

Matteo Cantoni

List of Publications by Year in descending order

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87

papers

1,913

citations

304743

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265206

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docs citations

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times ranked

3028

citing authors

#	ARTICLE	IF	CITATIONS
1	Interface Analysis of MOCVD Grown GeTe/Sb ₂ Te ₃ and Ge-Rich Ge-Sb-Te/Sb ₂ Te ₃ Core-Shell Nanowires. <i>Nanomaterials</i> , 2022, 12, 1623.	4.1	1
2	An investigation into the synthesis of cadmium sulfide pigments for a better understanding of their reactivity in artworks. <i>Dyes and Pigments</i> , 2021, 186, 108998.	3.7	10
3	Epitaxy and controlled oxidation of chromium ultrathin films on ferroelectric BaTiO ₃ templates. <i>Journal of Crystal Growth</i> , 2021, 558, 126012.	1.5	0
4	Room-temperature ferroelectric switching of spin-to-charge conversion in germanium telluride. <i>Nature Electronics</i> , 2021, 4, 740-747.	26.0	62
5	Silicon Oxycarbide Platform for Integrated Photonics. <i>Journal of Lightwave Technology</i> , 2020, 38, 784-791.	4.6	5
6	Electrical readout of the antiferromagnetic state of IrMn through anomalous Hall effect. <i>Journal of Applied Physics</i> , 2020, 128, 053904.	2.5	5
7	Study and optimization of epitaxial films of Cr and Pt/Cr bilayers on MgO. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 105303.	2.8	1
8	Interplay between morphology and magnetoelectric coupling in Fe/PMN-PT multiferroic heterostructures studied by microscopy techniques. <i>Physical Review Materials</i> , 2020, 4, .	2.4	7
9	Anomalous Hall effect in antiferromagnetic/nonmagnetic interfaces. <i>Physical Review Research</i> , 2020, 2, .	3.6	4
10	Reversible Modification of Ferromagnetism through Electrically Controlled Morphology. <i>Advanced Electronic Materials</i> , 2019, 5, 1900150. <i>Defecting antiferromagnetism in tetragonal</i> BaTiO_3	5.1	15
11	$\text{C} \times \text{O}^3 \rightarrow \text{Cr}_2\text{O}_3$ by electrical measurements. <i>Physical Review B</i> , 2019, 100, .	3.2	11
12	Blocking Temperature Engineering in Exchange-Biased CoFeB/IrMn Bilayer. <i>IEEE Transactions on Magnetics</i> , 2018, 54, 1-7.	2.1	6
13	Band structure of CuMnAs probed by optical and photoemission spectroscopy. <i>Physical Review B</i> , 2018, 97, .	3.2	22
14	Interdiffusion-driven synthesis of tetragonal chromium (III) oxide on BaTiO_3 . <i>Physical Review Materials</i> , 2018, 2, .	2.4	8
15	On-Chip Magnetic Platform for Single-Particle Manipulation with Integrated Electrical Feedback. <i>Small</i> , 2016, 12, 921-929.	10.0	15
16	Electrical Switching of Magnetization in the Artificial Multiferroic CoFeB/BaTiO ₃ . <i>Advanced Electronic Materials</i> , 2016, 2, 1600085.	5.1	25
17	Giant Rashba- ϵ Type Spin Splitting in Ferroelectric GeTe(111). <i>Advanced Materials</i> , 2016, 28, 560-565.	21.0	155
18	Light helicity detection in MOS-based spin-photodiodes: An analytical model. <i>Journal of Applied Physics</i> , 2016, 120, 104505.	2.5	5

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19	Evidence for spin to charge conversion in GeTe(111). <i>APL Materials</i> , 2016, 4, .	5.1	36
20	Artificial Multiferroics: Electrical Switching of Magnetization in the Artificial Multiferroic CoFeB/BaTiO ₃ (<i>Adv. Electron. Mater.</i> 7/2016). <i>Advanced Electronic Materials</i> , 2016, 2, .	5.1	0
21	New Trends in Magnetic Memories. , 2016, , 457-509.		1
22	Determination of the spin diffusion length in germanium by spin optical orientation and electrical spin injection. <i>Journal Physics D: Applied Physics</i> , 2016, 49, 425104.	2.8	6
23	Electric field control of magnetic properties and electron transport in BaTiO ₃ -based multiferroic heterostructures. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 504004.	1.8	9
24	Switching magnetic order at an Fe/BaTiO ₃ interface on and off: Impact on hybrid magnetic-ferroelectric tunnel junctions. , 2015, , .		0
25	Direct observation of a highly spin-polarized organic spinterface at room temperature. , 2014, , .		1
26	Absence of strain-mediated magnetoelectric coupling at fully epitaxial Fe/BaTiO ₃ interface (invited). <i>Journal of Applied Physics</i> , 2014, 115, 172604.	2.5	10
27	Wide-range optical spin orientation in Ge from near-infrared to visible light. <i>Physical Review B</i> , 2014, 90, .	3.2	11
28	Determination of spin diffusion length in Germanium by optical and electrical spin injection. <i>Proceedings of SPIE</i> , 2014, , .	0.8	2
29	Closed loop microfluidic platform based on domain wall magnetic conduits: a novel tool for biology and medicine. <i>Materials Research Society Symposia Proceedings</i> , 2014, 1686, 1.	0.1	0
30	Electric control of magnetism at the Fe/BaTiO ₃ interface. <i>Nature Communications</i> , 2014, 5, 3404.	12.8	179
31	Structural comparison between MgO/Fe(001) and MgO/Fe(001)–p(1 Å–1)O interfaces for magnetic tunneling junctions: An Auger electron diffraction study. <i>Applied Surface Science</i> , 2014, 305, 167-172.	6.1	3
32	Two dimensional growth of ultrathin Fe films on BaTiO ₃ with sharp chemical interface. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	9
33	Towards the impedimetric tracking of single magnetically trailed microparticles. , 2014, , .		2
34	Bias-controlled ultrafast demagnetization in magnetic tunnel junctions. <i>Physical Review B</i> , 2014, 89, .	3.2	12
35	Magneto-optical investigation of Fe/CoO/Fe(001) trilayers. , 2014, , .		0
36	Direct observation of a highly spin-polarized organic spinterface at room temperature. <i>Scientific Reports</i> , 2013, 3, 1272.	3.3	118

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37	Conditions for efficient on-chip magnetic bead detection via magnetoresistive sensors. <i>Biosensors and Bioelectronics</i> , 2013, 47, 213-217.		10.1	28
38	Epitaxial Fe/MgO/Ge spin-photodiodes for integrated detection of light helicity at room temperature. <i>Journal of Applied Physics</i> , 2012, 111, 07C312.		2.5	6
39	Spin-photodiodes for SiGe spin-optoelectronics. <i>Proceedings of SPIE</i> , 2012, ,.		0.8	3
40	Growth of ultrathin epitaxial Fe/MgO spin injector on (0, 0, 1) (Ga, Mn)As. <i>Nanotechnology</i> , 2012, 23, 465202.		2.6	8
41	Fe nanoparticles on ZnSe: Reversible temperature dependence of the surface barrier potential. <i>Physical Review B</i> , 2012, 85, .		3.2	0
42	Ge-Based Spin-Photodiodes for Room-Temperature Integrated Detection of Photon Helicity. <i>Advanced Materials</i> , 2012, 24, 3037-3041.		21.0	40
43	Effect of Au proximity on the LSMO surface: An ab initio study. <i>Journal of Magnetism and Magnetic Materials</i> , 2012, 324, 2659-2663.		2.3	5
44	On-chip measurement of the Brownian relaxation frequency of magnetic beads using magnetic tunneling junctions. <i>Applied Physics Letters</i> , 2011, 98, 073702.		3.3	19
45	Sharp Fe/MgO/Ge(001) epitaxial heterostructures for tunneling junctions. <i>Journal of Applied Physics</i> , 2011, 109, .		2.5	19
46	Chemical and electronic properties of Fe/MgO/Ge heterostructures for spin electronics. <i>Journal of Physics: Conference Series</i> , 2011, 292, 012010.		0.4	11
47	Aberration corrected scanning transmission electron microscopy and electron energy loss spectroscopy studies of epitaxial Fe/MgO/(001)Ge heterostructures. <i>Journal of Materials Science</i> , 2011, 46, 4157-4161.		3.7	2
48	Epitaxial growth of Fe/MgO/Ge(001) heterostructures. <i>Microelectronic Engineering</i> , 2011, 88, 530-533.		2.4	10
49	Bandstructure line-up of epitaxial Fe/MgO/Ge heterostructures: A combined x-ray photoelectron spectroscopy and transport study. <i>Applied Physics Letters</i> , 2011, 98, 032104.		3.3	22
50	Band alignment at Cu ₂ O/La _{0.7} Sr _{0.3} MnO ₃ interface: A combined experimental-theoretical determination. <i>Applied Physics Letters</i> , 2010, 97, .		3.3	11
51	On-Chip Manipulation of Protein-Coated Magnetic Beads via Domain-Wall Conduits. <i>Advanced Materials</i> , 2010, 22, 2706-2710.		21.0	131
52	Activation of Zr-Co-rare earth getter films: An XPS study. <i>Applied Surface Science</i> , 2010, 256, 6291-6296.		6.1	42
53	Influence of Magnetic Fields on Autocatalytic Deposition of Co-Fe Thin Films. <i>Journal of the Electrochemical Society</i> , 2010, 157, D437.		2.9	4
54	<math display="block">\langle mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block">\displaystyle \frac{3}{2} \ranglea nonmagnetic semiconductor for spin transport in crystalline oxide electronics. <i>Physical Review B</i> , 2010, 81, .		3.2	

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55	Near-room-temperature control of magnetization in field effect devices based on La _{0.67} Sr _{0.33} MnO ₃ thin films. <i>Journal of Applied Physics</i> , 2010, 108, 113906.	2.5	27
56	Detection of a single synthetic antiferromagnetic nanoparticle with an AMR nanostructure: Comparison between simulations and experiments. <i>Journal of Physics: Conference Series</i> , 2010, 200, 122001.	0.4	5
57	Magnetic nanostructures for the manipulation of individual nanoscale particles in liquid environments (invited). <i>Journal of Applied Physics</i> , 2010, 107, .	2.5	25
58	Effects of Au nanoparticles on the magnetic and transport properties of $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$ layers. <i>Physical Review B</i> , 2010, 81, .	3.2	39
59	Frustration-driven micromagnetic structure in Fe/CoO/Fe thin film layered systems. <i>Physical Review B</i> , 2009, 79, .	3.2	16
60	MgO/Fe(001) and $\text{MgO}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$ for magnetic tu. <i>Physical Review B</i> , 2009, 80, .	3.2	20
61	Manipulation at the nano-scale of single magnetic particles via domain walls conduits. , 2009, .	0	
62	Photon- and electron-induced surface voltage in electron spectroscopies on ZnSe(001). <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2009, 173, 84-87.	1.7	2
63	Nanosized corners for trapping and detecting magnetic nanoparticles. <i>Nanotechnology</i> , 2009, 20, 385501.	2.6	59
64	Impact of O ₂ exposure on surface crystallinity of clean and Ba terminated Ge(100) surfaces. <i>Applied Surface Science</i> , 2008, 254, 2720-2724.	6.1	4
65	Epitaxial growth and characterization of CoO/Fe(001) thin film layered structures. <i>Thin Solid Films</i> , 2008, 516, 7519-7524.	1.8	29
66	Domain wall displacement in Py square ring for single nanometric magnetic bead detection. <i>Applied Physics Letters</i> , 2008, 93, 203502.	3.3	63
67	Surface electronic and magnetic properties of $\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$. <i>Physical Review B</i> , 2008, 78, .	3.2	17
68	X-ray photoemission study of the Au \bullet La _{0.67} Sr _{0.33} MnO ₃ interface formation. <i>Journal of Applied Physics</i> , 2008, 103, .	2.5	9
69	Influence of Au electrodes on the properties of SrTiO ₃ /La _{0.67} Sr _{0.33} MnO ₃ /Au magnetic tunnel junctions studied by aberration-corrected STEM-EELS. <i>Microscopy and Microanalysis</i> , 2008, 14, 1392-1393.	0.4	0
70	Proximity effects induced by a gold layer on La _{0.67} Sr _{0.33} MnO ₃ thin films. <i>Applied Physics Letters</i> , 2007, 91, .	3.3	18
71	Oxygen vacancies and induced changes in the electronic and magnetic structures of La _{0.66} Sr _{0.33} MnO ₃ : A combined ab initio and photoemission study. <i>Physical Review B</i> , 2007, 75, .	3.2	78
72	Temperature-dependent magnetism of Fe thin films on ZnSe(001). <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 316, e545-e548.	2.3	2

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73	Decrease of the Curie temperature in La _{0.67} Sr _{0.33} MnO ₃ thin films induced by Au capping. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2007, 144, 93-96.	3.5	9
74	Ultrathin Fe films on single crystal and virtual Ge(001) substrates: Towards the control of magnetic properties. <i>Applied Surface Science</i> , 2006, 252, 5304-5307.	6.1	2
75	Effect of Ba termination layer on chemical and electrical passivation of Ge (100) surfaces. <i>Materials Science in Semiconductor Processing</i> , 2006, 9, 701-705.	4.0	8
76	Epitaxial La _{2/3} Sr _{1/3} MnO ₃ thin films with unconventional magnetic and electric properties near the Curie temperature. <i>Thin Solid Films</i> , 2006, 515, 496-499.	1.8	5
77	Uniaxial magnetic anisotropies in Fe films on single crystal and virtual Ge(001) substrates studied with spin polarized inverse photoemission and MOKE. <i>Physical Review B</i> , 2006, 74, .	3.2	8
78	Electroless Deposition of Ultra-Thin Co-Fe Films. <i>ECS Transactions</i> , 2006, 3, 81-90.	0.5	1
79	Onset of ferromagnetism in ultrathin Fe films on semiconductors. <i>Solid State Communications</i> , 2005, 135, 158-161.	1.9	8
80	Epitaxial growth and characterization of layered magnetic nanostructures. <i>Applied Surface Science</i> , 2005, 252, 1754-1764.	6.1	39
81	Enhanced magnetic moment and conductive behavior in NiFe ₂ O ₄ spinel ultrathin films. <i>Physical Review B</i> , 2005, 71, .	3.2	138
82	Epitaxial La ₂ •Sr ₁ •MnO ₃ thin films with metallic behavior above the Curie temperature. <i>Applied Physics Letters</i> , 2005, 86, 252502.	3.3	23
83	Fe thin films grown on single-crystal and virtual Ge(001) substrates. <i>Journal of Applied Physics</i> , 2005, 97, 093906.	2.5	12
84	Electronic, magnetic, and structural properties of the Fe/ZnSe interface. <i>Physical Review B</i> , 2004, 69, .	3.2	19
85	High efficiency apparatus for spin polarized inverse photoemission. <i>Review of Scientific Instruments</i> , 2004, 75, 2387-2392.	1.3	20
86	Electronic and magnetic properties of the Fe/ZnSe() interface. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, 1907-1908.	2.3	2
87	Genetic algorithms and Monte Carlo simulation for optimal plant design. <i>Reliability Engineering and System Safety</i> , 2000, 68, 29-38.	8.9	79