

Witold Skowronski

List of Publications by Year in descending order

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52
papers

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471371

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54
docs citations

54
times ranked

996
citing authors

#	ARTICLE	IF	CITATIONS
1	Large Voltage-Induced Changes in the Perpendicular Magnetic Anisotropy of an MgO-Based Tunnel Junction with an Ultrathin Fe Layer. Physical Review Applied, 2016, 5, .	1.5	141
2	Underlayer material influence on electric-field controlled perpendicular magnetic anisotropy in CoFeB/MgO magnetic tunnel junctions. Physical Review B, 2015, 91, .	1.1	83
3	Perpendicular magnetic anisotropy of Ir/CoFeB/MgO trilayer system tuned by electric fields. Applied Physics Express, 2015, 8, 053003.	1.1	73
4	Influence of intermixing at the Ta/CoFeB interface on spin Hall angle in Ta/CoFeB/MgO heterostructures. Scientific Reports, 2017, 7, 968.	1.6	58
5	Zero-Field Spin Torque Oscillator Based on Magnetic Tunnel Junctions with a Tilted CoFeB Free Layer. Applied Physics Express, 2012, 5, 063005.	1.1	35
6	Magnetic field sensor with voltage-tunable sensing properties. Applied Physics Letters, 2012, 101, 192401.	1.5	33
7	Determination of Spin Hall Angle in Heavy-Metal/ Co/Fe Field-Free Spin-Orbit Torque Switching based Heterostructures with Interfacial Spin-Orbit	1.5	31
8	Interlayer exchange coupling and current induced magnetization switching in magnetic tunnel junctions with MgO wedge barrier. Journal of Applied Physics, 2010, 107, 093917.	1.5	30
9	Temperature dependence of spin-orbit torques in W/CoFeB bilayers. Applied Physics Letters, 2016, 109, .	1.1	25
10	Room-temperature perpendicular magnetic anisotropy of MgO/Fe/MgO ultrathin films. Journal of Applied Physics, 2013, 114, .	1.5	25
11	Spin-torque diode radio-frequency detector with voltage tuned resonance. Applied Physics Letters, 2014, 105, .	1.1	21
12	Influence of MgO tunnel barrier thickness on spin-transfer ferromagnetic resonance and torque in magnetic tunnel junctions. Physical Review B, 2013, 87, .	1.5	21
13	Reduction of low frequency magnetic noise by voltage-induced magnetic anisotropy modulation in tunneling magnetoresistance sensors. Applied Physics Letters, 2014, 105, .	1.1	20
14	Understanding stability diagram of perpendicular magnetic tunnel junctions. Scientific Reports, 2017, 7, 10172.	1.5	19
15	Rectification of radio-frequency current in a giant-magnetoresistance spin valve. Physical Review B, 2015, 91, .	1.6	19
16	Inductive determination of the optimum tunnel barrier thickness in magnetic tunneling junction stacks for spin torque memory applications. Journal of Applied Physics, 2011, 110, 023906.	1.1	18
17	Micromagnetic model for studies on Magnetic Tunnel Junction switching dynamics, including local current density. Physica B: Condensed Matter, 2014, 435, 105-108.	1.1	17
18		1.3	16

#	ARTICLE	IF	CITATIONS
19	Multi-state MRAM cells for hardware neuromorphic computing. <i>Scientific Reports</i> , 2022, 12, 7178.	1.6	16
20	Buffer influence on magnetic dead layer, critical current, and thermal stability in magnetic tunnel junctions with perpendicular magnetic anisotropy. <i>Journal of Applied Physics</i> , 2015, 117, .	1.1	12
21	Current-induced Magnetization Switching of Exchange-Biased NiO Heterostructures Characterized by Spin-Orbit Torque. <i>Physical Review Applied</i> , 2021, 15, .	1.5	12
22	The influence of interlayer exchange coupling in giant-magnetoresistive devices on spin diode effect in wide frequency range. <i>Applied Physics Letters</i> , 2015, 107, 122410.	1.5	11
23	Electric-field tunable spin diode FMR in patterned PMN-PT/NiFe structures. <i>Applied Physics Letters</i> , 2016, 109, 072406.	1.5	11
24	Perpendicular magnetic anisotropy influence on voltage-driven spin-diode effect in magnetic tunnel junctions: A micromagnetic study. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 429, 11-15.	1.0	11
25	The study of conductance in magnetic tunnel junctions with a thin MgO barrier: The effect of Ar pressure on tunnel magnetoresistance and resistance area product. <i>Journal of Applied Physics</i> , 2012, 111, 033903.	1.1	9
26	Backhopping effect in magnetic tunnel junctions: Comparison between theory and experiment. <i>Journal of Applied Physics</i> , 2013, 114, .	1.1	8
27	Spin-orbit torque induced magnetization dynamics and switching in a CoFeB/Ta/CoFeB system with mixed magnetic anisotropy. <i>Physical Review B</i> , 2021, 103, .	1.1	8
28	Backhopping in magnetic tunnel junctions: Micromagnetic approach and experiment. <i>Journal of Magnetism and Magnetic Materials</i> , 2015, 374, 451-454.	1.0	7
29	Multi-bit MRAM storage cells utilizing serially connected perpendicular magnetic tunnel junctions. <i>Journal of Applied Physics</i> , 2019, 125, .	1.1	7
30	Optimization of spin Hall magnetoresistance in heavy-metal/ferromagnetic-metal bilayers. <i>Scientific Reports</i> , 2020, 10, 10767.	1.6	6
31	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.	1.0	5
32	Reduction of critical current in magnetic tunnel junctions with CoFeB/Ru/CoFeB synthetic free layer. <i>Journal of Physics: Conference Series</i> , 2010, 200, 052035.	0.3	4
33	Electric-field tunable spin waves in PMN-PT/NiFe heterostructure: Experiment and micromagnetic simulations. <i>Journal of Magnetism and Magnetic Materials</i> , 2017, 428, 64-69.	1.0	4
34	Microwave magnetic field modulation of spin torque oscillator based on perpendicular magnetic tunnel junctions. <i>Scientific Reports</i> , 2019, 9, 19091.	1.6	4
35	Laser-induced magnetization precession parameters dependence on Pt spacer layer thickness in mixed magnetic anisotropies Co/Pt/Co trilayer. <i>Journal of Magnetism and Magnetic Materials</i> , 2020, 505, 166702.	1.0	4
36	Spin Hall Magnetoresistance and Spin-Orbit Torque Efficiency in Pt/FeCoB Bilayers. <i>IEEE Transactions on Magnetics</i> , 2022, 58, 1-5.	1.2	4

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37	Study of Spin-Orbit Interactions and Interlayer Ferromagnetic Coupling in Co/Pt/Co Trilayers in a Wide Range of Heavy-Metal Thickness. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 47019-47032.	4.0	4
38	Room-Temperature Multiferroicity and Magnetization Dynamics in Fe/BTO/LSMO Tunnel Junction. <i>Advanced Electronic Materials</i> , 2022, 8, .	2.6	4
39	Influence of a composite free layer structure on thermal stability of perpendicular magnetic tunnel junction. <i>Journal of Applied Physics</i> , 2018, 124, 063903.	1.1	3
40	Toward Wafer Scale Inductive Characterization of Spin-Transfer Torque Critical Current Density of Magnetic Tunnel Junction Stacks. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.	1.2	2
41	Magnetic Properties and Magnetization Dynamics of Magnetic Tunnel Junction Bottom Electrode With Different Buffer Layers. <i>IEEE Transactions on Magnetics</i> , 2015, 51, 1-4.	1.2	2
42	Angular Harmonic Hall Voltage and Magnetoresistance Measurements of Pt/FeCoB and Pt-Ti/FeCoB Bilayers for Spin Hall Conductivity Determination. <i>IEEE Transactions on Electron Devices</i> , 2021, 68, 6379-6385.	1.6	2
43	Numerical model of harmonic Hall voltage detection for spintronic devices. <i>Physical Review B</i> , 2022, 106, .	1.1	2
44	Influence of different buffers on magnetic dead layer, critical current and thermal stability in magnetic tunnel junctions with perpendicular magnetic anisotropy. , 2015, , .		1
45	Voltage-Controlled Magnetic Anisotropy in an Ultrathin Fe Layer Sandwiched Between Cr and MgO Layers. , 2016, , .		1
46	Magnetization dynamics of NiFe film and anisotropic magnetoresistance device: Comparison of microwave detection methods. , 2016, , .		1
47	Microwave detection based on magnetoresistance effect in spintronic devices. , 2016, , .		1
48	Biaxial Magnetic-Field Setup for Angular-Dependent Measurements of Magnetic Thin Films and Spintronic Nanodevices. <i>IEEE Transactions on Magnetics</i> , 2018, 54, 1-7.	1.2	1
49	High frequency voltage-induced ferromagnetic resonance in magnetic tunnel junctions. <i>Applied Physics Letters</i> , 2019, 115, 072401.	1.5	1
50	Magnetic Field Sensor Based on Magnetic Tunnel Junction with Voltage-Tunable Magnetic Anisotropy. <i>Acta Physica Polonica A</i> , 2015, 127, 496-498.	0.2	0
51	Magnetization dynamics of NiFe film and anisotropic magnetoresistance device: comparison of microwave detection methods. , 2016, , .		0
52	Stability diagram of perpendicular magnetic tunnel junction with a composite free layer. , 2017, , .		0