

# Pavel Baláž<sup>3/4</sup>

## List of Publications by Year in descending order

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37  
papers

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docs citations

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times ranked

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citing authors

#	ARTICLE	IF	CITATIONS
1	Interaction of In-Plane Magnetic Skyrmions with Magnetic Domain Walls: Micromagnetic Simulations. Physical Review Applied, 2022, 17, .	3.8	0
2	Melting of Néel skyrmion lattice. Physical Review B, 2021, 103, .	3.2	7
3	High-frequency magnon excitation due to femtosecond spin-transfer torques. Physical Review B, 2020, 101, .	3.2	13
4	Domain wall dynamics due to femtosecond laser-induced superdiffusive spin transport. Physical Review B, 2020, 101, .	3.2	12
5	Magnetic properties of Mn-doped topological insulators: $Ab$ initio calculations. Physical Review B, 2020, 101, .		
6	Tailoring femtosecond hot-electron pulses for ultrafast spin manipulation. Applied Physics Letters, 2020, 117, .	3.3	4
7	Tetragonal CuMnAs alloy: Role of defects. Journal of Magnetism and Magnetic Materials, 2019, 474, 467-471.	2.3	7
8	Transport theory for femtosecond laser-induced spin-transfer torques. Journal of Physics Condensed Matter, 2018, 30, 115801.	1.8	17
9	Static properties and current-induced dynamics of pinned $90^\circ$ magnetic domain walls under applied fields: An analytic approach. Physical Review B, 2018, 98, .	3.2	1
10	Physical properties of the tetragonal CuMnAs: A first-principles study. Physical Review B, 2017, 96, .	3.2	16
11	Laser-Induced Ultrafast Magnetic Phenomena. Handbook of Magnetic Materials, 2017, 26, 291-463.	0.6	11
12	Electronic and transport properties of the Mn-doped topological insulator $Bi_{2-x}Mn_xTe$ : A first-principles study. Physical Review B, 2016, 93, .		
13	Estimation of transverse spin penetration length using second-harmonic measurement: Proposal of an experimental method. Physical Review B, 2016, 94, .	3.2	2
14	Tunable short-wavelength spin wave excitation from pinned magnetic domain walls. Scientific Reports, 2016, 6, 21330.	3.3	63
15	Magnetic and structural properties of Mn-doped $Bi_2Se_3$ topological insulators. Physica B: Condensed Matter, 2016, 481, 262-267.	2.7	18
16	ELECTRICAL AND THERMAL CONTROL OF MAGNETIC MOMENTS. , 2015, , .		0
17	Spin waves in exchange-coupled double layers in the presence of spin torques. Physical Review B, 2015, 91, .	3.2	6
18	Effects of Spin Pumping on Spin Waves in Antiferromagnetically Exchange-Coupled Double Layers with Surface Anisotropy. Acta Physica Polonica A, 2015, 128, 150-153.	0.5	0

#	ARTICLE	IF	CITATIONS
19	Current-induced instability of a composite free layer with antiferromagnetic interlayer coupling. <i>Physical Review B</i> , 2013, 88, .	3.2	13
20	Spin-transfer torque and current-induced switching in metallic spin valves with perpendicular polarizers. <i>Physical Review B</i> , 2013, 88, .	3.2	4
21	Transverse spin penetration length in metallic spin valves. <i>Journal of Applied Physics</i> , 2013, 113, 193905.	2.5	6
22	Spin-transfer torque in a thick Néel domain wall. <i>Physical Review B</i> , 2012, 85, .	3.2	9
23	Current-Induced Spin Accumulation and Spin Transfer Torque in a Néel Domain Wall. <i>Acta Physica Polonica A</i> , 2012, 121, 1210-1212.	0.5	0
24	Current-induced dynamics of composite free layer with antiferromagnetic interlayer exchange coupling. <i>Physical Review B</i> , 2011, 83, .	3.2	8
25	Computational study of microwave oscillations in nonstandard spin valves in the diffusive transport limit. <i>Physical Review B</i> , 2010, 81, .	3.2	2
26	Nonlinear magnetotransport in dual spin valves. <i>Physical Review B</i> , 2010, 82, .	3.2	2
27	Current-induced dynamics in noncollinear dual spin valves. <i>Physical Review B</i> , 2009, 80, .	3.2	19
28	Current-pulse-induced magnetic switching in standard and nonstandard spin-valves: Theory and numerical analysis. <i>Physical Review B</i> , 2009, 79, .	3.2	12
29	Magnetization dynamics in nanopillars in the diffusive transport regime: Macrospin versus micromagnetic analysis. <i>Journal of Applied Physics</i> , 2009, 106, 113909.	2.5	2
30	Current-Pulse-Induced Switching of Asymmetric Spin Valves. <i>Acta Physica Polonica A</i> , 2009, 115, 278-280.	0.5	2
31	The dynamical response to the node defect in thermally activated remagnetization of magnetic dot array. <i>Journal of Magnetism and Magnetic Materials</i> , 2008, 320, 1083-1088.	2.3	1
32	Breakdown of an intermediate plateau in the magnetization process of anisotropic spin-1 Heisenberg dimer: Theory vs. experiment. <i>Physica B: Condensed Matter</i> , 2008, 403, 3146-3153.	2.7	5
33	The statistical response to the point defect in thermally activated remagnetization of magnetic dot array. <i>Physics of Particles and Nuclei Letters</i> , 2008, 5, 207-210.	0.4	0
34	Defect Sensitivity of Magnetic Dot Arrays Influenced by Thermal Activation and Intradot Anisotropy. <i>Acta Physica Polonica A</i> , 2008, 113, 583-586.	0.5	0
35	The evidence of the localized point defect from the remagnetization of a magnetic dot array. <i>Journal of Magnetism and Magnetic Materials</i> , 2006, 304, e486-e488.	2.3	3
36	The Effective Model of Chirality-chirality Correlations of the System of Magnetized Nano-loops. <i>European Physical Journal D</i> , 2004, 54, 117-120.	0.4	1

#	ARTICLE	IF	CITATIONS
37	The perturbative construction of the effective soft-spin Hamiltonian of the system of magnetized nano-loops. <i>Physica Status Solidi (B): Basic Research</i> , 2004, 241, 3624-3635.	1.5	1