

# Bernard van Heck

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

28  
papers

1,141  
citations

15  
h-index

31  
g-index

31  
ext. papers

1,463  
ext. citations

6.2  
avg, IF

4.51  
L-index

#	Paper	IF	Citations
28	Full parity phase diagram of a proximitized nanowire island. <i>Physical Review B</i> , <b>2021</b> , 104,	3.3	5
27	Andreev Modes from Phase Winding in a Full-Shell Nanowire-Based Transmon. <i>Physical Review Letters</i> , <b>2021</b> , 126, 047701	7.4	2
26	Energy spectrum and current-phase relation of a nanowire Josephson junction close to the topological transition. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	3
25	Observation of Vanishing Charge Dispersion of a Nearly Open Superconducting Island. <i>Physical Review Letters</i> , <b>2020</b> , 124, 246802	7.4	16
24	Suppressed Charge Dispersion via Resonant Tunneling in a Single-Channel Transmon. <i>Physical Review Letters</i> , <b>2020</b> , 124, 246803	7.4	14
23	Flux-induced topological superconductivity in full-shell nanowires. <i>Science</i> , <b>2020</b> , 367,	33.3	61
22	Controlled dc Monitoring of a Superconducting Qubit. <i>Physical Review Letters</i> , <b>2020</b> , 124, 056801	7.4	6
21	Destructive Little-Parks Effect in a Full-Shell Nanowire-Based Transmon. <i>Physical Review Letters</i> , <b>2020</b> , 125, 156804	7.4	8
20	Unified numerical approach to topological semiconductor-superconductor heterostructures. <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	30
19	Spectral response of Josephson junctions with low-energy quasiparticles. <i>SciPost Physics</i> , <b>2019</b> , 7,	6.1	11
18	Parity transitions in the superconducting ground state of hybrid InSb-Al Coulomb islands. <i>Nature Communications</i> , <b>2018</b> , 9, 4801	17.4	28
17	Quantum Criticality in Resonant Andreev Conduction. <i>Physical Review Letters</i> , <b>2017</b> , 119, 116802	7.4	6
16	Zeeman and spin-orbit effects in the Andreev spectra of nanowire junctions. <i>Physical Review B</i> , <b>2017</b> , 96,	3.3	18
15	Microwave spectroscopy of spinful Andreev bound states in ballistic semiconductor Josephson junctions. <i>Nature Physics</i> , <b>2017</b> , 13, 876-881	16.2	63
14	Conductance of a proximitized nanowire in the Coulomb blockade regime. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	69
13	Minimal circuit for a flux-controlled Majorana qubit in a quantum spin-Hall insulator. <i>Physica Scripta</i> , <b>2015</b> , T164, 014007	2.6	4
12	Topologically protected charge transfer along the edge of a chiral p-wave superconductor. <i>Physical Review B</i> , <b>2015</b> , 92,	3.3	8

11	Realization of Microwave Quantum Circuits Using Hybrid Superconducting-Semiconducting Nanowire Josephson Elements. <i>Physical Review Letters</i> , <b>2015</b> , 115, 127002	7.4	120
10	Statistical topological insulators. <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	57
9	Thermal conductance as a probe of the nonlocal order parameter for a topological superconductor with gauge fluctuations. <i>Physical Review B</i> , <b>2014</b> , 89,	3.3	10
8	Single fermion manipulation via superconducting phase differences in multiterminal Josephson junctions. <i>Physical Review B</i> , <b>2014</b> , 90,	3.3	48
7	Effects of disorder on Coulomb-assisted braiding of Majorana zero modes. <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	13
6	Topological blockade and measurement of topological charge. <i>Physical Review Letters</i> , <b>2013</b> , 110, 086803.	3.4	8
5	Flux-controlled quantum computation with Majorana fermions. <i>Physical Review B</i> , <b>2013</b> , 88,	3.3	199
4	Topological phases in two-dimensional arrays of parafermionic zero modes. <i>Physical Review B</i> , <b>2013</b> , 87,	3.3	32
3	Braiding of non-Abelian anyons using pairwise interactions. <i>Physical Review A</i> , <b>2013</b> , 87,	2.6	15
2	Coulomb-assisted braiding of Majorana fermions in a Josephson junction array. <i>New Journal of Physics</i> , <b>2012</b> , 14, 035019	2.9	196
1	Coulomb stability of the 4E-periodic Josephson effect of Majorana fermions. <i>Physical Review B</i> , <b>2011</b> , 84,	3.3	91