

# Farzad Mahfouzi

## List of Publications by Year in descending order

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39  
papers

1,086  
citations

361045

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395343

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docs citations

39  
times ranked

1312  
citing authors

#	ARTICLE	IF	CITATIONS
1	Elastodynamically Induced Spin and Charge Pumping in Bulk Heavy Metals. <i>Physical Review Letters</i> , 2022, 128, .	2.9	3
2	Inducing Dzyaloshinskii-Moriya interaction in symmetrical multilayers using post annealing. <i>Scientific Reports</i> , 2022, 12, .	1.6	4
3	Spin transfer torque in $\text{MnBi}$ -based ferrimagnetic tunnel junctions from first principles. <i>Physical Review B</i> , 2021, 103, .		
4	First-principles calculation of the Dzyaloshinskii-Moriya interaction: A Green's function approach. <i>Physical Review B</i> , 2021, 103, .	1.1	14
5	Novel Spin-Orbit Torque Generation at Room Temperature in an $\text{La}_{0.7}\text{Sr}_{0.3}\text{MnO}_3/\text{SrIrO}_3$ System. <i>Advanced Materials</i> , 2021, 33, e2008269.	11.1	32
6	Magnetoelastic and magnetostrictive properties of $\text{Co}_2\text{MnSi}$ Heusler compounds. <i>Physical Review B</i> , 2020, 102, .		
7	Microscopic origin of spin-orbit torque in ferromagnetic heterostructures: A first-principles approach. <i>Physical Review B</i> , 2020, 101, .	1.1	19
8	Ferroelectric-driven tunable magnetism in ultrathin platinum films. <i>Physical Review Materials</i> , 2020, 4, .	0.9	4
9	Voltage-Controlled Magnetic Anisotropy in Heterostructures with Atomically Thin Heavy Metals. <i>Physical Review Applied</i> , 2019, 12, .	1.5	22
10	Colossal electric field control of magnetic anisotropy at ferromagnetic interfaces induced by iridium overlayer. <i>Physical Review B</i> , 2019, 99, .	1.1	24
11	Electric-field control of spin accumulation direction for spin-orbit torques. <i>Nature Communications</i> , 2019, 10, 248.	5.8	61
12	Damping and antidamping phenomena in metallic antiferromagnets: An <i>ab initio</i> study. <i>Physical Review B</i> , 2018, 98, .	1.1	13
13	First-principles study of the angular dependence of the spin-orbit torque in Pt/Co and Pd/Co bilayers. <i>Physical Review B</i> , 2018, 97, .	1.1	38
14	Spin-orbit torque-driven magnetization switching in 2D-topological insulator heterostructure. <i>Europhysics Letters</i> , 2017, 117, 37001.	0.7	4
15	Current-induced damping of nanosized quantum moments in the presence of spin-orbit interaction. <i>Physical Review B</i> , 2017, 95, .	1.1	6
16	Structural defects influence on the conductance of strained zigzag graphene nanoribbon. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2017, 93, 216-223.	1.3	2
17	Intrinsic damping phenomena from quantum to classical magnets: An <i>ab initio</i> study of Gilbert damping in a Pt/Co bilayer. <i>Physical Review B</i> , 2017, 96, .	1.1	15
18	Antidamping spin-orbit torque driven by spin-flip reflection mechanism on the surface of a topological insulator: A time-dependent nonequilibrium Green function approach. <i>Physical Review B</i> , 2016, 93, .	1.1	43

#	ARTICLE	IF	CITATIONS
19	Ferromagnetic Damping/Anti-damping in a Periodic 2D Helical Surface; A Nonequilibrium Keldysh Green Function Approach. Spin, 2016, 06, 1640009.	0.6	1
20	Giant Spin Pumping and Inverse Spin Hall Effect in the Presence of Surface and Bulk Spin-Orbit Coupling of Topological Insulator $\text{Bi}_2\text{Se}_3$ . Nano Letters, 2015, 15, 7126-7132.	4.5	257
21	Spin-to-charge conversion in lateral and vertical topological-insulator/ferromagnet heterostructures with microwave-driven precessing magnetization. Physical Review B, 2014, 90, .	1.1	30
22	Spin-Seebeck effect on the surface of a topological insulator due to nonequilibrium spin-polarization parallel to the direction of thermally driven electronic transport. Physical Review B, 2014, 89, .	1.1	35
23	Signatures of electron-magnon interaction in charge and spin currents through magnetic tunnel junctions: A nonequilibrium many-body perturbation theory approach. Physical Review B, 2014, 90, .	1.1	25
24	HOW TO CONSTRUCT THE PROPER GAUGE-INVARIANT DENSITY MATRIX IN STEADY-STATE NONEQUILIBRIUM: APPLICATIONS TO SPIN-TRANSFER AND SPIN-ORBIT TORQUES. Spin, 2013, 03, 1330002.	0.6	20
25	Spin-charge conversion in a multiterminal Aharonov-Casher ring coupled to precessing ferromagnets: A charge-conserving Floquet nonequilibrium Green function approach. Physical Review B, 2013, 87, .	1.1	11
26	Charge pumping by magnetization dynamics in magnetic and semimagnetic tunnel junctions with interfacial Rashba or bulk extrinsic spin-orbit coupling. Physical Review B, 2012, 85, .	1.1	29
27	Spin-Orbit Coupling Induced Spin-Transfer Torque and Current Polarization in Topological-Insulator/Ferromagnet Vertical Heterostructures. Physical Review Letters, 2012, 109, 166602.	2.9	68
28	Microwave-driven ferromagnet-topological-insulator heterostructures: The prospect for giant spin battery effect and quantized charge pump devices. Physical Review B, 2010, 82, .	1.1	51
29	New features in collective dynamics of intrinsic Josephson junctions. Journal of Physics and Chemistry of Solids, 2008, 69, 3205-3207.	1.9	1
30	Structure of the breakpoint region on current-voltage characteristics of intrinsic Josephson junctions. Physical Review B, 2008, 78, .	1.1	30
31	Breakpoint region in the IV-characteristics of intrinsic Josephson junctions. Journal of Physics: Conference Series, 2008, 97, 012124.	0.3	0
32	Branching in current-voltage characteristics of intrinsic Josephson junctions. Superconductor Science and Technology, 2007, 20, S38-S42.	1.8	25
33	Influence of Coupling between Junctions on Breakpoint Current in Intrinsic Josephson Junctions. Physical Review Letters, 2007, 98, 157001.	2.9	58
34	Investigation of the breakpoint region in stacks with a finite number of intrinsic Josephson junctions. Physical Review B, 2007, 75, .	1.1	51
35	Branch structure of IV-characteristics in the capacitively coupled Josephson junctions model with the diffusion current. Physica C: Superconductivity and Its Applications, 2007, 460-462, 1301-1302.	0.6	5
36	Current-voltage characteristics of intrinsic Josephson junctions with charge-imbalance effect. Physica C: Superconductivity and Its Applications, 2007, 460-462, 1303-1304.	0.6	1

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37	Equidistance of branch structure in capacitively coupled Josephson junctions model with diffusion current. <i>Physica C: Superconductivity and Its Applications</i> , 2006, 449, 62-66.	0.6	43
38	Influence of coupling parameter on current-voltage characteristics of intrinsic Josephson junctions in high-T <sub>c</sub> superconductors. <i>Physica C: Superconductivity and Its Applications</i> , 2006, 434, 6-12.	0.6	21
39	Collective Dynamics of Intrinsic Josephson Junctions in HTSC. <i>Journal of Physics: Conference Series</i> , 2006, 43, 1143-1146.	0.3	3