Matteo Cantoni

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/1890777/publications.pdf

Version: 2024-02-01

87	1,913	304743	265206
papers	citations	22 h-index	42 g-index

87	87	87	3028
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electric control of magnetism at the Fe/BaTiO3 interface. Nature Communications, 2014, 5, 3404.	12.8	179
2	Giant Rashbaâ€Type Spin Splitting in Ferroelectric GeTe(111). Advanced Materials, 2016, 28, 560-565.	21.0	155
3	Enhanced magnetic moment and conductive behavior inNiFe2O4spinel ultrathin films. Physical Review B, 2005, 71, .	3.2	138
4	Onâ€Chip Manipulation of Proteinâ€Coated Magnetic Beads via Domainâ€Wall Conduits. Advanced Materials, 2010, 22, 2706-2710.	21.0	131
5	Direct observation of a highly spin-polarized organic spinterface at room temperature. Scientific Reports, 2013, 3, 1272.	3.3	118
6	Genetic algorithms and Monte Carlo simulation for optimal plant design. Reliability Engineering and System Safety, 2000, 68, 29-38.	8.9	79
7	Oxygen vacancies and induced changes in the electronic and magnetic structures ofLa0.66Sr0.33MnO3: A combinedab initioand photoemission study. Physical Review B, 2007, 75, .	3.2	78
8	Domain wall displacement in Py square ring for single nanometric magnetic bead detection. Applied Physics Letters, 2008, 93, 203502.	3.3	63
9	Room-temperature ferroelectric switching of spin-to-charge conversion in germanium telluride. Nature Electronics, 2021, 4, 740-747.	26.0	62
10	Nanosized corners for trapping and detecting magnetic nanoparticles. Nanotechnology, 2009, 20, 385501.	2.6	59
11	Activation of Zrâ€“Coâ€“rare earth getter films: An XPS study. Applied Surface Science, 2010, 256, 6291-6296.	6.1	42
12	Geâ€Based Spinâ€Photodiodes for Roomâ€Temperature Integrated Detection of Photon Helicity. Advanced Materials, 2012, 24, 3037-3041.	21.0	40
13	Epitaxial growth and characterization of layered magnetic nanostructures. Applied Surface Science, 2005, 252, 1754-1764.	6.1	39
14	Effects of Au nanoparticles on the magnetic and transport properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>La</mml:mtext></mml:mrow><mml:mrow><mml:mn>0.67</mml layers. Physical Review B, 2010, 81, .	3.2	39
15	Evidence for spin to charge conversion in GeTe(111). APL Materials, 2016, 4, .	5.1	36
16	Epitaxial growth and characterization of CoO/Fe(001) thin film layered structures. Thin Solid Films, 2008, 516, 7519-7524.	1.8	29
17	Conditions for efficient on-chip magnetic bead detection via magnetoresistive sensors. Biosensors and Bioelectronics, 2013, 47, 213-217.	10.1	28
18	Near-room-temperature control of magnetization in field effect devices based on La0.67Sr0.33MnO3 thin films. Journal of Applied Physics, 2010, 108, 113906.	2.5	27

#	Article	IF	Citations
19	Magnetic nanostructures for the manipulation of individual nanoscale particles in liquid environments (invited). Journal of Applied Physics, 2010, 107, .	2.5	25
20	Electrical Switching of Magnetization in the Artificial Multiferroic CoFeB/BaTiO₃. Advanced Electronic Materials, 2016, 2, 1600085.	5.1	25
21	Epitaxial La2â^•3Sr1â^•3MnO3 thin films with metallic behavior above the Curie temperature. Applied Physics Letters, 2005, 86, 252502.	3.3	23
22	Band structure of CuMnAs probed by optical and photoemission spectroscopy. Physical Review B, 2018, 97, .	3.2	22
23	Bandstructure line-up of epitaxial Fe/MgO/Ge heterostructures: A combined x-ray photoelectron spectroscopy and transport study. Applied Physics Letters, 2011, 98, 032104.	3.3	22
24	MgO/Fe(001) and<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mtext>MgO</mml:mtext><mml:mo>/</mml:mo><mml:mtext>Fe</mml:mtext></mml:mrow><mml:m for magnetic tu. Physical Review B, 2009, 80, .	3.2	21
25	High efficiency apparatus for spin polarized inverse photoemission. Review of Scientific Instruments, 2004, 75, 2387-2392.	1.3	20
26	Electronic, magnetic, and structural properties of the Fe/ZnSe interface. Physical Review B, 2004, 69, .	3.2	19
27	On-chip measurement of the Brownian relaxation frequency of magnetic beads using magnetic tunneling junctions. Applied Physics Letters, 2011, 98, 073702.	3.3	19
28	Sharp Fe/MgO/Ge(001) epitaxial heterostructures for tunneling junctions. Journal of Applied Physics, 2011, 109, .	2.5	19
29	Proximity effects induced by a gold layer on La0.67Sr0.33MnO3 thin films. Applied Physics Letters, 2007, 91, .	3.3	18
30	Surface electronic and magnetic properties of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>La</mml:mtext></mml:mrow><mml:mrow><mml:mn>2</mml:mn> Physical Review B, 2008, 78, .	3.2	17
31	Frustration-driven micromagnetic structure in Fe/CoO/Fe thin film layered systems. Physical Review B, 2009, 79, .	3.2	16
32	On-Chip Magnetic Platform for Single-Particle Manipulation with Integrated Electrical Feedback. Small, 2016, 12, 921-929.	10.0	15
33	Reversible Modification of Ferromagnetism through Electrically Controlled Morphology. Advanced Electronic Materials, 2019, 5, 1900150.	5.1	15
34	Fe thin films grown on single-crystal and virtual Ge(001) substrates. Journal of Applied Physics, 2005, 97, 093906.	2.5	12
35	Bias-controlled ultrafast demagnetization in magnetic tunnel junctions. Physical Review B, 2014, 89, .	3.2	12
36	Band alignment at Cu2O/La0.7Sr0.3MnO3 interface: A combined experimental-theoretical determination. Applied Physics Letters, 2010, 97, .	3.3	11

#	Article	IF	Citations
37	Chemical and electronic properties of Fe/MgO/Ge heterostructures for spin electronics. Journal of Physics: Conference Series, 2011, 292, 012010.	0.4	11
38	Wide-range optical spin orientation in Ge from near-infrared to visible light. Physical Review B, 2014, 90, .	3.2	11
39	Detecting antiferromagnetism in tetragonal <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">C</mml:mi><mml:msub><mml:mi mathvariant="normal">r</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math> by electrical measurements. Physical Review B, 2019, 100, .	3.2	11
40	Epitaxial growth of Fe/MgO/Ge(001) heterostructures. Microelectronic Engineering, 2011, 88, 530-533.	2.4	10
41	Absence of strain-mediated magnetoelectric coupling at fully epitaxial Fe/BaTiO3 interface (invited). Journal of Applied Physics, 2014, 115, 172604.	2.5	10
42	An investigation into the synthesis of cadmium sulfide pigments for a better understanding of their reactivity in artworks. Dyes and Pigments, 2021, 186, 108998.	3.7	10
43	Decrease of the Curie temperature in La0.67Sr0.33MnO3 thin films induced by Au capping. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2007, 144, 93-96.	3.5	9
44	X-ray photoemission study of the Auâ•La0.67Sr0.33MnO3 interface formation. Journal of Applied Physics, 2008, 103, .	2.5	9
45	<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Cu</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu a nonmagnetic semiconductor for spin transport in crystalline oxide electronics. Physical Review B, 2010, 81, .	3.2	9
46	Two dimensional growth of ultrathin Fe films on BaTiO3 with sharp chemical interface. Journal of Applied Physics, 2014, 115, .	2.5	9
47	Electric field control of magnetic properties and electron transport in BaTiO₃-based multiferroic heterostructures. Journal of Physics Condensed Matter, 2015, 27, 504004.	1.8	9
48	Onset of ferromagnetism in ultrathin Fe films on semiconductors. Solid State Communications, 2005, 135, 158-161.	1.9	8
49	Effect of Ba termination layer on chemical and electrical passivation of Ge (100) surfaces. Materials Science in Semiconductor Processing, 2006, 9, 701-705.	4.0	8
50	Uniaxial magnetic anisotropies in Fe films on single crystal and virtual Ge(001) substrates studied with spin polarized inverse photoemission and MOKE. Physical Review B, 2006, 74, .	3.2	8
51	Growth of ultrathin epitaxial Fe/MgO spin injector on (0, 0, 1) (Ga, Mn)As. Nanotechnology, 2012, 23, 465202.	2.6	8
52	Interdiffusion-driven synthesis of tetragonal chromium (III) oxide on <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>BaTi</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review Materials, 2018, 2, .	2.4	8
53	Interplay between morphology and magnetoelectric coupling in Fe/PMN-PT multiferroic heterostructures studied by microscopy techniques. Physical Review Materials, 2020, 4, .	2.4	7
54	Epitaxial Fe/MgO/Ge spin-photodiodes for integrated detection of light helicity at room temperature. Journal of Applied Physics, 2012, 111, 07C312.	2.5	6

#	Article	IF	Citations
55	Determination of the spin diffusion length in germanium by spin optical orientation and electrical spin injection. Journal Physics D: Applied Physics, 2016, 49, 425104.	2.8	6
56	Blocking Temperature Engineering in Exchange-Biased CoFeB/IrMn Bilayer. IEEE Transactions on Magnetics, 2018, 54, 1-7.	2.1	6
57	Epitaxial La2/3Sr1/3MnO3 thin films with unconventional magnetic and electric properties near the Curie temperature. Thin Solid Films, 2006, 515, 496-499.	1.8	5
58	Detection of a single synthetic antiferromagnetic nanoparticle with an AMR nanostructure: Comparison between simulations and experiments. Journal of Physics: Conference Series, 2010, 200, 122001.	0.4	5
59	Effect of Au proximity on the LSMO surface: An ab initio study. Journal of Magnetism and Magnetic Materials, 2012, 324, 2659-2663.	2.3	5
60	Light helicity detection in MOS-based spin-photodiodes: An analytical model. Journal of Applied Physics, 2016, 120, 104505.	2.5	5
61	Silicon Oxycarbide Platform for Integrated Photonics. Journal of Lightwave Technology, 2020, 38, 784-791.	4.6	5
62	Electrical readout of the antiferromagnetic state of IrMn through anomalous Hall effect. Journal of Applied Physics, 2020, 128, 053904.	2.5	5
63	Impact of O2 exposure on surface crystallinity of clean and Ba terminated Ge(100) surfaces. Applied Surface Science, 2008, 254, 2720-2724.	6.1	4
64	Influence of Magnetic Fields on Autocatalytic Deposition of Coâ€“Fe Thin Films. Journal of the Electrochemical Society, 2010, 157, D437.	2.9	4
65	Anomalous Hall effect in antiferromagnetic/nonmagnetic interfaces. Physical Review Research, 2020, 2, .	3.6	4
66	Spin-photodiodes for SiGe spin-optoelectronics. Proceedings of SPIE, 2012, , .	0.8	3
67	Structural comparison between MgO/Fe(001) and MgO/Fe(001)â€“p(1Ã—1)O interfaces for magnetic tunneling junctions: An Auger electron diffraction study. Applied Surface Science, 2014, 305, 167-172.	6.1	3
68	Electronic and magnetic properties of the Fe/ZnSe() interface. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1907-1908.	2.3	2
69	Ultrathin Fe films on single crystal and virtual Ge(001) substrates: Towards the control of magnetic properties. Applied Surface Science, 2006, 252, 5304-5307.	6.1	2
70	Temperature-dependent magnetism of Fe thin films on ZnSe(001). Journal of Magnetism and Magnetic Materials, 2007, 316, e545-e548.	2.3	2
71	Photon- and electron-induced surface voltage in electron spectroscopies on ZnSe(001). Journal of Electron Spectroscopy and Related Phenomena, 2009, 173, 84-87.	1.7	2
72	Aberration corrected scanning transmission electron microscopy and electron energy loss spectroscopy studies of epitaxial Fe/MgO/(001)Ge heterostructures. Journal of Materials Science, 2011, 46, 4157-4161.	3.7	2

#	Article	IF	Citations
73	Determination of spin diffusion length in Germanium by optical and electrical spin injection. Proceedings of SPIE, 2014, , .	0.8	2
74	Towards the impedimetric tracking of single magnetically trailed microparticles. , 2014, , .		2
75	Electroless Deposition of Ultra-Thin Co-Fe Films. ECS Transactions, 2006, 3, 81-90.	0.5	1
76	Direct observation of a highly spin-polarized organic spinterface at room temperature. , 2014, , .		1
77	New Trends in Magnetic Memories. , 2016, , 457-509.		1
78	Study and optimization of epitaxial films of Cr and Pt/Cr bilayers on MgO. Journal Physics D: Applied Physics, 2020, 53, 105303.	2.8	1
79	Interface Analysis of MOCVD Grown GeTe/Sb2Te3 and Ge-Rich Ge-Sb-Te/Sb2Te3 Core-Shell Nanowires. Nanomaterials, 2022, 12, 1623.	4.1	1
80	Influence of Au electrodes on the properties of SrTiO3/La0.67Sr0.33MnO3/Au magnetic tunnel junctions studied by bberration-corrected STEM-EELS. Microscopy and Microanalysis, 2008, 14, 1392-1393.	0.4	0
81	Manipulation at the nano-scale of single magnetic particles via domain walls conduits. , 2009, , .		0
82	Fe nanoparticles on ZnSe: Reversible temperature dependence of the surface barrier potential. Physical Review B, 2012, 85, .	3.2	0
83	Closed loop microfluidic platform based on domain wall magnetic conduits: a novel tool for biology and medicine. Materials Research Society Symposia Proceedings, 2014, 1686, 1.	0.1	0
84	Magneto-optical investigation of Fe/CoO/Fe(001) trilayers. , 2014, , .		0
85	Switching magnetic order at an Fe/BaTiO<inf>3</inf> interface on and off: Impact on hybrid magnetic-ferroelectric tunnel junctions. , 2015, , .		0
86	Artificial Multiferroics: Electrical Switching of Magnetization in the Artificial Multiferroic CoFeB/BaTiO3(Adv. Electron. Mater. 7/2016). Advanced Electronic Materials, 2016, 2, .	5.1	0
87	Epitaxy and controlled oxidation of chromium ultrathin films on ferroelectric BaTiO3 templates. Journal of Crystal Growth, 2021, 558, 126012.	1.5	0