# Volodymyr P Kravchuk

List of Publications by Year
in descending order



| 62 | 2,070 | 236833 | 233338 |
|---|---|---|---|
| papers | citations | 25 h-index | 45 g-index |

| 63 | 63 | 63 | 1214 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Fundamentals of Curvilinear Ferromagnetism: Statics and Dynamics of Geometrically Curved Wires and Narrow Ribbons. Small, 2022, 18, e2105219. | 5.2 | 19 |
| 2 | Curvature-induced drift and deformation of magnetic skyrmions: Comparison of the ferromagnetic and antiferromagnetic cases. Physical Review B, 2022, 105, . | 1.1 | 10 |
| 3 | Screw Dislocations in Chiral Magnets. Physical Review Letters, 2022, 128, 157204. | 2.9 | 8 |
| 4 | Microwave resonances of magnetic skyrmions in thin film multilayers. Nature Communications, 2021, 12, 1909. | 5.8 | 27 |
| 5 | Chaotic antiferromagnetic nano-oscillator driven by spin torque. Physical Review B, 2021, 104, . | 1.1 | 6 |
| 6 | Unidirectional tilt of domain walls in equilibrium in biaxial stripes with Dzyaloshinskiiâ€“Moriya interaction. Journal Physics D: Applied Physics, 2020, 53, 395003. | 1.3 | 5 |
| 7 | Effect of curvature on the eigenstates of magnetic skyrmions. Physical Review B, 2020, 102, . | 1.1 | 22 |
| 8 | Domain wall diode based on functionally graded Dzyaloshinskiiâ€“Moriya interaction. Applied Physics Letters, 2020, 116, 222406. | 1.5 | 5 |
| 9 | Solitary wave excitations of skyrmion strings in chiral magnets. Physical Review B, 2020, 102, . | 1.1 | 12 |
| 10 | Curvature effects on phase transitions in chiral magnets. SciPost Physics, 2020, 9, . | 1.5 | 17 |
| 11 | Spontaneous deformation of flexible ferromagnetic ribbons induced by Dzyaloshinskii-Moriya interaction. Physical Review B, 2019, 100, . | 1.1 | 14 |
| 12 | Spin eigenexcitations of an antiferromagnetic skyrmion. Physical Review B, 2019, 99, . | 1.1 | 28 |
| 13 | Magnetization-induced shape transformations in flexible ferromagnetic rings. Physical Review B, 2019, 99, . | 1.1 | 14 |
| 14 | Curvature induced magnonic crystal in nanowires. SciPost Physics, 2019, 7, . | 1.5 | 12 |
| 15 | Spin eigenmodes of magnetic skyrmions and the problem of the effective skyrmion mass. Physical Review B, 2018, 97, . | 1.1 | 67 |
| 16 | Multiplet of Skyrmion States on a Curvilinear Defect: Reconfigurable Skyrmion Lattices. Physical Review Letters, 2018, 120, 067201. | 2.9 | 64 |
| 17 | Mesoscale Dzyaloshinskii-Moriya interaction: geometrical tailoring of the magnetochirality. Scientific Reports, 2018, 8, 866. | 1.6 | 43 |
| 18 | Chiral Skyrmion and Skyrmionium States Engineered by the Gradient of Curvature. Physical Review Applied, 2018, 10, . | 1.5 | 26 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Fluctuation-induced NÃ©el and Bloch skyrmions at topological insulator surfaces. Physical Review B, 2018, 98, . | 1.1 | 8 |
| 20 | Localization of magnon modes in a curved magnetic nanowire. Low Temperature Physics, 2018, 44, 634-643. | 0.2 | 17 |
| 21 | Geometry-induced motion of magnetic domain walls in curved nanostripes. Physical Review B, 2018, 98, . | 1.1 | 41 |
| 22 | Magnetization in narrow ribbons: curvature effects. Journal of Physics A: Mathematical and Theoretical, 2017, 50, 385401. | 0.7 | 40 |
| 23 | Geometry induced phase transitions in magnetic spherical shell. Journal of Magnetism and Magnetic Materials, 2017, 443, 404-412. | 1.0 | 26 |
| 24 | Magnetism in curved geometries. Journal Physics D: Applied Physics, 2016, 49, 363001. | 1.3 | 263 |
| 25 | Rashba Torque Driven Domain Wall Motion in Magnetic Helices. Scientific Reports, 2016, 6, 23316. | 1.6 | 39 |
| 26 | Topologically stable magnetization states on a spherical shell: Curvature-stabilized skyrmions. Physical Review B, 2016, 94, . | 1.1 | 81 |
| 27 | Curvature and torsion effects in spin-current driven domain wall motion. Physical Review B, 2016, 93, . | 1.1 | 49 |
| 28 | Torsion-induced effects in magnetic nanowires. Physical Review B, 2015, 92, . | 1.1 | 37 |
| 29 | Curvature-induced domain wall pinning. Physical Review B, 2015, 92, . | 1.1 | 64 |
| 30 | Vortex polarity switching in magnets with surface anisotropy. Low Temperature Physics, 2015, 41, 361-374. | 0.2 | 3 |
| 31 | Resonantly excited precession motion of three-dimensional vortex core in magnetic nanospheres. Scientific Reports, 2015, 5, 11370. | 1.6 | 18 |
| 32 | Coupling of Chiralities in Spin and Physical Spaces: The MÃ¶bius Ring as a Case Study. Physical Review Letters, 2015, 114, 197204. | 2.9 | 73 |
| 33 | Curvature effects in statics and dynamics of low dimensional magnets. Journal of Physics A: Mathematical and Theoretical, 2015, 48, 125202. | 0.7 | 94 |
| 34 | Effects of a spin-polarized current assisted Ã˜rsted field in magnetization patterning. Journal of Applied Physics, 2015, 117, 213910. | 1.1 | 0 |
| 35 | Controllable vortex chirality switching on spherical shells. Journal of Applied Physics, 2015, 117, 083908. | 1.1 | 14 |
| 36 | Domain wall dynamics at the local wire bend. , 2015, , . | | 0 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Torsion effects in a helix nanowire with easy-tangential anisotropy. , 2015, , . | | 0 |
| 38 | Curvature induced chirality symmetry breaking in vortex core switching phenomena. Applied Physics Letters, 2014, 104, . | 1.5 | 25 |
| 39 | Effects of surface anisotropy on magnetic vortex core. Journal of Magnetism and Magnetic Materials, 2014, 361, 201-205. | 1.0 | 10 |
| 40 | Influence of Dzialoshinskiiâ€“Moriya interaction on static and dynamic properties of a transverse domain wall. Journal of Magnetism and Magnetic Materials, 2014, 367, 9-14. | 1.0 | 31 |
| 41 | Curvature Effects in Thin Magnetic Shells. Physical Review Letters, 2014, 112, 257203. | 2.9 | 160 |
| 42 | Stability of Magnetic Nanowires Against Spin-Polarized Current. Ukrainian Journal of Physics, 2014, 59, 1001-1006. | 0.1 | 5 |
| 43 | Regular and chaotic vortex core reversal by a resonant perpendicular magnetic field. Physical Review B, 2013, 88, . | 1.1 | 19 |
| 44 | Periodic magnetization structures generated by transverse spin current in magnetic nanowires. Physical Review B, 2013, 87, . | 1.1 | 9 |
| 45 | Periodic magnetic structures generated by spinâ€“polarized currents in nanostripes. Applied Physics Letters, 2013, 103, 222401. | 1.5 | 8 |
| 46 | EQUILIBRIUM STATES OF SOFT MAGNETIC HEMISPHERICAL SHELL. Spin, 2013, 03, 1340003. | 0.6 | 14 |
| 47 | Saturation of Magnetic Films with Spin-Polarized Current in the Presence of a Magnetic Field. Ukrainian Journal of Physics, 2013, 58, 666-672. | 0.1 | 0 |
| 48 | Magnetically Capped Rolled-up Nanomembranes. Nano Letters, 2012, 12, 3961-3966. | 4.5 | 50 |
| 49 | Magnetic vortex-antivortex crystals generated by spin-polarized current. Physical Review B, 2012, 86, . | 1.1 | 13 |
| 50 | Equilibrium magnetic states in individual hemispherical permalloy caps. Applied Physics Letters, 2012, 101, . | 1.5 | 72 |
| 51 | Magnetic vortices on closely packed spherically curved surfaces. Physical Review B, 2012, 85, . | 1.1 | 52 |
| 52 | Out-of-surface vortices in spherical shells. Physical Review B, 2012, 85, . | 1.1 | 59 |
| 53 | Spin-transfer torque and current-induced vortex superlattices in nanomagnets. Physical Review B, 2011, 84, . | 1.1 | 11 |
| 54 | Off-centred immobile magnetic vortex under influence of spin-transfer torque. Journal Physics D: Applied Physics, 2011, 44, 285001. | 1.3 | 6 |

| # | Article | IF | Citations |
|---|---|---|---|
| 55 | Magnetic vortex dynamics induced by an electrical current. International Journal of Quantum Chemistry, 2010, 110, 83-97. | 1.0 | 62 |
| 56 | Multiple vortex-antivortex pair generation in magnetic nanodots. Physical Review B, 2010, 81, . | 1.1 | 18 |
| 57 | Nucleation of a vortex-antivortex pair in the presence of an immobile magnetic vortex. Physical Review B, 2009, 80, . | 1.1 | 29 |
| 58 | Switching phenomena in magnetic vortex dynamics. Low Temperature Physics, 2008, 34, 528-534. | 0.2 | 15 |
| 59 | Controlled vortex core switching in a magnetic nanodisk by a rotating field. Journal of Applied Physics, 2007, 102, . | 1.1 | 62 |
| 60 | Effective anisotropy of thin nanomagnets: Beyond the surface-anisotropy approach. Physical Review B, 2007, 76, . | 1.1 | 15 |
| 61 | Equilibrium magnetisation structures in ferromagnetic nanorings. Journal of Magnetism and Magnetic Materials, 2007, 310, 116-125. | 1.0 | 40 |
| 62 | Thin ferromagnetic nanodisk in transverse magnetic field. Physics of the Solid State, 2007, 49, 1923-1931. | 0.2 | 19 |