

J S Jiang

List of Publications by Year in descending order

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123
papers

8,816
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124
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docs citations

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times ranked

7079
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Giant magnetoresistance in nonmultilayer magnetic systems. <i>Physical Review Letters</i> , 1992, 68, 3749-3752. | 7.8 | 1,625 |
| 2 | Fabrication and Magnetic Properties of Arrays of Metallic Nanowires. <i>Science</i> , 1993, 261, 1316-1319. | 12.6 | 1,169 |
| 3 | Exchange-spring behavior in epitaxial hard/soft magnetic bilayers. <i>Physical Review B</i> , 1998, 58, 12193-12200. | 3.2 | 452 |
| 4 | Oscillatory Superconducting Transition Temperature in Nb/Gd Multilayers. <i>Physical Review Letters</i> , 1995, 74, 314-317. | 7.8 | 371 |
| 5 | Giant negative magnetoresistance in granular ferromagnetic systems (invited). <i>Journal of Applied Physics</i> , 1993, 73, 5309-5314. | 2.5 | 332 |
| 6 | Magnetization-Orientation Dependence of the Superconducting Transition Temperature in the Ferromagnet-Superconductor-Ferromagnet System:CuNi/Nb/CuNi. <i>Physical Review Letters</i> , 2002, 89, 267001. | 7.8 | 306 |
| 7 | Antiferromagnetic Spin Seebeck Effect. <i>Physical Review Letters</i> , 2016, 116, 097204. | 7.8 | 248 |
| 8 | Extraordinary Hall effect and giant magnetoresistance in the granular Co-Ag system. <i>Physical Review Letters</i> , 1992, 69, 3220-3223. | 7.8 | 238 |
| 9 | Giant magnetoresistance in the granular Co-Ag system. <i>Physical Review B</i> , 1992, 46, 9266-9269. | 3.2 | 189 |
| 10 | Two-dimensional superconductivity and anisotropic transport at KTaO ₃ (111) interfaces. <i>Science</i> , 2021, 371, 716-721. | 12.6 | 136 |
| 11 | Anisotropy dependence of irreversible switching in Fe ²⁺ /SmCo and FeNi ²⁺ /FePt exchange spring magnet films. <i>Applied Physics Letters</i> , 2005, 86, 262503. | 3.3 | 134 |
| 12 | Spin injection, diffusion, and detection in lateral spin-valves. <i>Applied Physics Letters</i> , 2004, 85, 6218-6220. | 3.3 | 129 |
| 13 | Improving exchange-spring nanocomposite permanent magnets. <i>Applied Physics Letters</i> , 2004, 85, 5293-5295. | 3.3 | 119 |
| 14 | Structure and magnetic properties of exchange-spring Sm ²⁺ /Co/Co superlattices. <i>Applied Physics Letters</i> , 1998, 72, 380-382. | 3.3 | 115 |
| 15 | High coercivity, epitaxial Sm ²⁺ /Co films with uniaxial in-plane anisotropy. <i>Applied Physics Letters</i> , 1997, 71, 1579-1581. | 3.3 | 112 |
| 16 | Enhanced Interfacial Magnetic Coupling of Gd/Fe Multilayers. <i>Physical Review Letters</i> , 2001, 87, 207201. | 7.8 | 109 |
| 17 | Ligand Effect on the Growth and the Digestion of Co Nanocrystals. <i>Journal of the American Chemical Society</i> , 2005, 127, 4126-4127. | 13.7 | 107 |
| 18 | Competing magnetic phases and fluctuation-driven scalar spin chirality in the kagome metal YMn ₆ Sn ₆ . <i>Science Advances</i> , 2020, 6, . | 10.3 | 103 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 19 | Large anomalous Hall effect in the chiral-lattice antiferromagnet CoNb ₃ S ₆ . Nature Communications, 2018, 9, 3280. | 12.8 | 102 |
| 20 | Absence of spin transport in the organic semiconductor Alq ₃ . Physical Review B, 2008, 77, . | 3.2 | 101 |
| 21 | Surfactant-Induced Postsynthetic Modulation of Pd Nanoparticle Crystallinity. Nano Letters, 2011, 11, 1614-1617. | 9.1 | 98 |
| 22 | Superconducting transition and vortex pinning in Nb films patterned with nanoscale hole arrays. Physical Review B, 2002, 66, . | 3.2 | 93 |
| 23 | Spin-orbit torque-assisted switching in magnetic insulator thin films with perpendicular magnetic anisotropy. Nature Communications, 2016, 7, 12688. | 12.8 | 85 |
| 24 | A new approach for improving exchange-spring magnets. Journal of Applied Physics, 2005, 97, 10K311. | 2.5 | 78 |
| 25 | Spin Flop Transition in a Finite Antiferromagnetic Superlattice: Evolution of the Magnetic Structure. Physical Review Letters, 2002, 89, 127203. | 7.8 | 77 |
| 26 | Exchange-coupled Sm-Co/Nd-Co nanomagnets: correlation between soft phase anisotropy and exchange field. Applied Physics Letters, 2002, 81, 2029-2031. | 3.3 | 74 |
| 27 | Experimental Observation of Disorder-Driven Hysteresis-Loop Criticality. Physical Review Letters, 2000, 85, 4176-4179. | 7.8 | 73 |
| 28 | Effect of Ligand-Metal Interactions on the Growth of Transition-Metal and Alloy Nanoparticles. Chemistry of Materials, 2006, 18, 5203-5212. | 6.7 | 69 |
| 29 | Role of diffused Co atoms in improving effective exchange coupling in Sm-Co-Fe spring magnets. Physical Review B, 2007, 75, . | 3.2 | 67 |
| 30 | Stress-induced large Curie temperature enhancement in $Fe_{1-x}Co_x$ alloy. Physical Review B, 2009, 80, . | 3.2 | 65 |
| 31 | Magnetization switching using topological surface states. Science Advances, 2019, 5, eaaw3415. | 10.3 | 65 |
| 32 | Magnetic properties and giant magnetoresistance of granular permalloy in silver. Applied Physics Letters, 1992, 61, 2362-2364. | 3.3 | 64 |
| 33 | Origin of recoil hysteresis loops in Sm-Co-Fe exchange-spring magnets. Applied Physics Letters, 2007, 91, . | 3.3 | 57 |
| 34 | Role of intergrowths in the properties of naturally layered manganite single crystals (invited). Journal of Applied Physics, 1998, 83, 6385-6389. | 2.5 | 53 |
| 35 | Controlled interface profile in Sm-Co-Fe exchange-spring magnets. Applied Physics Letters, 2007, 91, . | 3.3 | 52 |
| 36 | Field Induced Biquadratic Exchange in Hard/Soft Ferromagnetic Bilayers. Physical Review Letters, 2001, 86, 4386-4389. | 7.8 | 50 |

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|----|---|------|-----------|
| 37 | Superconducting transition in Nb/Gd/Nb trilayers. <i>Physical Review B</i> , 1996, 54, 6119-6121. | 3.2 | 49 |
| 38 | Magnetization and finite-size effects in Gd/W multilayers. <i>Journal of Applied Physics</i> , 1996, 79, 5615. | 2.5 | 49 |
| 39 | Origin of the extremely large magnetoresistance in the semimetal YSb. <i>Physical Review B</i> , 2017, 96, . | 3.2 | 49 |
| 40 | Curie Temperature Enhancement and Induced Pd Magnetic Moments for Ultrathin Fe Films Grown on Stepped Pd(001). <i>Physical Review Letters</i> , 1999, 82, 1947-1950. | 7.8 | 48 |
| 41 | Rational design of the exchange-spring permanent magnet. <i>Journal of Physics Condensed Matter</i> , 2014, 26, 064214. | 1.8 | 48 |
| 42 | Exchange-spring behavior in epitaxial hard/soft magnetic bilayer films. <i>Journal of Applied Physics</i> , 1998, 83, 6238-6240. | 2.5 | 44 |
| 43 | Magnetic anisotropy of epitaxial Fe films grown on curved W(001) with a graded step density. <i>Physical Review B</i> , 1998, 57, R12713-R12716. | 3.2 | 43 |
| 44 | Non-local spin injection in lateral spin valves. <i>Journal Physics D: Applied Physics</i> , 2007, 40, 1280-1284. | 2.8 | 42 |
| 45 | Complementary polarized neutron and resonant x-ray magnetic reflectometry measurements in Fe/Gd heterostructures: Case of inhomogeneous intralayer magnetic structure. <i>Physical Review B</i> , 2009, 79, . | 3.2 | 42 |
| 46 | Magnetic configurations in exchange-biased double superlattices. <i>Applied Physics Letters</i> , 1999, 75, 4174-4176. | 3.3 | 41 |
| 47 | Magneto-thermal transport properties of granular Co-Ag solids. <i>Physical Review B</i> , 1993, 48, 638-641. | 3.2 | 40 |
| 48 | Recoil hysteresis of Sm ²⁺ /Co ²⁺ /Fe exchange-spring bilayers. <i>Journal of Applied Physics</i> , 2005, 98, 113906. | 2.5 | 39 |
| 49 | Dependence of exchange coupling interaction on micromagnetic constants in hard/soft magnetic bilayer systems. <i>Physical Review B</i> , 2007, 75, . | 3.2 | 36 |
| 50 | Temperature evolution of the Gd magnetization profile in strongly coupled Gd ³⁺ /Fe multilayers. <i>Physical Review B</i> , 2004, 70, . | 3.2 | 35 |
| 51 | Nuclear Resonant Magnetometry and its Application to Fe/Cr Multilayers. <i>Physical Review Letters</i> , 2004, 93, 037201. | 7.8 | 35 |
| 52 | Microstructure analysis of a SmCo/Fe exchange spring bilayer. <i>Applied Physics Letters</i> , 2008, 93, . | 3.3 | 35 |
| 53 | Giant Topological Hall Effect in van der Waals Heterostructures of CrTe ₂ /Bi ₂ Te ₃ . <i>ACS Nano</i> , 2021, 15, 15710-15719. | 14.6 | 34 |
| 54 | Exchange-bias effect in Fe/Cr(211) double superlattice structures. <i>Physical Review B</i> , 2000, 61, 9653-9656. | 3.2 | 33 |

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|----|---|------|-----------|
| 55 | Magnetic structure in Fe/Sm-Co exchange spring bilayers with intermixed interfaces. Physical Review B, 2011, 83, . | 3.2 | 33 |
| 56 | Anisotropy determination in epitaxial Sm ²⁺ /Co/Fe exchange springs. Journal of Applied Physics, 2000, 87, 6686-6688. | 2.5 | 31 |
| 57 | Noncollinear Fe spin structure in (Sm-Co)/Fe exchange-spring bilayers: Layer-resolved μ -SR spectroscopy and electronic structure calculations. Physical Review B, 2012, 85, . | 3.2 | 31 |
| 58 | Topological Hall Effect in a Topological Insulator Interfaced with a Magnetic Insulator. Nano Letters, 2021, 21, 84-90. | 9.1 | 28 |
| 59 | Observation of the Fe spin spiral structure in Fe/Sm-Co exchange-spring bilayers by μ -SR spectroscopy. Physical Review B, 2003, 68, . | 3.2 | 26 |
| 60 | Direct Determination of Energy Level Alignment and Charge Transport at Metal/Insulator Interfaces via Ballistic-Electron-Emission Spectroscopy. Physical Review Letters, 2011, 106, 156807. | 7.8 | 26 |
| 61 | A New Three-Dimensional Subsulfide Ir ₂ In ₈ S with Dirac Semimetal Behavior. Journal of the American Chemical Society, 2019, 141, 19130-19137. | 13.7 | 26 |
| 62 | Proximity and coupling effects in superconductor/ferromagnet multilayers (invited). Journal of Applied Physics, 1997, 81, 5358-5363. | 2.5 | 25 |
| 63 | Oscillation period of the interlayer coupling for epitaxial Fe/Cr _{1-x} V _x (100) and (211) superlattices. Journal of Applied Physics, 1999, 85, 5889-5891. | 2.5 | 22 |
| 64 | Nature of inhomogeneous magnetic state in artificial Fe/Gd ferrimagnetic multilayers. Physical Review B, 2003, 67, . | 3.2 | 22 |
| 65 | Unanticipated Proximity Behavior in Ferromagnet-Superconductor Heterostructures with Controlled Magnetic Noncollinearity. Physical Review Letters, 2013, 110, 177001. | 7.8 | 22 |
| 66 | Asymmetric ferromagnet-superconductor-ferromagnet switch. Physical Review B, 2008, 77, . | 3.2 | 20 |
| 67 | Reversal modes of exchange-spring magnets revealed by torque magnetometry. Applied Physics Letters, 2001, 79, 3992-3994. | 3.3 | 19 |
| 68 | Twisted magnetization states near the compensation temperature of Fe ²⁺ /Gd multilayers: Anisotropy and surface-termination effects. Physical Review B, 2006, 73, . | 3.2 | 19 |
| 69 | Ferromagnetic Mn moments at SrRuO ₃ /SrMnO ₃ interfaces. Applied Physics Letters, 2007, 91, . | 3.3 | 19 |
| 70 | Probing short-range magnetic order in a geometrically frustrated magnet by means of the spin Seebeck effect. Physical Review B, 2018, 98, . | 3.2 | 19 |
| 71 | Hysteresis in layered spring magnets. Discrete and Continuous Dynamical Systems - Series B, 2001, 1, 219-232. | 0.9 | 19 |
| 72 | Magnetization reversal in Py/Gd heterostructures. Physical Review B, 2017, 96, . | 3.2 | 18 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 73 | Cross-linked Heterogeneous Nanoparticles as Bifunctional Probe. Chemistry of Materials, 2012, 24, 2423-2425. | 6.7 | 17 |
| 74 | Observation of an antiferromagnetic quantum critical point in high-purity LaNiO ₃ . Nature Communications, 2020, 11, 1402. | 12.8 | 16 |
| 75 | Magnetic properties of ultrathin Fe films grown on stepped W(001) and Pd(001) substrates. Journal of Applied Physics, 1999, 85, 4958-4960. | 2.5 | 15 |
| 76 | Hard-axis magnetization behavior and the surface spin-flop transition in antiferromagnetic Fe ²⁺ /Cr(100) superlattices. Physical Review B, 2006, 73, . | 3.2 | 15 |
| 77 | Large anomalous Nernst and inverse spin-Hall effects in epitaxial thin films of kagome semimetal <math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Mn</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></math> Physical Review Materials, 2020, 4, . | 2.4 | 15 |
| 78 | Switching of the exchange bias in Fe/Cr(211) double-superlattice structures. Applied Physics Letters, 2000, 77, 2222-2224. | 3.3 | 14 |
| 79 | Hard x-ray magnetic circular dichroism study of a surface-driven twisted state in Gd/Fe multilayers. Journal of Applied Physics, 2003, 93, 6507-6509. | 2.5 | 14 |
| 80 | Structural and magnetic studies of fcc Fe films with self-organized lateral modulation on striped Cu(110)â€“(2Å-1) substrates. Journal of Applied Physics, 1999, 85, 5285-5287. | 2.5 | 13 |
| 81 | Rotational hysteresis of exchange-spring magnets. Journal Physics D: Applied Physics, 2002, 35, 2339-2343. | 2.8 | 13 |
| 82 | Magnetic imaging of a buried SmCo layer in a spring magnet. Journal of Applied Physics, 2001, 89, 7165-7167. | 2.5 | 12 |
| 83 | Electric field control of magnon spin currents in an antiferromagnetic insulator. Science Advances, 2021, 7, eabg1669. | 10.3 | 12 |
| 84 | Anisotropic angular magnetoresistance and Fermi surface topology of the candidate novel topological metal <math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Pd</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></math> Physical Review Materials, 2018, 2, . | 2.4 | 12 |
| 85 | Thermal and thermoelectric properties of granular Co-Ag solids. Journal of Magnetism and Magnetic Materials, 1994, 136, 221-228. | 2.3 | 10 |
| 86 | Magnetic stability of novel exchange coupled systems. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 1269-1272. | 2.1 | 10 |
| 87 | Mössbauer effect study of the Fe spin structure in exchange-bias and exchange-spring systems. Journal Physics D: Applied Physics, 2002, 35, 2352-2358. | 2.8 | 9 |
| 88 | Element-specific recoil loops in Smâ€“(Coâ€“(Fe exchange-spring magnets. Journal of Applied Physics, 2008, 103, . | 2.5 | 9 |
| 89 | Disorder-driven hysteresis-loop criticality in Co/CoO films. Journal of Applied Physics, 2001, 89, 7466-7468. | 2.5 | 8 |
| 90 | Magnetic stability in exchange-spring and exchange-bias systems after multiple switching cycles. Journal of Applied Physics, 2001, 89, 6817-6819. | 2.5 | 8 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 91 | Magnetoresistive detection of strongly pinned uncompensated magnetization in antiferromagnetic FeMn. Physical Review B, 2017, 95, . | 3.2 | 8 |
| 92 | Magnetization-orientation dependence of the superconducting transition temperature and magnetoresistance in the ferromagnet-superconductor-ferromagnet trilayer system. Journal of Applied Physics, 2003, 93, 7696-7698. | 2.5 | 7 |
| 93 | Net Mn moment due to canted spins at SrRuO ₃ /SrMnO ₃ interfaces. Journal of Applied Physics, 2008, 103, 07B517. | 2.5 | 7 |
| 94 | The effect of ion irradiation and annealing on exchange spring magnets. Journal of Applied Physics, 2009, 105, 023902. | 2.5 | 7 |
| 95 | Charge-magnetic interference resonant scattering studies of ferromagnetic crystals and thin films. European Physical Journal: Special Topics, 2012, 208, 141-155. | 2.6 | 7 |
| 96 | Mesoscopic magnetism and superconductivity. MRS Bulletin, 2015, 40, 925-932. | 3.5 | 7 |
| 97 | Exchange bias in Fe/Cr double superlattices. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 1264-1268. | 2.1 | 6 |
| 98 | Exchange coupling in epitaxial Sm ²⁺ Co(11 $\bar{1}$,00)/Nd ²⁺ Co exchange-spring bilayers. Journal of Applied Physics, 2003, 93, 8122-8124. | 2.5 | 6 |
| 99 | Element-resolved magnetism across the temperature- and pressure-induced spin reorientation in MnBi. Physical Review B, 2016, 94, . | 3.2 | 6 |
| 100 | Intrinsic and extrinsic magnetic properties of the naturally layered manganites. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 1239-1246. | 2.1 | 5 |
| 101 | <title>Imaging buried magnetic domains using hard x rays</title> . , 2001, 4499, 1. | | 5 |
| 102 | Magnetic vortex nucleation/annihilation in artificial-ferrimagnet microdisks. Journal of Applied Physics, 2017, 122, 083903. | 2.5 | 5 |
| 103 | Surface spin ²⁺ flop transition in a uniaxial antiferromagnetic Fe/Cr superlattice induced by a magnetic field of arbitrary direction. Journal of Physics Condensed Matter, 2007, 19, 136001. | 1.8 | 4 |
| 104 | Multiferroic behavior in EuTiO_3 films constrained by symmetry. Physical Review B, 2020, 101, . | 3.2 | 4 |
| 105 | Structure of Co _x Ag _{100-x} and Its Relation to GMR. Materials Research Society Symposia Proceedings, 1992, 286, 197. | 0.1 | 3 |
| 106 | Effect of mechanical processing on giant magnetoresistance in melt-spun Co ²⁺ Cu ribbons. Journal of Applied Physics, 1997, 82, 4435-4438. | 2.5 | 3 |
| 107 | Soft x-ray absorption of a buried SmCo film utilizing substrate fluorescence detection. Applied Physics Letters, 1999, 74, 3806-3808. | 3.3 | 3 |
| 108 | Remagnetization processes in SmCo/NdCo exchange springs. Journal of Applied Physics, 2003, 93, 6486-6488. | 2.5 | 3 |

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|-----|--|-----|-----------|
| 109 | Superconductivity in Y ₄ RuGe ₈ with a Vacancy-Ordered CeNiSi ₂ -Type Superstructure. Chemistry of Materials, 2021, 33, 7839-7847. | 6.7 | 3 |
| 110 | Magnetization processes in core/shell exchange-spring structures. Journal of Applied Physics, 2015, 117, 17A734. | 2.5 | 2 |
| 111 | Spin valve with non-collinear magnetization configuration imprinted by a static magnetic field. AIP Advances, 2016, 6, 056107. | 1.3 | 2 |
| 112 | Epitaxial hard-soft magnetic heterostructures as model exchange-spring magnets. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2000, 80, 247-256. | 0.6 | 1 |
| 113 | Temperature dependent anomalous Hall effect in LaCaMnO films. Journal of Applied Physics, 2000, 87, 5576-5578. | 2.5 | 1 |
| 114 | Model study of soft x-ray spectroscopy techniques for observing magnetic circular dichroism in buried SmCo magnetic films. Journal of Applied Physics, 2003, 93, 2002-2008. | 2.5 | 1 |
| 115 | Surface spin-flop transition in a uniaxial antiferromagnetic Fe/Cr superlattice induced by a magnetic field of arbitrary direction. Journal of Physics Condensed Matter, 2007, 19, 479003. | 1.8 | 1 |
| 116 | Fermi surface topology and nontrivial Berry phase in the flat-band semimetal Pd ₃ Pb. Physical Review B, 2020, 101, . | 3.2 | 1 |
| 117 | Growth and characterization of epitaxial fcc Fe wedges on diamond (100). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 2326-2329. | 2.1 | 0 |
| 118 | Effect of hard layer demagnetization on the magnetization reversal of epitaxial Fe/SmCo spring magnets. , 2006, , . | | 0 |
| 119 | First-Order Reversal Curve Studies of Magnetization Reversal in Prototype Recording Media. , 2006, , . | | 0 |
| 120 | Application of polarized neutron reflectometry and X-ray resonant magnetic reflectometry for determining the inhomogeneous magnetic structure in Fe/Gd multilayers. Bulletin of the Russian Academy of Sciences: Physics, 2010, 74, 1471-1473. | 0.6 | 0 |
| 121 | ESR Studies on Sm-Co/Fe Exchange-Spring Magnets. , 2004, , 229-237. | | 0 |
| 122 | Giant Magnetoresistance in Granular Magnetic Systems. NATO ASI Series Series B: Physics, 1993, , 381-388. | 0.2 | 0 |
| 123 | Giant Negative Magnetoresistance and Other Magneto-Transport Properties in Granular Magnetic Systems. , 1994, , 1071-1076. | | 0 |