Viktor ZÃ³lyomi

List of Publications by Year
in descending order

33 papers	3,668 citations	361413 20 h-index	414414 32 g-index
33 all docs	33 docs citations	33 times ranked	5647 citing authors

#	Article	IF	Citations
1	High electron mobility, quantum Hall effect and anomalous optical response in atomically thin InSe. Nature Nanotechnology, 2017, 12, 223-227.	31.5	996
2	Breaking of Valley Degeneracy by Magnetic Field 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, 2015, 114, 037401.	7.8	566
3	Monolayer MoS<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msub><mml:mrow /><mml:mn>2</mml:mn></mml:msub></mml:math>: Trigonal warping, the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mi>Î“</mml:mi></mml:math>valley, and spin-orbit coupling effects. Physical Review B, 2013, 88, .	3.2	357
4	High-Sensitivity Photodetectors Based on Multilayer GaTe Flakes. ACS Nano, 2014, 8, 752-760.	14.6	319
5	Atomic reconstruction in twisted bilayers of transition metal dichalcogenides. Nature Nanotechnology, 2020, 15, 592-597.	31.5	245
6	Spin-Orbit Coupling, Quantum Dots, and Qubits in Monolayer Transition Metal Dichalcogenides. Physical Review X, 2014, 4, .	8.9	222
7	The geometry and the radial breathing mode of carbon nanotubes: beyond the ideal behaviour. New Journal of Physics, 2003, 5, 125-125.	2.9	154
8	Broken mirror symmetry in excitonic response of reconstructed domains in twisted MoSe2/MoSe2 bilayers. Nature Nanotechnology, 2020, 15, 750-754.	31.5	106
9	Design of van der Waals interfaces for broad-spectrum optoelectronics. Nature Materials, 2020, 19, 299-304.	27.5	106
10	Exfoliation of natural van der Waals heterostructures to a single unit cell thickness. Nature Communications, 2017, 8, 14410.	12.8	93
11	Tunable Berry curvature and valley and spin Hall effect in bilayer <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></ Physical Review B, 2018, 98, .	3.2	68
12	Indirect to Direct Gap Crossover in Two-Dimensional InSe Revealed by Angle-Resolved Photoemission Spectroscopy. ACS Nano, 2019, 13, 2136-2142.	14.6	63
13	Infrared-to-violet tunable optical activity in atomic films of GaSe, InSe, and their heterostructures. 2D Materials, 2018, 5, 041009.	4.4	52
14	Valence band inversion and spin-orbit effects in the electronic structure of monolayer GaSe. Physical Review B, 2018, 98, .	3.2	47
15	Raman spectroscopy of GaSe and InSe post-transition metal chalcogenides layers. Faraday Discussions, 2021, 227, 163-170.	3.2	43
16	Electronic properties of linear carbon chains: Resolving the controversy. Journal of Chemical Physics, 2014, 140, 104306.	3.0	40
17	Formation and Healing of Defects in Atomically Thin GaSe and InSe. ACS Nano, 2019, 13, 5112-5123.	14.6	35
18	Hybrid <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi mathvariant="normal">k</mml:mi><mml:mo>Â·</mml:mo><mml:mi mathvariant="normal">p</mml:mi></mml:mrow></mml:math> tight-binding model for subbands and infrared intersubband optics in few-layer films of transition-metal dichalcogenides: <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msub><mml:mi>MoS</mml:mi><mml:mn>2</mml:mn></mml:msub></mn , <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:m. Physical Review B, 2018, 98, .	3.2	34

#	ARTICLE	IF	CITATIONS
19	Optoelectronic properties of atomically thin ReSSe with weak interlayer coupling. Nanoscale, 2016, 8, 5826-5834.	5.6	32
20	In Situ Raman Spectroelectrochemistry of Single-Walled Carbon Nanotubes: Investigation of Materials Enriched with (6,5) Tubes. Journal of Physical Chemistry C, 2008, 112, 14179-14187.	3.1	22
21	Density of states deduced from ESR measurements on lowâ€dimensional nanostructures; benchmarks to identify the ESR signals of graphene and SWCNTs. Physica Status Solidi (B): Basic Research, 2011, 248, 2688-2691.	1.5	16
22	Phonon dispersion of small diameter semiconducting chiral carbon nanotubes â€" a theoretical study. Physica Status Solidi (B): Basic Research, 2008, 245, 2137-2140.	1.5	8
23	Resonance Raman Spectroscopy of Silicene and Germanene. Journal of Physical Chemistry C, 2019, 123, 1995-2008.	3.1	8
24	Ghost anti-crossings caused by interlayer umklapp hybridization of bands in 2D heterostructures. 2D Materials, 2021, 8, 015016.	4.4	8
25	The transformation of open picotubes to a closed molecular configuration. Physica Status Solidi (B): Basic Research, 2006, 243, 3151-3154.	1.5	7
26	Crossover from weakly indirect to direct excitons in atomically thin films of InSe. Physical Review B, 2020, 101, .	3.2	6
27	Using line group theory for the symmetry assignment of the phonons of single walled carbon nanotubes. Physica Status Solidi (B): Basic Research, 2009, 246, 2614-2617.	1.5	4
28	Junctions of leftâ€•and rightâ€handed chiral carbon nanotubes â€" nanobamboo. Physica Status Solidi (B): Basic Research, 2009, 246, 2671-2674.	1.5	3
29	I-band-like non-dispersive inter-shell interaction induced Raman lines in the D-band region of double-walled carbon nanotubes. Applied Physics A: Materials Science and Processing, 2015, 118, 587-593.	2.3	3
30	Theoretical study of the electronic structure and the totally symmetric vibrations of selected CoMoCat carbon nanotubes. Physica Status Solidi (B): Basic Research, 2008, 245, 2141-2144.	1.5	2
31	Hydrocarbon chains and rings: bond length alternation in finite molecules. Theoretical Chemistry Accounts, 2015, 134, 1.	1.4	2
32	Two component doping of fullereneâ€"cubane cocrystals. Physica Status Solidi (B): Basic Research, 2009, 246, 2618-2621.	1.5	1
33	Singleâ€wall carbon nanotubes: spintronics in the Luttinger liquid phase. Physica Status Solidi (B): Basic Research, 2009, 246, 2744-2749.	1.5	0