Dmitry Smirnov

List of Publications by Year
in descending order

67 papers	3,142 citations	201575 27 h-index	155592 55 g-index
69 all docs	69 docs citations	69 times ranked	4201 citing authors

#	Article	IF	Citations
1	Valley Splitting and Polarization by the Zeeman Effect in Monolayer<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>MoSe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn> Physical Review Letters, 2014, 113, 266804.	2.9	395
2	Magnetic brightening and control of dark excitons in monolayer WSe2. Nature Nanotechnology, 2017, 12, 883-888.	15.6	315
3	Transport spectroscopy of symmetry-broken insulating states in bilayer graphene. Nature Nanotechnology, 2012, 7, 156-160.	15.6	264
4	Revealing the biexciton and trion-exciton complexes in BN encapsulated WSe2. Nature Communications, 2018, 9, 3719.	5.8	175
5	Efficient generation of neutral and charged biexcitons in encapsulated WSe2 monolayers. Nature Communications, 2018, 9, 3718.	5.8	133
6	High Photoresponsivity and Short Photoresponse Times in Few-Layered WSe₂ Transistors. ACS Applied Materials & Interfaces, 2015, 7, 12080-12088.	4.0	111
7	Emerging photoluminescence from the dark-exciton phonon replica in monolayer WSe2. Nature Communications, 2019, 10, 2469.	5.8	102
8	Pronounced Photovoltaic Response from Multilayered Transition-Metal Dichalcogenides PN-Junctions. Nano Letters, 2015, 15, 7532-7538.	4.5	98
9	Gate Tunable Dark Trions in Monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WSe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub> Physical Review Letters, 2019, 123, 027401.	9.0	95
10	Spinâ€“phonon couplings in transition metal complexes with slow magnetic relaxation. Nature Communications, 2018, 9, 2572.	5.8	93
11	Bilayer Lateral Heterostructures of Transition-Metal Dichalcogenides and Their Optoelectronic Response. ACS Nano, 2019, 13, 12372-12384.	7.3	89
12	Electronic correlations in nodal-line semimetals. Nature Physics, 2020, 16, 636-641.	6.5	86
13	Electron scattering spectroscopy by a high magnetic field in quantum cascade lasers. Physical Review B, 2006, 73, .	1.1	75
14	Temperature-driven massless Kane fermions in HgCdTe crystals. Nature Communications, 2016, 7, 12576.	5.8	73
15	Giant Valley-Zeeman Splitting from Spin-Singlet and Spin-Triplet Interlayer Excitons in WSe₂/MoSe₂ Heterostructure. Nano Letters, 2020, 20, 694-700.	4.5	70
16	Momentum-Dark Intervalley Exciton in Monolayer Tungsten Diselenide Brightened via Chiral Phonon. ACS Nano, 2019, 13, 14107-14113.	7.3	63
17	Direct Observation of Gate-Tunable Dark Trions in Monolayer WSe₂. Nano Letters, 2019, 19, 6886-6893.	4.5	60
18	Spin-induced linear polarization of photoluminescence in antiferromagnetic van der Waals crystals. Nature Materials, 2021, 20, 964-970.	13.3	59

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19	Luminescent Emission of Excited Rydberg Excitons from Monolayer WSe₂. Nano Letters, 2019, 19, 2464-2471.	4.5	51
20	Magnetic field mixing and splitting of bright and dark excitons in monolayer MoSe ₂. 2D Materials, 2020, 7, 015017.	2.0	45
21	Landau-level spectroscopy of massive Dirac fermions in single-crystalline <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>ZrTe</mml:mi><mml:mn>5</mml:mn></mml:msub></ thin flakes. Physical Review B, 2017, 96, .	1.1	33
22	Chiral Landau levels in Weyl semimetal NbAs with multiple topological carriers. Nature Communications, 2018, 9, 1854.	5.8	37
23	Exciton-polaron Rydberg states in monolayer MoSe2 and WSe2. Nature Communications, 2021, 12, 6131.	5.8	34
24	Magnetophonon resonance in graphite: High-field Raman measurements and electron-phonon coupling contributions. Physical Review B, 2012, 85, .	1.1	32
25	Magnetoplasmons in Quasineutral Epitaxial Graphene Nanoribbons. Physical Review Letters, 2013, 110, 246803.	2.9	30
26	Measurement of Filling-Factor-Dependent Magnetophonon Resonances in Graphene Using Raman Spectroscopy. Physical Review Letters, 2013, 110, 227402.	2.9	28
27	Cyclotron resonance of single-valley Dirac fermions in nearly gapless HgTe quantum wells. Physical Review B, 2014, 89, .	1.1	27
28	Electronic properties of unstrained unrelaxed narrow gap InAs_xSb_{1â^'x} alloys. Journal Physics D: Applied Physics, 2016, 49, 105101.	1.3	27
29	Unraveling the Topological Phase of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>ZrTe</mml:mi></mml:mrow><mml:mrow><mml:mn>5</mml:mn></ via Magnetoinfrared Spectroscopy. Physical Review Letters, 2020, 125, 046403.	2.9	26
30	Electrically controlled emission from singlet and triplet exciton species in atomically thin light-emitting diodes. Physical Review B, 2021, 103, .	1.1	26
31	Spectroscopic Studies of the Magnetic Excitation and Spinâ€Phonon Couplings in a Singleâ€Molecule Magnet. Chemistry - A European Journal, 2019, 25, 15846-15857.	1.7	22
32	Probing the semiconductor to semimetal transition in InAs/GaSb double quantum wells by magneto-infrared spectroscopy. Physical Review B, 2017, 95, .	1.1	21
33	Engineering Dirac Materials: Metamorphic InAs_{1â€“x}Sb_x/InAs_{1â€“y}Sb_y Superlattices with Ultralow Bandgap. Nano Letters, 2018, 18, 412-417.	4.5	21
34	Applying Unconventional Spectroscopies to the Singleâ€Molecule Magnets, Co(PPh₃)₂X₂(X=Cl, Br, I): Unveiling Magnetic Transitions and Spinâ€Phonon Coupling. Chemistry - A European Journal, 2021, 27, 11110-11125.	1.7	21
35	xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Co</mml:mi><mml:mo mathvariant="bold" stretchy="false">[</mml:mo><mml:mi mathvariant="bold">N</mml:mi><mml:mo mathvariant="bold" stretchy="false">(</mml:mo><mml:mi>CN</mml:mi><mml:msub><mml:mo) Tj ETQq1 1 0.784314 rgBT /Overloc	2.9	20
36	Landau Quantization in Coupled Weyl Points: A Case Study of Semimetal NbP. Nano Letters, 2018, 18, 7726-7731.	4.5	20

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37	Observation of Quantized Exciton Energies in Monolayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mi>WSe</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow> under a Strong Magnetic Field. Physical Review X, 2020, 10, .	2.8	20
38	High-frequency and -field EPR and FDMRS study of the [Fe(H2O)6]2+ ion in ferrous fluorosilicate. Journal of Magnetic Resonance, 2011, 213, 158-165.	1.2	18
39	Giant Valley-Polarized Rydberg Excitons in Monolayer WSe₂ Revealed by Magneto-photocurrent Spectroscopy. Nano Letters, 2020, 20, 7635-7641.	4.5	16
40	Layer- and gate-tunable spin-orbit coupling in a high-mobility few-layer semiconductor. Science Advances, 2021, 7, .	4.7	16
41	Structureâ€“Property Relations in Multiferroic [(CH₃)₂NH₂]M(HCOO)₃ (M = Mn, Co, Ni). Inorganic Chemistry, 2018, 57, 11569-11577.	1.9	15
42	Phonon-exciton Interactions in WSe2 under a quantizing magnetic field. Nature Communications, 2020, 11, 3104.	5.8	15
43	Electronic Raman scattering in the 2D antiferromagnet NiPS ₃. Science Advances, 2022, 8, eabl7707.	4.7	13
44	Measurement of graphite tight-binding parameters using high-field magnetoreflectance. Physical Review B, 2011, 84, .	1.1	12
45	Melting of charge order in the low-temperature state of an electronic ferroelectric-like system. Npj Quantum Materials, 2020, 5, .	1.8	12
46	Magneto-transport evidence for strong topological insulator phase in ZrTe5. Nature Communications, 2021, 12, 6758.	5.8	12
47	Circularly Polarized Photoluminescence as a Probe of Density of States in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>GaAs</mml:mi><mml:mo>/</mml:mo><mml:mi>AlGaAs</mml:mi></mml:math>Quantum Hall Bilayers. Physical Review Letters, 2012, 109, 046802.	2.9	9
48	Spectroscopic evidence of quantum Hall interlayer tunneling gap collapse caused by tilted magnetic field in a GaAs/AlGaAs triple quantum well. Physical Review B, 2014, 89, .	1.1	9
49	Magnetoinfrared spectroscopic study of thin<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi mathvariant="normal">Bi</mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mi mathvariant="normal">Te</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:math>single crystals. Physical Review B, 2016, 93, .	1.1	9
50	Electronâ€“Hole Asymmetry of Surface States in Topological Insulator Sb2Te3 Thin Films Revealed by Magneto-Infrared Spectroscopy. Nano Letters, 2020, 20, 4588-4593.	4.5	9
51	Unconventional valley-dependent optical selection rules and landau level mixing in bilayer graphene. Nature Communications, 2020, 11, 2941.	5.8	9
52	Quantum oscillations of spin polarization in a GaAs/AlGaAs double quantum well. Physical Review B, 2012, 86, .	1.1	7
53	Enhancement and narrowing of the Aharonov-Bohm oscillations due to built-in electric field in stacked type-II ZnTe/ZnSe quantum dots: Spectral analysis. Physical Review B, 2012, 86, .	1.1	7
54	Determination of lateral size distribution of type-II ZnTe/ZnSe stacked submonolayer quantum dots via spectral analysis of optical signature of the Aharanov-Bohm excitons. Journal of Applied Physics, 2014, 116, .	1.1	6

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55	Metamorphic narrow-gap InSb/InAsSb superlattices with ultra-thin layers. Applied Physics Letters, 2018, 113, .	1.5	6
56	Valley and Zeeman Splittings in Multilayer Epitaxial Graphene Revealed by Circular Polarization Resolved Magneto-infrared Spectroscopy. Nano Letters, 2019, 19, 7043-7049.	4.5	6
57	Dirac energy spectrum and inverted bandgap in metamorphic InAsSb/InSb superlattices. Applied Physics Letters, 2020, 116, 032101.	1.5	5
58	Weyl Fermion magneto-electrodynamics and ultralow field quantum limit in TaAs. Science Advances, 2022, 8, eabj1076.	4.7	4
59	Optical anisotropy in type-II ZnTe/ZnSe submonolayer quantum dots. Journal of Applied Physics, 2016, 119, 224306.	1.1	3
60	Decoherence in semiconductor nanostructures with type-II band alignment: All-optical measurements using Aharonov-Bohm excitons. Physical Review B, 2017, 95, .	1.1	3
61	Fractional and Symmetry-Broken Chern Insulators in Tunable MoirÃ© Superlattices. Nano Letters, 2019, 19, 4321-4326.	4.5	3
62	Landau quantization in tilted Weyl semimetals with broken symmetry. Journal of Applied Physics, 2021, 129, .	1.1	3
63	Long spin-flip time and large Zeeman splitting of holes in type-II ZnTe/ZnSe submonolayer quantum dots. Journal of Applied Physics, 2018, 124, 144306.	1.1	2
64	Probing the effect of magnetic field on charge order in the quasi-two-dimensional Mott insulator <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î¹</mml:mi><mml:mtext>â^'</mml:mtext><mml:mi>(ET)</mml:mi><mml:msub><mml:mi></mml:mi><mml:mn>2</mml:mn></mml:msub><mml:msub><mml:mrow><mml:mi>Hg(SCN)</mml:mi></mml:mrow><mml:mn>2</mml:mn></mml:msub></mml:math> Physical Review B, 2021, 104, .	1.1	2
65	Light sources with bias tunable spectrum based on van der Waals interface transistors. Nature Communications, 2022, 13, .	5.8	2
66	Observation of cyclotron antiresonance in the topological insulator Bi2Te3. Physical Review B, 2018, 98, .	1.1	1
67	Quantum Materials Based on Metamorphic InAsSb. , 2019, , .		0