Xavier Marti

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/7972594/publications.pdf

Version: 2024-02-01

88	6,272	109321 35	66911 78
papers	citations	h-index	g-index

90	90	90	7081
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Magnetoelectrically Driven Catalytic Degradation of Organics. Advanced Materials, 2019, 31, e1901378.	21.0	74
2	Programmable Locomotion Mechanisms of Nanowires with Semihard Magnetic Properties Near a Surface Boundary. ACS Applied Materials & Interfaces, 2019, 11, 3214-3223.	8.0	23
3	The multiple directions of antiferromagnetic spintronics. Nature Physics, 2018, 14, 200-203.	16.7	365
4	Large landslide stress states calculated during extreme climatic and tectonic events on El Hierro, Canary Islands. Landslides, 2018, 15, 1801-1814.	5.4	15
5	Band structure of CuMnAs probed by optical and photoemission spectroscopy. Physical Review B, 2018, 97, .	3.2	22
6	Reversible and magnetically unassisted voltage-driven switching of magnetization in FeRh/PMN-PT. Applied Physics Letters, 2018, 113, .	3.3	37
7	The Profile of Researchers Moving Towards Scientific Entrepreneurship. , 2018, , 143-157.		0
8	Structure of epitaxial SrIrO₃ perovskite studied by interference between X-ray waves diffracted by the substrate and the thin film. Journal of Applied Crystallography, 2017, 50, 385-398.	4.5	11
9	Electric-Field-Adjustable Time-Dependent Magnetoelectric Response in Martensitic FeRh Alloy. ACS Applied Materials & Interfaces, 2017, 9, 15577-15582.	8.0	29
10	Monitoring Giant Landslide Detachment Planes in the Era of Big Data Analytics. , 2017, , 333-340.		7
11	Antiferromagnetic CuMnAs multi-level memory cell with microelectronic compatibility. Nature Communications, 2017, 8, 15434.	12.8	149
12	Mn 3dbands and Yâ€“O hybridization of hexagonal and orthorhombic YMnO₃thin films. Journal of Physics Condensed Matter, 2017, 29, 295501.	1.8	2
13	On the persistence of polar domains in ultrathin ferroelectric capacitors. Journal of Physics Condensed Matter, 2017, 29, 284001.	1.8	14
14	Hidden Magnetic States Emergent Under Electric Field, In A Room Temperature Composite Magnetoelectric Multiferroic. Scientific Reports, 2017, 7, 15460.	3.3	25
15	Disclosure of Double Exchange Bias Effect in Chromium (III) Oxide Nanoparticles. IEEE Transactions on Magnetics, 2017, 53, 1-4.	2.1	4
16	Investigation of magneto-structural phase transition in FeRh by reflectivity and transmittance measurements in visible and near-infrared spectral region. New Journal of Physics, 2016, 18, 083017.	2.9	18
17	Antiferromagnetic spintronics. Nature Nanotechnology, 2016, 11, 231-241.	31.5	1,578
18	Calculating flux to predict future cave radon concentrations. Journal of Environmental Radioactivity, 2016, 157, 16-26.	1.7	15

#	Article	IF	Citations
19	Defect-induced magnetic structure of CuMnSb. Physical Review B, 2016, 94, .	3.2	8
20	Electric control of antiferromagnets. IEEE Transactions on Magnetics, 2016, , 1-1.	2.1	5
21	Ferroelectric phase transitions in multiferroicGe1â^'xMnxTedriven by local lattice distortions. Physical Review B, 2016, 94, .	3.2	13
22	Temperature and thickness dependence of tunneling anisotropic magnetoresistance in exchange-biased Py/IrMn/MgO/Ta stacks. Materials Research Express, 2016, 3, 076406.	1.6	9
23	Strain-induced nonsymmorphic symmetry breaking and removal of Dirac semimetallic nodal line in an orthoperovskite iridate. Physical Review B, 2016, 93, .	3.2	67
24	Multiple-stable anisotropic magnetoresistance memory in antiferromagnetic MnTe. Nature Communications, 2016, 7, 11623.	12.8	169
25	Isothermal anisotropic magnetoresistance in antiferromagnetic metallic IrMn. Scientific Reports, 2016, 6, 35471.	3.3	20
26	The instrumental resolution of a moire extensometer in light of its recent automatisation. Measurement: Journal of the International Measurement Confederation, 2016, 91, 258-265.	5.0	16
27	Structural order, magnetic and intrinsic dielectric properties of magnetoelectric La 2 CoMnO 6. Journal of Alloys and Compounds, 2016, 661, 541-552.	5.5	38
28	Ba-doping effects on structural, magnetic and vibrational properties of disordered La2NiMnO6. Journal of Alloys and Compounds, 2016, 663, 899-905.	5.5	33
29	Four-state ferroelectric spin-valve. Scientific Reports, 2015, 5, 9749.	3.3	38
30	In-plane tunnelling field-effect transistor integrated on Silicon. Scientific Reports, 2015, 5, 14367.	3.3	7
31	Prospect for Antiferromagnetic Spintronics. IEEE Transactions on Magnetics, 2015, 51, 1-4.	2.1	43
32	Giant reversible nanoscale piezoresistance at room temperature in Sr₂IrO₄ thin films. Nanoscale, 2015, 7, 3453-3459.	5.6	24
33	Role of rare-earth ionic radii on the spinâ€“phonon coupling in multiferroic ordered double perovskites. Materials Research Express, 2015, 2, 075201.	1.6	10
34	Voltage-Controlled Ferroelastic Switching in Pb(Zr_{0.2}Ti_{0.8})O₃ Thin Films. Nano Letters, 2015, 15, 2229-2234.	9.1	39
35	Multisegmented FeCo/Cu Nanowires: Electrosynthesis, Characterization, and Magnetic Control of Biomolecule Desorption. ACS Applied Materials & Interfaces, 2015, 7, 7389-7396.	8.0	54
36	Nanodomains and nanometer-scale disorder in multiferroic bismuth ferrite single crystals. Acta Materialia, 2015, 82, 356-368.	7.9	32

#	Article	IF	Citations
37	Room-temperature antiferromagnetic memory resistor. Nature Materials, 2014, 13, 367-374.	27.5	546
38	Tailoring the interfacial magnetic anisotropy in multiferroic field-effect devices. Physical Review B, 2014, 90, .	3.2	24
39	Spintronic Functionality of BiFeO₃ Domain Walls. Advanced Materials, 2014, 26, 7078-7082.	21.0	56
40	Room-Temperature Negative Capacitance in a Ferroelectricâ€“Dielectric Superlattice Heterostructure. Nano Letters, 2014, 14, 5814-5819.	9.1	123
41	Anisotropic magnetoresistance in an antiferromagnetic semiconductor. Nature Communications, 2014, 5, 4671.	12.8	136
42	Cathodoluminescence-Activated Imaging by Resonance Energy Transfer: A New Approach to Imaging Nanoscale Aqueous Biodynamics. Biophysical Journal, 2014, 106, 402a.	0.5	2
43	The direct magnetoelectric effect in ferroelectricâ€“ferromagnetic epitaxial heterostructures. Nanoscale, 2013, 5, 8037.	5.6	49
44	Tetragonal phase of epitaxial room-temperature antiferromagnet CuMnAs. Nature Communications, 2013, 4, 2322.	12.8	123
45	Bright Cathodoluminescent Thin Films for Scanning Nano-Optical Excitation and Imaging. ACS Nano, 2013, 7, 10397-10404.	14.6	13
46	Effect of stoichiometry on the dielectric properties and soft mode behavior of strained epitaxial SrTiO3 thin films on DyScO3 substrates. Applied Physics Letters, 2013, 102, .	3.3	39
47	A MATLABÂ® code for counting the moirÃ© interference fringes recorded by the optical-mechanical crack gauge TM-71. Computers and Geosciences, 2013, 52, 164-167.	4.2	21
48	Storing magnetic information in IrMn/MgO/Ta tunnel junctions via field-cooling. Applied Physics Letters, 2013, 102, .	3.3	56
49	Obtaining the structure factors for an epitaxial film using Cu X-ray radiation. Journal of Applied Crystallography, 2013, 46, 1749-1754.	4.5	16
50	Critical role of the sample preparation in experiments using piezoelectric actuators inducing uniaxial or biaxial strains. Review of Scientific Instruments, 2013, 84, 103902.	1.3	7
51	Spin-phonon coupling in Gd(Co1/2Mn1/2)O3 perovskite. Journal of Applied Physics, 2013, 114, .	2.5	27
52	Epitaxy-distorted spin-orbit Mott insulator in Sr<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>IrO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>4</mml:mn></mml:msub></mml:math>thin films. Physical Review B, 2013, 87, .	3.2	70
53	Electrical Measurement of Antiferromagnetic Moments in Exchange-Coupled<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>IrMn</mml:mi><mml:mo>/</mml:mo><mml:mi>NiFe</mml:mi></mml:math>Stacks. Physical Review Letters, 2013, 108, 017201.	7.8	70
54	Strain-driven transition from <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>E</mml:mi></mml:math>-type to <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>A</mml:mi></mml:math>-type magnetic order in YMnO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>epitaxial films. Physical Review B, 2012, 86, .	3.2	22

#	Article	IF	Citations
55	Scanning tunneling microscopy reveals LiMnAs is a room temperature anti-ferromagnetic semiconductor. Applied Physics Letters, 2012, 100, 112107.	3.3	11
56	Surface phase transitions in BiFeO<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>3</mml:mn></mml:msub></mml:math>below room temperature. Physical Review B, 2012, 85, .	3.2	70
57	The Poisson Ratio in CoFe₂O₄ Spinel Thin Films. Advanced Functional Materials, 2012, 22, 4344-4351.	14.9	72
58	Room-temperature antiferromagnetism in CuMnAs. Journal of Magnetism and Magnetic Materials, 2012, 324, 1606-1612.	2.3	59
59	Polarized neutron reflectivity study of NiFe₂O₄films with very large saturation magnetization. Journal of Physics: Conference Series, 2011, 303, 012013.	0.4	1
60	Ferroelectricity and strain effects in orthorhombic YMnO₃thin films. Phase Transitions, 2011, 84, 555-568.	1.3	16
61	Surface morphology and magnetic anisotropy in (Ga,Mn)As. Applied Physics Letters, 2011, 98, 152503.	3.3	10
62	Structure phase transitions of polymorphic compounds with layered crystal structures: The REIr2Si2 case. Intermetallics, 2011, 19, 1622-1626.	3.9	10
63	A spin-valve-like magnetoresistance of an antiferromagnet-based tunnel junction. Nature Materials, 2011, 10, 347-351.	27.5	485
64	Skin Layer of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mi>BiFeO</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>Single Crystals. Physical Review Letters, 2011, 106, 236101.	7.8	79
65	Molecular beam epitaxy of LiMnAs. Journal of Crystal Growth, 2011, 323, 348-350.	1.5	5
66	Diffusion of Mn interstitials in (Ga,Mn)As epitaxial layers. Physical Review B, 2011, 83, .	3.2	8
67	Magnetization Reversal by Electric-Field Decoupling of Magnetic and Ferroelectric Domain Walls in Multiferroic-Based Heterostructures. Physical Review Letters, 2011, 106, 057206.	7.8	121
68	X-ray interference effects on the determination of structural data in ultrathin La2/3Sr1/3MnO3 epitaxial thin films. Applied Physics Letters, 2011, 99, .	3.3	22
69	Demonstration of molecular beam epitaxy and a semiconducting band structure for I-Mn-V compounds. Physical Review B, 2011, 83, .	3.2	55
70	Chiral Domains in Cycloidal Multiferroic Thin Films: Switching and Memory Effects. Physical Review Letters, 2011, 107, 257601.	7.8	28
71	Infrared phonon spectroscopy of a compressively strained (001) SrTiO₃film grown on a (110) NdGaO₃substrate. Journal of Physics Condensed Matter, 2011, 23, 045901.	1.8	16
72	Nonferroelectric contributions to the hysteresis cycles in manganite thin films: A comparative study of measurement techniques. Journal of Applied Physics, 2011, 109, .	2.5	100

#	Article	IF	Citations
73	Dielectric anomalies in orthorhombic YMnO3 thin films. Thin Solid Films, 2010, 518, 4710-4713.	1.8	8
74	Emergence of ferromagnetism in antiferromagnetic TbMnO3 by epitaxial strain. Applied Physics Letters, 2010, 96, .	3.3	53
75	Density of Mn interstitials in (Ga,Mn)As epitaxial layers determined by anomalous x-ray diffraction. Applied Physics Letters, 2010, 97, .	3.3	6
76	Strain-driven noncollinear magnetic ordering in orthorhombic epitaxial YMnO3 thin films. Journal of Applied Physics, 2010, 108, .	2.5	25
77	Magnetic switch of polarization in epitaxial orthorhombic YMnO3 thin films. Applied Physics Letters, 2010, 97, .	3.3	42
78	Strain tuned magnetoelectric coupling in orthorhombic YMnO3 thin films. Applied Physics Letters, 2009, 95, .	3.3	26
79	Enhanced thermal stability of Pt electrodes for flat epitaxial biferroic-YMnO3/Pt heterostructures. Applied Physics Letters, 2009, 95, 181907.	3.3	4
80	Ferromagnetism in epitaxial orthorhombic YMnO3 thin films. Journal of Magnetism and Magnetic Materials, 2009, 321, 1719-1722.	2.3	38
81	Crystal texture selection in epitaxies of orthorhombic antiferromagnetic YMnO3 films. Thin Solid Films, 2008, 516, 4899-4907.	1.8	31
82	Dielectric anomaly and magnetic response of epitaxial orthorhombic YMnO₃ thin films. Journal of Materials Research, 2007, 22, 2096-2101.	2.6	25
83	Electric field effects on magnetotransport properties of multiferroic Py/YMnO3/Pt heterostructures. Philosophical Magazine Letters, 2007, 87, 183-191.	1.2	7
84	Epitaxial growth of biferroic YMnO3(0001) on platinum electrodes. Journal of Crystal Growth, 2007, 299, 288-294.	1.5	16
85	Strain-induced stabilization of new magnetic spinel structures in epitaxial oxide heterostructures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2007, 144, 43-48.	3.5	34
86	Electric-Field Control of Exchange Bias in Multiferroic Epitaxial Heterostructures. Physical Review Letters, 2006, 97, 227201.	7.8	295
87	Exchange bias between magnetoelectric YMnO3 and ferromagnetic SrRuO3 epitaxial films. Journal of Applied Physics, 2006, 99, 08P302.	2.5	43
88	Exchange biasing and electric polarization with YMnO3. Applied Physics Letters, 2006, 89, 032510.	3.3	37