Zhenchao Wen

List of Publications by Year
in descending order

77 papers	1,593 citations	279798 23 h-index	330143 37 g-index
79 all docs	79 docs citations	79 times ranked	1630 citing authors

#	Article	IF	Citations
1	Enhanced tunnel magnetoresistance in Fe/Mg4Al-Ox/Fe(001) magnetic tunnel junctions. Applied Physics Letters, 2022, 120, .	3.3	9
2	Nanoscale-Thick Ni-Based Half-Heusler Alloys with Structural Ordering-Dependent Ultralow Magnetic Damping: Implications for Spintronic Applications. ACS Applied Nano Materials, 2022, 5, 569-577.	5.0	6
3	Exceeding 400% tunnel magnetoresistance at room temperature in epitaxial Fe/MgO/Fe(001) spin-valve-type magnetic tunnel junctions. Applied Physics Letters, 2021, 118, .	3.3	27
4	Magnetization switching induced by spinâ€“orbit torque from Co2MnGa magnetic Weyl semimetal thin films. Applied Physics Letters, 2021, 118, 062402.	3.3	25
5	Spin Hall effect in a spin-1 chiral semimetal. Physical Review Research, 2021, 3, .	3.6	15
6	Revisiting Fe/MgO/Fe(001): Giant tunnel magnetoresistance up to ~420% at room temperature. , 2021, , .		1
7	Novel room-temperature ferromagnetism in Gd-doped 2-dimensional Ti3C2Tx MXene semiconductor for spintronics. Journal of Magnetism and Magnetic Materials, 2020, 497, 165954.	2.3	45
8	Current-perpendicular-to-plane giant magnetoresistance effects using Heusler alloys. Journal of Magnetism and Magnetic Materials, 2019, 492, 165667.	2.3	22
9	Tunability of Domain Structure and Magnonic Spectra in Antidot Arrays of Heusler Alloy. Physical Review Applied, 2019, 12, .	3.8	9
10	Anomaly in anomalous Nernst effect at low temperature for C1_b-type NiMnSb half-Heusler alloy thin film. Japanese Journal of Applied Physics, 2019, 58, SBBI03.	1.5	12
11	Spin-charge conversion in NiMnSb Heusler alloy films. Science Advances, 2019, 5, eaaw9337.	10.3	11
12	Structural-order dependence of anomalous Hall effect in Co2MnGa topological semimetal thin films. Applied Physics Letters, 2019, 115, .	3.3	25
13	Temperature dependence of current-perpendicular-to-plane giant magnetoresistance in the junctions with interface tailored Heusler alloy electrodes. Journal of Magnetism and Magnetic Materials, 2019, 474, 365-368.	2.3	4
14	Epitaxial CuN Films with Highly Tunable Lattice Constant for Latticeâ€Matched Magnetic Heterostructures with Enhanced Thermal Stability. Advanced Electronic Materials, 2018, 4, 1700367.	5.1	2
15	Optimization of half-Heusler PtMnSb alloy films for spintronic device applications. Journal Physics D: Applied Physics, 2018, 51, 435002.	2.8	4
16	Interface Tailoring Effect for Heusler Based CPP-GMR with an L12-Type Ag3Mg Spacer. Materials, 2018, 11, 219.	2.9	5
17	Current perpendicular-to-plane giant magnetoresistance devices using half-metallic Co₂Fe_{0.4}Mn_{0.6}Si electrodes and a Agâ€“Mg spacer. Journal Physics D: Applied Physics, 2017, 50, 014004.	2.8	17
18	Voltage control of magnetic anisotropy in epitaxial Ru/Co2FeAl/MgO heterostructures. Scientific Reports, 2017, 7, 45026.	3.3	40

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19	Interdiffusion in epitaxial ultrathin Co₂FeAl/MgO heterostructures with interface-induced perpendicular magnetic anisotropy. Applied Physics Express, 2017, 10, 013003.	2.4	22
20	Perpendicular magnetic anisotropy at lattice-matched Co2FeAl/MgAl2O4(001) epitaxial interfaces. Applied Physics Letters, 2017, 110, .	3.3	23
21	Dual-spacer nanojunctions exhibiting large current-perpendicular-to-plane giant magnetoresistance for ultrahigh density magnetic recording. Applied Physics Letters, 2017, 110, .	3.3	9
22	Nonlinear electric field effect on perpendicular magnetic anisotropy in Fe/MgO interfaces. Journal Physics D: Applied Physics, 2017, 50, 40LT04.	2.8	25
23	Increased magnetic damping in ultrathin films of Co2FeAl with perpendicular anisotropy. Applied Physics Letters, 2017, 110, .	3.3	20
24	Pronounced effects of high-magnetic-field solidification on metamagnetic transition in tetragonal Cu2Sb-type Mn1.8Cu0.2Sb alloy. Journal of Magnetism and Magnetic Materials, 2017, 442, 67-71.	2.3	10
25	[illegible] xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>L</mml:mi><mml:msub><mml:mn>1</mml:mn><mml:mn> xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi mathvariant="bold">Ag</mml:mi><mml:mn>3</mml:mn></mml:msub><mml:mi mathvariant="bold">Mg</mml:mi></mml:mrow></mml:math>spacer and<mml:math [illegible]	2.4	15
26	Tunable magnetization relaxation of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:msub><mml:mi>Fe</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:m half-metallic Heusler alloys by band structure engineering. Physical Review Materials, 2017, 1, .	2.4	16
27	Spin-orbit torque in Cr/CoFeAl/MgO and Ru/CoFeAl/MgO epitaxial magnetic heterostructures. AIP Advances, 2016, 6, .	1.3	29
28	Fully epitaxial C1b-type NiMnSb half-Heusler alloy films for current-perpendicular-to-plane giant magnetoresistance devices with a Ag spacer. Scientific Reports, 2016, 5, 18387.	3.3	38
29	Enhanced current-perpendicular-to-plane giant magnetoresistance effect in half-metallic NiMnSb based nanojunctions with multiple Ag spacers. Applied Physics Letters, 2016, 108, .	3.3	11
30	Relation between electronic structure and magnetic anisotropy in amorphous TbCo films probed by x-ray magnetic circular dichroism. Journal Physics D: Applied Physics, 2016, 49, 205001.	2.8	4
31	Manipulation of magnetization switching and tunnel magnetoresistance via temperature and voltage control. Scientific Reports, 2016, 5, 18269.	3.3	14
32	Tunnel Magnetoresistance of Ferromagnetic Antiperovskite MnGaN/MgO/CoFeB Perpendicular Magnetic Tunnel Junctions. IEEE Transactions on Magnetics, 2016, 52, 1-4.	2.1	4
33	Observation of pure inverse spin Hall effect in ferromagnetic metals via ferromagnetic/antiferromagnetic exchange-bias structures. Physical Review B, 2015, 92, .	3.2	38
34	Double-pinned magnetic tunnel junction sensors with spin-valve-like sensing layers. Journal of Applied Physics, 2015, 118, .	2.5	12
35	Electrical manipulation of magnetization switching in Co<inf>2</inf>FeAl alloy based magnetic tunnel junctions with in-plane and perpendicular magnetization. , 2015, , .		0
36	Lattice-matched magnetic tunnel junctions using a Heusler alloy Co2FeAl and a cation-disorder spinel Mg-Al-O barrier. Applied Physics Letters, 2014, 105, .	3.3	37

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37	Magnetotransport properties in perpendicularly magnetized tunnel junctions using an ultrathin Fe electrode. Journal Physics D: Applied Physics, 2014, 47, 322001.	2.8	3
38	A 4â€Foldâ€Symmetry Hexagonal Ruthenium for Magnetic Heterostructures Exhibiting Enhanced Perpendicular Magnetic Anisotropy and Tunnel Magnetoresistance. Advanced Materials, 2014, 26, 6483-6490.	21.0	76
39	Tunnel Magnetoresistance and Spin-Transfer Torque Switching in Polycrystalline <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>Co</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mr Magnetic Tunnel Junctions on Amorphous <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mi>Si</mml:mi><mml:mo>/</mml:mo><mml:msub><mml:mrow><mml:mi>S.	3.8	40
40	Fabrication of pseudo-spin-MOSFETs using a multi-project wafer CMOS chip. Solid-State Electronics, 2014, 102, 52-58.	1.4	8
41	Large perpendicular magnetic anisotropy at Fe/MgO interface. Applied Physics Letters, 2013, 103, .	3.3	100
42	Monolithic integration of pseudo-spin-MOSFETs using a custom CMOS chip fabricated through multi-project wafer service. , 2013, , .		4
43	Large anisotropic Fe orbital moments in perpendicularly magnetized Co2FeAl Heusler alloy thin films revealed by angular-dependent x-ray magnetic circular dichroism. Applied Physics Letters, 2013, 103, .	3.3	36
44	Magnetic Tunnel Junctions with Perpendicular Anisotropy Using a Co$_{2}$FeAl Full-Heusler Alloy. Applied Physics Express, 2012, 5, 063003.	2.4	55
45	Spin Polarimetry and Magnetic Dichroism on a Buried Magnetic Layer Using Hard X-ray Photoelectron Spectroscopy. Japanese Journal of Applied Physics, 2012, 51, 016602.	1.5	6
46	Crossover behaviors in magnetoresistance oscillations for Nb thin film with rectangular arrays of antidots. Europhysics Letters, 2012, 99, 37006.	2.0	14
47	Abnormal magnetoresistance behavior in Nb thin films with rectangular arrays of antidots. Chinese Physics B, 2012, 21, 077401.	1.4	2
48	Interstitial vortex in superconducting film with periodic hole arrays. Chinese Physics B, 2012, 21, 087401.	1.4	3
49	Reconfiguration and hysteresis in superconducting Nb film with honeycomb arrays. Journal of Physics: Conference Series, 2012, 400, 042018.	0.4	0
50	Design and performance of pseudo-spin-MOSFETs using nano-CMOS devices. , 2012, , .		13
51	Transport measurements on nano-engineered two dimensional superconducting wire networks. Physica C: Superconductivity and Its Applications, 2012, 480, 126-128.	1.2	3
52	Wire network behavior in superconducting Nb films with diluted triangular arrays of holes. Journal of Physics Condensed Matter, 2012, 24, 155702.	1.8	8
53	Spin-transfer switching in full-Heusler Co2FeAl-based magnetic tunnel junctions. Applied Physics Letters, 2012, 100, .	3.3	45
54	Competition between cotunneling, Kondo effect, and direct tunneling in discontinuous high-anisotropy magnetic tunnel junctions. Physical Review B, 2012, 85, .	3.2	19

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55	Spin Polarimetry and Magnetic Dichroism on a Buried Magnetic Layer Using Hard X-ray Photoelectron Spectroscopy. Japanese Journal of Applied Physics, 2012, 51, 016602.	1.5	5
56	Perpendicular magnetization of Co2FeAl full-Heusler alloy films induced by MgO interface. Applied Physics Letters, 2011, 98, .	3.3	119
57	Nanoelliptic Ring-Shaped Magnetic Tunnel Junction and Its Application in MRAM Design With Spin-Polarized Current Switching. IEEE Transactions on Magnetics, 2011, 47, 2957-2961.	2.1	13
58	Tunnel magnetoresistance in textured Co2FeAl/MgO/CoFe magnetic tunnel junctions on a Si/SiO2 amorphous substrate. Applied Physics Letters, 2011, 98, .	3.3	35
59	Influence of intrinsic electronic properties on light transmission through subwavelength holes on gold and MgB<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>thin films. Physical Review B, 2011, 84, .	3.2	2
60	PATTERNED NANOSCALE MAGNETIC TUNNEL JUNCTIONS WITH DIFFERENT GEOMETRICAL STRUCTURES. Spin, 2011, 01, 109-114.	1.3	3
61	Temperature and Bias-Assisted Transport Properties of LSMO/AlO/CoFeB Magnetic Tunnel Junction. IEEE Transactions on Magnetics, 2010, 46, 2383-2386.	2.1	3
62	Giant Coulomb blockade magnetoresistance in magnetic tunnel junctions with a granular layer. Physical Review B, 2010, 81, .	3.2	19
63	Direct observation of room-temperature ferromagnetism of single-phase Ga0.962Mn0.038N by magnetic force microscopy. Journal of Applied Physics, 2010, 108, 093913.	2.5	4
64	Cotunneling enhancement of magnetoresistance in double magnetic tunnel junctions with embedded superparamagnetic NiFe nanoparticles. Physical Review B, 2010, 82, .	3.2	16
65	Magnetic tunnel junction sensor with Co/Pt perpendicular anisotropy ferromagnetic layer. Applied Physics Letters, 2009, 94, 172902.	3.3	44
66	Composite metamaterials with dual-band magnetic resonances in the terahertz frequency regime. Journal Physics D: Applied Physics, 2009, 42, 115420.	2.8	10
67	Spin-dependent tunneling through NiFe nanoparticles. Journal of Applied Physics, 2009, 105, 07C923.	2.5	5
68	Structure, optical, and magnetic properties of rutile Sn1â^'xMnxO2 thin films. Applied Surface Science, 2009, 255, 7981-7984.	6.1	9
69	Role of defects in magnetic properties of Fe-doped SnO 2 films fabricated by the Solâ€"Gel method. Chinese Physics B, 2009, 18, 4025-4029.	1.4	4
70	Room temperature ferromagnetism of Mn-doped SnO2 thin films fabricated by solâ€“gel method. Applied Surface Science, 2008, 254, 7459-7463.	6.1	69
71	Nanoring magnetic tunnel junction and its application in magnetic random access memory demo devices with spin-polarized current switching (invited). Journal of Applied Physics, 2008, 103, .	2.5	66
72	Correlation between Electroresistance and Magnetoresistance in Slight Oxygen-Deficient Nd _{0.67} Sr _{0.33} MnO _{3-Î´} Polycrystalline Ceramics. Chinese Physics Letters, 2008, 25, 3773-3775.	3.3	1

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73	Effects of current on nanoscale ring-shaped magnetic tunnel junctions. Physical Review B, 2008, 77, .	3.2	26
74	Transmission properties of composite metamaterials in the terahertz domain. , 2008, , .		0
75	Current-induced multiple spin structures in 100 nm ring magnetic tunnel junctions. Physical Review B, 2008, 77, .	3.2	22
76	Room temperature ferromagnetism in Sn1â˜'xVxO2 films prepared by sol-gel method. Journal of Applied Physics, 2008, 104, 123909.	2.5	18
77	Patterned nanoring magnetic tunnel junctions. Applied Physics Letters, 2007, 91, 122511.	3.3	59