

# Chi-Feng Pai

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/824780/publications.pdf>

Version: 2024-02-01

40  
papers

6,721  
citations

304368

22  
h-index

301761

39  
g-index

40  
all docs

40  
docs citations

40  
times ranked

4225  
citing authors

#	ARTICLE	IF	CITATIONS
1	Spin-Torque Switching with the Giant Spin Hall Effect of Tantalum. <i>Science</i> , 2012, 336, 555-558.	6.0	3,176
2	Spin transfer torque devices utilizing the giant spin Hall effect of tungsten. <i>Applied Physics Letters</i> , 2012, 101, 122404.	1.5	1,173
3	Dependence of the efficiency of spin Hall torque on the transparency of Pt/ferromagnetic layer interfaces. <i>Physical Review B</i> , 2015, 92, .	1.1	380
4	Magnetic Oscillations Driven by the Spin Hall Effect in 3-Terminal Magnetic Tunnel Junction Devices. <i>Physical Review Letters</i> , 2012, 109, 186602.	2.9	306
5	Current-induced switching in a magnetic insulator. <i>Nature Materials</i> , 2017, 16, 309-314.	13.3	302
6	Determination of spin torque efficiencies in heterostructures with perpendicular magnetic anisotropy. <i>Physical Review B</i> , 2016, 93, .	1.1	286
7	Enhancement of perpendicular magnetic anisotropy and transmission of spin-Hall-effect-induced spin currents by a Hf spacer layer in W/Hf/CoFeB/MgO layer structures. <i>Applied Physics Letters</i> , 2014, 104, .	1.5	206
8	Enhancement of the anti-damping spin torque efficacy of platinum by interface modification. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	105
9	Origin of fieldlike spin-orbit torques in heavy metal/ferromagnet/oxide thin film heterostructures. <i>Physical Review B</i> , 2016, 94, .	1.1	95
10	Spin-orbit torques in Ta/TbxCo100-x ferrimagnetic alloy films with bulk perpendicular magnetic anisotropy. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	68
11	Current-Induced Spin-Orbit Torque and Field-Free Switching in $\text{Mo}$ -Based Magnetic Heterostructures. <i>Physical Review Applied</i> , 2018, 10, .	1.5	66
12	Effect of rare earth metal on the spin-orbit torque in magnetic heterostructures. <i>Applied Physics Letters</i> , 2016, 108, .	1.5	50
13	Control of propagating spin waves via spin transfer torque in a metallic bilayer waveguide. <i>Physical Review B</i> , 2014, 89, .	1.1	48
14	Tunable spin-orbit torque in Cu-Ta binary alloy heterostructures. <i>Physical Review B</i> , 2017, 96, .	1.1	38
15	Benchmarking of Spin-Orbit Torque Switching Efficiency in Pt Alloys. <i>Advanced Quantum Technologies</i> , 2020, 3, 2000024.	1.8	37
16	Chiral domain wall motion in unit-cell thick perpendicularly magnetized Heusler films prepared by chemical templating. <i>Nature Communications</i> , 2018, 9, 4653.	5.8	35
17	Efficient Spin-Orbit Torque Switching with Nonepitaxial Chalcogenide Heterostructures. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 7788-7794.	4.0	31
18	Pulse-Width and Temperature Effect on the Switching Behavior of an Etch-Stop-on-MgO-Barrier Spin-Orbit Torque MRAM Cell. <i>IEEE Electron Device Letters</i> , 2018, 39, 1306-1309.	2.2	29

#	ARTICLE	IF	CITATIONS
19	Comparative study on spin-orbit torque efficiencies from W/ferromagnetic and W/ferrimagnetic heterostructures. <i>Physical Review Materials</i> , 2018, 2, .	0.9	29
20	Field-free spin-orbit torque switching through domain wall motion. <i>Physical Review B</i> , 2019, 100, .	1.1	28
21	Determination of Spin-Orbit-Torque Efficiencies in Heterostructures with In-Plane Magnetic Anisotropy. <i>Physical Review Applied</i> , 2020, 13, .	1.5	25
22	Toward 100% Spin-Orbit Torque Efficiency with High Spin-Orbital Hall Conductivity Pt-Cr Alloys. <i>ACS Applied Electronic Materials</i> , 2022, 4, 1099-1108.	2.0	25
23	Switching by topological insulators. <i>Nature Materials</i> , 2018, 17, 755-757.	13.3	22
24	Spin transport in as-grown and annealed thulium iron garnet/platinum bilayers with perpendicular magnetic anisotropy. <i>Physical Review B</i> , 2017, 95, .	1.1	21
25	Spin-orbit torque characterization in a nutshell. <i>APL Materials</i> , 2021, 9, .	2.2	21
26	Spin-orbit torque magnetometry by wide-field magneto-optical Kerr effect. <i>Scientific Reports</i> , 2018, 8, 5613.	1.6	16
27	Current-induced spin-orbit torque efficiencies in W/Pt/Co/Pt heterostructures. <i>Applied Physics Letters</i> , 2020, 116, .	1.5	15
28	Efficient Spin-Orbit Torque Generation in Semiconducting WTe <sub>2</sub> with Hopping Transport. <i>ACS Applied Materials &amp; Interfaces</i> , 2021, 13, 15950-15957.	4.0	15
29	Current-Induced Magnetization Switching by the High Spin Hall Conductivity $\hat{I}_s$ . <i>Physica Status Solidi - Rapid Research Letters</i> , 2019, 13, 1900408.	1.2	13
30	Size-Dependent Switching Properties of Spin-Orbit Torque MRAM With Manufacturing-Friendly 8-Inch Wafer-Level Uniformity. <i>IEEE Journal of the Electron Devices Society</i> , 2020, 8, 163-169.	1.2	12
31	Pulse-width and temperature dependence of memristive spin-orbit torque switching. <i>Applied Physics Letters</i> , 2020, 117, 182402.	1.5	11
32	Anatomy of Type- <i>x</i> Spin-Orbit-Torque Switching. <i>Physical Review Applied</i> , 2021, 16, .	1.5	10
33	Large unidirectional magnetoresistance in metallic heterostructures in the spin transfer torque regime. <i>Physical Review B</i> , 2021, 104, .	1.1	7
34	Current control of magnetic anisotropy via stress in a ferromagnetic metal waveguide. <i>Physical Review B</i> , 2016, 93, .	1.1	5
35	Tailoring Neuromorphic Switching by $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll"} \langle \text{mml:mrow} \langle \text{mml:mi} \text{Cu} \langle \text{mml:mi} \text{N} \langle \text{mml:mi} \text{x} \langle \text{mml:mrow} \langle \text{mml:msub} \langle \text{mml:math} \rangle \rangle \rangle \rangle \rangle \rangle \rangle$ -Mediated Orbital Currents. <i>Physical Review Applied</i> , 2022, 17, .	1.5	5
36	Spin-Orbit Torque from a Magnetic Heterostructure of High-Entropy Alloy. <i>Physical Review Applied</i> , 2017, 8, .	1.5	2

#	ARTICLE	IF	CITATIONS
37	Spin-orbit torques acting upon a perpendicularly magnetized Py layer. APL Materials, 2018, 6, 121101.	2.2	2
38	Effect of asymmetric Pt thickness on the inverse spin Hall voltage in Pt/Co/Pt trilayers. AIP Advances, 2020, 10, .	0.6	2
39	Characterization of Spin-Orbit Torque Efficiency in the RF Regime for MRAM Applications. , 2021, , .		2
40	Deep learning for spin-orbit torque characterizations with a projected vector field magnet. Physical Review Research, 2022, 4, .	1.3	2