

# Jurgen H Smet

## List of Publications by Year in descending order

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64  
papers

5,178  
citations

172207

29  
h-index

123241

61  
g-index

65  
all docs

65  
docs citations

65  
times ranked

5834  
citing authors

#	ARTICLE	IF	CITATIONS
1	In situ Raman spectroscopy across superconducting transition of liquid-gated MoS <sub>2</sub> . Applied Physics Letters, 2022, 120, 053106.	1.5	0
2	Device level reversible potassium intercalation into bilayer graphene. 2D Materials, 2022, 9, 025020.	2.0	2
3	Competing correlated states around the zero-field Wigner crystallization transition of electrons in two dimensions. Nature Materials, 2022, 21, 311-316.	13.3	25
4	Wettability Engineering for Studying Ion Transport in 2D Layered Materials. Advanced Materials Interfaces, 2021, 8, 2001453.	1.9	3
5	Odd Integer Quantum Hall States with Interlayer Coherence in Twisted Bilayer Graphene. Nano Letters, 2021, 21, 4249-4254.	4.5	11
6	Emerging perovskite monolayers. Nature Materials, 2021, 20, 1325-1336.	13.3	124
7	Two-Dimensional Quantum Hall Effect and Zero Energy State in Few-Layer ZrTe <sub>5</sub> . Nano Letters, 2021, 21, 5998-6004.	4.5	4
8	Highly Polarized Single Photons from Strain-Induced Quasi-1D Localized Excitons in WSe <sub>2</sub> . Nano Letters, 2021, 21, 7175-7182.	4.5	33
9	Exceptional electron conduction in two-dimensional covalent organic frameworks. Chem, 2021, 7, 3309-3324.	5.8	41
10	Optoelectronic Properties of a van der Waals WS <sub>2</sub> Monolayer/2D Perovskite Vertical Heterostructure. ACS Applied Materials & Interfaces, 2020, 12, 45235-45242.	4.0	49
11	Alkali metals inside bi-layer graphene and MoS <sub>2</sub> : Insights from first-principles calculations. Nano Energy, 2020, 75, 104927.	8.2	30
12	Quasiparticle Tunneling across an Exciton Condensate. Physical Review Letters, 2020, 124, 246801.	2.9	6
13	Type-II Ising pairing in few-layer stanene. Science, 2020, 367, 1454-1457.	6.0	81
14	Magneto-Oscillations of the Charge of a Field-Effect Transistor That Are due to a Microwave-Induced Nonequilibrium Electron Energy Distribution. JETP Letters, 2020, 111, 562-567.	0.4	0
15	Capacitive detection of magnetic field induced quantum phase transitions in an imbalanced bilayer electron system. Physical Review B, 2020, 102, .	1.1	4
16	Anomalously large spin-current voltages on the surface of $\text{SmB}_6$ . Physical Review B, 2019, 100, .	1.1	12
17	Ballistic transport in periodically modulated MgZnO/ZnO two-dimensional electron systems. Applied Physics Letters, 2019, 115, 153101.	1.5	6
18	Spin-Split Band Hybridization in Graphene Proximitized with $\text{RuCl}_3$ Nanosheets. Nano Letters, 2019, 19, 4659-4665.	4.5	62

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19	Gate-Tunable Tunneling Transistor Based on a Thin Black Phosphorus $\text{SnSe}_2$ Heterostructure. ACS Applied Materials & Interfaces, 2019, 11, 20973-20978.	4.0	29
20	Probing Exfoliated Graphene Layers and Their Lithiation with Microfocused X-rays. Nano Letters, 2019, 19, 3634-3640.	4.5	10
21	Reliable Postprocessing Improvement of van der Waals Heterostructures. ACS Nano, 2019, 13, 14182-14190.	7.3	33
22	Quantum Effects in the Capacitance of Field-Effect Transistors with a Double Quantum Well. JETP Letters, 2019, 110, 424-429.	0.4	6
23	Even denominator fractional quantum Hall states in higher Landau levels of graphene. Nature Physics, 2019, 15, 154-158.	6.5	76
24	Reversible superdense ordering of lithium between two graphene sheets. Nature, 2018, 564, 234-239.	13.7	178
25	A cascade of phase transitions in an orbitally mixed half-filled Landau level. Science Advances, 2018, 4, eaat8742.	4.7	27
26	Characterization of individual layers in a bilayer electron system produced in a wide quantum well. Journal of Applied Physics, 2018, 123, .	1.1	9
27	Electron-Nuclear Spin Interactions in the Quantum Hall Regime. Springer Series in Solid-state Sciences, 2017, , 431-475.	0.3	0
28	Ultrafast lithium diffusion in bilayer graphene. Nature Nanotechnology, 2017, 12, 895-900.	15.6	149
29	Charge Inversion and Topological Phase Transition at a Twist Angle Induced van Hove Singularity of Bilayer Graphene. Nano Letters, 2016, 16, 5053-5059.	4.5	89
30	Observation of microwave induced resistance and photovoltage oscillations in MgZnO/ZnO heterostructures. Physical Review B, 2016, 93, .	1.1	30
31	Microwave-Induced Oscillations in Magnetocapacitance: Direct Evidence for Nonequilibrium Occupation of Electronic States. Physical Review Letters, 2016, 117, 176801.	2.9	17
32	MgZnO/ZnO heterostructures with electron mobility exceeding $1 \times 10^6 \text{ cm}^2/\text{Vs}$ . Scientific Reports, 2016, 6, 26598.	1.6	71
33	Microwave magnetoplasma resonances of two-dimensional electrons in MgZnO/ZnO heterojunctions. Physical Review B, 2015, 91, .	1.1	22
34	Random Flips of Electric Field in Microwave-Induced States with Spontaneously Broken Symmetry. Physical Review Letters, 2015, 114, 176808.	2.9	15
35	Even-denominator fractional quantum Hall physics in ZnO. Nature Physics, 2015, 11, 347-351.	6.5	138
36	Optical probing of MgZnO/ZnO heterointerface confinement potential energy levels. Applied Physics Letters, 2015, 106, .	1.5	23

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37	Fractional Quantum Hall States in Bilayer Graphene Probed by Transconductance Fluctuations. Nano Letters, 2015, 15, 7445-7451.	4.5	33
38	Electron scattering times in ZnO based polar heterostructures. Applied Physics Letters, 2015, 107, .	1.5	36
39	Signatures for Wigner Crystal Formation in the Chemical Potential of a Two-Dimensional Electron System. Physical Review Letters, 2014, 113, 076804.	2.9	24
40	Fractional Quantum Hall Phase Transitions and Four-Flux States in Graphene. Physical Review Letters, 2013, 111, 076802.	2.9	90
41	Local compressibility measurement of the $\nu = 1/2$ Quantum Hall State. Current-induced nuclear spin depolarization at Landau level filling factor $\nu = 1/2$ .	1.1	13
42	Current-induced nuclear spin depolarization at Landau level filling factor $\nu = 1/2$ . Physical Review B, 2012, 86, .	1.1	12
43	Random telegraph photosignals in a microwave-exposed two-dimensional electron system. Nature Physics, 2011, 7, 336-341.	6.5	56
44	Collective Modes and the Periodicity of Quantum Hall Stripes. Physical Review Letters, 2011, 106, 206804.	2.9	27
45	Hot Phonons in an Electrically Biased Graphene Constriction. Nano Letters, 2010, 10, 466-471.	4.5	100
46	Raman Scattering at Pure Graphene Zigzag Edges. Nano Letters, 2010, 10, 4544-4548.	4.5	166
47	Laser-induced disassembly of a graphene single crystal into a nanocrystalline network. Physical Review B, 2009, 79, .	1.1	200
48	Photocurrent and Photovoltage Oscillations in the Two-Dimensional Electron System: Enhancement and Suppression of Built-In Electric Fields. Physical Review Letters, 2009, 102, 036602.	2.9	41
49	Nature of the Spin Transition in the Half-filled Landau Level. Physical Review Letters, 2009, 102, 046803.	2.9	13
50	Dispersion of the Excitations of Fractional Quantum Hall States. Science, 2009, 324, 1044-1047.	6.0	102
51	Observation of electron "hole puddles" in graphene using a scanning single-electron transistor. Nature Physics, 2008, 4, 144-148.	6.5	1,350
52	Nuclear-Electron Spin Interactions in the Quantum Hall Regime. Springer Series in Solid-state Sciences, 2008, , 347-388.	0.3	5
53	Dispersion of the Composite-Fermion Cyclotron-Resonance Mode. Physical Review Letters, 2007, 98, 066403.	2.9	12
54	A plane mystery. Nature Physics, 2007, 3, 370-372.	6.5	4

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55	Detection of the Electron Spin Resonance of Two-Dimensional Electrons at Large Wave Vectors. Physical Review Letters, 2006, 96, 126807.	2.9	11
56	Circular-Polarization-Dependent Study of the Microwave Photoconductivity in a Two-Dimensional Electron System. Physical Review Letters, 2005, 95, 116804.	2.9	186
57	Radiation-induced oscillatory Hall effect in high-mobility GaAs/Al <sub>x</sub> Ga <sub>1-x</sub> As devices. Physical Review B, 2004, 69, .	1.1	96
58	Demonstration of a 1/4-Cycle Phase Shift in the Radiation-Induced Oscillatory Magnetoresistance in GaAs/AlGaAs Devices. Physical Review Letters, 2004, 92, 146801.	2.9	170
59	Anomalous-Filling-Factor-Dependent Nuclear-Spin Polarization in a 2D Electron System. Physical Review Letters, 2004, 92, 086802.	2.9	18
60	Ultrahigh-frequency surface acoustic waves for finite wave-vector spectroscopy of two-dimensional electrons. Applied Physics Letters, 2004, 85, 4526.	1.5	17
61	NMR study of the electron spin polarization in the fractional quantum Hall effect of a single quantum well: Spectroscopic evidence for domain formation. Physical Review B, 2004, 70, .	1.1	79
62	Zero-resistance states induced by electromagnetic-wave excitation in GaAs/AlGaAs heterostructures. Nature, 2002, 420, 646-650.	13.7	616
63	Gate-voltage control of spin interactions between electrons and nuclei in a semiconductor. Nature, 2002, 415, 281-286.	13.7	188
64	Ising Ferromagnetism and Domain Morphology in the Fractional Quantum Hall Regime. Physical Review Letters, 2001, 86, 2412-2415.	2.9	108