

# Michael Wimmer

## List of Publications by Year in descending order

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63  
papers

5,239  
citations

101543

36  
h-index

128289

60  
g-index

64  
all docs

64  
docs citations

64  
times ranked

3805  
citing authors

#	ARTICLE	IF	CITATIONS
1	Kwant: a software package for quantum transport. <i>New Journal of Physics</i> , 2014, 16, 063065.	2.9	862
2	Theory of the Topological Anderson Insulator. <i>Physical Review Letters</i> , 2009, 103, 196805.	7.8	311
3	Spin Currents in Rough Graphene Nanoribbons: Universal Fluctuations and Spin Injection. <i>Physical Review Letters</i> , 2008, 100, 177207.	7.8	288
4	Quantized Conductance at the Majorana Phase Transition in a Disordered Superconducting Wire. <i>Physical Review Letters</i> , 2011, 106, 057001.	7.8	252
5	A zero-voltage conductance peak from weak antilocalization in a Majorana nanowire. <i>New Journal of Physics</i> , 2012, 14, 125011.	2.9	247
6	Quantum point contact as a probe of a topological superconductor. <i>New Journal of Physics</i> , 2011, 13, 053016.	2.9	228
7	Ballistic superconductivity in semiconductor nanowires. <i>Nature Communications</i> , 2017, 8, 16025.	12.8	181
8	Reproducing topological properties with quasi-Majorana states. <i>SciPost Physics</i> , 2019, 7, .	4.9	164
9	Robustness of edge states in graphene quantum dots. <i>Physical Review B</i> , 2010, 82, .	3.2	154
10	Symmetry Classes in Graphene Quantum Dots: Universal Spectral Statistics, Weak Localization, and Conductance Fluctuations. <i>Physical Review Letters</i> , 2009, 102, 056806.	7.8	149
11	Quantized conductance doubling and hard gap in a two-dimensional semiconductor-superconductor heterostructure. <i>Nature Communications</i> , 2016, 7, 12841.	12.8	146
12	Majorana Bound States without Vortices in Topological Superconductors with Electrostatic Defects. <i>Physical Review Letters</i> , 2010, 105, 046803.	7.8	135
13	Barrier transmission of Dirac-like pseudospin-one particles. <i>Physical Review B</i> , 2011, 84, .	3.2	133
14	Next steps of quantum transport in Majorana nanowire devices. <i>Nature Communications</i> , 2019, 10, 5128.	12.8	130
15	Algorithm 923. <i>ACM Transactions on Mathematical Software</i> , 2012, 38, 1-17.	2.9	128
16	Spin-orbit interaction in InSb nanowires. <i>Physical Review B</i> , 2015, 91, .	3.2	125
17	Graphene rings in magnetic fields: Aharonov-Bohm effect and valley splitting. <i>Semiconductor Science and Technology</i> , 2010, 25, 034003.	2.0	93
18	Effects of electron scattering on the topological properties of nanowires: Majorana fermions from disorder and superlattices. <i>Physical Review B</i> , 2014, 89, .	3.2	83

#	ARTICLE	IF	CITATIONS
19	Electric and Magnetic Tuning Between the Trivial and Topological Phases in InAs/GaSb Double Quantum Wells. <i>Physical Review Letters</i> , 2015, 115, 036803.	7.8	82
20	Conductance through a helical state in an Indium antimonide nanowire. <i>Nature Communications</i> , 2017, 8, 478.	12.8	76
21	Biexciton recombination rates in self-assembled quantum dots. <i>Physical Review B</i> , 2006, 73, .	3.2	68
22	Engineering hybrid epitaxial InAsSb/Al nanowires for stronger topological protection. <i>Physical Review Materials</i> , 2018, 2, .	2.4	65
23	Proposal for the detection and braiding of Majorana fermions in a quantum spin Hall insulator. <i>Physical Review B</i> , 2013, 87, .	3.2	64
24	Unified numerical approach to topological semiconductor-superconductor heterostructures. <i>Physical Review B</i> , 2019, 99, .	3.2	64
25	Conformal mapping and shot noise in graphene. <i>Physical Review B</i> , 2009, 80, .	3.2	62
26	Effects of the electrostatic environment on the Majorana nanowire devices. <i>New Journal of Physics</i> , 2016, 18, 033013.	2.9	60
27	Spin-Orbit Protection of Induced Superconductivity in Majorana Nanowires. <i>Physical Review Letters</i> , 2019, 122, 187702.	7.8	60
28	Optimal block-tridiagonalization of matrices for coherent charge transport. <i>Journal of Computational Physics</i> , 2009, 228, 8548-8565.	3.8	51
29	Orbital Contributions to the Electron $g$ -Factor in Semiconductor Nanowires. <i>Physical Review Letters</i> , 2017, 119, 037701.	7.8	51
30	Quantized Conductance and Large $g$ -Factor Anisotropy in InSb Quantum Point Contacts. <i>Nano Letters</i> , 2016, 16, 7509-7513.	9.1	49
31	Andreev reflection from a topological superconductor with chiral symmetry. <i>Physical Review B</i> , 2012, 86, .	3.2	46
32	Dirac boundary condition at the reconstructed zigzag edge of graphene. <i>Physical Review B</i> , 2011, 84, .	3.2	43
33	Random-matrix theory of Andreev reflection from a topological superconductor. <i>Physical Review B</i> , 2011, 83, .	3.2	42
34	Emergence of Massless Dirac Fermions in Graphene's Hofstadter Butterfly at Switches of the Quantum Hall Phase Connectivity. <i>Physical Review Letters</i> , 2014, 112, 196602.	7.8	41
35	Quantized and unquantized zero-bias tunneling conductance peaks in Majorana nanowires: Conductance below and above $g$ -Factor. <i>Physical Review B</i> , 2021, 103, .	3.2	41
36	Interfaces within graphene nanoribbons. <i>New Journal of Physics</i> , 2009, 11, 095022.	2.9	38

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37	Symmetries and the conductance of graphene nanoribbons with long-range disorder. Physical Review B, 2012, 85, .	3.2	37
38	Giant Spin-Orbit Splitting in Inverted Quantum Wells. Physical Review Letters, 2017, 118, 016801.	7.8	33
39	Superconducting Quantum Interference through Trivial Edge States in InAs. Physical Review Letters, 2018, 120, 047702.	7.8	33
40	Wigner-Poisson Statistics of Topological Transitions in a Josephson Junction. Physical Review Letters, 2013, 111, 037001.	7.8	31
41	Spin-orbit interaction in a dual gated InAs/GaSb quantum well. Physical Review B, 2017, 96, .	3.2	31
42	Enhanced Proximity Effect in Zigzag-Shaped Majorana Josephson Junctions. Physical Review Letters, 2020, 125, 086802.	7.8	31
43	Robust helical edge transport in quantum spin Hall quantum wells. Physical Review B, 2018, 98, .	3.2	28
44	Disorder and magnetic-field-induced breakdown of helical edge conduction in an inverted electron-hole bilayer. Physical Review B, 2014, 89, .	3.2	25
45	Orbital effects on tunneling anisotropic magnetoresistance in Fe/GaAs/Au junctions. Physical Review B, 2009, 80, .	3.2	23
46	Spin-Orbit Interaction and Induced Superconductivity in a One-Dimensional Hole Gas. Nano Letters, 2018, 18, 6483-6488.	9.1	22
47	Electronic properties of InAs/EuS/Al hybrid nanowires. Physical Review B, 2021, 104, .	3.2	18
48	Extracting current-induced spins: spin boundary conditions at narrow Hall contacts. New Journal of Physics, 2007, 9, 382-382.	2.9	15
49	Phase-locked magnetoconductance oscillations as a probe of Majorana edge states. Physical Review B, 2013, 87, .	3.2	13
50	Disorder-induced topological transitions in multichannel Majorana wires. Physical Review B, 2017, 95, .	3.2	13
51	Conductance asymmetries in mesoscopic superconducting devices due to finite bias. SciPost Physics, 2021, 10, .	4.9	13
52	Zeeman ratchets for ballistic spin currents. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 4235-4238.	0.8	12
53	A general algorithm for computing bound states in infinite tight-binding systems. SciPost Physics, 2018, 4, .	4.9	12
54	InSb Nanowires with Built-In GaIn Tunnel Barriers for Majorana Devices. Nano Letters, 2017, 17, 721-727.	9.1	9

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55	Weak Localization in Mesoscopic Hole Transport: Berry Phases and Classical Correlations. Physical Review Letters, 2011, 106, 146801.	7.8	7
56	Electric control of tunneling energy in graphene double dots. Physical Review B, 2014, 89, .	3.2	6
57	Minimal Zeeman field requirement for a topological transition in superconductors. SciPost Physics, 2021, 10, .	4.9	5
58	Josephson current via an isolated Majorana zero mode. Physical Review B, 2021, 103, .	3.2	3
59	Optimizing the topological properties of semiconductor-ferromagnet-superconductor heterostructures. Physical Review B, 2022, 105, .	3.2	3
60	Universal spatial correlations in random spinor fields. Physical Review E, 2013, 87, 042115.	2.1	2
61	Spin-Polarized Quantum Transport in Mesoscopic Conductors: Computational Concepts and Physical Phenomena. , 2009, , 8597-8616.		1
62	Spin-Polarized Quantum Transport in Mesoscopic Conductors: Computational Concepts and Physical Phenomena. , 2013, , 1-30.		1
63	Tunneling magnetoresistance: The relevance of disorder at the interface. AIP Conference Proceedings, 2005, , .	0.4	0