Ivan A Verzhbitskiy

List of Publications by Year
in descending order

44 papers	3,010 citations	331538 21 h-index	302012 39 g-index
44 all docs	44 docs citations	44 times ranked	6165 citing authors

#	Article	IF	Citations
1	Synthesis of structurally well-defined and liquid-phase-processable graphene nanoribbons. Nature Chemistry, 2014, 6, 126-132.	6.6	468
2	Molecularly thin two-dimensional hybrid perovskites with tunable optoelectronic properties due to reversible surface relaxation. Nature Materials, 2018, 17, 908-914.	13.3	295
3	Raman study on defective graphene: Effect of the excitation energy, type, and amount of defects. Physical Review B, 2013, 88, .	1.1	279
4	Evidence for Fast Interlayer Energy Transfer in MoSe₂/WS₂ Heterostructures. Nano Letters, 2016, 16, 4087-4093.	4.5	205
5	Colossal Ultraviolet Photoresponsivity of Few-Layer Black Phosphorus. ACS Nano, 2015, 9, 8070-8077.	7.3	204
6	Chemical Stabilization of 1Tâ€² Phase Transition Metal Dichalcogenides with Giant Optical Kerr Nonlinearity. Journal of the American Chemical Society, 2017, 139, 2504-2511.	6.6	171
7	Controlling the magnetic anisotropy in Cr2Ge2Te6 by electrostatic gating. Nature Electronics, 2020, 3, 460-465.	13.1	145
8	Bottom-Up Synthesis of Liquid-Phase-Processable Graphene Nanoribbons with Near-Infrared Absorption. ACS Nano, 2014, 8, 11622-11630.	7.3	138
9	Engineering Bandgaps of Monolayer MoS₂ and WS₂ on Fluoropolymer Substrates by Electrostatically Tuned Manyâ€Body Effects. Advanced Materials, 2016, 28, 6457-6464.	11.1	116
10	Excitonâ€“Plasmon Coupling and Electromagnetically Induced Transparency in Monolayer Semiconductors Hybridized with Ag Nanoparticles. Advanced Materials, 2016, 28, 2709-2715.	11.1	115
11	Electroluminescent Devices Based on 2D Semiconducting Transition Metal Dichalcogenides. Advanced Materials, 2018, 30, e1802687.	11.1	86
12	Raman Fingerprints of Atomically Precise Graphene Nanoribbons. Nano Letters, 2016, 16, 3442-3447.	4.5	83
13	Raman scattering efficiency of graphene. Physical Review B, 2013, 87, .	1.1	82
14	Giant gate-tunable bandgap renormalization and excitonic effects in a 2D semiconductor. Science Advances, 2019, 5, eaaw2347.	4.7	80
15	Efficient Carrier-to-Exciton Conversion in Field Emission Tunnel Diodes Based on MIS-Type van der Waals Heterostack. Nano Letters, 2017, 17, 5156-5162.	4.5	71
16	Characterization of the second- and third-harmonic optical susceptibilities of atomically thin tungsten diselenide. Scientific Reports, 2018, 8, 10035.	1.6	57
17	Giant second-harmonic generation in ferroelectric NbOI2. Nature Photonics, 2022, 16, 644-650.	15.6	57
18	Determination of Crystal Axes in Semimetallic Tâ€²â€MoTe₂ by Polarized Raman Spectroscopy. Advanced Functional Materials, 2017, 27, 1604799.	7.8	47

#	Article	IF	Citations
19	Electron tunneling at the molecularly thin 2D perovskite and graphene van der Waals interface. Nature Communications, 2020, 11, 5483.	5.8	35
20	Effects Of Structural Phase Transition On Thermoelectric Performance in Lithium-Intercalated Molybdenum Disulfide (Li_xMoS₂). ACS Applied Materials & Interfaces, 2019, 11, 12184-12189.	4.0	31
21	Measuring Valley Polarization in Two-Dimensional Materials with Second-Harmonic Spectroscopy. ACS Photonics, 2020, 7, 925-931.	3.2	22
22	Data-driven discovery of high performance layered van der Waals piezoelectric NbOI2. Nature Communications, 2022, 13, 1884.	5.8	22
23	Strong Optical Absorption and Photocarrier Relaxation in 2-D Semiconductors. IEEE Journal of Quantum Electronics, 2015, 51, 1-6.	1.0	21
24	Suppressed Out-of-Plane Polarizability of Free Excitons in Monolayer WSe₂. ACS Nano, 2019, 13, 3218-3224.	7.3	21
25	Tunable D peak in gated graphene. Nano Research, 2014, 7, 338-344.	5.8	20
26	Polarity Tunable Trionic Electroluminescence in Monolayer WSe₂. Nano Letters, 2019, 19, 7470-7475.	4.5	20
27	Interlayer screening effects in WS ₂ /WSe ₂ van der Waals hetero-bilayer. 2D Materials, 2018, 5, 041003.	2.0	18
28	Harnessing Excitonâ€“Exciton Annihilation in Two-Dimensional Semiconductors. Nano Letters, 2020, 20, 1647-1653.	4.5	18
29	The isotropic remnant of the CO2 near-fully depolarized Raman 2Î½3 overtone. Journal of Chemical Physics, 2011, 134, 104310.	1.2	12
30	Elastomeric Waveguide on-Chip Coupling of an Encapsulated MoS2 Monolayer. ACS Photonics, 2019, 6, 595-599.	3.2	11
31	Evidence for double incoherent Raman scattering in binary gas mixtures:<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mi mathvariant="normal">SF</mml:mi><mml:mrow><mml:mn>6</mml:mn></mml:mrow></mml:msub><mml:mo>â^’</mml:mo><mml:msub><mml:mi mathvariant="normal">N</mml:mi><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>. Physical Review A, 2010, 81, .	1.0	10
32	Are asymmetric stretch Raman spectra by centrosymmetric molecules depolarized?: The 2Î½3 overtone of CO2. Journal of Chemical Physics, 2011, 134, 044318.	1.2	9
33	Evidence for an isotropic signature in double vibrational collision-induced Raman scattering: A point-polarizable molecule model. Physical Review A, 2010, 81, .	1.0	8
34	Double vibrational collision-induced Raman scattering by SF<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>6</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math>â€“N<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow /><mml:mrow><mml:mn>2</mml:mn></mml:mro	1.0	7
35	Disorder-driven two-dimensional quantum phase transitions in Li _x MoS₂. 2D Materials, 2020, 7, 035013.	2.0	7
36	The depolarized Raman 2Î½3 overtone of CO2: A line-mixing shape analysis. Journal of Chemical Physics, 2011, 134, 194305.	1.2	6

#	Article	IF	Citations
37	The isotropic spectrum of the CO2 Raman 2Î½3 overtone: A line-mixing band shape analysis at pressures up to several tens of atmospheres. Journal of Chemical Physics, 2011, 134, 224301.	1.2	4
38	Inâ€Plane Fieldâ€Driven Excitonic Electroâ€Optic Modulation in Monolayer Semiconductor. Advanced Optical Materials, 2022, 10, .	3.6	4
39	Modeâ€Center Placement of Monolayer WS 2 in a Photonic Polymer Waveguide. Advanced Optical Materials, 0, , 2101684.	3.6	3
40	Chalcogenide Nanosheets: Optical Signatures of Many-Body Effects and Electronic Band Structure. Nanostructure Science and Technology, 2017, , 133-162.	0.1	2
41	Double Raman Scattering In Gas Mixtures. , 2010, , .		0
42	Raman line shape studies of hydrogen cryosolutions. Journal of Physics: Conference Series, 2012, 397, 012058.	0.3	0
43	Coupling 2D Materials to an Elastomer Waveguide. , 2019, , .		0
44	Coupling of a 2D Heterostructure to a Photonic Polymer Waveguide via Mode-center Encapsulation. , 2021, , .		0