

# FrÃ©dÃ©ric Bonell

## List of Publications by Year in descending order

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47

papers

2,530

citations

279798

23

h-index

223800

46

g-index

47

all docs

47

docs citations

47

times ranked

2750

citing authors

#	ARTICLE	IF	CITATIONS
1	Induction of coherent magnetization switching in a few atomic layers of FeCo using voltage pulses. Nature Materials, 2012, 11, 39-43.	27.5	659
2	Electric-field-induced ferromagnetic resonance excitation in an ultrathin ferromagnetic metal layer. Nature Physics, 2012, 8, 491-496.	16.7	223
3	Strongly anisotropic spin relaxation in graphene transition metal dichalcogenide heterostructures at room temperature. Nature Physics, 2018, 14, 303-308.	16.7	193
4	Voltage controlled interfacial magnetism through platinum orbits. Nature Communications, 2017, 8, 15848.	12.8	128
5	Quantitative Evaluation of Voltage-Induced Magnetic Anisotropy Change by Magnetoresistance Measurement. Applied Physics Express, 2011, 4, 043005.	2.4	111
6	Opposite signs of voltage-induced perpendicular magnetic anisotropy change in CoFeB MgO junctions with different underlayers. Applied Physics Letters, 2013, 103, .	3.3	89
7	Large change in perpendicular magnetic anisotropy induced by an electric field in FePd ultrathin films. Applied Physics Letters, 2011, 98, .	3.3	88
8	Pulse voltage-induced dynamic magnetization switching in magnetic tunneling junctions with high resistance-area product. Applied Physics Letters, 2012, 101, .	3.3	77
9	Determination of the spin-lifetime anisotropy in graphene using oblique spin precession. Nature Communications, 2016, 7, 11444.	12.8	76
10	Reversible change in the oxidation state and magnetic circular dichroism of Fe driven by an electric field at the FeCo/MgO interface. Applied Physics Letters, 2013, 102, .	3.3	72
11	Spin-orbit torque in a bulk perpendicular magnetic anisotropy Pd/FePd/MgO system. Scientific Reports, 2014, 4, 6548.	3.3	59
12	Spin-Polarized Electron Tunneling in bcc<math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>FeCo</mml:mi><mml:mo></mml:mo><mml:mi>MgO</mml:mi><mml:mo></mml:mo><mml:mi>FeCo</mml:mi><mml:mo></mml:mo><mml:mi>Tj</mml:mi> ETQq0 0 0 rgBT /Overlock 10 Tf 50 292 Td (stretchy="false"></mml:mo><mml:mn>001</mml:mn><mml:mo></mml:mo><mml:mi>Tj</mml:mi> ETQq0 0 0 rgBT /Overlock 10 Tf 50 292 Td (stretchy="false"></mml:mo>	3.3	58
13	176602. Influence of misfit dislocations on the magnetoresistance of MgO-based epitaxial magnetic tunnel junctions. Physical Review B, 2010, 82, .	3.2	51
14	Consequences of interfacial Fe-O bonding and disorder in epitaxial Fe/MgO/Fe(001) magnetic tunnel junctions. Physical Review B, 2009, 79, .	3.2	50
15	Spin precession in anisotropic media. Physical Review B, 2017, 95, .	3.2	46
16	Control of Spin-Orbit Torques by Interface Engineering in Topological Insulator Heterostructures. Nano Letters, 2020, 20, 5893-5899.	9.1	46
17	Future prospects of MRAM technologies. , 2013, .		42
18	Large-scale epitaxy of two-dimensional van der Waals room-temperature ferromagnet Fe5GeTe2. Npj 2D Materials and Applications, 2022, 6, .	7.9	37

#	ARTICLE	IF	CITATIONS
19	Spin precession and spin Hall effect in monolayer graphene/Pt nanostructures. <i>2D Materials</i> , 2017, 4, 041008.	4.4	36
20	Growth of Twin-Free and Low-Doped Topological Insulators on BaF <sub>2</sub> (111). <i>Crystal Growth and Design</i> , 2017, 17, 4655-4660.	3.0	34
21	TEM and EELS measurements of interface roughness in epitaxial Fe/MgO/Fe magnetic tunnel junctions. <i>Physical Review B</i> , 2009, 79, .	3.2	30
22	Strongly suppressed 1/f noise and enhanced magnetoresistance in epitaxial Fe $\text{V}$ /MgO/Fe magnetic tunnel junctions. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	26
23	Bias dependence of tunneling magnetoresistance in magnetic tunnel junctions with asymmetric barriers. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 496005.	1.8	26
24	MgO-Based Epitaxial Magnetic Tunnel Junctions Using Fe-V Electrodes. <i>IEEE Transactions on Magnetics</i> , 2009, 45, 3467-3471. Absence of Magnetic Proximity Effect at the Interface of $\text{Bi}_{2\text{Mn}}\text{O}_3$ and $\text{Fe}_{1-x}\text{V}_x$ . <i>IEEE Transactions on Magnetics</i> , 2009, 45, 3467-3471.	2.1	24
25	Absence of Magnetic Proximity Effect at the Interface of $\text{Bi}_{2\text{Mn}}\text{O}_3$ and $\text{Fe}_{1-x}\text{V}_x$ . <i>IEEE Transactions on Magnetics</i> , 2009, 45, 3467-3471.	2.1	24

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37	Molecular Approach for Engineering Interfacial Interactions in Magnetic/Topological Insulator Heterostructures. <i>ACS Nano</i> , 2020, 14, 6285-6294.	14.6	9
38	Mechanism of the lattice relaxation in thin epitaxial films of iron oxides: Generalization from the case of ilmenite-hematite solid solution. <i>Surface Science</i> , 2011, 605, 1043-1047.	1.9	8
39	Magnetism, spin dynamics, and quantum transport in two-dimensional systems. <i>MRS Bulletin</i> , 2020, 45, 357-365.	3.5	8
40	Composition Dependence of Perpendicular Magnetic Anisotropy in Ta/Co <sub>x</sub> /Fe <sub>80-x</sub> B <sub>20</sub> /MgO/Ta (x=0, 10, 60) Multilayers. <i>Journal of Magnetics</i> , 2013, 18, 5-8.	0.4	8
41	Influence of interfacial oxygen on single-crystal magnetic tunnel junctions. <i>EPJ Applied Physics</i> , 2008, 43, 357-361.	0.7	7
42	Investigation of Au and Ag segregation on Fe(001) with soft X-ray absorption. <i>Surface Science</i> , 2013, 616, 125-130.	1.9	7
43	Influence of an electric field on the spin-reorientation transition in Ni/Cu(100). <i>Applied Physics Letters</i> , 2014, 105, 152903.	3.3	6
44	Growth of perpendicularly magnetized thin films on a polymer buffer and voltage-induced change of magnetic anisotropy at the MgO   CoFeB interface. <i>AIP Advances</i> , 2015, 5, 067132.	1.3	6
45	Electron diffraction study of the plastic relaxation of MgO epitaxially grown on BCC FeV(001) alloys by varying the lattice mismatch. <i>Surface Science</i> , 2017, 656, 140-147.	1.9	5
46	Magnetotransport in MgO-based magnetic tunnel junctions grown by molecular beam epitaxy (invited). <i>Journal of Applied Physics</i> , 2014, 115, 172610.	2.5	4
47	Fabrication of Fe/MgO/Gd Magnetic Tunnel Junctions. <i>IEEE Transactions on Magnetics</i> , 2013, 49, 4417-4420.	2.1	2