Tudor D Stanescu

List of Publications by Year in Descending Order

46 papers	2,710 citations	23 h-index	48 g-index
48 ext. papers	3,289 ext. citations	4.8 avg, IF	5.63 L-index

#	Paper	IF	Citations
46	Charge-Impurity Effects in Hybrid Majorana Nanowires. *Physical Review Applied*, **2021**, 16,	4.3	2
45	Giant Third-Harmonic Optical Generation from Topological Insulator Heterostructures. *Nano Letters* , **2021**, 21, 8872-8879	11.5	0
44	Estimating disorder and its adverse effects in semiconductor Majorana nanowires. *Physical Review Materials*, **2021**, 5,	3.2	3
43	Feasibility of measurement-based braiding in the quasi-Majorana regime of semiconductor-superconductor heterostructures. *Physical Review B*, **2020**, 102,	3.3	3
42	Hybridization energy oscillations of Majorana and Andreev bound states in semiconductor-superconductor nanowire heterostructures. *Physical Review B*, **2020**, 101,	3.3	3
41	Enhanced topological protection in planar quasi-one-dimensional channels with periodically modulated width. *Physical Review B*, **2020**, 101,	3.3	4
40	Subband occupation in semiconductor-superconductor nanowires. *Physical Review B*, **2020**, 101,	3.3	14
39	Majorana fermions go for a ride. *Science*, **2020**, 367, 23-24	33.3	1
38	Zero-energy pinning of topologically trivial bound states in multiband semiconductor-superconductor nanowires. *Physical Review B*, **2019**, 100,	3.3	27
37	Conductance smearing and anisotropic suppression of induced superconductivity in a Majorana nanowire. *Physical Review B*, **2019**, 99,	3.3	9
36	Electronic structure of full-shell InAs/Al hybrid semiconductor-superconductor nanowires: Spin-orbit coupling and topological phase space. *Physical Review B*, **2019**, 99,	3.3	11
35	Analytical solution of the finite-length Kitaev chain coupled to a quantum dot. *Physical Review B*, **2019**, 99,	3.3	4
34	Robust low-energy Andreev bound states in semiconductor-superconductor structures: Importance of partial separation of component Majorana bound states. *Physical Review B*, **2019**, 100,	3.3	25
33	Curvature of gap closing features and the extraction of Majorana nanowire parameters. *Physical Review B*, **2019**, 99,	3.3	5
32	Two-terminal charge tunneling: Disentangling Majorana zero modes from partially separated Andreev bound states in semiconductor-superconductor heterostructures. *Physical Review B*, **2018**, 97,	3.3	109
31	Building topological quantum circuits: Majorana nanowire junctions. *Physical Review B*, **2018**, 97,	3.3	19
30	Effective theory approach to the Schrödinger-Poisson problem in semiconductor Majorana devices. *Physical Review B*, **2018**, 98,	3.3	48

29	Control and detection of Majorana bound states in quantum dot arrays. *Physical Review B*, **2018**, 98,	3.3	10
28	Robust topological phase in proximitized core-shell nanowires coupled to multiple superconductors. *Beilstein Journal of Nanotechnology*, **2018**, 9, 1512-1526	3	10
27	Quasiparticle gaps in multiprobe Majorana nanowires. *Physical Review B*, **2018**, 98,	3.3	9
26	Metamorphosis of Andreev bound states into Majorana bound states in pristine nanowires. *Physical Review B*, **2018**, 98,	3.3	22
25	Quantized zero-bias conductance plateau in semiconductor-superconductor heterostructures without topological Majorana zero modes. *Physical Review B*, **2018**, 98,	3.3	74
24	Andreev bound states versus Majorana bound states in quantum dot-nanowire-superconductor hybrid structures: Trivial versus topological zero-bias conductance peaks. *Physical Review B*, **2017**, 96,	3.3	199
23	Experimental phase diagram of zero-bias conductance peaks in superconductor/semiconductor nanowire devices. *Science Advances*, **2017**, 3, e1701476	14.3	115
22	Proximity-induced low-energy renormalization in hybrid semiconductor-superconductor Majorana structures. *Physical Review B*, **2017**, 96,	3.3	27
21	Tunneling conductance in semiconductor-superconductor hybrid structures. *Physical Review B*, **2017**, 96,	3.3	11
20	Phase diagram of a three-dimensional antiferromagnet with random magnetic anisotropy. *Physical Review Letters*, **2015**, 114, 097201	7.4	3
19	Hidden-symmetry decoupling of Majorana bound states in topological superconductors. *Physical Review B*, **2015**, 91,	3.3	9
18	Effects of large induced superconducting gap on semiconductor Majorana nanowires. *Physical Review B*, **2015**, 92,	3.3	42
17	Soft superconducting gap in semiconductor-based Majorana nanowires. *Physical Review B*, **2014**, 90,	3.3	23
16	Dimensional crossover in spin-orbit-coupled semiconductor nanowires with induced superconducting pairing. *Physical Review B*, **2013**, 87,	3.3	42
15	To close or not to close: the fate of the superconducting gap across the topological quantum phase transition in Majorana-carrying semiconductor nanowires. *Physical Review Letters*, **2012**, 109, 266402	7.4	52
14	Electrostatic effects and band bending in doped topological insulators. *Physical Review B*, **2012**, 86,	3.3	18
13	Momentum relaxation in a semiconductor proximity-coupled to a disordered s-wave superconductor: Effect of scattering on topological superconductivity. *Physical Review B*, **2012**, 85,	3.3	32
12	Splitting of the zero-bias conductance peak as smoking gun evidence for the existence of the Majorana mode in a superconductor-semiconductor nanowire. *Physical Review B*, **2012**, 86,	3.3	213

11	Search for Majorana fermions in multiband semiconducting nanowires. *Physical Review Letters*, **2011**, 106, 127001	7.4	209
10	Majorana fermions in semiconductor nanowires. *Physical Review B*, **2011**, 84,	3.3	286
9	Non-Abelian quantum order in spin-orbit-coupled semiconductors: Search for topological Majorana particles in solid-state systems. *Physical Review B*, **2010**, 82,	3.3	341
8	Topological states in two-dimensional optical lattices. *Physical Review A*, **2010**, 82,	2.6	104
7	Proximity effect at the superconductor–topological insulator interface. *Physical Review B*, **2010**, 81,	3.3	149
6	Two-dimensional surface charge transport in topological insulators. *Physical Review B*, **2010**, 82,	3.3	136
5	Mott transition on a triangular lattice. *Physical Review B*, **2009**, 79,	3.3	20
4	Topological insulators and metals in atomic optical lattices. *Physical Review A*, **2009**, 79,	2.6	87
3	Effective masses in a strongly anisotropic fermi liquid. *Physical Review Letters*, **2008**, 101, 066405	7.4	8
2	Nonequilibrium spin dynamics in a trapped fermi gas with effective spin-orbit interactions. *Physical Review Letters*, **2007**, 99, 110403	7.4	105
1	Finite-temperature density instability at high landau level occupancy. *Physical Review Letters*, **2000**, 84, 1288-91	7.4	66