

# Tomasz Alè©zak

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/2210047/publications.pdf>

Version: 2024-02-01

87  
papers

1,275  
citations

361413

20  
h-index

434195

31  
g-index

90  
all docs

90  
docs citations

90  
times ranked

1242  
citing authors

#	ARTICLE	IF	CITATIONS
1	Tailorable exchange bias and memory of frozen antiferromagnetic spins in epitaxial CoO(1 1 1)/Fe(1 1 0) bilayers. Journal of Magnetism and Magnetic Materials, 2022, 545, 168783.	2.3	5
2	Beating the limitation of the Néel temperature of FeO with antiferromagnetic proximity in FeO/CoO. Applied Physics Letters, 2022, 120, 072404.	3.3	2
3	The first experimental results from the 04BM (PEEM/XAS) beamline at Solaris. Nuclear Instruments & Methods in Physics Research B, 2021, 492, 43-48.	1.4	48
4	Controllable magnetic anisotropy and spin orientation of a prototypical easy-plane antiferromagnet on a ferromagnetic support. Physical Review B, 2021, 104, .	3.2	7
5	Oscillating magnetic anisotropy in epitaxial Au/Fe(110) and Co/Au/Fe(110) films. Journal of Magnetism and Magnetic Materials, 2020, 497, 165963.	2.3	6
6	Perpendicular magnetic anisotropy and residual magnetic phases in gold-capped FeRh film on MgO(001). Journal of Magnetism and Magnetic Materials, 2020, 495, 165804.	2.3	3
7	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
8	Fe dopants and surface adatoms versus nontrivial topology of single-crystalline Bi <sub>2</sub> Se <sub>3</sub> . New Journal of Physics, 2020, 22, 063020.	2.9	4
9	Fine tuning of ferromagnet/antiferromagnet interface magnetic anisotropy for field-free switching of antiferromagnetic spins. Nanoscale, 2020, 12, 18091-18095.	5.6	11
10	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
11	Control of spin orientation in antiferromagnetic NiO by epitaxial strain and spin-flop coupling. APL Materials, 2020, 8, .	5.1	11
12	Magnetic Anisotropy and Temperature Dependence of Exchange Bias in Epitaxial CoO(111)/Fe(110) Bilayers. Acta Physica Polonica A, 2020, 137, 44-47.	0.5	4
13	Interface engineering towards enhanced exchange interaction between Fe and FeO in Fe/MgO/FeO epitaxial heterostructures. Applied Physics Letters, 2019, 115, .	3.3	13
14	Superstructures on Epitaxial Fe <sub>3</sub> O <sub>4</sub> (111) Films: Biphasic Formation versus the Degree of Reduction. Journal of Physical Chemistry C, 2019, 123, 4204-4216.	3.1	12
15	How a ferromagnet drives an antiferromagnet in exchange biased CoO/Fe(110) bilayers. Scientific Reports, 2019, 9, 889.	3.3	22
16	Multiple spin reorientation transitions and large in plane magnetic anisotropy in epitaxial Au/Co/Fe(110) films. Journal of Magnetism and Magnetic Materials, 2019, 475, 195-200.	2.3	5
17	Switching of Co Magnetization Driven by Antiferromagnetic-Ferromagnetic Phase Transition of FeRh Alloy in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mi} \rangle \text{Co} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle \text{FeRh} \langle \text{mml:mi} \rangle \langle \text{mml:mrow} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mi} \rangle \text{Bilayers}$ . Physical Review Applied, 2018, 9, .	3.8	15
18	Temperature controlled Fe/Au/FeRh spin valves. AIP Advances, 2018, 8, 101434.	1.3	6

#	ARTICLE	IF	CITATIONS
19	Adsorption induced modification of in-plane magnetic anisotropy in epitaxial Co and Fe/Co films on Fe(110). AIP Advances, 2018, 8, 056806.	1.3	5
20	Magnetic properties of epitaxial CoO/Fe(001) bilayers: The onset of exchange bias as a function of sublayer thickness and temperature. Physical Review B, 2017, 96, .	3.2	5
21	Interlayer exchange coupling, dipolar coupling and magnetoresistance in Fe/MgO/Fe trilayers with a subnanometer MgO barrier. Journal of Magnetism and Magnetic Materials, 2017, 424, 189-193.	2.3	5
22	Growth and magnetic properties of ultrathin epitaxial FeO films and Fe/FeO bilayers on MgO(001). Applied Physics Letters, 2016, 108, .	3.3	14
23	Giant in-plane magnetic anisotropy in epitaxial bcc Co/Fe(110) bilayers. Physical Review B, 2016, 94, .	3.2	17
24	P1029 Pan-microbial detection using Axiom genotyping solution from Affymetrix. Journal of Animal Science, 2016, 94, 29-29.	0.5	0
25	Phonons in Ultrathin Oxide Films: 2D to 3D Transition in FeO on Pt(111). Physical Review Letters, 2015, 115, 186102.	7.8	22
26	Prospects of X-ray photoemission electron microscopy at the first beamline of the Polish synchrotron facility "Solaris". X-Ray Spectrometry, 2015, 44, 317-322.	1.4	7
27	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
28	Tunable magnetic properties of monoatomic metal-oxide Fe/MgO multilayers. Physical Review B, 2014, 90, .	3.2	7
29	Oxygen on an Fe monolayer on W(110): From chemisorption to oxidation. Surface Science, 2013, 617, 183-191.	1.9	14
30	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
31	Different scenarios for the in-plane spin reorientation transition in Fe(110) films on W(110). Physical Review B, 2013, 87, .	3.2	16
32	Perpendicular magnetic anisotropy and noncollinear magnetic structure in ultrathin Fe films on W(110). Physical Review B, 2013, 87, .	3.2	18
33	Magnetism of ultrathin Fe films in MgO/Fe/MgO in epitaxial structures probed by nuclear resonant scattering of synchrotron radiation. Journal of Applied Physics, 2013, 113, 214309.	2.5	12
34	Room-temperature perpendicular magnetic anisotropy of MgO/Fe/MgO ultrathin films. Journal of Applied Physics, 2013, 114, .	2.5	21
35	The dynamics of the non-heme iron in bacterial reaction centers from Rhodobacter sphaeroides. Biochimica Et Biophysica Acta - Bioenergetics, 2012, 1817, 2095-2102.	1.0	7
36	Electronic and magnetic properties of ultra-thin epitaxial magnetite films on MgO(001). Thin Solid Films, 2011, 519, 5588-5595.	1.8	21

#	ARTICLE	IF	CITATIONS
37	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
38	Influence of Cd <sup>2+</sup> on the spin state of non-heme iron and on protein local motions in reactions centers from purple photosynthetic bacterium <i>Rhodospirillum rubrum</i> . Journal of Physics: Conference Series, 2010, 217, 012021.	0.4	2
39	Phonons in iron monolayers. Journal of Physics: Conference Series, 2010, 217, 012144.	0.4	6
40	Coupling of collective motions of the protein matrix to vibrations of the non-heme iron in bacterial photosynthetic reaction centers. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 1696-1704.	1.0	7
41	Exchange bias in epitaxial CoO/Fe bilayer grown on MgO(001). Surface and Interface Analysis, 2010, 42, 696-698.	1.8	12
42	Thickness-driven polar spin reorientation transition in ultrathin Fe/Au(001) films. Physical Review B, 2010, 81, .	3.2	18
43	Noncollinear Magnetization Structure at the Thickness-Driven Spin-Reorientation Transition in Epitaxial Fe Films on W(110). Physical Review Letters, 2010, 105, 027206.	7.8	44
44	Thermal and irradiation induced interdiffusion in Fe <sub>3</sub> O <sub>4</sub> /MgO(001) thin film. Nuclear Instruments & Methods in Physics Research B, 2009, 267, 1484-1488.	1.4	11
45	Thermal and irradiation induced interdiffusion in magnetite thin films grown on magnesium oxide (001) substrates. Surface Science, 2009, 603, 1175-1181.	1.9	32
46	Probing the magnetic state of Fe/FeO/Fe trilayers by multiple isotopic sensor layers. Applied Physics Letters, 2009, 94, .	3.3	16
47	Structure, composition and crystallinity of epitaxial magnetite thin films. Surface Science, 2008, 602, 2358-2362.	1.9	28
48	Nuclear resonant scattering studies of electric field gradient in Fe monolayer on W(110). Surface Science, 2008, 602, 1453-1457.	1.9	10
49	Tailoring of the Perpendicular Magnetization Component in Ferromagnetic Films on a Vicinal Substrate. Physical Review Letters, 2008, 101, 217202.	7.8	28
50	Magnetization processes in ultrathin Au <sup>107</sup> Co <sup>59</sup> Au films grown on a bifacial Mo(110)/Mo(540) single crystal. Journal of Applied Physics, 2008, 103, .	2.5	3
51	An ultrahigh vacuum system for in situ studies of thin films and nanostructures by nuclear resonance scattering of synchrotron radiation. Review of Scientific Instruments, 2008, 79, 045108.	1.3	33
52	Depth dependence of iron diffusion in Fe <sub>3</sub> S studied with nuclear resonant scattering. Physical Review B, 2007, 75, .	3.2	12
53	Phonons at the Fe(110) Surface. Physical Review Letters, 2007, 99, 066103.	7.8	46
54	Phonons in Iron: From the Bulk to an Epitaxial Monolayer. Physical Review Letters, 2007, 99, 185501.	7.8	56

#	ARTICLE	IF	CITATIONS
55	Conversion electron Mössbauer spectroscopy studies of ultrathin Fe films on MgO(001). Surface Science, 2007, 601, 4305-4310.	1.9	10
56	The influence of the interlayer exchange coupling on the magnetism of an Fe(001) monolayer. Surface Science, 2007, 601, 4300-4304.	1.9	3
57	Hyperfine Relaxation in an Iron Submonolayer. Defect and Diffusion Forum, 2005, 237-240, 1225-1229.	0.4	6
58	Iron Diffusion Near Surface of Fe<sub>3</sub>Si is Fast- and Decays to Bulk Values within 3 nm. Defect and Diffusion Forum, 2005, 237-240, 1222-1224.	0.4	2
59	Experimental and theoretical studies of vibrational density of states in Fe <sub>3</sub> O <sub>4</sub> single-crystalline thin films. Physical Review B, 2005, 71, .	3.2	41
60	Site-Selective Holographic Imaging of Iron Arrangements in Magnetite. Physical Review Letters, 2004, 92, 205501.	7.8	24
61	Dynamics in submonolayer Fe-films. Surface Science, 2004, 566-568, 372-376.	1.9	6
62	Ultrathin epitaxial bcc-Co films stabilized on Au(001)-hex. Surface Science, 2004, 566-568, 272-277.	1.9	21
63	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
64	Observation of the domain structure in Fe-Au superlattices with perpendicular anisotropy. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1253-1254.	2.3	4
65	Spin polarization and interlayer coupling in Fe/FeAl/Fe sandwiches. Journal of Magnetism and Magnetic Materials, 2004, 272-276, E971-E972.	2.3	0
66	Long range electron spin polarization in the Ag layer of a Fe/Ag film. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1128-1129.	2.3	3
67	R-VSM and MOKE magnetometers for nanostructures. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 2294-2295.	2.3	6
68	Surface Structure of Epitaxial Magnetite Fe <sub>3</sub> O <sub>4</sub> (001) Films: In Situ STM and CEMS Studies. Journal of Physical Chemistry B, 2004, 108, 14356-14361.	2.6	39
69	Diffusion of muons in metallic multilayers. Physica B: Condensed Matter, 2003, 326, 545-549.	2.7	6
70	Kerr magnetometer based on a differential amplifier. Physica Status Solidi A, 2003, 196, 161-164.	1.7	3
71	Observation of the Conduction Electron Spin Polarization in the Ag Spacer of a Fe/Ag/Fe Trilayer. Physical Review Letters, 2003, 91, 017204.	7.8	36
72	Correlation of morphology and magnetic properties in ultrathin epitaxial Co films on Au(). Surface Science, 2002, 507-510, 546-552.	1.9	12

#	ARTICLE	IF	CITATIONS
73	Spin engineering with Fe <sup>57</sup> Au monolayers. Journal of Magnetism and Magnetic Materials, 2002, 240, 362-364.	2.3	18
74	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
75	CEMS Studies of Au/Fe/Au Ultrathin Films and Monoatomic Multilayers. Physica Status Solidi A, 2002, 189, 287-292.	1.7	7
76	Interface Structure and Indirect Coupling in Annealed Fe/Cr/Fe Ultrathin Films. Physica Status Solidi A, 2002, 189, 705-709.	1.7	6
77	Size effects in epitaxial films of magnetite. Thin Solid Films, 2002, 412, 14-23.	1.8	70
78	Magnesium interdiffusion and surface oxidation in magnetite epitaxial films grown on MgO(1 0 0).. Vacuum, 2001, 63, 331-336.	3.5	24
79	Interface modeling in Cr/Fe/Cr sandwiches studied by CEMS. Vacuum, 2001, 63, 337-344.	3.5	16
80	Giant magneto-optical anisotropy in Fe/Au monoatomic multilayer. Solid State Communications, 2000, 114, 441-445.	1.9	5
81	Magnetism of thin chromium films studied with low-energy muon spin rotation. Physica B: Condensed Matter, 2000, 289-290, 326-330.	2.7	3
82	Verwey Transition in Epitaxial Fe <sub>3</sub> O <sub>4</sub> Films. Journal of Radioanalytical and Nuclear Chemistry, 2000, 246, 27-32.	1.5	9
83	Magneto-optical anisotropy study of Fe <sub>n</sub> /Au <sub>n</sub> superlattices. Physical Review B, 2000, 62, 13731-13747.	3.2	39
84	From Monoatomic Multilayers To Ordered Alloys. Acta Physica Polonica A, 2000, 97, 129-139.	0.5	18
85	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
86	Atomic Resolution <sup>57</sup> Fe K-edge X-ray Holography Using the Mössbauer Effect. Physical Review Letters, 1997, 79, 3518-3521.	7.8	62
87	NONMAGNETIC IRON LAYERS AT THE Fe/Ru INTERFACE. Surface Review and Letters, 1997, 04, 1239-1243.	1.1	2