

Thomas A Lograsso

List of Publications by Year in descending order

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104
papers

4,259
citations

147801

31
h-index

114465

63
g-index

105
all docs

105
docs citations

105
times ranked

3425
citing authors

#	ARTICLE	IF	CITATIONS
1	6% magnetic-field-induced strain by twin-boundary motion in ferromagnetic Ni ^{1-x} Mn ^x Ga. Applied Physics Letters, 2000, 77, 886-888.	3.3	1,057
2	Extraordinary magnetoelasticity and lattice softening in bcc Fe-Ga alloys. Journal of Applied Physics, 2003, 93, 8621-8623.	2.5	505
3	Magnetostrictive Properties of Galfenol Alloys Under Compressive Stress. Materials Transactions, 2002, 43, 881-886.	1.2	199
4	Magnetostriction of binary and ternary Fe ^{1-x} Ga ^x alloys. Journal of Materials Science, 2007, 42, 9582-9594.	3.7	140
5	Tetragonal magnetostriction and magnetoelastic coupling in Fe-Al, Fe-Ga, Fe-Ge, Fe-Si, Fe-Ga-Al, and Fe-Ga-Ge alloys. Journal of Applied Physics, 2012, 111, .	2.5	100
6	Magnetic field dependence of galfenol elastic properties. Journal of Applied Physics, 2005, 97, 10M315.	2.5	93
7	Flux growth at ambient pressure of millimeter-sized single crystals of LaFeAsO, LaFeAsO _{1-x} F _x , and LaFe _{1-x} CoxAsO. Applied Physics Letters, 2009, 95, .	3.3	81
8	Magnetic field dependence of the maximum magnetic entropy change. Physical Review B, 2011, 83, .	3.2	81
9	Magnetostrictive and piezoelectric behavior of Fe ^{1-x} Ga ^x Pb(Zr,Ti)O ₃ laminates. Journal of Applied Physics, 2005, 97, 103902.	2.5	74
10	Fe ^{1-x} Ga ^x Pb(Mg _{1-x} Nb _{2-x})O ₃ PbTiO ₃ magnetoelectric laminate composites. Applied Physics Letters, 2005, 87, 222504.	3.3	72
11	Magnetostriction of ternary Fe ^{1-x} Ga ^x X (X=C,V,Cr,Mn,Co,Rh) alloys. Journal of Applied Physics, 2007, 101, 09C507.	2.5	70
12	Hydrostatic pressure control of the magnetostructural phase transition in Gd ₅ Si ₂ Ge ₂ single crystals. Physical Review B, 2005, 72, .	3.2	63
13	Energy gap evolution across the superconductivity dome in single crystals of (Ba _{1-x} Tl _x) ₂ ETQq ₁ 1 _{0.784314} rgBT/Overlock 10 Tf 50 237 Td (xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block">10.3	10.3	54
14	Comprehensive scenario for single-crystal growth and doping dependence of resistivity and anisotropic upper critical fields in (Ba _{1-x} Tl _x) ₂ ETQq ₀ 0 ₀ rgBT/Overlock 10 Tf 50 237 Td (xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block">3.2	3.2	52
15	Native defects in tetradymite Bi ₂ Te ₃ . Physical Review B, 2004, 70, 041407. (xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block">http://www.w3.org/1998/Math/Ma	2.5	51
16	Magnetostriction of ternary Fe ^{1-x} Ga ^x X alloys (X=Ni,Mo,Sn,Al). Journal of Applied Physics, 2002, 91, 8225.	2.5	51
17	Temperature dependence of the magnetic anisotropy and magnetostriction of Fe _{100-x} Gax (x=8.6, 16.6.) Tj ETQq ₀ 0 ₀ rgBT/Overlock 10 Tf 50 237 Td (xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block">3.2	3.2	48
18	Phase relationships and structural, magnetic, and thermodynamic properties of alloys in the pseudobinary Er ₅ Si ₄ Er ₅ Ge ₄ system. Physical Review B, 2004, 70, 041407. (xmlns:mml="http://www.w3.org/1998/Math/MathML" display="block">3.2	3.2	48

#	ARTICLE	IF	CITATIONS
19	Reversible spin-flop and irreversible metamagneticlike transitions induced by a magnetic field in the layeredGd5Ge4antiferromagnet. Physical Review B, 2004, 69, .	3.2	47
20	On the growth of icosahedral Alâ€“Pdâ€“Mn quasicrystals from the ternary melt. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1999, 79, 1673-1684.	0.6	43
21	Magnetic properties of single-crystalDyAl2. Physical Review B, 2005, 72, .	3.2	43
22	Upper critical field of $K\text{Fe}_2\text{As}_2$ pressure: A test for the change in the superconducting gap structure. Physical Review B, 2014, 89, .	3.2	43
23	Preparation of large single grains of the quasicrystalline icosahedral Alâ€“Cuâ€“Fe $\overline{1}$ phase. Journal of Materials Research, 1996, 11, 2125-2127.	2.6	40
24	Relation between Ga ordering and magnetostriction of Fe-Ga alloys studied by x-ray diffuse scattering. Physical Review B, 2010, 81, .	3.2	39
25	Real-space observation of quasicrystalline Sn monolayer formed on the fivefold surface of icosahedralAlâ€“Cuâ€“Fequasicrystal. Physical Review B, 2005, 72, .	3.2	37
26	Surface-driven electronic structure in LaFeAsO studied by angle-resolved photoemission spectroscopy. Physical Review B, 2010, 82, .	3.2	37
27	Magnetic domains in magnetostrictive Feâ€“Ga alloys. Applied Physics Letters, 2008, 93, .	3.3	36
28	Electronic structure and lattice dynamics of the magnetic shape-memory alloy Co_2MnSi . Physical Review B, 2010, 82, and superlattice misfit strain of Co_2MnSi	3.2	36
29	Electronic structure and lattice dynamics of the magnetic shape-memory alloy RFeAsO		

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37	Phase selection during directional solidification of peritectic alloys. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2005, 36, 1287-1300.	2.2	27
38	Crossover in the magnetic response of single-crystalline $BaKFe_2$. Physical Review B, 2014, 90, .	2.7	27
39	Gd ₅ (Si,Ge) ₄ thin film displaying large magnetocaloric and strain effects due to magnetostructural transition. Applied Physics Letters, 2015, 106, .	3.3	27
40	Itinerant and Localized Magnetization Dynamics in Antiferromagnetic Ho. Physical Review Letters, 2016, 116, 257202.	7.8	27
41	Giant magnetostriction behavior at the Curie temperature of single crystal Gd ₅ (Si _{0.5} Ge _{0.5}) ₄ . Journal of Applied Physics, 2004, 95, 6945-6947.	2.5	26
42	Spatially-resolved study of the Meissner effect in superconductors using NV-centers-in-diamond optical magnetometry. New Journal of Physics, 2018, 20, 043010.	2.9	26
43	Fermi surface reconstruction in $FeTj$ compound. Physical Review B, 2012, 86, .	3.2	25
44	Surface oxidation of a quasicrystalline $AlCuFe$ alloy: No effect of surface orientation and grain boundaries on the final state. Journal of Materials Research, 1999, 14, 3185-3188.	3.2	25
45	Surface oxidation of a quasicrystalline $AlCuFe$ alloy: No effect of surface orientation and grain boundaries on the final state. Journal of Materials Research, 1999, 14, 3185-3188.	2.6	24
46	Magnetic force microscopy investigation of domain structures in $Fe_{1-x}Ga_x$ single crystals (12 < x < 25). Journal of Applied Physics, 2005, 98, 023904.	2.5	24
47	Hydrostatic and uniaxial pressure dependence of superconducting transition temperature of $KFeAs_2$ single crystals. Physical Review B, 2012, 86, .	3.2	24
48	Magnetostriction of iron-germanium single crystals. Journal of Applied Physics, 2008, 103, .	2.5	23
49	Experimental Study on Viscosity and Phase Segregation of $AlSi$ Powders in Microsemisolid Powder Forming. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2010, 132, .	2.2	22
50	Neutron diffraction studies of the magnetoelastic compounds $Tb_5Si_6Ge_4$ (x=2.2 and 2.5). Physical Review B, 2005, 72, .	3.2	21
51	RHEED and STM studies of the pseudo-tenfold surface of the $Al_{77.5}Pd_{19}Mn_{3.5}$ approximant crystal. Physical Review B, 2005, 71, .	3.2	21
52	Evolution of London penetration depth with scattering in single crystals of $KNaFe_2As_2$. Physical Review B, 2014, 89, .	3.2	20
53	Compositional variation of the phonon dispersion curves of bcc Fe-Ga alloys. Physical Review B, 2005, 72, .	3.2	18
54	Magnetic and structural transitions in $La_{1-x}Mn_x$ crystals. Physical Review B, 2015, 91, .	2.2	18

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55	Formation mechanism of superconducting phase and its three-dimensional architecture in pseudo-single-crystal $K_xFe_2\tilde{y}Se_2$. Physical Review B, 2016, 93, .	3.2	16
56	Quasiperiodic ordering in thick Sn layer on $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mi} \rangle i \langle / \text{mml:mi} \rangle \langle / \text{mml:math} \rangle$ -Al-Pd-Mn: A possible quasicrystalline clathrate. Physical Review Research, 2020, 2, .	3.6	16
57	Large magnetically induced strains in Ni ₅₀ Mn _{28.7} Ga _{21.3} driven with collinear field and stress. Journal of Applied Physics, 2006, 99, 063903.	2.5	15
58	Spin-wave dispersion in magnetostrictive Fe-Ga alloys: Inelastic neutron scattering measurements. Physical Review B, 2007, 75, .	3.2	15
59	Structural studies of Fe _{0.81} Ga _{0.19} by reciprocal space mapping. Applied Physics Letters, 2002, 81, 3185-3187.	3.3	13
60	X-ray diffuse scattering measurements of chemical short-range order and lattice strains in a highly magnetostrictive Fe _{b>0.813Ga_{b>0.187 alloy in an applied magnetic field. Physical Review B, 2012, 85, .}}	3.2	13
61	Electrical resistivity and magnetoresistance of single-crystal $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{display="inline"} \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle Tb \langle / \text{mml:mtext} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 5 \langle / \text{mml:mn} \rangle \langle / \text{mml:msub} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 12 \langle / \text{mml:mn} \rangle \langle / \text{mml:math} \rangle$ Physical Review B, 2009, 80, .	3.2	12
62	Magnetostructural transition in $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{display="inline"} \langle \text{mml:mrow} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mtext} \rangle Gd \langle / \text{mml:mtext} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 5 \langle / \text{mml:mn} \rangle \langle / \text{mml:msub} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 12 \langle / \text{mml:mn} \rangle \langle / \text{mml:math} \rangle$ Physical Review B, 2009, 80, .	3.2	12
63	Flux requirements for the growth of RFeAsO \hat{e} (R=rare \hat{e} ,earth) superconductors. Applied Physics Letters, 2011, 98, .	3.3	12
64	Reversible tuning of the surface state in a pseudobinary Bi ₂ (Te-Se) ₃ topological insulator. Physical Review B, 2012, 86, .	3.2	12
65	Terrace-dependent morphology of thin Sn films deposited on the fivefold surface of the icosahedral Al \hat{e} "Cu \hat{e} "Fe quasicrystal. Philosophical Magazine, 2006, 86, 807-812.	1.6	11
66	Experimental exploration of the origin of magnetostriction in single crystalline iron. Applied Physics Letters, 2010, 97, 072508.	3.3	11
67	High superconducting anisotropy and weak vortex pinning in Co-doped LaFeAsO. Physical Review B, 2012, 86, .	3.2	11
68	In situ high energy x-ray synchrotron diffraction study of the synthesis and stoichiometry of LaFeAsO and LaFeAsO _{1\hat{a}"x} Fy. Journal of Applied Physics, 2009, 105, 123912.	2.5	10
69	Magnetoelasticity of Fe \hat{e} "Si single crystals. Journal of Applied Physics, 2010, 107, 09A911.	2.5	10
70	The occurrence and periodicity of oscillating peritectic microstructures developed during directional solidification. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 1997, 28, 1543-1552.	2.2	9
71	Temperature dependence of the magnetic relaxation peak and magnetic relaxation in $\langle \text{mml:math} \text{xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mrow} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle (\langle / \text{mml:mo} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle T_j \langle / \text{mml:mi} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle T_j \langle / \text{mml:mi} \rangle \langle / \text{mml:mrow} \rangle \langle \text{mml:mn} \rangle 1 \langle / \text{mml:mn} \rangle \langle / \text{mml:math} \rangle$ Journal of Applied Physics, 2018, 97, .	3.2	9
72	Magnetoelastic coupling in Fe _{100\hat{a}"x} Gex single crystals with 4<x<18. Journal of Applied Physics, 2009, 105, 07A932.	2.5	8

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73	Imprinting bulk amorphous alloy at room temperature. Scientific Reports, 2015, 5, 16540.	3.3	8
74	Dependence of the absolute value of the penetration depth in $\text{Ba}_{1-x}\text{K}_x\text{Fe}_2\text{As}_2$. Physical Review B, 2018, 98, .	3.2	8
75	Dielectric resonator method for determining gap symmetry of superconductors through anisotropic nonlinear Meissner effect. Review of Scientific Instruments, 2019, 90, 043901.	1.3	8
76	The Pr-rich portion of the Ni-Pr system. Journal of Phase Equilibria and Diffusion, 2005, 26, 209-214.	1.4	7
77	Thermal expansion and Grüneisen parameters in some PrNiSi compounds. Journal of Applied Physics, 2005, 97, 10M516.	2.5	7
78	Voids and pits on sputter-annealed fivefold terraces of icosahedral AlPdMn quasicrystals. Philosophical Magazine, 2006, 86, 819-824.	1.6	7
79	Anisotropic magnetoelastic coupling in single-crystalline CeFeAsO as seen via high-resolution x-ray diffraction. Physical Review B, 2011, 84, .	3.2	7
80	Anisotropic magnetic deflagration in single crystals of $\text{Gd}_{5-x}\text{Ge}_x$. Physical Review B, 2012, 85, .	3.2	7
81	Magnetism-dependent phonon anomaly in LaFeAsO observed via inelastic x-ray scattering. Physical Review B, 2013, 87, .	3.2	7
82	Chemical Disorder in Topological Insulators: A Route to Magnetism Tolerant Topological Surface States. Nano Letters, 2017, 17, 4047-4054.	9.1	7
83	Terrace-dependent nucleation of small Ag clusters on a five-fold icosahedral quasicrystal surface. Philosophical Magazine, 2007, 87, 2995-3001.	1.6	6
84	Competition between orthorhombic and re-entrant tetragonal phases in underdoped $\text{Ba}_{1-x}\text{K}_x\text{Fe}_2\text{As}_2$ probed by the response to contr. Physical Review B, 2019, 99, .	3.2	6
85	Low-Energy Ion Scattering Measurements from an Al-Pd-Mn Quasicrystal. Materials Research Society Symposia Proceedings, 2000, 643, 1111.	0.1	5
86	Specific heat investigation for line nodes in heavily overdoped $\text{Ba}_{1-x}\text{K}_x\text{Fe}_2\text{As}_2$. Physical Review B, 2015, 91, .	3.2	5
87	Phase Stability of Single Crystalline Co-Ni-Ga Shape Memory Alloy. Materials Research Society Symposia Proceedings, 2003, 785, 781.	0.1	4
88	Magnetic anisotropy and phase transitions in single-crystal $\text{Tb}_5(\text{Si}_2\text{Ge}_1.8)$. Journal of Applied Physics, 2005, 97, 10M313.	2.5	4
89	Solid and liquid thermal expansion and structural observations in the quasicrystalline $\text{Cd}_{84}\text{Yb}_{16}$ compound. Philosophical Magazine Letters, 2005, 85, 151-162.	1.2	4
90	Contamination from magnetic starting materials in flux-grown single crystals of RFeAsO superconductors. Physical Review B, 2011, 84, .	3.2	4

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91	Polarized Light Microscopy Study on the Reentrant Phase Transition in a $(\text{Ba}_{1-x}\text{K}_x)\text{Fe}_2\text{As}_2$ Single Crystal with $x = 0.24$. Crystals, 2016, 6, 142.	2.2	3
92	Laser angle-resolved photoemission as a probe of initial state k_z dispersion, final-state band gaps, and spin texture of Dirac states in the Bi_2Te_3 topological insulator. Physical Review B, 2016, 94, .	3.2	3
93	Doping evolution of the anisotropic upper critical fields in the iron-based superconductor $(\text{Ba}_{1-x}\text{K}_x)\text{Fe}_2\text{As}_2$. Physical Review B, 2017, 96, .	3.2	3
94	Magnetostrictive performance of additively manufactured CoFe rods using the LENSTMS system. AIP Advances, 2018, 8, 056403.	1.3	3
95	Bulk single crystal growth and sample surface preparation of catalytic NaAu2. Journal of Alloys and Compounds, 2019, 789, 362-366.	5.5	3
96	Mechanical detwinning device for anisotropic resistivity measurements in samples requiring dismounting for particle irradiation. Review of Scientific Instruments, 2020, 91, 073904.	1.3	2
97	On the growth of icosahedral Al-Pd-Mn quasicrystals from the ternary melt. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 1999, 79, 1673-1684.	0.6	2
98	Processing Of Al-Cu-Fe Quasicrystalline Single Grains. Materials Research Society Symposia Proceedings, 1998, 553, 3.	0.1	1
99	Determination of Structural Anisotropy of Stress-Annealed $\text{Fe}_{80.5}\text{Ga}_{19.5}$. IEEE Transactions on Magnetics, 2009, 45, 4142-4144.	2.1	1
100	The Influence of Growth Rate on Porosity in Al-Pd-Mn Icosahedral Quasicrystals.. Materials Research Society Symposia Proceedings, 2000, 643, 151.	0.1	0
101	Magnetism dependent phonon anomaly in LaFeAsO observed via inelastic x-ray scattering. Journal of Applied Physics, 2013, 113, 17E153.	2.5	0
102	Femto second pulsed laser deposition of nanoparticulate thin film of $\text{Gd}_5(\text{Si}_x\text{Ge}_{1-x})_4$. , 2015, , .		0
103	Effect of controlled pointlike disorder induced by 2.5-MeV electron irradiation on the nematic resistivity anisotropy of hole-doped $(\text{Ba},\text{K})\text{Fe}_2\text{As}_2$. Physical Review B, 2020, 102, .	3.2	0
104	Quantum size effects in Ag thin films grown on the fivefold surface of the icosahedral Al-Cu-Fe quasicrystal: Influence of the growth temperature. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2022, 40, 013212.	2.1	0