

# Timo Kuschel

## List of Publications by Citations

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

62

papers

1,712

citations

21

h-index

40

g-index

66

ext. papers

1,989

ext. citations

4.2

avg, IF

4.52

L-index

#	Paper	IF	Citations
62	Quantitative study of the spin Hall magnetoresistance in ferromagnetic insulator/normal metal hybrids. <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	346
61	Transverse spin Seebeck effect versus anomalous and planar Nernst effects in Permalloy thin films. <i>Physical Review Letters</i> , <b>2013</b> , 111, 187201	7.4	109
60	Thermally driven spin and charge currents in thin NiFe <sub>2</sub> O <sub>4</sub> /Pt films. <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	99
59	Negative spin Hall magnetoresistance of Pt on the bulk easy-plane antiferromagnet NiO. <i>Applied Physics Letters</i> , <b>2017</b> , 111, 052409	3.4	91
58	Longitudinal spin Seebeck effect contribution in transverse spin Seebeck effect experiments in Pt/YIG and Pt/NFO. <i>Nature Communications</i> , <b>2015</b> , 6, 8211	17.4	71
57	Enhanced Magneto-optic Kerr Effect and Magnetic Properties of CeY <sub>2</sub> Fe <sub>5</sub> O <sub>12</sub> Epitaxial Thin Films. <i>Physical Review Applied</i> , <b>2015</b> , 4,	4.3	61
56	Longitudinal spin Seebeck coefficient: heat flux vs. temperature difference method. <i>Scientific Reports</i> , <b>2017</b> , 7, 46752	4.9	58
55	Static Magnetic Proximity Effect in Pt/NiFe <sub>2</sub> O <sub>4</sub> and Pt/Fe Bilayers Investigated by X-Ray Resonant Magnetic Reflectivity. <i>Physical Review Letters</i> , <b>2015</b> , 115, 097401	7.4	54
54	Picosecond Spin Seebeck Effect. <i>Physical Review Letters</i> , <b>2017</b> , 118, 057201	7.4	53
53	Nonlocal magnon-polaron transport in yttrium iron garnet. <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	50
52	Influence of yttrium iron garnet thickness and heater opacity on the nonlocal transport of electrically and thermally excited magnons. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	49
51	Influence of heat flow directions on Nernst effects in Py/Pt bilayers. <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	48
50	Physical characteristics and cation distribution of NiFe <sub>2</sub> O <sub>4</sub> thin films with high resistivity prepared by reactive co-sputtering. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 123903	2.5	47
49	Spin orbitronics: Charges ride the spin wave. <i>Nature Nanotechnology</i> , <b>2015</b> , 10, 22-4	28.7	43
48	Nonlocal magnon spin transport in NiFe <sub>2</sub> O <sub>4</sub> thin films. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 132406	3.4	34
47	Static magnetic proximity effect in Pt/Ni <sub>1-x</sub> Fe <sub>x</sub> bilayers investigated by x-ray resonant magnetic reflectivity. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	32
46	Quantitative Disentanglement of the Spin Seebeck, Proximity-Induced, and Ferromagnetic-Induced Anomalous Nernst Effect in Normal-Metal-Ferromagnet Bilayers. <i>Physical Review Letters</i> , <b>2017</b> , 119, 227205	7.4	32

45	Large magneto-Seebeck effect in magnetic tunnel junctions with half-metallic Heusler electrodes. <i>Nature Communications</i> , <b>2017</b> , 8, 1626	17.4	31
44	Vectorial magnetometry using magnetooptic Kerr effect including first- and second-order contributions for thin ferromagnetic films. <i>Journal Physics D: Applied Physics</i> , <b>2011</b> , 44, 265003	3	25
43	Comparison of laser-induced and intrinsic tunnel magneto-Seebeck effect in CoFeB/MgAl <sub>2</sub> O <sub>4</sub> and CoFeB/MgO magnetic tunnel junctions. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	22
42	Enhanced magnon spin transport in NiFe <sub>2</sub> O <sub>4</sub> thin films on a lattice-matched substrate. <i>Applied Physics Letters</i> , <b>2018</b> , 113, 162403	3.4	22
41	Quantitative separation of the anisotropic magnetothermopower and planar Nernst effect by the rotation of an in-plane thermal gradient. <i>Scientific Reports</i> , <b>2017</b> , 7, 40586	4.9	17
40	Electrical transport and optical band gap of NiFe <sub>2</sub> O <sub>x</sub> thin films. <i>Journal of Applied Physics</i> , <b>2017</b> , 122, 225101	2.5	16
39	Static Magnetic Proximity Effect in Pt Layers on Sputter-Deposited NiFe <sub>2</sub> O <sub>4</sub> and on Fe of Various Thicknesses Investigated by XRMR. <i>IEEE Transactions on Magnetics</i> , <b>2016</b> , 52, 1-4	2	15
38	Magnon planar Hall effect and anisotropic magnetoresistance in a magnetic insulator. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	15
37	From Fe <sub>3</sub> O <sub>4</sub> /NiO bilayers to NiFe <sub>2</sub> O <sub>4</sub> -like thin films through Ni interdiffusion. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	14
36	Enhancement of thermovoltage and tunnel magneto-Seebeck effect in CoFeB-based magnetic tunnel junctions by variation of the MgAl <sub>2</sub> O <sub>4</sub> and MgO barrier thickness. <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	14
35	Sign change in the tunnel magnetoresistance of Fe <sub>3</sub> O <sub>4</sub> /MgO/Co-Fe-B magnetic tunnel junctions depending on the annealing temperature and the interface treatment. <i>AIP Advances</i> , <b>2015</b> , 5, 047103	1.5	14
34	Tunnel magneto-Seebeck effect. <i>Journal Physics D: Applied Physics</i> , <b>2019</b> , 52, 133001	3	14
33	. <i>IEEE Transactions on Instrumentation and Measurement</i> , <b>2019</b> , 68, 1765-1773	5.2	14
32	Modifying magnetic properties of ultra-thin magnetite films by growth on Fe pre-covered MgO(001). <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 113904	2.5	13
31	Time-dependent rotatable magnetic anisotropy in polycrystalline exchange-bias systems: Dependence on grain-size distribution. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	12
30	Structural analysis of FeO(1 1 1)/Ag(0 0 1): undulation of hexagonal oxide monolayers due to square lattice metal substrates. <i>Journal of Physics Condensed Matter</i> , <b>2014</b> , 26, 315001	1.8	11
29	Dependence of transverse magnetothermoelectric effects on inhomogeneous magnetic fields. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	11
28	Magnetic anisotropy related to strain and thickness of ultrathin iron oxide films on MgO(001). <i>Materials Research Express</i> , <b>2015</b> , 2, 016101	1.7	11

27	Uniaxial magnetic anisotropy for thin Co films on glass studied by magneto-optic Kerr effect. <i>Journal of Applied Physics</i> , <b>2011</b> , 109, 093907	2.5	11
26	Impact of the magnetic proximity effect in Pt on the total magnetic moment of Pt/Co/Ta trilayers studied by x-ray resonant magnetic reflectivity. <i>AIP Advances</i> , <b>2020</b> , 10, 015154	1.5	10
25	Magnetic characterization of thin Co <sub>50</sub> Fe <sub>50</sub> films by magneto-optic Kerr effect. <i>Journal Physics D: Applied Physics</i> , <b>2012</b> , 45, 495002	3	10
24	Thermal conductivity of thin insulating films determined by tunnel magneto-Seebeck effect measurements and finite-element modeling. <i>Journal Physics D: Applied Physics</i> , <b>2018</b> , 51, 224006	3	10
23	Vectorial observation of the spin Seebeck effect in epitaxial NiFe <sub>2</sub> O <sub>4</sub> thin films with various magnetic anisotropy contributions. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 232404	3.4	8
22	Nonlocal magnon spin transport in yttrium iron garnet with tantalum and platinum spin injection/detection electrodes. <i>Journal Physics D: Applied Physics</i> , <b>2018</b> , 51, 224005	3	8
21	Preferential weakening of rotational magnetic anisotropy by keV-He ion bombardment in polycrystalline exchange bias layer systems. <i>New Journal of Physics</i> , <b>2018</b> , 20, 053018	2.9	7
20	Anomalous Nernst effect and three-dimensional temperature gradients in magnetic tunnel junctions. <i>Communications Physics</i> , <b>2018</b> , 1,	5.4	7
19	Enhancement in Thermally Generated Spin Voltage at the Interfaces between Pd and NiFe <sub>2</sub> O <sub>4</sub> Films Grown on Lattice-Matched Substrates. <i>Physical Review Applied</i> , <b>2020</b> , 14,	4.3	6
18	Quadratic magneto-optic Kerr effect spectroscopy of Fe epitaxial films on MgO(001) substrates. <i>Physical Review B</i> , <b>2019</b> , 100,	3.3	6
17	Advanced data analysis procedure for hard x-ray resonant magnetic reflectivity discussed for Pt thin film samples of various complexity. <i>Journal Physics D: Applied Physics</i> , <b>2020</b> , 53, 375004	3	6
16	Asymmetric modification of the magnetic proximity effect in Pt/Co/Pt trilayers by the insertion of a Ta buffer layer. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	6
15	Magnetic order of Dy <sup>3+</sup> and Fe <sup>3+</sup> moments in antiferromagnetic DyFeO <sub>3</sub> probed by spin Hall magnetoresistance and spin Seebeck effect. <i>Physical Review B</i> , <b>2021</b> , 103,	3.3	6
14	Thermal Conductivity of Oxide Tunnel Barriers in Magnetic Tunnel Junctions Measured by Ultrafast Thermoreflectance and Magneto-Optic Kerr Effect Thermometry. <i>Physical Review Applied</i> , <b>2020</b> , 13,	4.3	5
13	Magneto-optical spectroscopy of Co <sub>2</sub> FeSi Heusler compound. <i>Journal of Applied Physics</i> , <b>2014</b> , 115, 17A927	2.7	5
12	Static magnetic proximity effects and spin Hall magnetoresistance in Pt/Y <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> and inverted Y <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> /Pt bilayers. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	5
11	Detection of DC currents and resistance measurements in longitudinal spin Seebeck effect experiments on Pt/YIG and Pt/NFO. <i>AIP Advances</i> , <b>2016</b> , 6, 056302	1.5	5
10	Magnetization reversal analysis of a thin B <sub>2</sub> -type ordered Co <sub>50</sub> Fe <sub>50</sub> film by magneto-optic Kerr effect. <i>Journal Physics D: Applied Physics</i> , <b>2012</b> , 45, 205001	3	4

9	Cation- and lattice-site-selective magnetic depth profiles of ultrathin Fe <sub>3</sub> O <sub>4</sub> (001) films. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	4
8	Quantitative comparison of the magnetic proximity effect in Pt detected by XRMR and XMCD. <i>Applied Physics Letters</i> , <b>2021</b> , 118, 012407	3.4	4
7	Co-sputtered PtMnSb thin films and PtMnSb/Pt bilayers for spin-orbit torque investigations. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2017</b> , 11, 1600439	2.5	2
6	Role of NiO in the nonlocal spin transport through thin NiO films on Y <sub>3</sub> Fe <sub>5</sub> O <sub>12</sub> . <i>Physical Review B</i> , <b>2021</b> , 103,	3.3	2
5	Impact of Strain and Morphology on Magnetic Properties of FeO/NiO Bilayers Grown on Nb:SrTiO <sub>3</sub> (001) and MgO(001). <i>Materials</i> , <b>2018</b> , 11,	3.5	2
4	Quadratic magneto-optic spectroscopy setup based on photoelastic light modulation. <i>Photonics and Nanostructures - Fundamentals and Applications</i> , <b>2018</b> , 31, 60-65	2.6	2
3	Scaling of quadratic and linear magneto-optic Kerr effect spectra with L21 ordering of Co <sub>2</sub> MnSi Heusler compound. <i>Applied Physics Letters</i> , <b>2020</b> , 116, 262401	3.4	1
2	Structural, magnetic and Magneto optical properties of Fe <sub>3</sub> O <sub>4</sub> /NiO bilayers on MgO(001) <b>2016</b> ,		1
1	Magnetic anisotropy of thin sputtered MgB <sub>2</sub> films on MgO substrates in high magnetic fields. <i>AIP Advances</i> , <b>2014</b> , 4, 037115	1.5	