

Tomasz Alè©zak

List of Publications by Year in descending order

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87
papers

1,275
citations

361413

20
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434195

31
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90
all docs

90
docs citations

90
times ranked

1242
citing authors

#	ARTICLE	IF	CITATIONS
1	Size effects in epitaxial films of magnetite. <i>Thin Solid Films</i> , 2002, 412, 14-23.	1.8	70
2	Atomic Resolution $\hat{3}$ -ray Holography Using the MÅrssbauer Effect. <i>Physical Review Letters</i> , 1997, 79, 3518-3521.	7.8	62
3	Phonons in Iron: From the Bulk to an Epitaxial Monolayer. <i>Physical Review Letters</i> , 2007, 99, 185501.	7.8	56
4	The first experimental results from the 04BM (PEEM/XAS) beamline at Solaris. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2021, 492, 43-48.	1.4	48
5	Phonons at the Fe(110) Surface. <i>Physical Review Letters</i> , 2007, 99, 066103.	7.8	46
6	Noncollinear Magnetization Structure at the Thickness-Driven Spin-Reorientation Transition in Epitaxial Fe Films on W(110). <i>Physical Review Letters</i> , 2010, 105, 027206.	7.8	44
7	Experimental and theoretical studies of vibrational density of states in Fe ₃ O ₄ single-crystalline thin films. <i>Physical Review B</i> , 2005, 71, .	3.2	41
8	Magneto-optical anisotropy study of Fe _n /Au superlattices. <i>Physical Review B</i> , 2000, 62, 13731-13747.	3.2	39
9	Surface Structure of Epitaxial Magnetite Fe ₃ O ₄ (001) Films: In Situ STM and CEMS Studies. <i>Journal of Physical Chemistry B</i> , 2004, 108, 14356-14361.	2.6	39
10	Observation of the Conduction Electron Spin Polarization in the Ag Spacer of a Fe/Ag/Fe Trilayer. <i>Physical Review Letters</i> , 2003, 91, 017204.	7.8	36
11	An ultrahigh vacuum system for in situ studies of thin films and nanostructures by nuclear resonance scattering of synchrotron radiation. <i>Review of Scientific Instruments</i> , 2008, 79, 045108.	1.3	33
12	Thermal and irradiation induced interdiffusion in magnetite thin films grown on magnesium oxide (001) substrates. <i>Surface Science</i> , 2009, 603, 1175-1181.	1.9	32
13	Structure, composition and crystallinity of epitaxial magnetite thin films. <i>Surface Science</i> , 2008, 602, 2358-2362.	1.9	28
14	Tailoring of the Perpendicular Magnetization Component in Ferromagnetic Films on a Vicinal Substrate. <i>Physical Review Letters</i> , 2008, 101, 217202.	7.8	28
15	Magnesium interdiffusion and surface oxidation in magnetite epitaxial films grown on MgO(1 0 0). <i>Vacuum</i> , 2001, 63, 331-336.	3.5	24
16	Site-Selective Holographic Imaging of Iron Arrangements in Magnetite. <i>Physical Review Letters</i> , 2004, 92, 205501.	7.8	24
17	Phonons in Ultrathin Oxide Films: 2D to 3D Transition in FeO on Pt(111). <i>Physical Review Letters</i> , 2015, 115, 186102.	7.8	22
18	How a ferromagnet drives an antiferromagnet in exchange biased CoO/Fe(110) bilayers. <i>Scientific Reports</i> , 2019, 9, 889.	3.3	22

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19	Ultrathin epitaxial bcc-Co films stabilized on Au(001)-hex. Surface Science, 2004, 566-568, 272-277.	1.9	21
20	Electronic and magnetic properties of ultra-thin epitaxial magnetite films on MgO(001). Thin Solid Films, 2011, 519, 5588-5595.	1.8	21
21	Room-temperature perpendicular magnetic anisotropy of MgO/Fe/MgO ultrathin films. Journal of Applied Physics, 2013, 114, .	2.5	21
22	Spin engineering with Fe ²⁺ Au monolayers. Journal of Magnetism and Magnetic Materials, 2002, 240, 362-364.	2.3	18
23	Thickness-driven polar spin reorientation transition in ultrathin Fe/Au(001) films. Physical Review B, 2010, 81, .	3.2	18
24	Perpendicular magnetic anisotropy and noncollinear magnetic structure in ultrathin Fe films on W(110). Physical Review B, 2013, 87, .	3.2	18
25	From Monoatomic Multilayers To Ordered Alloys. Acta Physica Polonica A, 2000, 97, 129-139.	0.5	18
26	X-ray photoemission electron microscopy study of the in-plane spin reorientation transitions in epitaxial Fe films on W(110). Journal of Magnetism and Magnetic Materials, 2013, 348, 101-106.	2.3	17
27	Giant in-plane magnetic anisotropy in epitaxial bcc Co/Fe(110) bilayers. Physical Review B, 2016, 94, .	3.2	17
28	Interface modeling in Cr/Fe/Cr sandwiches studied by CEMS. Vacuum, 2001, 63, 337-344.	3.5	16
29	Probing the magnetic state of Fe/FeO/Fe trilayers by multiple isotopic sensor layers. Applied Physics Letters, 2009, 94, .	3.3	16
30	Different scenarios for the in-plane spin reorientation transition in Fe(110) films on W(110). Physical Review B, 2013, 87, .	3.2	16
31	Switching of Co Magnetization Driven by Antiferromagnetic-Ferromagnetic Phase Transition of FeRh Alloy in $\langle \text{Co} \rangle / \langle \text{FeRh} \rangle$ Bilayers. Physical Review Applied, 2018, 9, .	3.8	15
32	Oxygen on an Fe monolayer on W(110): From chemisorption to oxidation. Surface Science, 2013, 617, 183-191.	1.9	14
33	Growth and magnetic properties of ultrathin epitaxial FeO films and Fe/FeO bilayers on MgO(001). Applied Physics Letters, 2016, 108, .	3.3	14
34	Antiferromagnetic interlayer exchange coupling in epitaxial Fe/MgO/Fe trilayers with MgO barriers as thin as single monolayers. Journal of Applied Physics, 2014, 115, .	2.5	13
35	Interface engineering towards enhanced exchange interaction between Fe and FeO in Fe/MgO/FeO epitaxial heterostructures. Applied Physics Letters, 2019, 115, .	3.3	13
36	Correlation of morphology and magnetic properties in ultrathin epitaxial Co films on Au(). Surface Science, 2002, 507-510, 546-552.	1.9	12

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37	Depth dependence of iron diffusion in Fe ₃ S studied with nuclear resonant scattering. <i>Physical Review B</i> , 2007, 75, .	3.2	12
38	Exchange bias in epitaxial CoO/Fe bilayer grown on MgO(001). <i>Surface and Interface Analysis</i> , 2010, 42, 696-698.	1.8	12
39	Magnetism of ultrathin Fe films in MgO/Fe/MgO in epitaxial structures probed by nuclear resonant scattering of synchrotron radiation. <i>Journal of Applied Physics</i> , 2013, 113, 214309.	2.5	12
40	Superstructures on Epitaxial Fe ₃ O ₄ (111) Films: Biphasic Formation versus the Degree of Reduction. <i>Journal of Physical Chemistry C</i> , 2019, 123, 4204-4216.	3.1	12
41	Thermal and irradiation induced interdiffusion in Fe ₃ O ₄ /MgO(001) thin film. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2009, 267, 1484-1488.	1.4	11
42	Fine tuning of ferromagnet/antiferromagnet interface magnetic anisotropy for field-free switching of antiferromagnetic spins. <i>Nanoscale</i> , 2020, 12, 18091-18095.	5.6	11
43	Control of spin orientation in antiferromagnetic NiO by epitaxial strain and spin-flop coupling. <i>APL Materials</i> , 2020, 8, .	5.1	11
44	Conversion electron Mössbauer spectroscopy studies of ultrathin Fe films on MgO(001). <i>Surface Science</i> , 2007, 601, 4305-4310.	1.9	10
45	Nuclear resonant scattering studies of electric field gradient in Fe monolayer on W(110). <i>Surface Science</i> , 2008, 602, 1453-1457.	1.9	10
46	Verwey Transition in Epitaxial Fe ₃ O ₄ Films. <i>Journal of Radioanalytical and Nuclear Chemistry</i> , 2000, 246, 27-32.	1.5	9
47	CEMS Studies of Au/Fe/Au Ultrathin Films and Monoatomic Multilayers. <i>Physica Status Solidi A</i> , 2002, 189, 287-292.	1.7	7
48	Coupling of collective motions of the protein matrix to vibrations of the non-heme iron in bacterial photosynthetic reaction centers. <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2010, 1797, 1696-1704.	1.0	7
49	The dynamics of the non-heme iron in bacterial reaction centers from <i>Rhodobacter sphaeroides</i> . <i>Biochimica Et Biophysica Acta - Bioenergetics</i> , 2012, 1817, 2095-2102.	1.0	7
50	Tunable magnetic properties of monoatomic metal-oxide Fe/MgO multilayers. <i>Physical Review B</i> , 2014, 90, .	3.2	7
51	Prospects of X-ray photoemission electron microscopy at the first beamline of the Polish synchrotron facility - Solaris™. <i>X-Ray Spectrometry</i> , 2015, 44, 317-322.	1.4	7
52	Controllable magnetic anisotropy and spin orientation of a prototypical easy-plane antiferromagnet on a ferromagnetic support. <i>Physical Review B</i> , 2021, 104, .	3.2	7
53	Interface Structure and Indirect Coupling in Annealed Fe/Cr/Fe Ultrathin Films. <i>Physica Status Solidi A</i> , 2002, 189, 705-709.	1.7	6
54	Diffusion of muons in metallic multilayers. <i>Physica B: Condensed Matter</i> , 2003, 326, 545-549.	2.7	6

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55	Dynamics in submonolayer Fe-films. <i>Surface Science</i> , 2004, 566-568, 372-376.	1.9	6
56	R-VSM and MOKE magnetometers for nanostructures. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, 2294-2295.	2.3	6
57	Hyperfine Relaxation in an Iron Submonolayer. <i>Defect and Diffusion Forum</i> , 2005, 237-240, 1225-1229.	0.4	6
58	Phonons in iron monolayers. <i>Journal of Physics: Conference Series</i> , 2010, 217, 012144.	0.4	6
59	Temperature controlled Fe/Au/FeRh spin valves. <i>AIP Advances</i> , 2018, 8, 101434.	1.3	6
60	Oscillating magnetic anisotropy in epitaxial Au/Fe(110) and Co/Au/Fe(110) films. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 497, 165963.	2.3	6
61	Giant magneto-optical anisotropy in Fe/Au monoatomic multilayer. <i>Solid State Communications</i> , 2000, 114, 441-445.	1.9	5
62	Magnetic properties of epitaxial CoO/Fe(001) bilayers: The onset of exchange bias as a function of sublayer thickness and temperature. <i>Physical Review B</i> , 2017, 96, .	3.2	5
63	Interlayer exchange coupling, dipolar coupling and magnetoresistance in Fe/MgO/Fe trilayers with a subnanometer MgO barrier. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 424, 189-193.	2.3	5
64	Adsorption induced modification of in-plane magnetic anisotropy in epitaxial Co and Fe/Co films on Fe(110). <i>AIP Advances</i> , 2018, 8, 056806.	1.3	5
65	Multiple spin reorientation transitions and large in plane magnetic anisotropy in epitaxial Au/Co/Fe(110) films. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 475, 195-200.	2.3	5
66	Tailorable exchange bias and memory of frozen antiferromagnetic spins in epitaxial CoO(111)/Fe(110) bilayers. <i>Journal of Magnetism and Magnetic Materials</i> , 2022, 545, 168783.	2.3	5
67	Observation of the domain structure in Fe/Au superlattices with perpendicular anisotropy. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, 1253-1254.	2.3	4
68	Fe dopants and surface adatoms versus nontrivial topology of single-crystalline Bi ₂ Se ₃ . <i>New Journal of Physics</i> , 2020, 22, 063020.	2.9	4
69	Magnetic Anisotropy and Temperature Dependence of Exchange Bias in Epitaxial CoO(111)/Fe(110) Bilayers. <i>Acta Physica Polonica A</i> , 2020, 137, 44-47.	0.5	4
70	Magnetism of thin chromium films studied with low-energy muon spin rotation. <i>Physica B: Condensed Matter</i> , 2000, 289-290, 326-330.	2.7	3
71	Kerr magnetometer based on a differential amplifier. <i>Physica Status Solidi A</i> , 2003, 196, 161-164.	1.7	3
72	Long range electron spin polarization in the Ag layer of a Fe/Ag film. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, 1128-1129.	2.3	3

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73	The influence of the interlayer exchange coupling on the magnetism of an Fe(001) monolayer. Surface Science, 2007, 601, 4300-4304.	1.9	3
74	Magnetization processes in ultrathin Au•Co•Au films grown on a bifacial Mo(110)/Mo(540) single crystal. Journal of Applied Physics, 2008, 103, .	2.5	3
75	Perpendicular magnetic anisotropy and residual magnetic phases in gold-capped FeRh film on MgO(0•0•1). Journal of Magnetism and Magnetic Materials, 2020, 495, 165804.	2.3	3
76	Spin-flop coupling induced large coercivity enhancement in Fe/FeRh/W(110) bilayers across ferromagnetic•antiferromagnetic phase transition of FeRh alloy. Journal of Magnetism and Magnetic Materials, 2020, 498, 166258.	2.3	3
77	NONMAGNETIC IRON LAYERS AT THE Fe/Ru INTERFACE. Surface Review and Letters, 1997, 04, 1239-1243.	1.1	2
78	Indirect exchange coupling and spin polarization in Fe/AlFe/Fe trilayers. Journal of Magnetism and Magnetic Materials, 1999, 198-199, 405-407.	2.3	2
79	Experimental studies of the non-collinear magnetic states in epitaxial FeAu multilayers. Journal of Magnetism and Magnetic Materials, 2002, 240, 536-538.	2.3	2
80	Iron Diffusion Near Surface of Fe₃Si is Fast- and Decays to Bulk Values within 3 nm. Defect and Diffusion Forum, 2005, 237-240, 1222-1224.	0.4	2
81	Magnetism of ultra-thin iron films seen by the nuclear resonant scattering of synchrotron radiation. Journal of Physics: Conference Series, 2010, 217, 012090.	0.4	2
82	Influence of Cd ²⁺ on the spin state of non-heme iron and on protein local motions in reactions centers from purple photosynthetic bacterium Rhodospirillum rubrum. Journal of Physics: Conference Series, 2010, 217, 012021.	0.4	2
83	Beating the limitation of the Néel temperature of FeO with antiferromagnetic proximity in FeO/CoO. Applied Physics Letters, 2022, 120, 072404.	3.3	2
84	Domain structures and magnetization processes of ultrathin ordered iron•gold alloys films. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E555-E556.	2.3	1
85	Spin polarization and interlayer coupling in Fe/FeAl/Fe sandwiches. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E971-E972.	2.3	0
86	Driving the polar spin reorientation transition of ultrathin ferromagnets with antiferromagnetic•ferromagnetic phase transition of nearby FeRh alloy film. Scientific Reports, 2020, 10, 14901.	3.3	0
87	P1029 Pan-microbial detection using Axiom genotyping solution from Affymetrix. Journal of Animal Science, 2016, 94, 29-29.	0.5	0