

Byong-Guk Park

List of Publications by Year in descending order

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Version: 2024-02-01

65
papers

2,806
citations

331670

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docs citations

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times ranked

3305
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Reduced Spin-Orbit Torque Switching Current by Voltage-Controlled Easy-Cone States. <i>Advanced Functional Materials</i> , 2022, 32, 2107944. | 14.9 | 2 |
| 2 | Thickness dependence of spin-orbit torques in Pt/Co structures on epitaxial substrates. <i>APL Materials</i> , 2022, 10, . | 5.1 | 5 |
| 3 | SOT-MRAM Digital PIM Architecture With Extended Parallelism in Matrix Multiplication. <i>IEEE Transactions on Computers</i> , 2022, 71, 2816-2828. | 3.4 | 8 |
| 4 | Efficient spin-orbit torque in magnetic trilayers using all three polarizations of a spin current. <i>Nature Electronics</i> , 2022, 5, 217-223. | 26.0 | 28 |
| 5 | Voltage-driven gigahertz frequency tuning of spin Hall nano-oscillators. <i>Nature Communications</i> , 2022, 13, . | 12.8 | 14 |
| 6 | Anisotropic Spin-Orbit Torque through Crystal-Orientation Engineering in Epitaxial $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" \rangle \langle \text{mml:mi} \rangle \text{Pt} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$. <i>Physical Review Applied</i> , 2021, 15, . | 3.8 | 13 |
| 7 | Magnetization switching through symmetry. <i>Nature Nanotechnology</i> , 2021, 16, 227-228. | 31.5 | 6 |
| 8 | Magnetic Anisotropy and Damping Constant of Ferrimagnetic GdCo Alloy near Compensation Point. <i>Materials</i> , 2021, 14, 2604. | 2.9 | 10 |
| 9 | Morphology-dependent spin Seebeck effect in yttrium iron garnet thin films prepared by metal-organic decomposition. <i>Ceramics International</i> , 2021, 47, 16770-16775. | 4.8 | 11 |
| 10 | Unconventional Hall effect in metal/semiconductor hybrid spintronic devices. <i>Applied Physics Letters</i> , 2021, 119, 112401. | 3.3 | 1 |
| 11 | Stochastic SOT device based SNN architecture for On-chip Unsupervised STDP Learning. <i>IEEE Transactions on Computers</i> , 2021, , 1-1. | 3.4 | 7 |
| 12 | Temperature dependence of intrinsic and extrinsic contributions to anisotropic magnetoresistance. <i>Scientific Reports</i> , 2021, 11, 20884. | 3.3 | 10 |
| 13 | Efficient conversion of orbital Hall current to spin current for spin-orbit torque switching. <i>Communications Physics</i> , 2021, 4, . | 5.3 | 65 |
| 14 | Current-induced manipulation of exchange bias in IrMn/NiFe bilayer structures. <i>Nature Communications</i> , 2021, 12, 6420. | 12.8 | 24 |
| 15 | Unidirectional spin Hall magnetoresistance in epitaxial Cr/Fe bilayer from electron-magnon scattering. <i>Communications Physics</i> , 2021, 4, . | 5.3 | 7 |
| 16 | Enhanced spin-orbit torque in Ni ₈₁ Fe ₁₉ /Pt bilayer with NdNiO ₃ contact. <i>Applied Physics Letters</i> , 2021, 119, . | 3.3 | 2 |
| 17 | Orbital torque in magnetic bilayers. <i>Nature Communications</i> , 2021, 12, 6710. | 12.8 | 69 |
| 18 | Electric-field control of field-free spin-orbit torque switching via laterally modulated Rashba effect in Pt/Co/AlO _x structures. <i>Nature Communications</i> , 2021, 12, 7111. | 12.8 | 36 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 19 | Observation of Thermal Spin-Orbit Torque in W/CoFeB/MgO Structures. Nano Letters, 2020, 20, 7803-7810. | 9.1 | 7 |
| 20 | Negative spin Hall magnetoresistance of normal metal/ferromagnet bilayers. Nature Communications, 2020, 11, 3619. | 12.8 | 13 |
| 21 | Control of electrical resistance and magnetoresistance by electric-field-driven oxygen ion migration in a single GdOx wire. NPC Asia Materials, 2020, 12, . | 7.9 | 4 |
| 22 | Extreme anti-reflection enhanced magneto-optic Kerr effect microscopy. Nature Communications, 2020, 11, 5937. | 12.8 | 21 |
| 23 | Amplification of Spin Thermoelectric Signals in Multilayer Spin Thermopiles. ACS Applied Electronic Materials, 2020, 2, 2906-2912. | 4.3 | 4 |
| 24 | Current-Induced Spin-Orbit Torques for Spintronic Applications. Advanced Materials, 2020, 32, e1907148. | 21.0 | 121 |
| 25 | Distinct handedness of spin wave across the compensation temperatures of ferrimagnets. Nature Materials, 2020, 19, 980-985. | 27.5 | 42 |
| 26 | Spin-Orbit Torque in a Perpendicularly Magnetized Ferrimagnetic $Tb-Co$ Single Layer. Physical Review Applied, 2020, 13, . | 3.8 | 43 |
| 27 | Effects of proton and ion beam radiation on magnetic tunnel junctions. Thin Solid Films, 2019, 686, 137432. | 1.8 | 12 |
| 28 | Material and Thickness Investigation in Ferromagnet/Ta/CoFeB Trilayers for Enhancement of Spin-Orbit Torque and Field-Free Switching. Advanced Electronic Materials, 2019, 5, 1900598. | 5.1 | 23 |
| 29 | Underlayer dependence of electric field effect on magnetic anisotropy and its volatility in CoFeB/MgO structures. Current Applied Physics, 2019, 19, 50-54. | 2.4 | 1 |
| 30 | Antiferromagnetic Oscillators Driven by Spin Currents with Arbitrary Spin Polarization Directions. Physical Review Applied, 2019, 11, . | 3.8 | 14 |
| 31 | Spectrometer based real-time magnetic Faraday rotation spectroscopy of Bi-YIG thin films. Journal of Magnetism and Magnetic Materials, 2019, 482, 61-65. | 2.3 | 7 |
| 32 | Enhanced spin-orbit torque <i>via</i> interface engineering in Pt/CoFeB/MgO heterostructures. APL Materials, 2019, 7, . | 5.1 | 48 |
| 33 | Anisotropic magnetoresistance of 3d Ferromagnetic metals observed by terahertz time domain spectroscopy. , 2019, , . | | 0 |
| 34 | Largely enhanced coercivity of cobalt adjacent to straight-stripe mixed-phase bismuth ferrites. Physical Review B, 2018, 97, . | 3.2 | 2 |
| 35 | Spin currents and spin-orbit torques in ferromagnetic trilayers. Nature Materials, 2018, 17, 509-513. | 27.5 | 337 |
| 36 | Precise Determination of the Temperature Gradients in Laser-irradiated Ultrathin Magnetic Layers for the Analysis of Thermal Spin Current. Scientific Reports, 2018, 8, 11337. | 3.3 | 2 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 37 | Complementary logic operation based on electric-field controlled spin-orbit torques. Nature Electronics, 2018, 1, 398-403. | 26.0 | 100 |
| 38 | Plasmon-enhanced Photodetection in Ferromagnet/Nonmagnet Spin Thermoelectric Structures. Advanced Functional Materials, 2018, 28, 1802936. | 14.9 | 7 |
| 39 | Enhanced tunnel magnetoresistance and electric-field effect in CoFeB/MgO/CoFeB perpendicular tunnel junctions with W underlayer. Current Applied Physics, 2017, 17, 962-965. | 2.4 | 14 |
| 40 | Novel Operation of a Multi-Bit SOT Memory Cell Addressed With a Single Write Line. IEEE Transactions on Magnetics, 2017, 53, 1-5. | 2.1 | 3 |
| 41 | Integrated arrays of air-dielectric graphene transistors as transparent active-matrix pressure sensors for wide pressure ranges. Nature Communications, 2017, 8, 14950. | 12.8 | 167 |
| 42 | Inertia-driven resonant excitation of a magnetic skyrmion. Scientific Reports, 2017, 7, 13993. | 3.3 | 14 |
| 43 | Enhanced spin-orbit torque by engineering Pt resistivity in Pt/Co structures. Physical Review B, 2017, 96, . | 3.2 | 65 |
| 44 | Observation of transverse spin Nernst magnetoresistance induced by thermal spin current in ferromagnet/non-magnet bilayers. Nature Communications, 2017, 8, 1400. | 12.8 | 36 |
| 45 | Spin Hall magnetoresistance in heavy-metal/metallic-ferromagnet multilayer structures. Physical Review B, 2017, 96, . | 3.2 | 20 |
| 46 | Contributions of Co and Fe orbitals to perpendicular magnetic anisotropy of MgO/CoFeB bilayers with Ta, W, IrMn, and Ti underlayers. Applied Physics Express, 2017, 10, 073006. | 2.4 | 9 |
| 47 | Hardness of AISI type 410 martensitic steels after high temperature irradiation via nanoindentation. Metals and Materials International, 2017, 23, 1257-1265. | 3.4 | 9 |
| 48 | Relativistic Motion of Antiferromagnetic Domain Walls Driven by Spin-Orbit Torques. , 2016, , . | | 0 |
| 49 | Field-free switching of perpendicular magnetization through spin-orbit torque in antiferromagnet/ferromagnet/oxide structures. Nature Nanotechnology, 2016, 11, 878-884. | 31.5 | 438 |
| 50 | Utilization of the Antiferromagnetic IrMn Electrode in Spin Thermoelectric Devices and Their Beneficial Hybrid for Thermopiles. Advanced Functional Materials, 2016, 26, 5507-5514. | 14.9 | 21 |
| 51 | Electric field control of magnetic anisotropy in the easy cone state of Ta/Pt/CoFeB/MgO structures. Applied Physics Letters, 2016, 109, . | 3.3 | 23 |
| 52 | Antiferromagnetic Domain Wall Motion Driven by Spin-Orbit Torques. Physical Review Letters, 2016, 117, 087203. | 7.8 | 201 |
| 53 | Effect of Proton Irradiation on the Magnetic Properties of Antiferromagnet/ferromagnet Structures. Journal of Magnetics, 2016, 21, 159-163. | 0.4 | 3 |
| 54 | Thermoelectric Signal Enhancement by Reconciling the Spin Seebeck and Anomalous Nernst Effects in Ferromagnet/Non-magnet Multilayers. Scientific Reports, 2015, 5, 10249. | 3.3 | 65 |

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|----|---|------|-----------|
| 55 | Magneto-optical kerr spectroscopy and interfacial perpendicular magnetic anisotropy of (Hf,Pt)/CoFeB/MgO thin films. Journal of the Korean Physical Society, 2015, 67, 1235-1239. | 0.7 | 4 |
| 56 | Large spin Hall magnetoresistance and its correlation to the spin-orbit torque in W/CoFeB/MgO structures. Scientific Reports, 2015, 5, 14668. | 3.3 | 147 |
| 57 | Large planar Hall effect in perpendicularly magnetized W/CoFeB/MgO structures. Current Applied Physics, 2015, 15, 902-905. | 2.4 | 11 |
| 58 | Fast current-induced motion of a transverse domain wall induced by interfacial Dzyaloshinskiï€Moriya interaction. Current Applied Physics, 2015, 15, 1139-1142. | 2.4 | 4 |
| 59 | Magnetic resonance absorption in isolated metal/insulator/metal nanodot arrays with transmission geometry. Current Applied Physics, 2015, 15, 844-849. | 2.4 | 3 |
| 60 | Dependence of inverse-spin Hall effect and spin-rectified voltage on tantalum thickness in Ta/CoFeB bilayer structure. Applied Physics Letters, 2015, 106, 032409. | 3.3 | 15 |
| 61 | Dissipative soliton dynamics in a discrete magnetic nano-dot chain. Applied Physics Letters, 2014, 104, 052416. | 3.3 | 6 |
| 62 | Interfacial perpendicular magnetic anisotropy in CoFeB/MgO structure with various underlayers. Journal of Applied Physics, 2014, 115, . | 2.5 | 56 |
| 63 | Ferromagnetic resonance spin pumping in CoFeB with highly resistive non-magnetic electrodes. Current Applied Physics, 2014, 14, 1344-1348. | 2.4 | 28 |
| 64 | CuO-based sintering aids for low temperature sintering of BaFe ₁₂ O ₁₉ ceramics. Journal of Asian Ceramic Societies, 2013, 1, 170-177. | 2.3 | 21 |
| 65 | Spin Hall Effect Transistor. Science, 2010, 330, 1801-1804. | 12.6 | 288 |