Carlo Paolo Sasso

List of Publications by Year
in descending order

84 papers	1,629 citations	394421 19 h-index	315739 38 g-index
85 all docs	85 docs citations	85 times ranked	1270 citing authors

#	Article	IF	Citations
1	Neutron interference from a split-crystal interferometer. Journal of Applied Crystallography, 2022, 55, 870-875.	4.5	5
2	Measurement of miscut angles in the determination of Si lattice parameters. Metrologia, 2021, 58, 034004.	1.2	3
3	Defocused travelling fringes in a scanning triple-Laue X-ray interferometry setup. Journal of Applied Crystallography, 2021, 54, 1403-1408.	4.5	1
4	The Measurement of the Silicon Lattice Parameter and the Count of Atoms to Realise the Kilogram. Mapan - Journal of Metrology Society of India, 2020, 35, 511-519.	1.5	12
5	X-ray phase-contrast topography to measure the surface stress and bulk strain in a silicon crystal. Journal of Applied Crystallography, 2020, 53, 1195-1202.	4.5	3
6	Corrections of the travelling-fringe period for the interference of aberrated beams. Metrologia, 2019, 56, 055004.	1.2	3
7	The LISA interferometer: impact of stray light on the phase of the heterodyne signal. Classical and Quantum Gravity, 2019, 36, 075015.	4.0	6
8	Bayesian model selection applied to linear regressions with weighted data. Metrologia, 2019, 56, 025003.	1.2	2
9	Telescope jitters and phase noise in the LISA interferometer. Optics Express, 2019, 27, 16855.	3.4	18
10	Fake tilts in differential wavefront sensing. Optics Express, 2019, 27, 34505.	3.4	1
11	Coupling of wavefront errors and jitter in the LISA interferometer: far-field propagation. Classical and Quantum Gravity, 2018, 35, 185013.	4.0	27
12	Thermal Gradients in the Si Lattice Parameter Measurement. , 2018, , .		0
13	Accuracy of Temperature Measurements of the Avogadro-Project. , 2018, , .		2
14	Coupling of wavefront errors and pointing jitter in the LISA interferometer: misalignment of the interfering wavefronts. Classical and Quantum Gravity, 2018, 35, 245002.	4.0	16
15	Forward scattering in two-beam laser interferometry. Metrologia, 2018, 55, 222-228.	1.2	3
16	Wavefront errors in a two-beam interferometer. Metrologia, 2018, 55, 535-540.	1.2	5
17	A new analysis for diffraction correction in optical interferometry. Metrologia, 2017, 54, 559-565.	1.2	11
18	A new²⁸Si single crystal: counting the atoms for the new kilogram definition. Metrologia, 2017, 54, 693-715.	1.2	92

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19	Quantification of the Void Volume in Single-Crystal Silicon. Analytical Chemistry, 2016, 88, 11678-11683.	6.5	5
20	A two thickness interferometer for lattice strain investigations. , 2016, , .		1
21	Diffraction effects in length measurements by laser interferometry. Optics Express, 2016, 24, 6522.	3.4	7
22	A More Accurate Measurement of the 28Si Lattice Parameter. Journal of Physical and Chemical Reference Data, 2015, 44, .	4.2	40
23	The Correlation of the NA Measurements by Counting 28Si Atoms. Journal of Physical and Chemical Reference Data, 2015, 44, .	4.2	21
24	Improved measurement results for the Avogadro constant using a²⁸Si-enriched crystal. Metrologia, 2015, 52, 360-375.	1.2	143
25	The watt-balance operation: a continuous model of the coil interaction with the magnetic field. Metrologia, 2014, 51, S65-S71.	1.2	5
26	Entropy change at magnetic phase transitions of the first order and second order. International Journal of Refrigeration, 2014, 37, 257-265.	3.4	15
27	Non-Conventional Techniques for the Study of Phase Transitions in NiTi-Based Alloys. Journal of Materials Engineering and Performance, 2014, 23, 2491-2497.	2.5	4
28	Tunable frequency ferromagnetic resonance of Co nanowire arrays. , 2013, , .		0
29	A finite element analysis of surface-stress effects on measurement of the Si lattice parameter. Metrologia, 2013, 50, 243-248.	1.2	13
30	The watt-balance operation: magnetic force and induced electric potential on a conductor in a magnetic field. Metrologia, 2013, 50, 164-169.	1.2	6
31	Recent Developments in Magnetic Measurements: from Technical Method to Physical Knowledge. Journal of Magnetics, 2013, 18, 331-338.	0.4	0
32	Direct calorimetric measurements of isothermal entropy change on single crystal W-type hexaferrites at the spin reorientation transition. Journal of Applied Physics, 2012, 111, 07A905.	2.5	11
33	Evaluation of the reliability of the measurement of key magnetocaloric properties: A round robin study of La(Fe,Si,Mn)HÎ´ conducted by the SSEEC consortium of European laboratories. International Journal of Refrigeration, 2012, 35, 1528-1536.	3.4	54
34	Hysteresis and magnetocaloric effect at the magnetostructural phase transition of Ni-Mn-Ga and Ni-Mn-Co-Sn Heusler alloys. Physical Review B, 2012, 85, .	3.2	119
35	Spin reorientation transition: phase diagrams and entropy change. Materials Research Society Symposia Proceedings, 2011, 1310, 1.	0.1	0
36	Magnetic and structural characterization of nanosized BaCoxZn2â^'xFe16O27hexaferrite in the vicinity of spin reorientation transition. Journal of Physics: Conference Series, 2011, 303, 012045.	0.4	4

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37	Enhanced field induced martensitic phase transition and magnetocaloric effect in Ni55Mn20Ga25 metallic foams. Intermetallics, 2011, 19, 952-956.	3.9	19
38	Er2Fe14B single crystal as magnetic refrigerant at the spin reorientation transition. Journal of Applied Physics, 2011, 109, .	2.5	17
39	Magnetization Properties of FeTb Thin Films. IEEE Transactions on Magnetics, 2010, 46, 487-490.	2.1	6
40	Entropy change and entropy production in barium ferrite. Journal of Magnetism and Magnetic Materials, 2010, 322, 1585-1588.	2.3	3
41	<xmml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:mn>4</mml:mn><mml:mi>f</mml:mi></mml:mrow></mml:math>charge-density deformation and magnetostrictive bond strain observed in amorphous<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>TbFe</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:	3.2	14
42	Transformation of twinned<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Ni</mml:mtext></mml:mrow><mml:mrow><mml:mn>2.0</mml: in a rotating magnetic field: Theory and ex. Physical Review B, 2010, 81, .	3.2	12
43	A Peltier cells differential calorimeter with kinetic correction for the measurement of cp(H,T) and Î”s(H,T) of magnetocaloric materials. Review of Scientific Instruments, 2010, 81, 113904.	1.3	47
44	Thermomagnetic properties of single crystal Ni54Fe19Ga27 Heusler alloys. Journal of Applied Physics, 2009, 105, 07A937.	2.5	6
45	Instabilities in adiabatic transformations of first-order phase transitions in a model with bistable units. Physica B: Condensed Matter, 2008, 403, 312-315.	2.7	3
46	Hall Imaging of the History Dependence of the Magnetocaloric Effect in Gd$_{5}$Si$_{2.09}$Ge$_{1.91}$. IEEE Transactions on Magnetics, 2008, 44, 3233-3236.	2.1	5
47	Direct measurements of the entropy change and its history dependence in Niâ€“Mnâ€“Ga alloys. Journal of Applied Physics, 2008, 103, .	2.5	22
48	A Peltier cell calorimeter for the direct measurement of the isothermal entropy change in magnetic materials. Review of Scientific Instruments, 2008, 79, 063907.	1.3	31
49	Modeling and Experimental Analysis of Magnetostrictive Devices: From the Material Characterization to Their Dynamic Behavior. IEEE Transactions on Magnetics, 2008, 44, 3009-3012.	2.1	19
50	Magnetic Field, Stress and Temperature Control of Phase Transitions in Ni$_{55}$Mn$_{20}$Ga$_{25}$ Shape Memory Alloy. IEEE Transactions on Magnetics, 2008, 44, 3021-3024.	2.1	0
51	Modeling Hysteresis of First-Order Magneto-Structural Phase Transformations. IEEE Transactions on Magnetics, 2008, 44, 3177-3180.	2.1	15
52	Field-driven structural phase transition and sign-switching magnetocaloric effect in Niâ€“Mnâ€“Sn. Applied Physics Letters, 2007, 91, 131904.	3.3	23
53	Role of pressure and magnetic field in the magnetostructural phase transition of GdSiGe alloys. Journal of Magnetism and Magnetic Materials, 2007, 316, 361-363.	2.3	5
54	Thermodynamic aspects of first-order phase transformations with hysteresis in magnetic materials. Journal of Magnetism and Magnetic Materials, 2007, 316, 262-268.	2.3	39

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55	An Isothermal Peltier Cell Calorimeter For Measuring the Magnetocaloric Effect. IEEE Transactions on Magnetics, 2007, 43, 2764-2766.	2.1	13
56	Effect of material hysteresis in magnetic refrigeration cycles. International Journal of Refrigeration, 2006, 29, 1358-1365.	3.4	30
57	Piezomagnetic coefficients of polymer bonded Co-ferrites. Sensors and Actuators A: Physical, 2006, 129, 159-162.	4.1	8
58	Carnot cycle for magnetic materials: The role of hysteresis. Physica B: Condensed Matter, 2006, 372, 9-12.	2.7	11
59	Thermodynamic aspects of magnetic-field-driven phase transformations in Gd-Si-Ge alloys. Journal of Applied Physics, 2006, 99, 08K907.	2.5	14
60	Nanometer scale correlation of magnetic and structural features in Ni2MnGa. , 2006, , .		0
61	Magnetostructural transitions and adiabatic temperature variation in polycrystal and single-crystal Ni2MnGa alloys. Journal of Applied Physics, 2006, 99, 08K905.	2.5	13
62	Theoretical approach to the magnetocaloric effect with hysteresis. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 654-657.	2.3	29
63	Barkhausen jumps and magnetic viscosity in NdFeB magnets. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1184-1187.	2.3	4
64	Magnetomechanical properties of nanogranular Coâ€“Feâ€“Alâ€“O films. Journal of Applied Physics, 2005, 97, 10N306.	2.5	7
65	Entropy and entropy production in magnetic systems with hysteresis. Journal of Applied Physics, 2005, 97, 10E513.	2.5	6
66	Magnetostructural transition and magnetocaloric effect inNi55Mn20Ga25single crystals. Physical Review B, 2005, 72, .	3.2	246
67	Magnetic entropy in Ni2MnGa single crystals. Journal of Applied Physics, 2004, 95, 6918-6920.	2.5	20
68	Barkhausen noise in nucleation-type hard magnetic materials. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E539-E541.	2.3	8
69	Static and dynamic magnetostrictive properties of polymer-bonded Feâ€“Co based alloy composites. Physica Status Solidi (B): Basic Research, 2004, 241, 1740-1743.	1.5	3
70	Temperature dependence of mechanical and magnetic curves in Ni/sub 2/MnGa single crystals. IEEE Transactions on Magnetics, 2003, 39, 3399-3401.	2.1	4
71	Analysis of mechanical and magnetic instabilities in Ni-Mn-Ga single crystals. Journal of Applied Physics, 2003, 93, 8641-8643.	2.5	17
72	Temperature dependence of magnetically induced strain in single crystal samples of Niâ€“Mnâ€“Ga. Journal of Applied Physics, 2002, 91, 7815.	2.5	26

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73	Magnetic and mechanical properties of Ni-Mn-Ga single crystals. IEEE Transactions on Magnetics, 2002, 38, 2847-2849.	2.1	11
74	Structural, magnetic and anisotropic properties of Ni2MnGa melt-spun ribbons. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1421-1424.	2.3	56
75	Stress sensing with Co based ferrite composites. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1460-1463.	2.3	12
76	Modeling of interactions in amorphous and nanocrystalline alloys with induced anisotropy. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1093-1096.	2.3	2
77	Analysis of stress-dependent hysteresis in soft amorphous materials [Fe/sub 64/Co/sub 21/B/sub 15/ ribbons]. IEEE Transactions on Magnetics, 2001, 37, 2281-2283.	2.1	4
78	Effect of texturing on the magnetically activated properties of polycrystalline NiMnGa alloys. European Physical Journal Special Topics, 2001, 11, Pr8-305-Pr8-309.	0.2	4
79	Field and temperature induced giant strain in single crystal Ni-Mn-Ga. IEEE Transactions on Magnetics, 2001, 37, 2669-2671.	2.1	9
80	Power losses and magnetization process in Feâ€“Si non-oriented steels under tensile and compressive stress. Journal of Magnetism and Magnetic Materials, 2000, 215-216, 124-126.	2.3	77
81	Magnetic properties of TbFe thin films under applied stress. Journal of Magnetism and Magnetic Materials, 2000, 215-216, 769-771.	2.3	8
82	NiMnGa polycrystalline magnetically activated shape memory alloys. IEEE Transactions on Magnetics, 2000, 36, 3263-3265.	2.1	26
83	Vector model for the study of hysteresis under stress. Journal of Applied Physics, 2000, 87, 4774-4776.	2.5	6
84	Analysis and optimization of the magnetomechanical properties of Terfenol-D composites at audio frequencies. IEEE Transactions on Magnetics, 1999, 35, 3829-3831.	2.1	9