (CH <sub>3</sub> ) <sub>2</sub> (CH <sub>2</sub> ) <sub>n</sub> <sup>+</sup> 1 <sup>-</sup> (NH <sub>3</sub> ) <sub>2</sub> MnCl <sub>4</sub> single crystals. NPC Asia Materials, 2022, 14, .	7.9	7
65	Joint effect of gate bias and light illumination on metallic LaAlO <sub>3</sub> /SrTiO <sub>3</sub> interface. Applied Physics Letters, 2017, 111, .	3.3	6
66	Complex magnetic properties and large magnetocaloric effects in RCoGe (R=Tb, Dy) compounds. AIP Advances, 2018, 8, .	1.3	6
67	Metallic conduction and ferromagnetism in <i>M</i> Al <sub>2</sub> O <sub>4</sub> /SrTiO <sub>3</sub> spinel/perovskite heterostructures ( <i>M</i> =Fe, Co, Ni). Applied Physics Letters, 2018, 113, .	3.3	6
68	A Distinct Spin Structure and Giant Baromagnetic Effect in MnNiGe Compounds with Fe-Doping. Journal of the American Chemical Society, 2021, 143, 6798-6804.	13.7	6
69	Preparation and Mössbauer study of Gd <sub>2</sub> Fe <sub>17</sub> C <sub>x</sub> (x=0.2) with higher carbon concentration by melt quenching. Journal of Applied Physics, 1993, 73, 5893-5895.	2.5	5
70	Multiple transitions and wide refrigeration temperature range in R <sub>3</sub> NiSi <sub>2</sub> (R=ÅTb, Dy) compounds. Journal of Magnetism and Magnetic Materials, 2020, 502, 166551.	2.3	5
71	Strengthened caloric effect in MnCoSi under combined applications of magnetic field and hydrostatic pressure. Journal of Materials Science, 2021, 56, 20060-20070.	3.7	5
72	Anisotropic bilinear magnetoresistance in (110) $\text{SrTiO}_3$ -based two-dimensional electron gas. Physical Review B, 2021, 104, .	3.2	4

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73	Unipolar electric-field-controlled nonvolatile multistate magnetic memory in FeRh/(001)PMN-PT heterostructures over a broad temperature span. <i>Science China: Physics, Mechanics and Astronomy</i> , 2022, 65, 1.	5.1	4
74	Carbonation process and domain structure in Sm <sub>2</sub> Fe <sub>17</sub> C <sub>x</sub> compounds prepared by gas-solid interaction. <i>Physica Status Solidi A</i> , 1995, 148, 275-282.	1.7	3
75	A Structural, Magnetic and Mössbauer Study of Tb <sub>0.3</sub> Dy <sub>0.7</sub> (Fe <sub>1-x</sub> Al <sub>x</sub> ) <sub>1.95</sub> Alloys. <i>Hyperfine Interactions</i> , 2002, 142, 503-511.	0.5	3
76	Two-dimensional electron gas at manganite buffered LaAlO <sub>3</sub> /SrTiO <sub>3</sub> (001) interface by spin coating chemical methods. <i>Applied Physics Letters</i> , 2018, 113, 071601.	3.3	3
77	Oxide Interfaces: Diluted Oxide Interfaces with Tunable Ground States ( <i>Adv. Mater.</i> 10/2019). <i>Advanced Materials</i> , 2019, 31, 1970072.	21.0	3
78	Spin reorientation at (110)-La <sub>2/3</sub> Sr <sub>1/3</sub> MnO <sub>3</sub> /LaCoO <sub>3</sub> interfaces by orbital/charge reconstruction. <i>APL Materials</i> , 2020, 8, .	5.1	3
79	Strain control of phase transition and magnetocaloric effect in Nd <sub>0.5</sub> Sr <sub>0.5</sub> MnO <sub>3</sub> thin films. <i>Applied Physics Letters</i> , 2020, 116, .	3.3	3
80	Exchange interaction and demagnetization process of high-abundance rare-earth magnets sintered using dual alloy method. <i>Science China: Physics, Mechanics and Astronomy</i> , 2022, 65, 1.	5.1	3
81	Robust Electronic Structure of Manganite-Buffered Oxide Interfaces with Extreme Mobility Enhancement. <i>ACS Nano</i> , 2022, 16, 6437-6443.	14.6	3
82	The Martensitic Transition and Magnetocaloric Effect of Mn-Poor MnCoGe Melt-Spun Ribbons. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.	2.1	2
83	Anatase TiO <sub>2</sub> -based two-dimensional electron gases generated by low-energy argon-ion irradiation. <i>Applied Physics Letters</i> , 2018, 112, 241601.	3.3	2
84	Interfacial coupling-induced distinct magnetic structure in La <sub>1/2</sub> Sr <sub>1/2</sub> CoO <sub>2.5</sub> /La <sub>2/3</sub> Sr <sub>1/3</sub> MnO <sub>3</sub> /La <sub>1/2</sub> Sr <sub>1/2</sub> CoO <sub>2.5</sub> heterostructure. <i>AIP Advances</i> , 2019, 9, 035130.	1.3	2
85	Electric field control of magnetism through modulating phase separation in (011)-Nd <sub>0.5</sub> Sr <sub>0.5</sub> MnO <sub>3</sub> /PMN-PT heterostructures. <i>Nanoscale</i> , 2021, 13, 8030-8037.	5.6	2
86	Intense ferromagnetic fluctuations preceding magnetoelastic first-order transitions in giant magnetocaloric $\text{La}_{2-x}\text{Fe}_x\text{Mn}_2\text{O}_{10}$ . <i>Physical Review Materials</i> , 2021, 5, .	2.4	2
87	Enhancement of phonon skew scattering in epitaxial Pt/Co/Pt trilayers by crystal engineering. <i>Physical Review B</i> , 2021, 104, .	3.2	2
88	Effect of Si Substitution on Structure and Magnetic Properties in Mischmetal-Fe-B Ribbons. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.	2.1	1
89	In-plane reversal of the magnetic anisotropy in (110)-oriented LaCoO <sub>3</sub> /La <sub>0.67</sub> Sr <sub>0.33</sub> MnO <sub>3</sub> heterostructures. <i>AIP Advances</i> , 2018, 8, .	1.3	1
90	Asymmetric interfaces sandwiched between infinite-layer oxides and perovskite oxides. <i>Physical Review B</i> , 2021, 104, .	3.2	1

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91	Synthesis and magnetic property of condensation product of bis(oxamide oximato)nickel and 1,1- $\epsilon^2$ -dicarbaldehydeferrocene. <i>Journal of Applied Physics</i> , 1999, 85, 5702-5704.	2.5	0
92	Enhanced Field Modulation Sensitivity and Anomalous Polarity-Dependency Emerged in Spatial-Confined Manganite Strips. <i>ACS Applied Materials &amp; Interfaces</i> , 2018, 10, 32597-32606.	8.0	0
93	Direct observation of multiple magnetic transitions in the La <sub>3</sub> NiGe <sub>2</sub> -type compounds. <i>Applied Physics Letters</i> , 2020, 117, 022401.	3.3	0
94	Two-dimensional conducting states in infinite-layer oxide/perovskite oxide hetero-structures. <i>Journal of Physics Condensed Matter</i> , 2022, 34, 035003.	1.8	0