Sidong Lei

List of Publications by Year in Descending Order

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66 20,056 136 307 h-index g-index citations papers 6.69 23,286 8.5 335 L-index avg, IF ext. citations ext. papers

#	Paper	IF	Citations
307	Topological spintronics and magnetoelectronics <i>Nature Materials</i> , 2022 , 21, 15-23	27	15
306	Current-induced NBl order switching facilitated by magnetic phase transition <i>Nature Communications</i> , 2022 , 13, 1629	17.4	2
305	A van der Waals Interface Hosting Two Groups of Magnetic Skyrmions Advanced Materials, 2022 , e211	05.83	6
304	Comprehensive Study of the Current-Induced Spin-Orbit Torque Perpendicular Effective Field in Asymmetric Multilayers. <i>Nanomaterials</i> , 2022 , 12, 1887	5.4	1
303	Manipulating Exchange Bias in a van der Waals Ferromagnet Advanced Materials, 2021 , e2105266	24	3
302	Magnetic memory driven by topological insulators. <i>Nature Communications</i> , 2021 , 12, 6251	17.4	12
301	Room-Temperature Ferromagnetism of Single-Layer MoS2 Induced by Antiferromagnetic Proximity of Yttrium Iron Garnet. <i>Advanced Quantum Technologies</i> , 2021 , 4, 2000104	4.3	3
300	Chiral Symmetry Breaking for Deterministic Switching of Perpendicular Magnetization by Spin-Orbit Torque. <i>Nano Letters</i> , 2021 , 21, 515-521	11.5	18
299	Experimental demonstration of voltage-gated spin-orbit torque switching in an antiferromagnet/ferromagnet structure. <i>Physical Review B</i> , 2021 , 103,	3.3	4
298	Temperature dependence of spinBrbit torque-driven magnetization switching in in situ grown Bi2Te3/MnTe heterostructures. <i>Applied Physics Letters</i> , 2021 , 118, 112406	3.4	3
297	Large spin to charge conversion in antiferromagnetic Weyl semimetal Mn3Sn. <i>APL Materials</i> , 2021 , 9, 041111	5.7	1
296	Broadband photocurrent spectroscopy and temperature dependence of band gap of few-layer indium selenide (InSe). <i>Emergent Materials</i> , 2021 , 4, 1029-1036	3.5	0
295	Adaptive MRAM Write and Read with MTJ Variation Monitor. <i>IEEE Transactions on Emerging Topics in Computing</i> , 2021 , 9, 402-413	4.1	5
294	Faraday Rotation Due to Quantum Anomalous Hall Effect in Cr-Doped (Bi,Sb)2Te3. <i>Crystals</i> , 2021 , 11, 154	2.3	1
293	NBl-Type Elliptical Skyrmions in a Laterally Asymmetric Magnetic Multilayer. <i>Advanced Materials</i> , 2021 , 33, e2006924	24	9
292	Bulk dissipation in the quantum anomalous Hall effect. APL Materials, 2021, 9, 081116	5.7	0
291	Single-molecule photocatalytic dynamics at individual defects in two-dimensional layered materials. <i>Science Advances</i> , 2021 , 7, eabj4452	14.3	2

(2020-2020)

290	Exchange bias switching in an antiferromagnet/ferromagnet bilayer driven by spinbrbit torque. <i>Nature Electronics</i> , 2020 , 3, 757-764	28.4	30
289	SpinBrbit torques in structures with asymmetric dusting layers. <i>Applied Physics Letters</i> , 2020 , 117, 18240	03.4	5
288	Interfacial spin transmission and spinbrbit torques in as-grown and annealed W/Co2FeAl/MgO multilayers. <i>Applied Physics Letters</i> , 2020 , 117, 172406	3.4	3
287	Topological quantum materials. <i>MRS Bulletin</i> , 2020 , 45, 373-379	3.2	1
286	Probing the low-temperature limit of the quantum anomalous Hall effect. <i>Science Advances</i> , 2020 , 6, eaaz3595	14.3	10
285	Study of the perpendicular magnetic anisotropy, spinBrbit torque, and DzyaloshinskiiMoriya interaction in the heavy metal/CoFeB bilayers with Ir22Mn78 insertion. <i>Applied Physics Letters</i> , 2020 , 116, 242407	3.4	6
284	Criticality or Supersymmetry Breaking?. Symmetry, 2020 , 12, 805	2.7	3
283	Deterministic Spin-Orbit Torque Switching by a Light-Metal Insertion. <i>Nano Letters</i> , 2020 , 20, 3703-3709	11.5	22
282	Creation and annihilation of non-volatile fixed magnetic skyrmions using voltage control of magnetic anisotropy. <i>Nature Electronics</i> , 2020 , 3, 539-545	28.4	31
281	Topology-Dependent Brownian Gyromotion of a Single Skyrmion. <i>Physical Review Letters</i> , 2020 , 125, 027206	7.4	20
280	Strongly Surface State Carrier-Dependent Spin-Orbit Torque in Magnetic Topological Insulators. <i>Advanced Materials</i> , 2020 , 32, e1907661	24	16
279	Resistive switching materials for information processing. <i>Nature Reviews Materials</i> , 2020 , 5, 173-195	73.3	318
278	Influence of channel thickness on charge transport behavior of multi-layer indium selenide (InSe) field-effect transistors. <i>2D Materials</i> , 2020 , 7, 025030	5.9	4
277	Anomalous Conductivity Switch Observed in Treated Hafnium Diselenide Transistors. <i>Advanced Electronic Materials</i> , 2020 , 6, 1901246	6.4	4
276	Spin transmission in IrMn through measurements of spin Hall magnetoresistance and spin-orbit torque. <i>Physical Review B</i> , 2020 , 101,	3.3	5
275	Record thermopower found in an IrMn-based spintronic stack. <i>Nature Communications</i> , 2020 , 11, 2023	17.4	12
274	Spectroscopic fingerprint of chiral Majorana modes at the edge of a quantum anomalous Hall insulator/superconductor heterostructure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020 , 117, 238-242	11.5	9
273	Observation of Quantum Anomalous Hall Effect and Exchange Interaction in Topological Insulator/Antiferromagnet Heterostructure. <i>Advanced Materials</i> , 2020 , 32, e2001460	24	11

272	Above Room-Temperature Ferromagnetism in Wafer-Scale Two-Dimensional van der Waals FeGeTe Tailored by a Topological Insulator. <i>ACS Nano</i> , 2020 , 14, 10045-10053	16.7	45
271	Ferrimagnetic Skyrmions in Topological Insulator/Ferrimagnet Heterostructures. <i>Advanced Materials</i> , 2020 , 32, e2003380	24	21
270	Modulation of thermal stability and spinBrbit torque in IrMn/CoFeB/MgO structures through atom thick W insertion. <i>Applied Physics Letters</i> , 2020 , 117, 212401	3.4	7
269	Large exchange splitting in monolayer graphene magnetized by an antiferromagnet. <i>Nature Electronics</i> , 2020 , 3, 604-611	28.4	10
268	Termination switching of antiferromagnetic proximity effect in topological insulator. <i>Science Advances</i> , 2020 , 6, eaaz8463	14.3	13
267	Enhancement of the spinBrbit torque efficiency in W/Cu/CoFeB heterostructures via interface engineering. <i>Applied Physics Letters</i> , 2020 , 117, 082409	3.4	4
266	Experimental Demonstration of Spintronic Broadband Microwave Detectors and Their Capability for Powering Nanodevices. <i>Physical Review Applied</i> , 2019 , 11,	4.3	32
265	Failure Mechanism Analysis of SiC MOSFETs in Unclamped Inductive Switching Conditions 2019,		8
264	Giant Charge-to-Spin Conversion Efficiency in SrTiO3-Based Electron Gas Interface. <i>Physical Review Applied</i> , 2019 , 12,	4.3	13
263	Interfacial States and Fano-Feshbach Resonance in Graphene-Silicon Vertical Junction. <i>Nano Letters</i> , 2019 , 19, 6765-6771	11.5	2
262	Unidirectional Magneto-Resistance in Modulation-Doped Magnetic Topological Insulators. <i>Nano Letters</i> , 2019 , 19, 692-698	11.5	9
261	Electric Double Layer Field-Effect Transistors Using Two-Dimensional (2D) Layers of Copper Indium Selenide (CuIn7Se11). <i>Electronics (Switzerland)</i> , 2019 , 8, 645	2.6	6
260	Compact Model for Negative Capacitance Enhanced Spintronics Devices. <i>IEEE Transactions on Electron Devices</i> , 2019 , 66, 2795-2801	2.9	2
259	Topological Hall effect at above room temperature in heterostructures composed of a magnetic insulator and a heavy metal. <i>Nature Electronics</i> , 2019 , 2, 182-186	28.4	73
258	Spin-orbit torque from a ferromagnetic metal. <i>Physical Review B</i> , 2019 , 99,	3.3	40
257	Control of Spin-Wave Damping in YIG Using Spin Currents from Topological Insulators. <i>Physical Review Applied</i> , 2019 , 11,	4.3	17
256	Exploring interfacial exchange coupling and sublattice effect in heavy metal/ferrimagnetic insulator heterostructures using Hall measurements, x-ray magnetic circular dichroism, and neutron reflectometry. <i>Physical Review B</i> , 2019 , 99,	3.3	26
255	Large Tunneling Magnetoresistance in VSe/MoS Magnetic Tunnel Junction. <i>ACS Applied Materials</i> & Samp; Interfaces, 2019 , 11, 17647-17653	9.5	44

(2018-2019)

254	Colossal electric field control of magnetic anisotropy at ferromagnetic interfaces induced by iridium overlayer. <i>Physical Review B</i> , 2019 , 99,	3.3	11
253	MBE Growth of Ge-Based Diluted Magnetic Semiconductors 2019 , 349-364		1
252	Two-dimensional spintronics for low-power electronics. <i>Nature Electronics</i> , 2019 , 2, 274-283	28.4	163
251	Spin-Orbit Torque Switching of a Nearly Compensated Ferrimagnet by Topological Surface States. <i>Advanced Materials</i> , 2019 , 31, e1901681	24	48
250	Field-Free Spin-Orbit Torque Switching of Perpendicular Magnetization by the Rashba Interface. <i>ACS Applied Materials & Distributed & Di</i>	9.5	24
249	Gate-Induced Metal-Insulator Transition in 2D van der Waals Layers of Copper Indium Selenide Based Field-Effect Transistors. <i>ACS Nano</i> , 2019 , 13, 13413-13420	16.7	12
248	Predictive Materials Design of Magnetic Random-Access Memory Based on Nanoscale Atomic Structure and Element Distribution. <i>Nano Letters</i> , 2019 , 19, 8621-8629	11.5	9
247	Voltage-Controlled Magnetic Anisotropy in Heterostructures with Atomically Thin Heavy Metals. <i>Physical Review Applied</i> , 2019 , 12,	4.3	12
246	Single-spin sensing of domain-wall structure and dynamics in a thin-film skyrmion host. <i>Physical Review Materials</i> , 2019 , 3,	3.2	16
245	Room-Temperature Spin-Orbit Torque from Topological Surface States. <i>Physical Review Letters</i> , 2019 , 123, 207205	7.4	67
244	Generation and Hall effect of skyrmions enabled using nonmagnetic point contacts. <i>Physical Review B</i> , 2019 , 100,	3.3	6
243	Heat-assisted microwave amplifier. <i>Nature Nanotechnology</i> , 2019 , 14, 9-11	28.7	
242	Analysis and Compact Modeling of Magnetic Tunnel Junctions Utilizing Voltage-Controlled Magnetic Anisotropy. <i>IEEE Transactions on Magnetics</i> , 2018 , 54, 1-9	2	16
241	Voltage-Controlled Magnetic Tunnel Junctions for Processing-In-Memory Implementation. <i>IEEE Electron Device Letters</i> , 2018 , 39, 440-443	4.4	18
240	Interfacial Dzyaloshinskii-Moriya Interaction: Effect of 5d Band Filling and Correlation with Spin Mixing Conductance. <i>Physical Review Letters</i> , 2018 , 120, 157204	7.4	73
239	Anomalous helicity-dependent photocurrent in the topological insulator (Bi0.5Sb0.5)2Te3 on a GaAs substrate. <i>Physical Review B</i> , 2018 , 97,	3.3	6
238	Room-Temperature Skyrmions in an Antiferromagnet-Based Heterostructure. <i>Nano Letters</i> , 2018 , 18, 980-986	11.5	68
237	A Study of Vertical Transport through Graphene toward Control of Quantum Tunneling. <i>Nano Letters</i> , 2018 , 18, 682-688	11.5	9

236	Interface control of domain wall depinning field. AIP Advances, 2018, 8, 056314	1.5	2
235	Fast photoresponse and high detectivity in copper indium selenide (CuIn 7 Se 11) phototransistors. 2D Materials, 2018 , 5, 015001	5.9	20
234	Investigation on single pulse avalanche failure of 900V SiC MOSFETs 2018,		6
233	Layer-by-layer hybrid chemical doping for high transmittance uniformity in graphene-polymer flexible transparent conductive nanocomposite. <i>Scientific Reports</i> , 2018 , 8, 10259	4.9	13
232	Enhancement of Perpendicular Magnetic Anisotropy Through Fe Insertion at the CoFe/W Interface. <i>IEEE Transactions on Magnetics</i> , 2018 , 54, 1-5	2	5
231	Exchange-biasing topological charges by antiferromagnetism. <i>Nature Communications</i> , 2018 , 9, 2767	17.4	46
230	Proximity-Induced Magnetic Order in a Transferred Topological Insulator Thin Film on a Magnetic Insulator. <i>ACS Nano</i> , 2018 , 12, 5042-5050	16.7	31
229	Large Room Temperature Charge-to-Spin Conversion Efficiency in Topological Insulator/CoFeB bilayers 2018 ,		3
228	High photoresponse of individual WS2 nanowire-nanoflake hybrid materials. <i>Applied Physics Letters</i> , 2018 , 112, 233103	3.4	6
227	A Basic Phase Diagram of Neuronal Dynamics. <i>Neural Computation</i> , 2018 , 30, 2418-2438	2.9	1
226	Spintronic devices for low energy dissipation 2018,		4
225	Near-Field Coupled Integrable Two-Dimensional InSe Photosensor on Optical Fiber. <i>ACS Nano</i> , 2018 , 12, 12571-12577	16.7	14
224	Voltage-controlled magnetoelectric memory and logic devices. MRS Bulletin, 2018, 43, 970-977	3.2	27
223	Strain-Mediated Spin-Orbit-Torque Switching for Magnetic Memory. <i>Physical Review Applied</i> , 2018 , 10,	4.3	21
222	Spin-Torque Ferromagnetic Resonance in W/CoHeB/W/CoHeB/MgO Stacks. <i>Physical Review Applied</i> , 2018 , 10,	4.3	15
221	Correlation between the Dzyaloshinskii-Moriya interaction and spin-mixing conductance at an antiferromagnet/ferromagnet interface. <i>Physical Review B</i> , 2018 , 98,	3.3	10
220	Part-per-million quantization and current-induced breakdown of the quantum anomalous Hall effect. <i>Physical Review B</i> , 2018 , 98,	3.3	39
219	Role of dimensional crossover on spin-orbit torque efficiency in magnetic insulator thin films. Nature Communications, 2018 , 9, 3612	17.4	53

218	Topological Transitions Induced by Antiferromagnetism in a Thin-Film Topological Insulator. <i>Physical Review Letters</i> , 2018 , 121, 096802	7.4	32
217	Nanoengineering of an Si/MnGe quantum dot superlattice for high Curie-temperature ferromagnetism. <i>Nanoscale</i> , 2017 , 9, 3086-3094	7.7	7
216	Giant interfacial perpendicular magnetic anisotropy in MgO/CoFe/capping layer structures. <i>Applied Physics Letters</i> , 2017 , 110, 072403	3.4	53
215	A Word Line Pulse Circuit Technique for Reliable Magnetoelectric Random Access Memory. <i>IEEE Transactions on Very Large Scale Integration (VLSI) Systems</i> , 2017 , 25, 2027-2034	2.6	11
214	Joule Heating Effect on Field-Free Magnetization Switching by Spin-Orbit Torque in Exchange-Biased Systems. <i>Physical Review Applied</i> , 2017 , 7,	4.3	29
213	Enhancement of voltage-controlled magnetic anisotropy through precise control of Mg insertion thickness at CoFeB MgO interface. <i>Applied Physics Letters</i> , 2017 , 110, 052401	3.4	64
212	Direct growth of MoS 2 single crystals on polyimide substrates. 2D Materials, 2017, 4, 021028	5.9	27
211	Interfacial Perpendicular Magnetic Anisotropy in Sub-20 nm Tunnel Junctions for Large-Capacity Spin-Transfer Torque Magnetic Random-Access Memory. <i>IEEE Magnetics Letters</i> , 2017 , 8, 1-5	1.6	15
21 0	Hybrid VC-MTJ/CMOS non-volatile stochastic logic for efficient computing 2017,		7
209	Observation of Quantum Hall effect in an ultra-thin (Bi0.53Sb0.47)2Te3 film. <i>Applied Physics Letters</i> , 2017 , 110, 212401	3.4	11
208	Synthesis of large-scale atomic-layer SnS2 through chemical vapor deposition. <i>Nano Research</i> , 2017 , 10, 2386-2394	10	97
207	Efficient Excitation of High-Frequency Exchange-Dominated Spin Waves in Periodic Ferromagnetic Structures. <i>Physical Review Applied</i> , 2017 , 7,	4.3	17
206	Room-Temperature Skyrmion Shift Device for Memory Application. <i>Nano Letters</i> , 2017 , 17, 261-268	11.5	160
205	Atomic-Monolayer Two-Dimensional Lateral Quasi-Heterojunction Bipolar Transistors with Resonant Tunneling Phenomenon. <i>ACS Nano</i> , 2017 , 11, 11015-11023	16.7	29
204	Effects of Cd vacancies and unconventional spin dynamics in the Dirac semimetal CdAs. <i>Journal of Chemical Physics</i> , 2017 , 147, 084706	3.9	4
203	Stateful Reconfigurable Logic via a Single-Voltage-Gated Spin Hall-Effect Driven Magnetic Tunnel Junction in a Spintronic Memory. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 4295-4301	2.9	52
202	Partial spin absorption induced magnetization switching and its voltage-assisted improvement in an asymmetrical all spin logic device at the mesoscopic scale. <i>Applied Physics Letters</i> , 2017 , 111, 052407	3.4	12
201	Chiral Majorana fermion modes in a quantum anomalous Hall insulator-superconductor structure. <i>Science</i> , 2017 , 357, 294-299	33.3	363

200	Voltage induced artificial ferromagnetic-antiferromagnetic ordering in synthetic multiferroics. Journal of Applied Physics, 2017 , 122, 224102	2.5	7
199	Anomalous Nernst effect in Ir22Mn78/Co20Fe60B20/MgO layers with perpendicular magnetic anisotropy. <i>Applied Physics Letters</i> , 2017 , 111, 222401	3.4	15
198	Zero-field edge plasmons in a magnetic topological insulator. <i>Nature Communications</i> , 2017 , 8, 1836	17.4	18
197	Large voltage-controlled magnetic anisotropy in the SrTiO3/Fe/Cu structure. <i>Applied Physics Letters</i> , 2017 , 111, 152403	3.4	13
196	Tayi et al. reply. <i>Nature</i> , 2017 , 547, E14-E15	50.4	3
195	Dzyaloshinskii-Moriya Interaction across an Antiferromagnet-Ferromagnet Interface. <i>Physical Review Letters</i> , 2017 , 119, 027202	7.4	48
194	Deficiency of the bulk spin Hall effect model for spin-orbit torques in magnetic-insulator/heavy-metal heterostructures. <i>Physical Review B</i> , 2017 , 95,	3.3	19
193	Tailoring exchange couplings in magnetic topological-insulator/antiferromagnet heterostructures. <i>Nature Materials</i> , 2017 , 16, 94-100	27	108
192	Characterization of tin(II) sulfide defects/vacancies and correlation with their photocurrent. <i>Nano Research</i> , 2017 , 10, 218-228	10	6
191	Imaging the motion of electrons across semiconductor heterojunctions. <i>Nature Nanotechnology</i> , 2017 , 12, 36-40	28.7	86
190	Direct observation of the skyrmion Hall effect. <i>Nature Physics</i> , 2017 , 13, 162-169	16.2	555
189	Chiral transport along magnetic domain walls in the quantum anomalous Hall effect. <i>Npj Quantum Materials</i> , 2017 , 2,	5	24
188	Novel Magnetic Tunneling Junction Memory Cell With Negative Capacitance-Amplified Voltage-Controlled Magnetic Anisotropy Effect. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 4919-49	927	3
187	Leveraging nMOS Negative Differential Resistance for Low Power, High Reliability Magnetic Memory. <i>IEEE Transactions on Electron Devices</i> , 2017 , 64, 4084-4090	2.9	3
186	Interfacial control of Dzyaloshinskii-Moriya interaction in heavy metal/ferromagnetic metal thin film heterostructures. <i>Physical Review B</i> , 2016 , 94,	3.3	50
185	Self-aligned graphene oxide nanoribbon stack with gradient bandgap for visible-light photodetection. <i>Nano Energy</i> , 2016 , 27, 114-120	17.1	11
184	High performance silicon carbide avalanche-p-i-n ultraviolet photodiode with dual operation models. <i>Electronics Letters</i> , 2016 , 52, 1474-1476	1.1	8
183	Strong Rashba-Edelstein Effect-Induced Spin-Orbit Torques in Monolayer Transition Metal Dichalcogenide/Ferromagnet Bilayers. <i>Nano Letters</i> , 2016 , 16, 7514-7520	11.5	181

(2016-2016)

1	82	Observing the interplay between surface and bulk optical nonlinearities in thin van der Waals crystals. <i>Scientific Reports</i> , 2016 , 6, 22620	4.9	31
1	81	Dual-mode operation of 2D material-base hot electron transistors. <i>Scientific Reports</i> , 2016 , 6, 32503	4.9	11
1	80	Enhancing electric-field control of ferromagnetism through nanoscale engineering of high-T MnGe nanomesh. <i>Nature Communications</i> , 2016 , 7, 12866	17.4	26
1	79	Spintronics Based on Topological Insulators. <i>Spin</i> , 2016 , 06, 1640001	1.3	56
1	78	Direct Mapping of Charge Distribution during Lithiation of Ge Nanowires Using Off-Axis Electron Holography. <i>Nano Letters</i> , 2016 , 16, 3748-53	11.5	31
1	77	Layer Engineering of 2D Semiconductor Junctions. <i>Advanced Materials</i> , 2016 , 28, 5126-32	24	53
1	76	Low-Power, High-Density Spintronic Programmable Logic With Voltage-Gated Spin Hall Effect in Magnetic Tunnel Junctions. <i>IEEE Magnetics Letters</i> , 2016 , 7, 1-5	1.6	10
1	75	Room-Temperature Creation and Spin-Orbit Torque Manipulation of Skyrmions in Thin Films with Engineered Asymmetry. <i>Nano Letters</i> , 2016 , 16, 1981-8	11.5	211
1	74	Surface functionalization of two-dimensional metal chalcogenides by Lewis acid-base chemistry. <i>Nature Nanotechnology</i> , 2016 , 11, 465-71	28.7	150
1	73	Co-doped Sb2Te3 paramagnetic nanoplates. <i>Journal of Materials Chemistry C</i> , 2016 , 4, 521-525	7.1	10
1	72	Solid-Liquid Self-Adaptive Polymeric Composite. ACS Applied Materials & Samp; Interfaces, 2016, 8, 2142-7	7 9.5	5
1	71	Electric-field control of spin-orbit torque in a magnetically doped topological insulator. <i>Nature Nanotechnology</i> , 2016 , 11, 352-9	28.7	170
1	7º	Topological supersymmetry breaking: The definition and stochastic generalization of chaos and the limit of applicability of statistics. <i>Modern Physics Letters B</i> , 2016 , 30, 1650086	1.6	8
1	69	Synthesis of Millimeter-Scale Transition Metal Dichalcogenides Single Crystals. <i>Advanced Functional Materials</i> , 2016 , 26, 2009-2015	15.6	126
1	68	Evidence for ferromagnetic coupling at the doped topological insulator/ferrimagnetic insulator interface. <i>AIP Advances</i> , 2016 , 6, 055813	1.5	8
1	67	Giant spin-torque diode sensitivity in the absence of bias magnetic field. <i>Nature Communications</i> , 2016 , 7, 11259	17.4	89
1	66	Competing effect of spin-orbit torque terms on perpendicular magnetization switching in structures with multiple inversion asymmetries. <i>Scientific Reports</i> , 2016 , 6, 23956	4.9	18
1	65	Mobile NBI skyrmions at room temperature: status and future. <i>AIP Advances</i> , 2016 , 6, 055602	1.5	34

164	Spin-torque ferromagnetic resonance measurements utilizing spin Hall magnetoresistance in W/Co40Fe40B20/MgO structures. <i>Applied Physics Letters</i> , 2016 , 109, 202404	3.4	24
163	Influence of inserted Mo layer on the thermal stability of perpendicularly magnetized Ta/Mo/Co20Fe60B20/MgO/Ta films. <i>AIP Advances</i> , 2016 , 6, 045107	1.5	8
162	Enabling Ultrasensitive Photo-detection Through Control of Interface Properties in Molybdenum Disulfide Atomic Layers. <i>Scientific Reports</i> , 2016 , 6, 39465	4.9	2
161	Effect of heavy metal layer thickness on spin-orbit torque and current-induced switching in Hf CoFeB MgO structures. <i>Applied Physics Letters</i> , 2016 , 109, 022403	3.4	27
160	Spin-orbit torques in perpendicularly magnetized Ir22Mn78/Co20Fe60B20/MgO multilayer. <i>Applied Physics Letters</i> , 2016 , 109, 222401	3.4	51
159	Wafer-scale monodomain films of spontaneously aligned single-walled carbon nanotubes. <i>Nature Nanotechnology</i> , 2016 , 11, 633-8	28.7	209
158	Versatile Fabrication of Self-Aligned Nanoscale Hall Devices Using Nanowire Masks. <i>Nano Letters</i> , 2016 , 16, 3109-15	11.5	4
157	Comparative Evaluation of Spin-Transfer-Torque and Magnetoelectric Random Access Memory. IEEE Journal on Emerging and Selected Topics in Circuits and Systems, 2016, 6, 134-145	5.2	58
156	Strain-Induced Electronic Structure Changes in Stacked van der Waals Heterostructures. <i>Nano Letters</i> , 2016 , 16, 3314-20	11.5	101
155	Low-Cost, Large-Area, Facile, and Rapid Fabrication of Aligned ZnO Nanowire Device Arrays. <i>ACS Applied Materials & Device Arrays</i> , 2016, 8, 13466-71	9.5	37
154	Atomic-Monolayer MoS Band-to-Band Tunneling Field-Effect Transistor. Small, 2016, 12, 5676-5683	11	33
153	Strong Electrical Manipulation of SpinDrbit Torque in Ferromagnetic Heterostructures. <i>Advanced Electronic Materials</i> , 2016 , 2, 1600219	6.4	29
152	Solid-Vapor Reaction Growth of Transition-Metal Dichalcogenide Monolayers. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 10656-61	16.4	20
151	SolidVapor Reaction Growth of Transition-Metal Dichalcogenide Monolayers. <i>Angewandte Chemie</i> , 2016 , 128, 10814-10819	3.6	13
150	Spiral Growth of SnSe2 Crystals by Chemical Vapor Deposition. <i>Advanced Materials Interfaces</i> , 2016 , 3, 1600383	4.6	40
149	Two-Step Growth of Two-Dimensional WSe2/MoSe2 Heterostructures. <i>Nano Letters</i> , 2015 , 15, 6135-41	11.5	401
148	Nanoscale Ehuclear magnetic resonance depth imaging of topological insulators. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2015 , 112, E3645-50	11.5	15
147	Scalable Transfer of Suspended Two-Dimensional Single Crystals. <i>Nano Letters</i> , 2015 , 15, 5089-97	11.5	33

(2015-2015)

146	A Material Framework for Beyond-CMOS Devices. <i>IEEE Journal on Exploratory Solid-State Computational Devices and Circuits</i> , 2015 , 1, 19-27	2.4	3
145	Piezoelectric effect in chemical vapour deposition-grown atomic-monolayer triangular molybdenum disulfide piezotronics. <i>Nature Communications</i> , 2015 , 6, 7430	17.4	193
144	Effect of the oxide layer on current-induced spin-orbit torques in Hf CoFeB MgO and Hf CoFeB TaOx structures. <i>Applied Physics Letters</i> , 2015 , 106, 032406	3.4	51
143	Precise Quantization of the Anomalous Hall Effect near Zero Magnetic Field. <i>Physical Review Letters</i> , 2015 , 114, 187201	7.4	189
142	Vapor-phase transport deposition, characterization, and applications of large nanographenes. Journal of the American Chemical Society, 2015 , 137, 4453-9	16.4	15
141	An Atomically Layered InSe Avalanche Photodetector. <i>Nano Letters</i> , 2015 , 15, 3048-55	11.5	201
140	High-Current Gain Two-Dimensional MoSEBase Hot-Electron Transistors. <i>Nano Letters</i> , 2015 , 15, 7905-1	211.5	42
139	Metal-to-insulator switching in quantum anomalous Hall states. <i>Nature Communications</i> , 2015 , 6, 8474	17.4	100
138	3D Band Diagram and Photoexcitation of 2D-3D Semiconductor Heterojunctions. <i>Nano Letters</i> , 2015 , 15, 5919-25	11.5	26
137	Atomic-Scale Magnetism of Cr-Doped Bi2Se3 Thin Film Topological Insulators. ACS Nano, 2015 , 9, 1023	7-43 7	46
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