Mattias Kruskopf

List of Publications by Year
in descending order

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52	757	471061	525886
papers	citations	17	27
		h-index	g-index

53	53	53	709
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Comeback of epitaxial graphene for electronics: large-area growth of bilayer-free graphene on SiC. 2D Materials, 2016, 3, 041002.	2.0	135
2	Minimum Resistance Anisotropy of Epitaxial Graphene on SiC. ACS Applied Materials & Interfaces, 2018, 10, 6039-6045.	4.0	47
3	Gateless and reversible Carrier density tunability in epitaxial graphene devices functionalized with chromium tricarbonyl. Carbon, 2019, 142, 468-474.	5.4	37
4	Confocal laser scanning microscopy for rapid optical characterization of graphene. Communications Physics, 2018, 1, .	2.0	36
5	Epitaxial graphene on SiC: modification of structural and electron transport properties by substrate pretreatment. Journal of Physics Condensed Matter, 2015, 27, 185303.	0.7	34
6	Two-Terminal and Multi-Terminal Designs for Next-Generation Quantized Hall Resistance Standards: Contact Material and Geometry. IEEE Transactions on Electron Devices, 2019, 66, 3973-3977.	1.6	34
7	Epitaxial graphene for quantum resistance metrology. Metrologia, 2018, 55, R27-R36.	0.6	33
8	Graphene Devices for Tabletop and High-Current Quantized Hall Resistance Standards. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 1870-1878.	2.4	32
9	Towards epitaxial graphene p-n junctions as electrically programmable quantum resistance standards. Scientific Reports, 2018, 8, 15018.	1.6	31
10	Next-generation crossover-free quantum Hall arrays with superconducting interconnections. Metrologia, 2019, 56, 065002.	0.6	30
11	Infrared Nanospectroscopy of Phospholipid and Surfactin Monolayer Domains. ACS Omega, 2018, 3, 4141-4147.	1.6	25
12	A morphology study on the epitaxial growth of graphene and its buffer layer. Thin Solid Films, 2018, 659, 7-15.	0.8	22
13	Comparison Between NIST Graphene and AIST GaAs Quantized Hall Devices. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 3103-3108.	2.4	22
14	Examining epitaxial graphene surface conductivity and quantum Hall device stability with Parylene passivation. Microelectronic Engineering, 2018, 194, 51-55.	1.1	21
15	Compressed sensing FTIR nano-spectroscopy and nano-imaging. Optics Express, 2018, 26, 18115.	1.7	20
16	Graphene quantum Hall effect parallel resistance arrays. Physical Review B, 2021, 103, .	1.1	20
17	Atypical quantized resistances in millimeter-scale epitaxial graphene p-n junctions. Carbon, 2019, 154, 230-237.	5.4	19
18	Graphene Quantum Hall Effect Devices for AC and DC Electrical Metrology. IEEE Transactions on Electron Devices, 2021, 68, 3672-3677.	1.6	17

#	Article	IF	Citations
19	Analytical determination of atypical quantized resistances in graphene p-n junctions. Physica B: Condensed Matter, 2020, 582, 411971.	1.3	15
20	Highly sensitive broadband binary photoresponse in gateless epitaxial graphene on 4Hâ€“SiC. Carbon, 2021, 184, 72-81.	5.4	13
21	Nonequilibrium mesoscopic conductance fluctuations as the origin of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mn>1</mml:mn><mml:mo>/</mml:mo><mml:mi>f</mml:mi></mml:mrow> noise in epitaxial graphene. Physical Review B, 2016, 94, .	1.1	12
22	AC Quantum Hall Effect in Epitaxial Graphene. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 1459-1466.	2.4	12
23	Nanostructured graphene for nanoscale electron paramagnetic resonance spectroscopy. JPhys Materials, 2020, 3, 014013.	1.8	11
24	Investigation of the stability of graphene devices for quantum resistance metrology at direct and alternating current. Measurement Science and Technology, 2022, 33, 065012.	1.4	9
25	Magnetocapacitance and dissipation factor of epitaxial graphene-based quantum Hall effect devices. Physical Review B, 2017, 96, .	1.1	8
26	A four-terminal-pair Josephson impedance bridge combined with a graphene-quantized Hall resistance. Measurement Science and Technology, 2021, 32, 065007.	1.4	7
27	Accessing ratios of quantized resistances in graphene pâ€“n junction devices using multiple terminals. AIP Advances, 2020, 10, 025112.	0.6	6
28	Analysing quantized resistance behaviour in graphene Corbino p-n junction devices. Journal Physics D: Applied Physics, 2020, 53, 275301.	1.3	5
29	A Table-Top Graphene Quantized Hall Standard. , 2018, , .		4
30	Uncertainty of the Ohm Using Cryogenic and Non-Cryogenic Bridges. , 2018, , .		4
31	A Self-Assembled Graphene Ribbon Device on SiC. ACS Applied Electronic Materials, 2020, 2, 204-212.	2.0	4
32	AC Quantum Hall Resistance combined with a Four-Terminal Pair Pulse-Driven Josephson Impedance Bridge. , 2020, , .		4
33	Quantum Hall resistance dartboards using graphene p-n junction devices with Corbino geometries. AIP Advances, 2020, 10, 035205.	0.6	4
34	Implementation of a graphene quantum Hall Kelvin bridge-on-a-chip for resistance calibrations. Metrologia, 2020, 57, 015007.	0.6	4
35	Quantum Hall device data monitoring following encapsulating polymer deposition. Data in Brief, 2018, 20, 1201-1208.	0.5	3
36	Onsager-Casimir frustration from resistance anisotropy in graphene quantum Hall devices. Physical Review B, 2021, 104, .	1.1	3

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37	Magnetotransport in hybrid InSe/monolayer graphene on SiC. Nanotechnology, 2021, 32, 155704.	1.3	3
38	Graphene quantum Hall effect devices for AC and DC resistance metrology. , 2020, , .		2
39	Comparison Between Graphene and GaAs Quantized Hall Devices With a Dual Probe. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 9374-9380.	2.4	2
40	Analytical determination of atypical quantized resistances in graphene junctions. Physica B: Condensed Matter, 2020, 582, .	1.3	2
41	AC quantum Hall effect in epitaxial graphene. , 2016, , .		1
42	Epitaxial Graphene for High-Current QHE Resistance Standards. , 2018, , .		1
43	The EMPIR Project GIQS: Graphene Impedance Quantum Standard. , 2020, , .		1
44	Superconducting Contact Geometries for Next-Generation Quantized Hall Resistance Standards. , 2020, 1.633481E6, .		1
45	Novel digital impedance bridges for the realization of the farad from graphene quantum standards. , 2022, , .		1
46	Dissipation factor and frequency dependence of graphene quantum Hall devices. , 2016, , .		0
47	Magnetocapacitance and dissipation factor of epitaxial graphene Hall bars. , 2016, , .		0
48	Epitaxial Graphene p-n Junctions. , 2018, , .		0
49	Metrological Suitability of Functionalized Epitaxial Graphene. , 2020, 1, .		0
50	AC and DC Quantized Hall Array Resistance Standards. , 2020, , .		0
51	Development of gateless quantum Hall checkerboard pâ€“n junction devices. Journal Physics D: Applied Physics, 2020, 53, 345302.	1.3	0
52	Development of gateless quantum Hall checkerboard junction devices. Journal Physics D: Applied Physics, 2020, 53, .	1.3	0