

Gang Xiao

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4042948/publications.pdf>

Version: 2024-02-01

104
papers

5,127
citations

117625

34
h-index

88630

70
g-index

105
all docs

105
docs citations

105
times ranked

4230
citing authors

#	ARTICLE	IF	CITATIONS
19	Spin curvature induced resistivity in epitaxial half-metallic CrO ₂ thin films. Nanoscale, 2020, 12, 3958-3964.	5.6	3
20	Low-Frequency Noise of Magnetic Sensors Based on the Anomalous Hall Effect in FePt Alloys. Sensors, 2019, 19, 3537.	3.8	20
21	Magnetotransport and electronic noise in superparamagnetic magnetic tunnel junctions. Applied Physics Letters, 2019, 115, .	3.3	12
22	Spin torque effect on topological defects and transitions of magnetic domain phases in Ta/CoFeB/MgO. Physical Review B, 2019, 99, .	3.2	12
23	Controlled modification of skyrmion information in a three-terminal racetrack memory. Nanoscale, 2019, 11, 6952-6961.	5.6	23
24	Highly effective photon-to-cooling thermal device. Scientific Reports, 2019, 9, 19317.	3.3	15
25	Spin-dependent shot noise in MgO-based magnetic tunnel junctions under noncollinear magnetization alignment. Physical Review B, 2019, 100, .	3.2	5
26	Controlling the anomalous Hall effect by electric-field-induced piezo-strain in Fe ₄₀ Pt ₆₀ (001)-Pb(Mg _{1/3} Nb _{2/3}) _{0.67} Ti _{0.33} O ₃ multiferroic heterostructures. Applied Physics Letters, 2018, 112, .	3.3	7
27	A $\hat{\Gamma}^2$ -Ta system for current induced magnetic switching in the absence of external magnetic field. AIP Advances, 2018, 8, .	1.3	8
28	Spin Hall effect and current induced magnetic switching in antiferromagnetic IrMn. AIP Advances, 2018, 8, .	1.3	9
29	PicoTesla magnetic tunneling junction sensors integrated with double staged magnetic flux concentrators. Applied Physics Letters, 2018, 113, .	3.3	40
30	Robustness of Voltage-induced Magnetocapacitance. Scientific Reports, 2018, 8, 14709.	3.3	12
31	Temperature study of the giant spin Hall effect in the bulk limit of $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mrow} \langle \text{mml:mi} \hat{\Gamma}^2 \langle \text{mml:mi} \rangle \langle \text{mml:mo} \rangle \hat{\wedge} \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle \langle \text{mml:mathvariant="normal"} \rangle W \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle .$ Physical Review B, 2018, 98, .		
32	Resistance of domain-wall states in half-metallic $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mrow} \langle \text{mml:mi} \text{Cr} \langle \text{mml:mi} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \text{mathvariant="normal"} \rangle \text{O} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:math} \rangle .$ Physical Review B, 2018, 98, .	3.2	9
33	Deterministic Current Induced Magnetic Switching Without External Field using Giant Spin Hall Effect of $\hat{\Gamma}^2$ -W. Scientific Reports, 2018, 8, 8144.	3.3	34
34	Inverse Tunnel Magnetocapacitance in Fe/Al-oxide/Fe ₃ O ₄ . Scientific Reports, 2017, 7, 2682.	3.3	15
35	Anomalous Hall effect and magnetic properties of Fe _x Pt _{100-x} alloys with strong spin-orbit interaction. Journal of Applied Physics, 2017, 122, .	2.5	19
36	High Contrast Far-Field Radiative Thermal Diode. Scientific Reports, 2017, 7, 6339.	3.3	29

#	ARTICLE	IF	CITATIONS
37	Magnetic stability under magnetic cycling of MgO-based magnetic tunneling junctions with an exchange-biased synthetic antiferromagnetic pinned layer. AIP Advances, 2016, 6, 025303.	1.3	0
38	Large magnetocapacitance effect in magnetic tunnel junctions based on Debye-Fröhlich model. Applied Physics Letters, 2015, 107, .	3.3	21
39	Giant spin Hall effect and magnetotransport in a Ta/CoFeB/MgO layered structure: A temperature dependence study. Physical Review B, 2015, 91, .	3.2	71
40	Giant Spin Hall Effect and Switching Induced by Spin-Transfer Torque in a $W/\text{Mn}_2\text{Co}/\text{Mn}_2\text{B}$ structure. Applied, 2015, 3, .	3.3	187
41	Beta (I^2) tungsten thin films: Structure, electron transport, and giant spin Hall effect. Applied Physics Letters, 2015, 106, .	3.3	148
42	DC and AC Characterization of MgO Magnetic Tunnel Junction Sensors. IEEE Transactions on Magnetics, 2013, 49, 5469-5474.	2.1	17
43	Ferromagnetic resonance and damping properties of CoFeB thin films as free layers in MgO-based magnetic tunnel junctions. Journal of Applied Physics, 2011, 110, .	2.5	188
44	Ultrafast magnetization dynamics in magnetic tunneling junctions. Applied Physics Letters, 2011, 98, 263506.	3.3	1
45	Low-frequency noise in serial arrays of MgO-based magnetic tunnel junctions. Physical Review B, 2011, 84, .	3.2	17
46	Impedance spectroscopy of micron sized magnetic tunnel junctions with MgO tunnel barrier. Applied Physics Letters, 2010, 96, 232506.	3.3	21
47	Effects of superparamagnetism in MgO based magnetic tunnel junctions. Physical Review B, 2009, 79, .	3.2	26
48	Magnetotransport properties of polycrystalline and epitaxial chromium dioxide nanowires. Journal of Applied Physics, 2008, 103, .	2.5	3
49	Mn_2Co/Mn_2Z . http://www.w3.org/1998/Math/MathML display="inline" Mn_2Co/Mn_2Z		

#	ARTICLE	IF	CITATIONS
55	Low frequency noise in highly sensitive magnetic tunnel junctions with (001) MgO tunnel barrier. Applied Physics Letters, 2007, 91, .	3.3	34
56	Magnetic domain configurations of epitaxial chromium dioxide (CrO ₂) nanostructures. Applied Physics Letters, 2007, 91, 113512.	3.3	24
57	Thermal stability, sensitivity, and noise characteristics of MgO-based magnetic tunnel junctions (invited). Journal of Applied Physics, 2007, 101, 09B502.	2.5	29
58	Thermal stability of magnetic tunneling junctions with MgO barriers for high temperature spintronics. Applied Physics Letters, 2006, 89, 023504.	3.3	48
59	Influence of substrate treatment on the growth morphology and magnetic anisotropy of epitaxial CrO ₂ films. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1513-1520.	1.8	7
60	Inelastic tunneling spectroscopy of magnetic tunnel junctions based on CoFeB/MgO/CoFeB with Mg insertion layer. Journal of Applied Physics, 2006, 99, 08T305.	2.5	72
61	Effect of film roughness in MgO-based magnetic tunnel junctions. Applied Physics Letters, 2006, 88, 182508.	3.3	68
62	Scanning magnetoresistive microscopy study of quasi-static magnetic switching in mesoscopic square dots: observation of field-driven transition between flux-closure states. IEEE Transactions on Magnetism, 2005, 41, 2226-2229.	2.1	2
63	Variations in the magnetic anisotropy properties of epitaxialCrO ₂ films as a function of thickness. Physical Review B, 2005, 71, .	3.2	63
64	Giant magnetoresistive structures based on CrO ₂ with epitaxial RuO ₂ as the spacer layer. Journal of Applied Physics, 2005, 97, 10C924.	2.5	23
65	Giant Hall resistance in Pt-based ferromagnetic alloys. Applied Physics Letters, 2004, 85, 73-75.	3.3	33
66	Current density mapping and pinhole imaging in magnetic tunnel junctions via scanning magnetic microscopy. Applied Physics Letters, 2004, 84, 2937-2939.	3.3	9
67	Magnetization reversal of submicrometer Co rings with uniaxial anisotropy via scanning magnetoresistance microscopy. Physical Review B, 2004, 70, .	3.2	8
68	Low-frequency magnetic noise in magnetic tunnel junctions. Physical Review B, 2004, 69, .	3.2	51
69	Martensitic transformation and shape memory effect in ferromagnetic Heusler alloy Ni ₂ FeGa. Applied Physics Letters, 2003, 82, 424-426.	3.3	243
70	Submicron electrical current density imaging of embedded microstructures. Applied Physics Letters, 2003, 82, 3272-3274.	3.3	24
71	Thermal annealing effects on low-frequency noise and transfer behavior in magnetic tunnel junction sensors. Journal of Applied Physics, 2003, 94, 6218-6220.	2.5	17
72	Microstructures of magnetic tunneling junctions. Journal of Applied Physics, 2003, 93, 467-470.	2.5	7

#	ARTICLE	IF	CITATIONS
73	Magnetic tunnel junction field sensors with hard-axis bias field. Journal of Applied Physics, 2002, 92, 4722-4725.	2.5	74
74	Role of electron scattering in the magnetization relaxation of thin Ni ₈₁ Fe ₁₉ films. Physical Review B, 2002, 66, .	3.2	100
75	Near-complete spin polarization in atomically-smooth chromium-dioxide epitaxial films prepared using a CVD liquid precursor. Physical Review B, 2001, 64, .	3.2	118
76	Determination of the Spin Polarization of Half-Metallic CrO ₂ by Point Contact Andreev Reflection. Physical Review Letters, 2001, 86, 5585-5588.	7.8	442
77	Switching behavior and its strain dependence in epitaxial CrO ₂ /thin films. IEEE Transactions on Magnetics, 2001, 37, 2596-2598.	2.1	4
78	Inverse magnetoresistance in chromium-dioxide-based magnetic tunnel junctions. Applied Physics Letters, 2001, 78, 1894-1896.	3.3	96
79	Strain dependence and magnetic anisotropy in chromium dioxide thin films. Materials Research Society Symposia Proceedings, 2000, 648, 1.	0.1	0
80	Large magnetic moment enhancement and extraordinary Hall effect in Co/Pt superlattices. Physical Review B, 2000, 62, 508-519.	3.2	110
81	Magnetic and transport properties of epitaxial and polycrystalline chromium dioxide thin films (invited). Journal of Applied Physics, 2000, 87, 6073-6078.	2.5	89
82	Probing magnetic anisotropy effects in epitaxial CrO ₂ thin films. Physical Review B, 2000, 62, 8931-8934.	3.2	56
83	Low-Frequency Magnetic Noise in Micron-Scale Magnetic Tunnel Junctions. Physical Review Letters, 2000, 85, 3289-3292.	7.8	131
84	Selective-area and lateral overgrowth of chromium dioxide (CrO ₂) films by chemical vapor deposition. Applied Physics Letters, 1999, 75, 2996-2998.	3.3	48
85	Magnetoresistance and Hall effect of chromium dioxide epitaxial thin films. Journal of Applied Physics, 1999, 85, 5585-5587.	2.5	107
86	Magnetotransport in doped manganate perovskites. IBM Journal of Research and Development, 1998, 42, 89-102.	3.1	28
87	Transport and magnetic properties of epitaxial and polycrystalline magnetite thin films. Journal of Applied Physics, 1998, 83, 7049-7051.	2.5	133
88	Extraordinary Hall effect in (111) and (100)-orientated Co/Pt superlattices. Journal of Applied Physics, 1997, 81, 5367-5369.	2.5	62
89	Sub-200 Oe Giant Magnetoresistance in Manganite Tunnel Junctions. Materials Research Society Symposia Proceedings, 1997, 494, 221.	0.1	1
90	Magnetic domain structures of La _{0.67} Sr _{0.33} MnO ₃ thin films with different morphologies. Journal of Applied Physics, 1997, 82, 3934-3939.	2.5	68

#	ARTICLE	IF	CITATIONS
91	Low-field magnetoresistive properties of polycrystalline and epitaxial perovskite manganite films. Applied Physics Letters, 1997, 71, 1124-1126.	3.3	358
92	Microstructured magnetic tunnel junctions (invited). Journal of Applied Physics, 1997, 81, 3741-3746.	2.5	451
93	Large magnetic Hall effect in ferromagnetic $\text{Fe}_{1-x}\text{Pt}_x$ thin films. Journal of Applied Physics, 1996, 79, 6126.	2.5	21
94	Emission studies of the gas-phase oxidation of Mn during pulsed laser deposition of manganates in O_2 and N_2O atmospheres. Journal of Applied Physics, 1996, 80, 513-517.	2.5	32
95	Finite-size effect and its temperature dependence of giant magnetoresistance in magnetic granular materials. Journal of Applied Physics, 1996, 79, 5587.	2.5	12
96	Transport and magnetic properties of in situ grown thin film $\text{La}_{1-x}\text{Ca}_x\text{MnO}$. Applied Physics Letters, 1995, 67, 2726-2728.	3.3	46
97	Magnetic properties of metallic Co - and Fe -based granular alloys. Journal of Applied Physics, 1994, 75, 6604-6606.	2.5	10
98	Giant magnetoresistance and its dependence on processing conditions in magnetic granular alloys. Journal of Applied Physics, 1994, 75, 6903-6905.	2.5	8
99	Anomalous Hall Effect And Giant Magnetoresistance In Co - and Fe - (Cu , Ag , Au , Pt) Granular Alloys. , 1993, , .		0
100	Giant magnetoresistance and its evolution in the granular $\text{Fe}_{1-x}\text{Ag}_x$ system (0% x %100). Applied Physics Letters, 1993, 62, 420-422.	3.3	83
101	Superconducting electron focusing and guiding based on the Andreev reflection mechanism. Applied Physics Letters, 1992, 60, 504-506.	3.3	1
102	Correlations between T_c and n/m^* (carrier density/ effective mass) in high- T_c and organic superconductors. Hyperfine Interactions, 1991, 63, 131-137.	0.5	7
103	Micromagnetic investigations of mesoscopic magnetic rings via magnetic force and magnetoresistive microscopy. , 0, , .		0
104	Real-time current density imaging of electromigration processes using scanning magnetoresistive microscopy. , 0, , .		0