

# Evgeny Tsymbal

## List of Publications by Year in descending order

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254  
papers

18,778  
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9786

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14208

128  
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266  
all docs

266  
docs citations

266  
times ranked

13803  
citing authors

#	ARTICLE	IF	CITATIONS
1	APPLIED PHYSICS: Tunneling Across a Ferroelectric. Science, 2006, 313, 181-183.	12.6	755
2	Predicted Magnetoelectric Effect in Fe/BaTiO <sub>3</sub> Multilayers: Ferroelectric Control of Magnetism. Physical Review Letters, 2006, 97, 047201.	7.8	642
3	Giant Electroresistance in Ferroelectric Tunnel Junctions. Physical Review Letters, 2005, 94, .	7.8	626
4	Surface Magnetoelectric Effect in Ferromagnetic Metal Films. Physical Review Letters, 2008, 101, 137201.	7.8	606
5	Tunneling Electroresistance Effect in Ferroelectric Tunnel Junctions at the Nanoscale. Nano Letters, 2009, 9, 3539-3543.	9.1	536
6	Spin-dependent tunnelling in magnetic tunnel junctions. Journal of Physics Condensed Matter, 2003, 15, R109-R142.	1.8	510
7	Magnetic nanoparticles: recent advances in synthesis, self-assembly and applications. Journal of Materials Chemistry, 2011, 21, 16819.	6.7	442
8	Freestanding crystalline oxide perovskites down to the monolayer limit. Nature, 2019, 570, 87-90.	27.8	398
9	<a href="http://www.n3.org/1996/Mark/MarkML">Ferroelectric control of magnetism in <math>\text{BaTiO}_3/\text{TiO}_3</math> heterostructures via interface strain coupling. Physical Review B, 2007, 76.</a>	3.2	312
10	Suppression of Octahedral Tilts and Associated Changes in Electronic Properties at Epitaxial Oxide Heterostructure Interfaces. Physical Review Letters, 2010, 105, 087204.	7.8	308
11	Magnetic Tunnel Junctions with Ferroelectric Barriers: Prediction of Four Resistance States from First Principles. Nano Letters, 2009, 9, 427-432.	9.1	305
12	Ferroelectric Tunnel Memristor. Nano Letters, 2012, 12, 5697-5702.	9.1	285
13	Enhanced tunnelling electroresistance effect due to a ferroelectrically induced phase transition at a magnetic complex oxide interface. Nature Materials, 2013, 12, 397-402.	27.5	283
14	Electric field effect on magnetization at the Fe/MgO(001) interface. Applied Physics Letters, 2010, 96, .	3.3	270
15	Emergence of room-temperature ferroelectricity at reduced dimensions. Science, 2015, 349, 1314-1317.	12.6	259
16	Tailoring a two-dimensional electron gas at the LaAlO <sub>3</sub> /SrTiO <sub>3</sub> (001) interface by epitaxial strain. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 4720-4724.	7.1	218
17	Perspectives of giant magnetoresistance. Solid State Physics, 2001, 56, 113-237.	0.5	212
18	Metallic and Insulating Oxide Interfaces Controlled by Electronic Correlations. Science, 2011, 331, 886-889.	12.6	212

#	ARTICLE	IF	CITATIONS
19	Prediction of electrically induced magnetic reconstruction at the manganite/ferroelectric interface. Physical Review B, 2009, 80, .	3.2	210
20	Multi-ferroic and magnetoelectric materials and interfaces. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 3069-3097.	3.4	190
21	Ferroelectric and multiferroic tunnel junctions. MRS Bulletin, 2012, 37, 138-143.	3.5	182
22	Interface Effect on Ferroelectricity at the Nanoscale. Nano Letters, 2006, 6, 483-487.	9.1	179
23	A room-temperature ferroelectric semimetal. Science Advances, 2019, 5, eaax5080.	10.3	176
24	Switchable Induced Polarization in LaAlO <sub>3</sub> /SrTiO <sub>3</sub> Heterostructures. Nano Letters, 2012, 12, 1765-1771.	9.1	167
25	Effect of Ferroelectricity on Electron Transport in Pt/BaTiO <sub>3</sub> /Pt Tunnel Junctions. Physical Review Letters, 2007, 98, 137201.	7.8	163
26	Electronic, magnetic and transport properties of rare-earth monpnictides. Journal of Physics Condensed Matter, 2007, 19, 315220.	1.8	158
27	Isostructural metal-insulator transition in VO <sub>2</sub> . Science, 2018, 362, 1037-1040.	12.6	158
28	Magnetoelectric effect at the interface: A first-principles study. Physical Review B, 2008, 78, .	12.6	158
29	Intrinsic defects in multiferroic BiFeO <sub>3</sub> and their effect on magnetism. Physical Review B, 2012, 85, .	3.2	153
30	Imaging and control of ferromagnetism in LaMnO <sub>3</sub> /SrTiO <sub>3</sub> heterostructures. Science, 2015, 349, 716-719.	12.6	153
31	Resonant Inversion of Tunneling Magnetoresistance. Physical Review Letters, 2003, 90, 186602.	7.8	152
32	Direct observation of a two-dimensional hole gas at oxide interfaces. Nature Materials, 2018, 17, 231-236.	27.5	151
33	Tailoring magnetic anisotropy at the ferromagnetic/ferroelectric interface. Applied Physics Letters, 2008, 92, .	3.3	139
34	Structural and electronic properties of Co/Al <sub>2</sub> O <sub>3</sub> /Comagnetic tunnel junction from first principles. Physical Review B, 2000, 62, 3952-3959.	3.2	138
35	Magnetic and superconducting phases at the LaAlO <sub>3</sub> /SrTiO <sub>3</sub> interface: The role of interfacial Ti <sub>3d</sub>	3.2	137
36	Tunneling electroresistance in ferroelectric tunnel junctions with a composite barrier. Applied Physics Letters, 2009, 95, .	3.3	124

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37	Oxygen vacancies at titanate interfaces: Two-dimensional magnetism and orbital reconstruction. <i>Physical Review B</i> , 2012, 86, .	3.2	124
38	Effect of interface states on spin-dependent tunneling in $\text{Fe}^{\text{MgO}}/\text{Fe}$ tunnel junctions. <i>Physical Review B</i> , 2005, 72, .	3.2	123
39	Interlayer exchange coupling in $\text{Fe}^{\text{MgO}}/\text{Fe}$ magnetic tunnel junctions. <i>Applied Physics Letters</i> , 2006, 89, 112503.	3.3	123
40	Magnetoelectric effect at the $\text{SrRuO}_3/\text{BaTiO}_3$ (001) interface: An <i>ab initio</i> study. <i>Applied Physics Letters</i> , 2009, 95, .	3.3	119
41	Tunable Optical Properties and Charge Separation in $\text{CH}_3\text{NH}_3\text{Sn}^{\text{Pb}}/\text{TiO}_2/\text{BaTiO}_3$ -Based Planar Perovskites Cells. <i>Journal of the American Chemical Society</i> , 2015, 137, 8227-8236.	4.7	110
42	Ferroelectric switch for spin injection. <i>Applied Physics Letters</i> , 2005, 87, 222114.	3.3	118
43	Electric modulation of magnetization at the $\text{BaTiO}_3/\text{La}_{0.67}\text{Sr}_{0.33}\text{MnO}_3$ interfaces. <i>Applied Physics Letters</i> , 2012, 100, .	3.3	118
44	Enhancement of Ferroelectric Polarization Stability by Interface Engineering. <i>Advanced Materials</i> , 2012, 24, 1209-1216.	21.0	118
45	Ferroelectric Instability Under Screened Coulomb Interactions. <i>Physical Review Letters</i> , 2012, 109, 247601.	7.8	117
46	Prediction of a Switchable Two-Dimensional Electron Gas at Ferroelectric Oxide Interfaces. <i>Physical Review Letters</i> , 2009, 103, 016804.	7.8	115
47	Spin-Dependent Transport in van der Waals Magnetic Tunnel Junctions with $\text{Fe}_3\text{GeTe}_2$ Electrodes. <i>Nano Letters</i> , 2019, 19, 5133-5139.	9.1	115
48	Spin-polarized electron tunneling across a disordered insulator. <i>Physical Review B</i> , 1998, 58, 432-437.	3.2	113
49	Ballistic Anisotropic Magnetoresistance. <i>Physical Review Letters</i> , 2005, 94, 127203.	7.8	113
50	Interface effects in spin-polarized metal/insulator layered structures. <i>Surface Science Reports</i> , 2008, 63, 400-425.	7.2	113
51	Giant Tunneling Electroresistance Effect Driven by an Electrically Controlled Spin Valve at a Complex Oxide Interface. <i>Physical Review Letters</i> , 2011, 106, 157203.	7.8	111
52	Persistent spin texture enforced by symmetry. <i>Nature Communications</i> , 2018, 9, 2763.	12.8	109
53	Quantum Nature of Two-Dimensional Electron Gas Confinement at $\text{LaAlO}_3/\text{LaAlO}_3$ Interface. <i>Physical Review Letters</i> , 2009, 102, 106803.	7.8	108
54	Ferroelectric tunnel junctions with graphene electrodes. <i>Nature Communications</i> , 2014, 5, 5518.	12.8	107

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55	Beyond the barrier. Nature Materials, 2013, 12, 602-604.	27.5	106
56	Controlling spin current polarization through non-collinear antiferromagnetism. Nature Communications, 2020, 11, 4671.	12.8	103
57	Negative Spin Polarization and Large Tunneling Magnetoresistance in Epitaxial Co   SrTiO <sub>3</sub>   CoMagnetic Tunnel Junctions. Physical Review Letters, 2005, 95, 216601.	7.8	101
58	Hydroxyl-decorated graphene systems as candidates for organic metal-free ferroelectrics, multiferroics, and high-performance proton battery cathode materials. Physical Review B, 2013, 87, .	3.2	100
59	Hexagonal rare-earth manganites as promising photovoltaics and light polarizers. Physical Review B, 2015, 92, .	3.2	100
60	Bias Voltage Dependence of Tunneling Anisotropic Magnetoresistance in Magnetic Tunnel Junctions with MgO and $Al_2O_3$ Tunnel Barriers. Physical Review Letters, 2007, 99, 226602.	7.8	98
61	Atomic and electronic structure of Co/SrTiO <sub>3</sub> /CoMagnetic tunnel junctions. Physical Review B, 2001, 65, .	3.2	96
62	Electric toggling of magnets. Nature Materials, 2012, 11, 12-13.	27.5	96
63	Tunneling Anisotropic Magnetoresistance Driven by Resonant Surface States: First-Principles Calculations on an Fe(001) Surface. Physical Review Letters, 2007, 98, 046601.	7.8	93
64	Interface effects in spin-dependent tunneling. Progress in Materials Science, 2007, 52, 401-420.	32.8	92
65	Predictive modelling of ferroelectric tunnel junctions. Npj Computational Materials, 2016, 2, .	8.7	88
66	Impurity-Assisted Interlayer Exchange Coupling across a Tunnel Barrier. Physical Review Letters, 2005, 94, 026806.	7.8	85
67	Effect of spin-dependent screening on tunneling electroresistance and tunneling magnetoresistance in multiferroic tunnel junctions. Physical Review B, 2010, 81, .	3.2	85
68	Quantized magnetoresistance in atomic-size contacts. Nature Nanotechnology, 2007, 2, 171-175.	31.5	83
69	Model of orbital populations for voltage-controlled magnetic anisotropy in transition-metal thin films. Physical Review B, 2017, 96, .	3.2	82
70	Direct observation of room-temperature out-of-plane ferroelectricity and tunneling electroresistance at the two-dimensional limit. Nature Communications, 2018, 9, 3319.	12.8	81
71	Reversible spin texture in ferroelectric $HfO_2$ . Physical Review B, 2017, 95, .	3.2	80
72	Effect of oxygen vacancies on spin-dependent tunneling in Fe <sup>2+</sup> /MgO/Fe magnetic tunnel junctions. Applied Physics Letters, 2007, 90, 072502.	3.3	76

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73	Reversal of Spin Polarization in Fe/GaAs(001) Driven by Resonant Surface States: First-Principles Calculations. <i>Physical Review Letters</i> , 2007, 99, 196603.	7.8	75
74	Mechanical Tuning of LaAlO <sub>3</sub> /SrTiO <sub>3</sub> Interface Conductivity. <i>Nano Letters</i> , 2015, 15, 3547-3551.	9.1	75
75	Polarization-Mediated Modulation of Electronic and Transport Properties of Hybrid MoS <sub>2</sub> –BaTiO <sub>3</sub> –SrRuO <sub>3</sub> Tunnel Junctions. <i>Nano Letters</i> , 2017, 17, 922-927.	9.1	75
76	Effect of interface bonding on spin-dependent tunneling from the oxidized Co surface. <i>Physical Review B</i> , 2004, 69, .	3.2	74
77	Anisotropic spin-orbit torque generation in epitaxial SrIrO <sub>3</sub> by symmetry design. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2019, 116, 16186-16191.	7.1	73
78	Spin Filtering in CrI <sub>3</sub> Tunnel Junctions. <i>ACS Applied Materials &amp; Interfaces</i> , 2019, 11, 15781-15787.	8.0	71
79	Atomic and electronic structure of the CoFeB/MgO interface from first principles. <i>Applied Physics Letters</i> , 2006, 89, 142507.	3.3	68
80	Intrinsic ferroelectricity in Y-doped HfO <sub>2</sub> thin films. <i>Nature Materials</i> , 2022, 21, 903-909.	27.5	66
81	Organic Multiferroic Tunnel Junctions with Ferroelectric Poly(vinylidene fluoride) Barriers. <i>Nano Letters</i> , 2011, 11, 599-603.	9.1	65
82	Enhanced flexoelectricity at reduced dimensions revealed by mechanically tunable quantum tunnelling. <i>Nature Communications</i> , 2019, 10, 537.	12.8	64
83	Tilted spin current generated by the collinear antiferromagnet ruthenium dioxide. <i>Nature Electronics</i> , 2022, 5, 267-274.	26.0	64
84	Spin-neutral currents for spintronics. <i>Nature Communications</i> , 2021, 12, 7061.	12.8	63
85	Epitaxial CrN Thin Films with High Thermoelectric Figure of Merit. <i>Advanced Materials</i> , 2015, 27, 3032-3037.	21.0	59
86	Mechanically-Induced Resistive Switching in Ferroelectric Tunnel Junctions. <i>Nano Letters</i> , 2012, 12, 6289-6292.	9.1	58
87	Band structure and spin texture of Bi metal interface. <i>Physical Review B</i> , 2016, 94, .		
88	Surface Electronic Structure of Hybrid Organo Lead Bromide Perovskite Single Crystals. <i>Journal of Physical Chemistry C</i> , 2016, 120, 21710-21715.	3.1	58
89	Two-dimensional spin-valley locking spin valve. <i>Physical Review B</i> , 2019, 100, .	3.2	57
90	Imprint Control of BaTiO <sub>3</sub> Thin Films via Chemically Induced Surface Polarization Pinning. <i>Nano Letters</i> , 2016, 16, 2400-2406.	9.1	56

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91	Solid-State Synapse Based on Magnetoelectrically Coupled Memristor. ACS Applied Materials & Interfaces, 2018, 10, 5649-5656.	8.0	55
92	Magnetism of LaAlO <sub>3</sub> •SrTiO <sub>3</sub> superlattices. Journal of Applied Physics, 2008, 103, 07B508.	2.5	54
93	Electrically driven magnetism on a Pd thin film. Physical Review B, 2010, 81, .	3.2	53
94	Polarization-controlled Ohmic to Schottky transition at a metal/ferroelectric interface. Physical Review B, 2013, 88, .	3.2	53
95	Anisotropic polarization-induced conductance at a ferroelectric-insulator interface. Nature Nanotechnology, 2018, 13, 1132-1136.	31.5	53
96	Van der Waals Multiferroic Tunnel Junctions. Nano Letters, 2021, 21, 175-181.	9.1	53
97	Defects in ferroelectric HfO <sub>2</sub> . Nanoscale, 2021, 13, 11635-11678.	5.6	53
98	Perspectives of spin-textured ferroelectrics. Journal Physics D: Applied Physics, 2021, 54, 113001.	2.8	53
99	Enhanced Tunneling Electroresistance in Ferroelectric Tunnel Junctions due to the Reversible Metallization of the Barrier. Physical Review Letters, 2016, 116, 197602.	7.8	52
100	Nonlinear Anomalous Hall Effect for Néel Vector Detection. Physical Review Letters, 2020, 124, 067203.	7.8	52
101	Two-Dimensional Antiferroelectric Tunnel Junction. Physical Review Letters, 2021, 126, 057601.	7.8	52
102	Ferroelectric dead layer driven by a polar interface. Physical Review B, 2010, 82, .	3.2	51
103	Tunable ferroelectricity in artificial tri-layer superlattices comprised of non-ferroic components. Nature Communications, 2012, 3, 1064.	12.8	51
104	Ambipolar ferromagnetism by electrostatic doping of a manganite. Nature Communications, 2018, 9, 1897.	12.8	51
105	Dirac Nodal Line Metal for Topological Antiferromagnetic Spintronics. Physical Review Letters, 2019, 122, 077203.	7.8	51
106	Mean Free Path Effects on the Current Perpendicular to the Plane Magnetoresistance of Magnetic Multilayers. Physical Review Letters, 2000, 85, 1314-1317.	7.8	50
107	Anomalous Hall conductivity of noncollinear magnetic antiperovskites. Physical Review Materials, 2019, 3, .	2.4	50
108	Multiferroic Materials Based on Organic Transition-Metal Molecular Nanowires. Journal of the American Chemical Society, 2012, 134, 14423-14429.	13.7	49

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109	Electronic structure and stability of the $C_{3N}$	3.2	49
110	Magnetic ordering in Gd monopnictides: Indirect exchange versus superexchange interaction. Applied Physics Letters, 2006, 88, 182505.	3.3	47
111	Universality of the surface magnetoelectric effect in half-metals. Physical Review B, 2009, 79, .	3.2	47
112	Interface dipole effect on thin film ferroelectric stability: First-principles and phenomenological modeling. Physical Review B, 2012, 85, .	3.2	45
113	Prediction of a spin-polarized two-dimensional electron gas at the LaAlO <sub>3</sub> /EuO(001) interface. Physical Review B, 2009, 79, .	3.2	44
114	Transport spin polarization of high Curie temperature MnBi films. Physical Review B, 2011, 83, .	3.2	44
115	Effects of Strain and Film Thickness on the Stability of the Rhombohedral Phase of $HfO_2$ . Physical Review Applied, 2020, 14, .	3.8	43
116	Multifunctional Oxide Heterostructures. , 2012, , .		42
117	Electromechanics of Ferroelectric-Like Behavior of LaAlO <sub>3</sub> Thin Films. Advanced Functional Materials, 2015, 25, 6538-6544.	14.9	42
118	Giant Enhancement of Magnetic Anisotropy in Ultrathin Manganite Films via Nanoscale 1D Periodic Depth Modulation. Physical Review Letters, 2016, 116, 187201.	7.8	41
119	Direct imaging of the electron liquid at oxide interfaces. Nature Nanotechnology, 2018, 13, 198-203.	31.5	40
120	Ferroelectric Control of Magnetocrystalline Anisotropy at Cobalt/Poly(vinylidene fluoride) Interfaces. ACS Nano, 2012, 6, 9745-9750.	14.6	39
121	Defect-Assisted Tunneling Electroresistance in Ferroelectric Tunnel Junctions. Physical Review Letters, 2018, 121, 056601.	7.8	39
122	Multiferroic tunnel junctions with poly(vinylidene fluoride). Physical Review B, 2012, 85, .	3.2	37
123	Anomalous and spin Hall effects in a magnetic tunnel junction with Rashba spin-orbit coupling. Applied Physics Letters, 2013, 103, .	3.3	36
124	Two-dimensional ferroelectricity by design. Science, 2021, 372, 1389-1390.	12.6	35
125	Ferroelectric Control of Magnetic Skyrmions in Two-Dimensional van der Waals Heterostructures. Nano Letters, 2022, 22, 3349-3355.	9.1	35
126	Tunneling Magnetoresistance in Noncollinear Antiferromagnetic Tunnel Junctions. Physical Review Letters, 2022, 128, .	7.8	35



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127	First-principles studies of a two-dimensional electron gas at the interface in ferroelectric oxide heterostructures. <i>Physical Review B</i> , 2009, 80, .	3.2	34
128	Ferroelectric control of the magnetocrystalline anisotropy of the Fe/BaTiO <sub>3</sub> (001) interface. <i>Journal of Physics Condensed Matter</i> , 2012, 24, 226003.	1.8	33
129	Positive spin polarization in Co <sup>2+</sup> /Al <sub>2</sub> O <sub>3</sub> /Co tunnel junctions driven by oxygen adsorption. <i>Physical Review B</i> , 2005, 71, .	3.2	32
130	Effects of ferroelectricity and magnetism on electron and spin transport in Fe <sup>2+</sup> /BaTiO <sub>3</sub> /Fe multiferroic tunnel junctions. <i>Journal of Applied Physics</i> , 2008, 103, 07A701.	2.5	32
131	Room-temperature Ferroelectricity in Hexagonal TbMnO <sub>3</sub> Thin Films. <i>Advanced Materials</i> , 2014, 26, 7660-7665.	21.0	32
132	Domain overlap in antiferromagnetically coupled [Co <sup>2+</sup> /Pt] <sup>n</sup> /NiO <sup>x</sup> /[Co <sup>2+</sup> /Pt] multilayers. <i>Applied Physics Letters</i> , 2006, 89, 202505.	3.3	31
133	Origin of the interlayer exchange coupling in [Co <sup>2+</sup> /Pt] <sup>n</sup> /NiO <sup>x</sup> /[Co <sup>2+</sup> /Pt] multilayers studied with XAS, XMCD, and micromagnetic modeling. <i>Physical Review B</i> , 2006, 74, .	3.2	31
134	Polarization discontinuity induced two-dimensional electron gas at ZnO/Zn(Mg)O interfaces: A first-principles study. <i>Physical Review B</i> , 2013, 88, .	3.2	31
135	Polar coupling enabled nonlinear optical filtering at MoS <sub>2</sub> /ferroelectric heterointerfaces. <i>Nature Communications</i> , 2020, 11, 1422.	12.8	31
136	Theory of magnetostatic coupling in thin-film rectangular magnetic elements. <i>Applied Physics Letters</i> , 2000, 77, 2740-2742.	3.3	30
137	Domain-wall magnetoresistance of Co nanowires. <i>Physical Review B</i> , 2005, 72, .	3.2	30
138	Evolution of the band alignment at polar oxide interfaces. <i>Physical Review B</i> , 2010, 82, .	3.2	30
139	Tunneling Hot Spots in Ferroelectric SrTiO <sub>3</sub> . <i>Nano Letters</i> , 2018, 18, 491-497.	9.1	30
140	Direct observation of ferroelectricity in two-dimensional MoS <sub>2</sub> . <i>Npj 2D Materials and Applications</i> , 2022, 6, .	7.9	30
141	Giant magnetoresistance in spin valves: effect of interfaces and outer boundaries. <i>Journal of Magnetism and Magnetic Materials</i> , 1999, 202, 163-173.	2.3	29
142	Spin blockade in ferromagnetic nanocontacts. <i>Applied Physics Letters</i> , 2003, 83, 3534-3536.	3.3	29
143	Magnetoelectric interfaces and spin transport. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2012, 370, 4840-4855.	3.4	29
144	Magnetism in curved geometries. <i>Journal of Applied Physics</i> , 2021, 129, .	2.5	29

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145	Modulation of Spin-Orbit Torque from SrRuO <sub>3</sub> by Epitaxial Strain-Induced Octahedral Rotation. <i>Advanced Materials</i> , 2021, 33, e2007114.	21.0	29
146	Highly Spin-Polarized Conducting State at the Interface between Nonmagnetic Band Insulators: $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{LaAlO} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mo} \rangle / \langle \text{mml:mo} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{YbFeO} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mo} \rangle / \langle \text{mml:mo} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{Physical Review Letters}$ , 2011, 107, 166601.	7.8	28
147	Chemically induced Jahn-Teller ordering on manganite surfaces. <i>Nature Communications</i> , 2014, 5, 4528.	12.8	28
148	Importance of the interband contribution to the magneto-refractive effect in Co/Cu multilayers. <i>Journal of Physics Condensed Matter</i> , 2003, 15, L695-L702.	1.8	27
149	Electronic structure and direct observation of ferrimagnetism in multiferroic hexagonal $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"} \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{YbFeO} \langle \text{mml:mi} \rangle \langle \text{mml:mn} \rangle 3 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mo} \rangle / \langle \text{mml:mo} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mi} \rangle \text{Physical Review B}$ , 2017, 95, .	12.7	27
150	Controlling the Magnetic Properties of LaMnO <sub>3</sub> /SrTiO <sub>3</sub> Heterostructures by Stoichiometry and Electronic Reconstruction: Atomic-Scale Evidence. <i>Advanced Materials</i> , 2019, 31, 1901386.	21.0	27
151	Valley-Spin Logic Gates. <i>Physical Review Applied</i> , 2020, 13, .	3.8	27
152	Multiferroic tunnel junctions and ferroelectric control of magnetic state at interface (invited). <i>Journal of Applied Physics</i> , 2015, 117, .	2.5	26
153	Strain-driven disproportionation at a correlated oxide metal-insulator transition. <i>Physical Review B</i> , 2020, 101, .	3.2	26
154	Local impurity-assisted conductance in magnetic tunnel junctions. <i>Physical Review B</i> , 2001, 64, .	3.2	25
155	Interface-engineered electron and hole tunneling. <i>Science Advances</i> , 2021, 7, .	10.3	25
156	Effects of magnetostatic coupling on stripe domain structures in magnetic multilayers with perpendicular anisotropy. <i>Journal of Applied Physics</i> , 2007, 101, 113921.	2.5	24
157	Spin filtering with EuO: Insight from the complex band structure. <i>Physical Review B</i> , 2012, 85, .	3.2	24
158	Complex band structure of topological insulator Bi <sub>2</sub> Se <sub>3</sub> . <i>Journal of Physics Condensed Matter</i> , 2016, 28, 395501.	1.8	24
159	Complex band structure of topologically protected edge states. <i>Physical Review B</i> , 2014, 90, .	3.2	23
160	Palladium-based ferroelectrics and multiferroics: Theory and experiment. <i>Physical Review B</i> , 2017, 95, .	3.2	23
161	Ferroelectric Tunnel Junctions Enhanced by a Polar Oxide Barrier Layer. <i>Nano Letters</i> , 2019, 19, 7385-7393.	9.1	23
162	Effect of disorder on perpendicular magnetotransport in Co/Cu multilayers. <i>Physical Review B</i> , 2000, 62, R3608-R3611.	3.2	22

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163	Role of interface bonding in spin-dependent tunneling (invited). Journal of Applied Physics, 2005, 97, 10C910.	2.5	22
164	The interface electronic structure of thiol terminated molecules on cobalt and gold surfaces. Journal of Materials Science, 2006, 41, 6198-6206.	3.7	22
165	Interface states in CoFe <sub>2</sub> O <sub>4</sub> spin-filter tunnel junctions. Physical Review B, 2013, 88, .	3.2	22
166	Effects of pressure and strain on spin polarization of IrMnSb. Journal of Physics Condensed Matter, 2017, 29, 075801.	1.8	22
167	Spin-polarized two-dimensional electron gas at the interface of GdTiO <sub>3</sub> /SrTiO <sub>3</sub> . Physical Review B, 2017, 96, .	3.2	22
168	Prediction of a mobile two-dimensional electron gas at the interface of LaScO <sub>3</sub> /SrTiO <sub>3</sub> . Physical Review B, 2017, 96, .	3.2	22
169	Resonant tunneling across a ferroelectric domain wall. Physical Review B, 2018, 97, .	3.2	22
170	Sign of thermoelectric power in Co/Cu and Fe/Cr multilayers. Physical Review B, 1999, 59, 8371-8374.	3.2	21
171	Tunneling anisotropic magnetoresistance in a magnetic tunnel junction with half-metallic electrodes. Physical Review B, 2016, 93, .	3.2	21
172	Colossal X-ray-induced Persistent Photoconductivity in Current-perpendicular-to-plane Ferroelectric/Semiconductor Junctions. Advanced Functional Materials, 2018, 28, 1704337.	14.9	21
173	Tunneling anomalous Hall effect in a ferroelectric tunnel junction. Applied Physics Letters, 2018, 113, 172405.	3.3	21
174	Colossal flexoresistance in dielectrics. Nature Communications, 2020, 11, 2586.	12.8	21
175	Spin-torque switching of noncollinear antiferromagnetic antiperovskites. Physical Review B, 2020, 101, .	3.2	21
176	Effect of oxygen vacancies on interlayer exchange coupling in Fe/MgO/Fe tunnel junctions. Journal of Magnetism and Magnetic Materials, 2006, 300, e277-e280.	2.3	20
177	Comment on "Destructive Effect of Disorder and Bias Voltage on Interface Resonance Transmission in Symmetric Tunnel Junctions". Physical Review Letters, 2006, 96, 119601; author reply 119602.	7.8	20
178	Magnetic Moment Softening and Domain Wall Resistance in Ni Nanowires. Physical Review Letters, 2006, 97, 077204.	7.8	20
179	On the structural origin of the single-ion magnetic anisotropy in LuFeO <sub>3</sub> . Journal of Physics Condensed Matter, 2016, 28, 156001.	1.8	20
180	Interfacial Crystal Hall Effect Reversible by Ferroelectric Polarization. Physical Review Applied, 2021, 15, .	3.8	20

#	ARTICLE	IF	CITATIONS
181	Quantum-well resistivity for perpendicular transport in magnetic layered systems. Physical Review B, 2000, 61, 506-510.	3.2	19
182	First-principles study of adsorption of methanethiol on Co(0001). Physical Review B, 2004, 70, .	3.2	19
183	Effect of epitaxial strain on tunneling electroresistance in ferroelectric tunnel junctions. Nanotechnology, 2015, 26, 305202.	2.6	19
184	Effect of tip resonances on tunneling anisotropic magnetoresistance in ferromagnetic metal break-junctions: A first-principles study. Physical Review B, 2007, 76, .	3.2	18
185	Epitaxial antiperovskite/perovskite heterostructures for materials design. Science Advances, 2020, 6, eaba4017.	10.3	18
186	Ferroelectric polarization control of magnetic anisotropy in $\text{PbZr}_{0.2}\text{Tl}_{0.8}\text{O}_3$ . Physical Review B, 2018, 98, .	2.4	18
187	Field-controlled domain-wall resistance in magnetic nanojunctions. Applied Physics Letters, 2004, 85, 251-253.	3.3	17
188	Two-dimensional type-II Dirac fermions in a $\text{LaAlO}_3/\text{LaNiO}_3$ quantum well. Physical Review B, 2018, 98, .	3.3	17
189	Magnetoelectric control of topological phases in graphene. Physical Review B, 2019, 100, .	3.2	17
190	Domain-Wall Tunneling Electroresistance Effect. Physical Review Letters, 2019, 123, 266602.	7.8	17
191	Magneto-dipole coupling in arrays of micron-size rectangular magnetic elements. Journal of Magnetism and Magnetic Materials, 2001, 226-230, 1835-1837.	2.3	16
192	In-plane quasi-single-domain BaTiO <sub>3</sub> via interfacial symmetry engineering. Nature Communications, 2021, 12, 6784.	12.8	16
193	Exchange Model for Oscillatory Interlayer Coupling and Induced Unidirectional Anisotropy in [Pt/Co] <sub>3</sub> /NiO/[Pt/Co] <sub>3</sub> Multilayers. Physical Review Letters, 2004, 92, 219703.	7.8	15
194	Interlayer exchange coupling across a ferroelectric barrier. Journal of Physics Condensed Matter, 2010, 22, 352203.	1.8	15
195	Magnetoelectric Effect at the $\text{NiO}/\text{HfO}_2$ Interface Induced by Ferroelectric Polarization. Physical Review Applied, 2019, 12, .	3.8	15
196	Insulator-to-conductor transition driven by the Rashba-Zeeman effect. Npj Computational Materials, 2020, 6, .	8.7	15
197	Spin injection into amorphous semiconductors. Physical Review B, 2002, 66, .	3.2	14
198	Crossing the wall. Nature Nanotechnology, 2017, 12, 614-615.	31.5	14

#	ARTICLE	IF	CITATIONS
199	Metal-Oxide Interfaces in Magnetic Tunnel Junctions. Journal of Materials Science, 2004, 12, 105-116.	1.2	13
200	Epitaxial thin films of Dirac semimetal antiperovskite Cu <sub>3</sub> PdN. APL Materials, 2017, 5, .	5.1	13
201	Polarization-controlled modulation doping of a ferroelectric from first principles. Physical Review B, 2018, 97, .	3.2	13
202	Atomic-Scale Control of Magnetism at the Titanite-Manganite Interfaces. Nano Letters, 2019, 19, 3057-3065.	9.1	13
203	Electric Control of Spin Injection into a Ferroelectric Semiconductor. Physical Review Letters, 2015, 114, 046601.	7.8	12
204	Giant Transport Anisotropy in $\text{ReS}_2$ Revealed via Nanoscale Conducting-Path Control. Physical Review Letters, 2021, 127, 136803.	7.8	12
205	Long-range electronic reconstruction to a dx <sub>z</sub> ,yz-dominated Fermi surface below the LaAlO <sub>3</sub> /SrTiO <sub>3</sub> interface. Scientific Reports, 2014, 4, 5338.	3.3	11
206	Tunable two-dimensional Dirac nodal nets. Physical Review B, 2018, 98, .	3.2	11
207	Polarization-dependent electric potential distribution across nanoscale ferroelectric Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> in functional memory capacitors. Nanoscale, 2019, 11, 19814-19822.	5.6	11
208	Magnetoelectric Coupling at the Ni/Hf <sub>0.5</sub> Zr <sub>0.5</sub> O <sub>2</sub> Interface. ACS Nano, 2021, 15, 14891-14902.	14.6	11
209	Resonant tunneling in magnetoresistive Ni/NiO/Co nanowire junctions. Journal of Applied Physics, 2003, 93, 7029-7031.	2.5	10
210	Defect-Mediated Properties of Magnetic Tunnel Junctions. IEEE Transactions on Magnetics, 2007, 43, 2770-2775.	2.1	10
211	Effects of B and C doping on tunneling magnetoresistance in CoFe/MgO magnetic tunnel junctions. Physical Review B, 2018, 98, .	3.2	10
212	Resonant band engineering of ferroelectric tunnel junctions. Physical Review B, 2021, 104, .	3.2	10
213	Spin-orbit dependence of anisotropic current-induced spin polarization. Physical Review B, 2021, 104, .	3.2	10
214	Evaluating the Thermoelectric Properties of BaTiS <sub>3</sub> by Density Functional Theory. ACS Omega, 2020, 5, 12385-12390.	3.5	10
215	Electrically reversible magnetization at the antiperovskite/perovskite interface. Physical Review Materials, 2019, 3, .	2.4	10
216	Transport spin polarization of noncollinear antiferromagnetic antiperovskites. Physical Review Materials, 2021, 5, .	2.4	10

#	ARTICLE	IF	CITATIONS
217	Correlation between domain structure and magnetoresistance in an active spin-valve element. Physical Review B, 1998, 58, R591-R594.	3.2	9
218	Atomic, electronic, and magnetic properties of magnetic tunnel junctions. Journal of Applied Physics, 2003, 93, 6429-6431.	2.5	9
219	Interface proximity effects in current-perpendicular-to-plane magnetoresistance. Physical Review B, 2005, 71, .	3.2	9
220	New view of the occupied band structure of Mo(112). Physical Review B, 2012, 85, .	3.2	9
221	In-situ Lorentz microscopy studies of spin-valve structures. IEEE Transactions on Magnetics, 1999, 35, 788-793.	2.1	8
222	Conductance of Ni nanocontacts within first-principle approach. Journal of Magnetism and Magnetic Materials, 2004, 272-276, 1730-1731.	2.3	8
223	A symmetric Green function for the non-collinear magnetic multilayer. Journal of Physics A, 2005, 38, 5547-5556.	1.6	8
224	Oxide tunnel junctions supporting a two-dimensional electron gas. Physical Review B, 2009, 80, .	3.2	8
225	The stability and surface termination of hexagonal LuFeO <sub>3</sub> . Journal of Physics Condensed Matter, 2015, 27, 175004.	1.8	8
226	Whirling spins with a ferroelectric. Nature Materials, 2018, 17, 1054-1055.	27.5	8
227	Importance of resonant effects in spin-polarized electron tunneling. Journal of Magnetism and Magnetic Materials, 1999, 198-199, 146-148.	2.3	7
228	Structural and magnetic properties of clean and methylthiolate-adsorbed Co(0001) surfaces: a first-principles study. Journal of Magnetism and Magnetic Materials, 2005, 286, 119-123.	2.3	7
229	Atomic motion in ferromagnetic break junctions. Nature Nanotechnology, 2007, 2, 522-523.	31.5	7
230	Unveiling multiferroic proximity effect in graphene. 2D Materials, 2020, 7, 015020.	4.4	7
231	Reversal of the magnetoelectric effect at a ferromagnetic metal/ferroelectric interface induced by metal oxidation. Npj Computational Materials, 2021, 7, .	8.7	7
232	Oxide Two-dimensional Electron Gas with High Mobility at Room Temperature. Advanced Science, 2022, 9, e2105652.	11.2	7
233	THE IMPORTANCE OF $Fe$ SURFACE STATES FOR MAGNETIC TUNNEL JUNCTION BASED SPINTRONIC DEVICES. Modern Physics Letters B, 2008, 22, 2529-2551.	1.9	6
234	Grand challenges in condensed matter physics: from knowledge to innovation. Frontiers in Physics, 2013, 1, .	2.1	6

#	ARTICLE	IF	CITATIONS
235	Emergent vortices at a ferromagnetic superconducting oxide interface. <i>New Journal of Physics</i> , 2014, 16, 103012.	2.9	6
236	Contributions of the lead-bromine weighted bands to the occupied density of states of the hybrid tri-bromide perovskites. <i>Applied Physics Letters</i> , 2018, 113, 022101.	3.3	6
237	Induced spin textures at $3d$ transition metal "topological insulator interfaces. <i>Physical Review B</i> , 2020, 101, .	3.2	5
238	Coherent potential approximation as a voltage probe. <i>Physical Review B</i> , 2012, 85, .	3.2	5
239	Modification of the G-phonon mode of graphene by nitrogen doping. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	5
240	Magnetic gating of a 2D topological insulator. <i>Journal of Physics Condensed Matter</i> , 2016, 28, 38LT01.	1.8	5
241	Local currents in a 2D topological insulator. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 505301.	1.8	4
242	Detection of decoupled surface and bulk states in epitaxial orthorhombic $\text{SrIrO}_3$ thin films. <i>AIP Advances</i> , 2020, 10, 045027.	1.3	4
243	Ferroelectric-driven tunable magnetism in ultrathin platinum films. <i>Physical Review Materials</i> , 2020, 4, .	2.4	4
244	Emerging materials for spin " charge interconversion. <i>APL Materials</i> , 2021, 9, 120401.	5.1	4
245	Local resonant conductance in magnetic tunnel junctions. <i>Journal of Magnetism and Magnetic Materials</i> , 2002, 242-245, 457-460.	2.3	2
246	Spin-dependent tunneling from clean and oxidized Co surfaces. <i>Journal of Magnetism and Magnetic Materials</i> , 2004, 272-276, 1954-1955.	2.3	2
247	Resistance of a tunnel barrier with a pinhole. <i>Journal of Experimental and Theoretical Physics</i> , 2007, 104, 87-95.	0.9	2
248	Engineering interfacial energy profile by changing the substrate terminating plane in perovskite heterointerfaces. <i>Physical Review B</i> , 2016, 93, .	3.2	2
249	In-situ probing of coupled atomic restructuring and metallicity of oxide heterointerfaces induced by polar adsorbates. <i>Applied Physics Letters</i> , 2017, 111, 141604.	3.3	2
250	Tunneling Anisotropic Magnetoresistance in Ferroelectric Tunnel Junctions. <i>Physical Review Applied</i> , 2019, 12, .	3.8	2
251	Electronic reconstruction at the polar (111)-oriented oxide interface. <i>APL Materials</i> , 2022, 10, .	5.1	2
252	First-principles Modeling of $\text{Co/SrTiO}_3/\text{Co}$ Magnetic Tunnel Junctions. <i>Materials Research Society Symposia Proceedings</i> , 2001, 690, F2.6.1.	0.1	1

#	ARTICLE	IF	CITATIONS
253	Tunneling anisotropic magnetoresistance with half-metallic electrodes. , 2015, , .		0
254	Electrically controlled spin injection into a ferroelectric semiconductor. , 2015, , .		0