

Carlo Paolo Sasso

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5131777/publications.pdf>

Version: 2024-02-01

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	Magnetostructural transition and magnetocaloric effect in Ni ₅₅ Mn ₂₀ Ga ₂₅ single crystals. <i>Physical Review B</i> , 2005, 72, .	3.2	246
2	Improved measurement results for the Avogadro constant using a ²⁸ Si-enriched crystal. <i>Metrologia</i> , 2015, 52, 360-375.	1.2	143
3	Hysteresis and magnetocaloric effect at the magnetostructural phase transition of Ni-Mn-Ga and Ni-Mn-Co-Sn Heusler alloys. <i>Physical Review B</i> , 2012, 85, .	3.2	119
4	A new ²⁸ Si single crystal: counting the atoms for the new kilogram definition. <i>Metrologia</i> , 2017, 54, 693-715.	1.2	92
5	Power losses and magnetization process in Fe- ⁶⁰ Si non-oriented steels under tensile and compressive stress. <i>Journal of Magnetism and Magnetic Materials</i> , 2000, 215-216, 124-126.	2.3	77
6	Structural, magnetic and anisotropic properties of Ni ₂ MnGa melt-spun ribbons. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 242-245, 1421-1424.	2.3	56
7	Evaluation of the reliability of the measurement of key magnetocaloric properties: A round robin study of La(Fe,Si,Mn)H _{1.7} conducted by the SSEC consortium of European laboratories. <i>International Journal of Refrigeration</i> , 2012, 35, 1528-1536.	3.4	54
8	A Peltier cells differential calorimeter with kinetic correction for the measurement of $c_p(H,T)$ and $\rho_s(H,T)$ of magnetocaloric materials. <i>Review of Scientific Instruments</i> , 2010, 81, 113904.	1.3	47
9	A More Accurate Measurement of the ²⁸ Si Lattice Parameter. <i>Journal of Physical and Chemical Reference Data</i> , 2015, 44, .	4.2	40
10	Thermodynamic aspects of first-order phase transformations with hysteresis in magnetic materials. <i>Journal of Magnetism and Magnetic Materials</i> , 2007, 316, 262-268.	2.3	39
11	A Peltier cell calorimeter for the direct measurement of the isothermal entropy change in magnetic materials. <i>Review of Scientific Instruments</i> , 2008, 79, 063907.	1.3	31
12	Effect of material hysteresis in magnetic refrigeration cycles. <i>International Journal of Refrigeration</i> , 2006, 29, 1358-1365.	3.4	30
13	Theoretical approach to the magnetocaloric effect with hysteresis. <i>Journal of Magnetism and Magnetic Materials</i> , 2005, 290-291, 654-657.	2.3	29
14	Coupling of wavefront errors and jitter in the LISA interferometer: far-field propagation. <i>Classical and Quantum Gravity</i> , 2018, 35, 185013.	4.0	27
15	NiMnGa polycrystalline magnetically activated shape memory alloys. <i>IEEE Transactions on Magnetics</i> , 2000, 36, 3263-3265.	2.1	26
16	Temperature dependence of magnetically induced strain in single crystal samples of Ni- ⁶⁰ Mn- ⁶⁰ Ga. <i>Journal of Applied Physics</i> , 2002, 91, 7815.	2.5	26
17	Field-driven structural phase transition and sign-switching magnetocaloric effect in Ni- ⁶⁰ Mn- ⁶⁰ Sn. <i>Applied Physics Letters</i> , 2007, 91, 131904.	3.3	23
18	Direct measurements of the entropy change and its history dependence in Ni- ⁶⁰ Mn- ⁶⁰ Ga alloys. <i>Journal of Applied Physics</i> , 2008, 103, .	2.5	22

#	ARTICLE	IF	CITATIONS
19	The Correlation of the $\langle N \rangle_A$ Measurements by Counting ^{28}Si Atoms. Journal of Physical and Chemical Reference Data, 2015, 44, .	4.2	21
20	Magnetic entropy in Ni_2MnGa single crystals. Journal of Applied Physics, 2004, 95, 6918-6920.	2.5	20
21	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
22	Enhanced field induced martensitic phase transition and magnetocaloric effect in $\text{Ni}_{55}\text{Mn}_{20}\text{Ga}_{25}$ metallic foams. Intermetallics, 2011, 19, 952-956.	3.9	19
23	Telescope jitters and phase noise in the LISA interferometer. Optics Express, 2019, 27, 16855.	3.4	18
24	Analysis of mechanical and magnetic instabilities in Ni-Mn-Ga single crystals. Journal of Applied Physics, 2003, 93, 8641-8643.	2.5	17
25	$\text{Er}_2\text{Fe}_{14}\text{B}$ single crystal as magnetic refrigerant at the spin reorientation transition. Journal of Applied Physics, 2011, 109, .	2.5	17
26	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
27	Modeling Hysteresis of First-Order Magneto-Structural Phase Transformations. IEEE Transactions on Magnetics, 2008, 44, 3177-3180.	2.1	15
28	Entropy change at magnetic phase transitions of the first order and second order. International Journal of Refrigeration, 2014, 37, 257-265.	3.4	15
29	Thermodynamic aspects of magnetic-field-driven phase transformations in Gd-Si-Ge alloys. Journal of Applied Physics, 2006, 99, 08K907.	2.5	14
30	$\langle \text{charge-density deformation and magnetostrictive bond strain observed in amorphous} \rangle$ $\langle \text{charge-density deformation and magnetostrictive bond strain observed in amorphous} \rangle$ $\langle \text{charge-density deformation and magnetostrictive bond strain observed in amorphous} \rangle$	3.2	14
31	x-ray absorption spectroscopy. Physical Review B, 2010, 81, . Magnetostructural transitions and adiabatic temperature variation in polycrystal and single-crystal Ni_2MnGa alloys. Journal of Applied Physics, 2006, 99, 08K905.	2.5	13
32	An Isothermal Peltier Cell Calorimeter For Measuring the Magnetocaloric Effect. IEEE Transactions on Magnetics, 2007, 43, 2764-2766.	2.1	13
33	Transformation of twinned $\langle \text{charge-density deformation and magnetostrictive bond strain observed in amorphous} \rangle$ $\langle \text{charge-density deformation and magnetostrictive bond strain observed in amorphous} \rangle$ $\langle \text{charge-density deformation and magnetostrictive bond strain observed in amorphous} \rangle$ in a rotating magnetic field: Theory and ex. Physical Review B, 2010, 81, .	3.2	13
34	A finite element analysis of surface-stress effects on measurement of the Si lattice parameter. Metrologia, 2013, 50, 243-248.	1.2	13
35	Stress sensing with Co based ferrite composites. Journal of Magnetism and Magnetic Materials, 2002, 242-245, 1460-1463.	2.3	12
36	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

#	ARTICLE	IF	CITATIONS
37	Magnetic and mechanical properties of Ni-Mn-Ga single crystals. IEEE Transactions on Magnetics, 2002, 38, 2847-2849.	2.1	11
38	Carnot cycle for magnetic materials: The role of hysteresis. Physica B: Condensed Matter, 2006, 372, 9-12.	2.7	11
39	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
40	A new analysis for diffraction correction in optical interferometry. Metrologia, 2017, 54, 559-565.	1.2	11
41	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
42	Field and temperature induced giant strain in single crystal Ni-Mn-Ga. IEEE Transactions on Magnetics, 2001, 37, 2669-2671.	2.1	9
43	Magnetic properties of TbFe thin films under applied stress. Journal of Magnetism and Magnetic Materials, 2000, 215-216, 769-771.	2.3	8
44	Barkhausen noise in nucleation-type hard magnetic materials. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E539-E541.	2.3	8
45	Piezomagnetic coefficients of polymer bonded Co-ferrites. Sensors and Actuators A: Physical, 2006, 129, 159-162.	4.1	8
46	Magnetomechanical properties of nanogranular Co-Fe-Al-O films. Journal of Applied Physics, 2005, 97, 10N306.	2.5	7
47	Diffraction effects in length measurements by laser interferometry. Optics Express, 2016, 24, 6522.	3.4	7
48	Vector model for the study of hysteresis under stress. Journal of Applied Physics, 2000, 87, 4774-4776.	2.5	6
49	Entropy and entropy production in magnetic systems with hysteresis. Journal of Applied Physics, 2005, 97, 10E513.	2.5	6
50	Thermomagnetic properties of single crystal Ni ₅₄ Fe ₁₉ Ga ₂₇ Heusler alloys. Journal of Applied Physics, 2009, 105, 07A937.	2.5	6
51	Magnetization Properties of FeTb Thin Films. IEEE Transactions on Magnetics, 2010, 46, 487-490.	2.1	6
52	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
53	The LISA interferometer: impact of stray light on the phase of the heterodyne signal. Classical and Quantum Gravity, 2019, 36, 075015.	4.0	6
54	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

#	ARTICLE	IF	CITATIONS
55	Hall Imaging of the History Dependence of the Magnetocaloric Effect in $Gd_{0.5}Si_{2.09}Ge_{1.91}$. IEEE Transactions on Magnetics, 2008, 44, 3233-3236.	2.1	5
56	The watt-balance operation: a continuous model of the coil interaction with the magnetic field. Metrologia, 2014, 51, S65-S71.	1.2	5
57	Quantification of the Void Volume in Single-Crystal Silicon. Analytical Chemistry, 2016, 88, 11678-11683.	6.5	5
58	Wavefront errors in a two-beam interferometer. Metrologia, 2018, 55, 535-540.	1.2	5
59	Neutron interference from a split-crystal interferometer. Journal of Applied Crystallography, 2022, 55, 870-875.	4.5	5
60	Analysis of stress-dependent hysteresis in soft amorphous materials [$Fe_{64}Co_{21}B_{15}$ ribbons]. IEEE Transactions on Magnetics, 2001, 37, 2281-2283.	2.1	4
61	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
62	Temperature dependence of mechanical and magnetic curves in Ni_2MnGa single crystals. IEEE Transactions on Magnetics, 2003, 39, 3399-3401.	2.1	4
63	Barkhausen jumps and magnetic viscosity in NdFeB magnets. Journal of Magnetism and Magnetic Materials, 2005, 290-291, 1184-1187.	2.3	4
64	Magnetic and structural characterization of nanosized $BaCo_xZn_{2-x}Fe_{16}O_{27}$ hexaferrite in the vicinity of spin reorientation transition. Journal of Physics: Conference Series, 2011, 303, 012045.	0.4	4
65	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
66	Static and dynamic magnetostrictive properties of polymer-bonded Fe-Co based alloy composites. Physica Status Solidi (B): Basic Research, 2004, 241, 1740-1743.	1.5	3
67	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
68	Entropy change and entropy production in barium ferrite. Journal of Magnetism and Magnetic Materials, 2010, 322, 1585-1588.	2.3	3
69	Forward scattering in two-beam laser interferometry. Metrologia, 2018, 55, 222-228.	1.2	3
70	Corrections of the travelling-fringe period for the interference of aberrated beams. Metrologia, 2019, 56, 055004.	1.2	3
71	Measurement of miscut angles in the determination of Si lattice parameters. Metrologia, 2021, 58, 034004.	1.2	3
72	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

#	ARTICLE	IF	CITATIONS
73	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
74	Accuracy of Temperature Measurements of the Avogadro-Project. , 2018, , .		2
75	Bayesian model selection applied to linear regressions with weighted data. Metrologia, 2019, 56, 025003.	1.2	2
76	A two thickness interferometer for lattice strain investigations. , 2016, , .		1
77	Defocused travelling fringes in a scanning triple-Laue X-ray interferometry setup. Journal of Applied Crystallography, 2021, 54, 1403-1408.	4.5	1
78	Fake tilts in differential wavefront sensing. Optics Express, 2019, 27, 34505.	3.4	1
79	Nanometer scale correlation of magnetic and structural features in Ni ₂ MnGa. , 2006, , .		0
80	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
81	Spin reorientation transition: phase diagrams and entropy change. Materials Research Society Symposia Proceedings, 2011, 1310, 1.	0.1	0
82	Tunable frequency ferromagnetic resonance of Co nanowire arrays. , 2013, , .		0
83	Thermal Gradients in the Si Lattice Parameter Measurement. , 2018, , .		0
84	Recent Developments in Magnetic Measurements: from Technical Method to Physical Knowledge. Journal of Magnetism, 2013, 18, 331-338.	0.4	0