

Scalable designs for quasiparticle-poisoning-protected with Majorana zero modes

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Citation Report

#	ARTICLE	IF	CITATIONS
1	Quon 3D language for quantum information. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 2497-2502.	3.3	13
2	Quasiparticle relaxation in superconducting nanostructures. Physical Review B, 2017, 96, .	1.1	8
3	Zero-Energy Modes from Coalescing Andreev States in a Two-Dimensional Semiconductor-Superconductor Hybrid Platform. Physical Review Letters, 2017, 119, 176805.	2.9	182
4	Nonequilibrium Andreev bound states population in short superconducting junctions coupled to a resonator. Physical Review B, 2017, 96, .	1.1	6
6	Braiding errors in interacting Majorana quantum wires. Physical Review B, 2017, 96, .	1.1	26
7	Majorana-Hubbard model on the square lattice. Physical Review B, 2017, 96, .	1.1	27
8	Andreev molecules in semiconductor nanowire double quantum dots. Nature Communications, 2017, 8, 585.	5.8	54
9	A Roadmap for a Scalable Topological Quantum Computer. Physics Magazine, 0, 10, .	0.1	4
10	Low-field topological threshold in Majorana double nanowires. Physical Review B, 2017, 96, .	1.1	32
11	Coulomb blockade in fractional topological superconductors. Physical Review B, 2017, 96, .	1.1	8
12	Proximity-induced low-energy renormalization in hybrid semiconductor-superconductor Majorana structures. Physical Review B, 2017, 96, .	1.1	45
13	Coupling and braiding Majorana bound states in networks defined in two-dimensional electron gases with proximity-induced superconductivity. Physical Review B, 2017, 96, .	1.1	35
14	Spin-dependent coupling between quantum dots and topological quantum wires. Physical Review B, 2017, 96, .	1.1	55
15	Transport through a Majorana Island in the Strong Tunneling Regime. Physical Review Letters, 2017, 119, 057002.	2.9	12
16	Measuring Majorana nonlocality and spin structure with a quantum dot. Physical Review B, 2017, 96, .	1.1	162
17	Even-odd interference effect in a topological superconducting wire. Physical Review B, 2017, 96, .	1.1	13
18	Experimentally accessible topological quality factor for wires with zero energy modes. Physical Review B, 2017, 96, .	1.1	67
19	Enhancing qubit readout through dissipative sub-Poissonian dynamics. Physical Review A, 2017, 96, .	1.0	10

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20	Quantum Phase Transitions of the Majorana Toric Code in the Presence of Finite Cooper-Pair Tunneling. <i>Physical Review Letters</i> , 2017, 119, 180508.	2.9	11
21	Supercurrent Interference in Few-Mode Nanowire Josephson Junctions. <i>Physical Review Letters</i> , 2017, 119, 187704.	2.9	43
22	Combining Topological Hardware and Topological Software: Color-Code Quantum Computing with Topological Superconductor Networks. <i>Physical Review X</i> , 2017, 7, .	2.8	54
23	Braiding by Majorana tracking and long-range CNOT gates with color codes. <i>Physical Review B</i> , 2017, 96, .	1.1	26
24	Dephasing of Majorana-based qubits. <i>Physical Review B</i> , 2018, 97, .	1.1	60
25	Distinguishing Majorana bound states from localized Andreev bound states by interferometry. <i>Physical Review B</i> , 2018, 97, .	1.1	57
26	Exact master equation and non-Markovian decoherence dynamics of Majorana zero modes under gate-induced charge fluctuations. <i>Physical Review B</i> , 2018, 97, .	1.1	32
27	Measurement and control of a Coulomb-blockaded parafermion box. <i>Physical Review B</i> , 2018, 97, .	1.1	13
28	Identification of Majorana Modes in Interacting Systems by Local Integrals of Motion. <i>Physical Review Letters</i> , 2018, 120, 040504.	2.9	16
29	Conductance interference in a superconducting Coulomb blockaded Majorana ring. <i>Physical Review B</i> , 2018, 97, .	1.1	17
30	Building topological quantum circuits: Majorana nanowire junctions. <i>Physical Review B</i> , 2018, 97, .	1.1	21
31	Quantum anomalous Hall Majorana platform. <i>Physical Review B</i> , 2018, 97, .	1.1	26
32	Robust integer and fractional helical modes in the quantum Hall effect. <i>Nature Physics</i> , 2018, 14, 411-416.	6.5	23
33	Charge response of the Majorana toric code. <i>Physical Review B</i> , 2018, 97, .	1.1	4
34	Quantum computing with Majorana fermion codes. <i>Physical Review B</i> , 2018, 97, .	1.1	47
35	Impurity-induced states in superconducting heterostructures. <i>Physical Review B</i> , 2018, 97, .	1.1	20
36	Majorana zero modes in superconductor-semiconductor heterostructures. <i>Nature Reviews Materials</i> , 2018, 3, 52-68.	23.3	680
37	Manipulating quantum coherence of charge states in interacting double-dot Aharonov-Bohm interferometers. <i>New Journal of Physics</i> , 2018, 20, 043043.	1.2	5

#	ARTICLE	IF	CITATIONS
38	Topological \mathbb{Z}_2 Anomalous Hall Junctions from Crossed Andreev Reflection in the Quantum Hall Regime. Physical Review Letters, 2018, 120, 116801.	2.9	12
39	Quasi-one-dimensional quantum anomalous Hall systems as new platforms for scalable topological quantum computation. Physical Review B, 2018, 97, .	1.1	44
40	Switching effects and spin-valley Andreev resonant peak shifting in silicene superconductor. Physica E: Low-Dimensional Systems and Nanostructures, 2018, 97, 375-383.	1.3	8
41	Between Promise, Fear and Disillusion: Two Decades of Public Engagement Around Nanotechnology. , 2018, , .		0
42	Parity transitions in the superconducting ground state of hybrid InSb/Al Coulomb islands. Nature Communications, 2018, 9, 4801.	5.8	49
43	Robust topological phase in proximitized core-shell nanowires coupled to multiple superconductors. Beilstein Journal of Nanotechnology, 2018, 9, 1512-1526.	1.5	12
44	Four-Majorana qubit with charge readout: Dynamics and decoherence. Physical Review B, 2018, 98, .	1.1	22
45	Proximity-induced supercurrent through topological insulator based nanowires for quantum computation studies. Scientific Reports, 2018, 8, 17237.	1.6	23
46	Electric field tunable superconductor-semiconductor coupling in Majorana nanowires. New Journal of Physics, 2018, 20, 103049.	1.2	81
47	Majorana Kramers Pairs in Higher-Order Topological Insulators. Physical Review Letters, 2018, 121, 196801.	2.9	162
48	QFlow lite dataset: A machine-learning approach to the charge states in quantum dot experiments. PLoS ONE, 2018, 13, e0205844.	1.1	17
49	Majorana Superconducting Qubit. Physical Review Letters, 2018, 121, 267002.	2.9	34
50	Hybridization of Subgap States in One-Dimensional Superconductor-Semiconductor Coulomb Islands. Physical Review Letters, 2018, 121, 256803.	2.9	34
51	Majorana bound state engineering via efficient real-space parameter optimization. Physical Review B, 2018, 98, .	1.1	9
52	Quantifying wave-function overlaps in inhomogeneous Majorana nanowires. Physical Review B, 2018, 98, .	1.1	58
53	Topological quantum computation based on chiral Majorana fermions. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 10938-10942.	3.3	194
54	Selective-Area-Grown Semiconductor-Superconductor Hybrids: A Basis for Topological Networks. Physical Review Letters, 2018, 121, 147701.	2.9	83
55	Renormalization of the quantum dot g -factor in superconducting Rashba nanowires. Physical Review B, 2018, 98, .	1.1	14

#	ARTICLE	IF	CITATIONS
56	Lifetime of Majorana qubits in Rashba nanowires with nonuniform chemical potential. Physical Review B, 2018, 98, .	1.1	24
57	Phonon-induced Majorana qubit relaxation in tunnel-coupled two-island topological superconductors. Physical Review B, 2018, 98, .	1.1	5
58	Quantum transport in coupled Majorana box systems. Physical Review B, 2018, 97, .	1.1	9
59	Mathematics of topological quantum computing. Bulletin of the American Mathematical Society, 2018, 55, 183-238.	0.8	37
60	Majorana-Based Fermionic Quantum Computation. Physical Review Letters, 2018, 120, 220504.	2.9	27
61	Braids and phase gates through high-frequency virtual tunneling of Majorana zero modes. Physical Review B, 2018, 97, .	1.1	5
62	Parity-Controlled 2π Josephson Effect Mediated by Majorana Kramers Pairs. Physical Review Letters, 2018, 120, 267002.	2.9	41
63	Parafermionic generalization of the topological Kondo effect. Physical Review B, 2018, 97, .	1.1	12
64	Optimal noise-canceling shortcuts to adiabaticity: application to noisy Majorana-based gates. New Journal of Physics, 2018, 20, 065005.	1.2	15
65	Higher-order topology in bismuth. Nature Physics, 2018, 14, 918-924.	6.5	590
66	Controllable Majorana fermions on domain walls of a magnetic topological insulator. Physical Review B, 2018, 98, .	1.1	5
67	Effective theory approach to the Schrödinger-Poisson problem in semiconductor Majorana devices. Physical Review B, 2018, 98, .	1.1	74
68	Engineering quantum spin liquids and many-body Majorana states with a driven superconducting box circuit. Physical Review B, 2018, 98, .	1.1	6
69	Control and detection of Majorana bound states in quantum dot arrays. Physical Review B, 2018, 98, .	1.1	14
70	Realization of a Valley Superlattice. Physical Review Letters, 2018, 121, 036802.	2.9	11
71	Hybridization at Superconductor-Semiconductor Interfaces. Physical Review X, 2018, 8, .	2.8	79
72	Effects of Gate-Induced Electric Fields on Semiconductor Majorana Nanowires. Physical Review X, 2018, 8, .	2.8	106
73	Bi_2Se_3 topological insulator at the 2D-limit: role of halide-doping on Dirac point. Physical Chemistry Chemical Physics, 2018, 20, 17934-17941.	1.3	3

#	ARTICLE	IF	CITATIONS
74	Non-Abelian Berry phase for open quantum systems: Topological protection versus geometric dephasing. Physical Review B, 2019, 100, .	1.1	11
75	Non-Abelian Geometric Dephasing. Physical Review Letters, 2019, 123, 060405.	2.9	13
76	Time-reversal-invariant topological superconductivity in one and two dimensions. Physics Reports, 2019, 825, 1-48.	10.3	54
77	Radio-Frequency Methods for Majorana-Based Quantum Devices: Fast Charge Sensing and Phase-Diagram Mapping. Physical Review Applied, 2019, 11, .	1.5	18
78	Ballistic superconductivity and tunable π -junctions in InSb quantum wells. Nature Communications, 2019, 10, 3764.	5.8	40
79	Detecting parity effect in a superconducting device in the presence of parity switches. Physical Review B, 2019, 100, .	1.1	8
80	Effects of decoherence on diabatic errors in Majorana braiding. Physical Review A, 2019, 100, .	1.0	13
81	Higher-order topological superconductors as generators of quantum codes. Physical Review B, 2019, 100, .	1.1	38
82	Topological superconductivity at finite temperatures in proximitized magnetic nanowires. Physical Review B, 2019, 99, .	1.1	12
83	Full-stack, real-system quantum computer studies. , 2019, , .		90
84	Topologically protected braiding in a single wire using Floquet Majorana modes. Physical Review B, 2019, 100, .	1.1	33
85	Supersymmetry in the Insulating Phase of a Chain of Majorana Cooper Pair Boxes. Physical Review Letters, 2019, 123, 026401.	2.9	10
86	Error generation and propagation in Majorana-based topological qubits. Physical Review B, 2019, 100, .	1.1	11
87	Universal quantum computing with parafermions assisted by a half-fluxon. Physical Review B, 2019, 100, .	1.1	8
88	Robust low-energy Andreev bound states in semiconductor-superconductor structures: Importance of partial separation of component Majorana bound states. Physical Review B, 2019, 100, .	1.1	52
89	Suppressing quasiparticle poisoning with a voltage-controlled filter. Physical Review B, 2019, 100, .	1.1	14
90	Ballistic InSb Nanowires and Networks via Metal-Sown Selective Area Growth. Nano Letters, 2019, 19, 9102-9111.	4.5	31
91	Next steps of quantum transport in Majorana nanowire devices. Nature Communications, 2019, 10, 5128.	5.8	130

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92	Supercurrent interference in semiconductor nanowire Josephson junctions. Physical Review B, 2019, 100, .	1.1	20
93	Non-Abelian defects in fracton phases of matter. Physical Review B, 2019, 100, .	1.1	7
94	Manipulating Majorana zero modes in double quantum dots. Physical Review B, 2019, 100, .	1.1	19
95	Topological ordering in the Majorana toric code. Physical Review B, 2019, 100, .	1.1	3
96	Synthetic Weyl Points and Chiral Anomaly in Majorana Devices with Nonstandard Andreev-Bound-State Spectra. Physical Review Letters, 2019, 123, 126802.	2.9	22
97	Delocalisation of Majorana quasiparticles in plaquetteâ€“nanowire hybrid system. Scientific Reports, 2019, 9, 12933.	1.6	11
98	Machine learning techniques for state recognition and auto-tuning in quantum dots. Npj Quantum Information, 2019, 5, .	2.8	53
99	Conductance smearing and anisotropic suppression of induced superconductivity in a Majorana nanowire. Physical Review B, 2019, 99, .	1.1	18
100	Higher-order topological superconductivity: Possible realization in Fermi gases and $Sr_2Ru_4O_{14}$. Physical Review B, 2019, 99, .	2.1	19
101	Fractional Josephson effect with and without Majorana zero modes. Physical Review B, 2019, 99, .	1.1	42
102	Revisiting \mathbb{Z}_2 phase slip suppression in topological Josephson junctions. Physical Review B, 2019, 99, .	1.1	6
103	Spin liquids from Majorana zero modes in a Cooper-pair box. Physical Review B, 2019, 99, .	1.1	19
104	Majorana fermions in magnetic chains. Progress in Particle and Nuclear Physics, 2019, 107, 1-19.	5.6	44
105	Majorana qubit readout using longitudinal qubit-resonator interaction. Physical Review B, 2019, 99, .	1.1	16
106	Majorana bound states in double nanowires with reduced Zeeman thresholds due to supercurrents. Physical Review B, 2019, 99, .	1.1	18
107	Composition-dependent topological-insulator properties of epitaxial $(\text{Bi}1-\text{Sb})_2(\text{Te}1-\text{Se})_3$ thin films. Journal of Alloys and Compounds, 2019, 800, 81-87.	2.8	3
108	Pseudo Klein tunneling induced by zero Chern numbers in multiple-topological barriers silicene junction. Physica E: Low-Dimensional Systems and Nanostructures, 2019, 114, 113584.	1.3	2
109	Non-Abelian operation on chiral Majorana fermions by quantum dots. Physical Review B, 2019, 99, .	1.1	19

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110	Thermoelectric transport through a finite-U quantum dot side-coupled to Majorana bound state. <i>European Physical Journal B</i> , 2019, 92, 1.	0.6	4
111	High Mobility Stemless InSb Nanowires. <i>Nano Letters</i> , 2019, 19, 3575-3582.	4.5	36
112	Scalable fermionic error correction in Majorana surface codes. <i>Physical Review B</i> , 2019, 99, .	1.1	10
113	Bottom-up grown nanowire quantum devices. <i>MRS Bulletin</i> , 2019, 44, 403-410.	1.7	3
114	Topological superconductivity in a phase-controlled Josephson junction. <i>Nature</i> , 2019, 569, 93-98.	13.7	225
115	Fidelity and visibility loss in Majorana qubits by entanglement with environmental modes. <i>Physical Review B</i> , 2019, 99, .	1.1	10
116	Rapid Detection of Coherent Tunneling in an InAs Nanowire Quantum Dot through Dispersive Gate Sensing. <i>Physical Review Applied</i> , 2019, 11, .	1.5	26
117	Hierarchical Majoranas in a programmable nanowire network. <i>Physical Review B</i> , 2019, 99, .	1.1	11
118	Topological insulator: Spintronics and quantum computations. <i>Frontiers of Physics</i> , 2019, 14, 1.	2.4	144
119	Heat pumping from braiding Majorana zero modes. <i>Physical Review B</i> , 2019, 99, .	1.1	5
120	Dirac States of 2D Topological Insulators: Effect of Heterovalent Dopant-Content. <i>Microscopy and Microanalysis</i> , 2019, 25, 1437-1441.	0.2	4
121	Robust Majorana magic gates via measurements. <i>Physical Review B</i> , 2019, 99, .	1.1	14
122	Superconducting spin properties of Majorana nanowires and the associated spin-orbit coupling driven transverse supercurrent. <i>Physical Review B</i> , 2019, 99, .	1.1	3
123	Majorana-Josephson interferometer. <i>Physical Review B</i> , 2019, 99, .	1.1	15
124	Giant Shot Noise from Majorana Zero Modes in Topological Trijunctions. <i>Physical Review Letters</i> , 2019, 122, 097003.	2.9	29
125	Transport Studies of Epi-Al/InAs Two-Dimensional Electron Gas Systems for Required Building-Blocks in Topological Superconductor Networks. <i>Nano Letters</i> , 2019, 19, 3083-3090.	4.5	38
126	Simulating topological tensor networks with Majorana qubits. <i>Physical Review B</i> , 2019, 99, .	1.1	15
127	Fractional Josephson Vortices and Braiding of Majorana Zero Modes in Planar Superconductor-Semiconductor Heterostructures. <i>Physical Review Letters</i> , 2019, 122, 107701.	2.9	30

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128	Deterministic Creation and Braiding of Chiral Edge Vortices. <i>Physical Review Letters</i> , 2019, 122, 146803.	2.9	41
129	Decays of Majorana or Andreev Oscillations Induced by Steplike Spin-Orbit Coupling. <i>Physical Review Letters</i> , 2019, 122, 147701.	2.9	38
130	Renâ€™s rule and extensibility in quantum computing. <i>Microprocessors and Microsystems</i> , 2019, 67, 1-7.	1.8	52
131	Curvature of gap closing features and the extraction of Majorana nanowire parameters. <i>Physical Review B</i> , 2019, 99, .	1.1	11
132	Chiral and counter-propagating Majorana fermions in a p-wave superconductor. <i>New Journal of Physics</i> , 2019, 21, 123014.	1.2	5
133	End-to-end correlated subgap states in hybrid nanowires. <i>Physical Review B</i> , 2019, 100, .	1.1	36
134	Broadband microwave spectroscopy of semiconductor nanowire-based Cooper-pair transistors. <i>Physical Review B</i> , 2019, 99, .	1.1	5
135	Dispersive sensing in hybrid InAs/Al nanowires. <i>Applied Physics Letters</i> , 2019, 115, .	1.5	9
136	Flux-induced topological superconductor in planar Josephson junction. <i>Physical Review B</i> , 2019, 100, .	1.1	7
137	Extreme magnetic field-boosted superconductivity. <i>Nature Physics</i> , 2019, 15, 1250-1254.	6.5	138
138	Protocol for Reading Out Majorana Vortex Qubits and Testing Non-Abelian Statistics. <i>Physical Review Applied</i> , 2019, 12, .	1.5	10
139	Revealing charge-tunneling processes between a quantum dot and a superconducting island through gate sensing. <i>Physical Review B</i> , 2019, 100, .	1.1	12
140	Coulomb Blockade of a Nearly Open Majorana Island. <i>Physical Review Letters</i> , 2019, 122, 016801.	2.9	15
141	Superconductor Electronics: Status and Outlook. <i>Journal of Superconductivity and Novel Magnetism</i> , 2019, 32, 23-44.	0.8	78
142	Supercurrent and Multiple Andreev Reflections in InSb Nanosheet SNS Junctions. <i>Physica Status Solidi (B): Basic Research</i> , 2019, 256, 1800538.	0.7	13
143	Nontopological Majorana Zero Modes in Inhomogeneous Spin Ladders. <i>Physical Review Letters</i> , 2019, 122, 027201.	2.9	13
144	Detecting Majorana modes through Josephson junction ring-quantum dot hybrid architectures. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 128, 179-187.	1.9	1
145	Spectroscopic Visualization of a Robust Electronic Response of Semiconducting Nanowires to Deposition of Superconducting Islands. <i>Physical Review X</i> , 2020, 10, .	2.8	5

#	ARTICLE	IF	CITATIONS
146	Majorana Zero Modes in Networks of Cooper-Pair Boxes: Topologically Ordered States and Topological Quantum Computation. Annual Review of Condensed Matter Physics, 2020, 11, 397-420.	5.2	41
147	Driven Dissipative Majorana Dark Spaces. Physical Review Letters, 2020, 125, 147701.	2.9	16
148	Coupled wire construction of a topological phase with chiral tricritical Ising edge modes. Physical Review B, 2020, 102, .	1.1	7
149	Towards dark space stabilization and manipulation in driven dissipative Majorana platforms. Physical Review B, 2020, 102, .	1.1	12
150	Lower bounds on the non-Clifford resources for quantum computations. Quantum Science and Technology, 2020, 5, 035009.	2.6	31
151	Electrical Probes of the Non-Abelian Spin Liquid in Kitaev Materials. Physical Review X, 2020, 10, .	2.8	35
152	Fragility of the Fractional Josephson Effect in Time-Reversal-Invariant Topological Superconductors. Physical Review Letters, 2020, 125, 207002.	2.9	8
153	Photon-Assisted Transport Through a Quantum Dot Side-Coupled to Majorana Bound States. Frontiers in Physics, 2020, 8, .	1.0	14
154	Transmission phase read-out of a large quantum dot in a nanowire interferometer. Nature Communications, 2020, 11, 3666.	5.8	10
155	Multiple Majorana edge modes in magnetic topological insulator-semiconductor heterostructures. Physical Review B, 2020, 102, .	1.1	7
156	Braiding photonic topological zero modes. Nature Physics, 2020, 16, 989-993.	6.5	51
157	Majorana-based quantum computing in nanowire devices. Physical Review B, 2020, 102, .	1.1	16
158	From Andreev to Majorana bound states in hybrid superconductor-semiconductor nanowires. Nature Reviews Physics, 2020, 2, 575-594.	11.9	251
159	Optimized micromagnet geometries for Majorana zero modes in low g -factor materials. Physical Review B, 2020, 102, .	1.1	10
160	Epitaxial Al/GaAs/Al tri-layers fabricated using a novel wafer-bonding technique. Journal of Applied Physics, 2020, 128, 115301.	1.1	2
161	Architecting Noisy Intermediate-Scale Trapped Ion Quantum Computers. , 2020, , .		26
162	Detection of the Quantum Capacitance of a Point Contact via Dispersive Gate Sensing. Physical Review Applied, 2020, 14, .	1.5	4
163	A topological Josephson junction platform for creating, manipulating, and braiding Majorana bound states. Annals of Physics, 2020, 423, 168326.	1.0	21

#	ARTICLE	IF	CITATIONS
164	Hard-Gap Spectroscopy in a Self-Defined Mesoscopic Nanowire Josephson Junction. Physical Review Applied, 2020, 14, .	1.5	4
165	Transport characterization of topological superconductivity in a planar Josephson junction. Physical Review B, 2020, 102, .	1.1	8
166	Feasibility of measurement-based braiding in the quasi-Majorana regime of semiconductor-superconductor heterostructures. Physical Review B, 2020, 102, .	1.1	10
167	Charge Noise and Overdrive Errors in Dispersive Readout of Charge, Spin, and Majorana Qubits. Physical Review Applied, 2020, 14, .	1.5	18
168	Measurements of spin-orbit interaction in epitaxially grown InAs nanosheets. Applied Physics Letters, 2020, 117, 132101.	1.5	5
169	One-dimensional error-correcting code for Majorana qubits. Physical Review A, 2020, 101, .	1.0	1
170	Autonomous Tuning and Charge-State Detection of Gate-Defined Quantum Dots. Physical Review Applied, 2020, 13, .	1.5	23
171	Highly Transparent Gatable Superconducting Shadow Junctions. ACS Nano, 2020, 14, 14605-14615.	7.3	32
172	Transport properties of coupled Majorana bound states in the Coulomb blockade regime. Physical Review B, 2020, 101, .	1.1	8
173	Majorana qubits for topological quantum computing. Physics Today, 2020, 73, 44-50.	0.3	46
174	Decoherence dynamics of Majorana qubits under braiding operations. Physical Review B, 2020, 101, .	1.1	7
175	Quantum Computer Systems: Research for Noisy Intermediate-Scale Quantum Computers. Synthesis Lectures on Computer Architecture, 2020, 15, 1-227.	1.3	13
176	Detection of Majorana Bound States by Sign Change of the Tunnel Magnetoresistance in a Quantum Dot Coupled to Ferromagnetic Electrodes. Frontiers in Physics, 2020, 8, .	1.0	8
177	Quasiparticle poisoning effects on the dynamics of topological Josephson junctions. Physical Review B, 2020, 101, .	1.1	12
178	Majorana phase gate based on the geometric phase. Physical Review B, 2020, 101, .	1.1	9
179	Certified quantum measurement of Majorana fermions. Physical Review A, 2020, 101, .	1.0	7
180	Number-conserving analysis of measurement-based braiding with Majorana zero modes. Physical Review B, 2020, 101, .	1.1	15
181	Transport signatures of Majorana bound states in superconducting hybrid structures. European Physical Journal: Special Topics, 2020, 229, 593-620.	1.2	13

#	ARTICLE	IF	CITATIONS
182	Topological superconductivity in hybrid devices. Nature Physics, 2020, 16, 718-724.	6.5	105
183	Coherent transport through a Majorana island in an Aharonov-Bohm interferometer. Nature Communications, 2020, 11, 3212.	5.8	39
184	Long-distance coherence of Majorana wires. Physical Review B, 2020, 101, .	1.1	2
185	Rigorous Results on Topological Superconductivity with Particle Number Conservation. Physical Review Letters, 2020, 124, 257002.	2.9	13
186	Parity-to-charge conversion for readout of topological Majorana qubits. Physical Review B, 2020, 101, .	1.1	16
187	Absence of supercurrent sign reversal in a topological junction with a quantum dot. Physical Review B, 2020, 101, .	1.1	16
188	Dephasing and leakage dynamics of noisy Majorana-based qubits: Topological versus Andreev. Physical Review B, 2020, 101, .	1.1	24
189	Measurement-only quantum computation with Floquet Majorana corner modes. Physical Review B, 2020, 101, .	1.1	54
190	Quantum phases of a one-dimensional Majorana-Bose-Hubbard model. Physical Review B, 2020, 101, .	1.1	9
191	Weak Measurement Protocols for Majorana Bound State Identification. Physical Review Letters, 2020, 124, 096801.	2.9	41
192	Geometry-dependent effects in Majorana nanowires. Physical Review B, 2020, 101, .	1.1	9
193	Photon-assisted tunnelling of zero modes in a Majorana wire. Nature Physics, 2020, 16, 663-668.	6.5	39
194	In-plane selective area InSb-Al nanowire quantum networks. Communications Physics, 2020, 3, .	2.0	37
195	Signature of a pair of Majorana zero modes in superconducting gold surface states. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 8775-8782.	3.3	112
196	Generic quantized zero-bias conductance peaks in superconductor-semiconductor hybrid structures. Physical Review B, 2020, 101, .	1.1	55
197	Large enhancement of thermoelectric effect by Majorana bound states coupled to a quantum dot. Journal of Applied Physics, 2020, 127, .	1.1	17
198	Quantum Dots in an $\ln\langle\text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll">\langle\text{mml:mrow}>\langle\text{mml:mi}>\ln\langle\text{mml:mi}>\langle\text{mml:mi}>\text{Sb}\langle\text{mml:mi}>\langle\text{mml:mrow}>\langle\text{mml:math}>$ Two-Dimensional Electron Gas. Physical Review Applied, 2020, 13, .	1.5	12
199	Majorana zero modes from topological kink states in the two-dimensional electron gas. Physical Review B, 2020, 101, .	1.1	4

#	ARTICLE	IF	CITATIONS
200	Zero-bias peaks at zero magnetic field in ferromagnetic hybrid nanowires. <i>Nature Physics</i> , 2021, 17, 43-47.	6.5	75
201	Second Chern Number and Non-Abelian Berry Phase in Topological Superconducting Systems. <i>PRX Quantum</i> , 2021, 2, .	3.5	31
202	A cryogenic CMOS chip for generating control signals for multiple qubits. <i>Nature Electronics</i> , 2021, 4, 64-70.	13.1	105
203	Anodic oxidation of epitaxial superconductor-semiconductor hybrids. <i>Physical Review Materials</i> , 2021, 5, .	0.9	8
204	Quantum Interference Effects in Quantum Dot Molecular With Majorana Bound States. <i>Frontiers in Physics</i> , 2021, 8, .	1.0	4
205	A charge sensor integration to tunable double quantum dots on two neighboring InAs nanowires. <i>Nanoscale</i> , 2021, 13, 1048-1054.	2.8	4
206	Quasiparticle Poisoning of Majorana Qubits. <i>Physical Review Letters</i> , 2021, 126, 057702.	2.9	33
207	Roadmap on quantum nanotechnologies. <i>Nanotechnology</i> , 2021, 32, 162003.	1.3	45
208	Fragility of surface states in topological superfluid ^3He . <i>Nature Communications</i> , 2021, 12, 1574.	5.8	18
209	Surface Modification and Subsequent Fermi Density Enhancement of Bi(111). <i>Journal of Physical Chemistry C</i> , 2021, 125, 5549-5558.	1.5	7
210	Fibonacci Anyons Versus Majorana Fermions: A Monte Carlo Approach to the Compilation of Braid Circuits in $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline" overflow="scroll" \rangle \langle \text{mml:mi} \rangle \text{SU} \langle \text{mml:mi} \rangle \langle \text{mml:mo} \text{stretchy="false"} \rangle \langle \text{mml:mo} \rangle \langle \text{mml:mn} \rangle 2 \langle \text{mml:mn} \rangle \langle \text{mml:msub} \rangle \langle \text{mml:mo} \rangle \text{Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50}^3 \text{Td} \langle \text{stretchy="fa}$	3.5	14
211	Quantum, 2021, 2, . Doping challenges and pathways to industrial scalability of III-V nanowire arrays. <i>Applied Physics Reviews</i> , 2021, 8, .	5.5	32
212	Topological superconductivity in semiconductor-superconductor-magnetic-insulator heterostructures. <i>Physical Review B</i> , 2021, 103, .	1.1	21
213	Realization of arbitrary two-qubit quantum gates based on chiral Majorana fermions*. <i>Chinese Physics B</i> , 2021, 30, 040303.	0.7	1
214	Quantum Topological Photonics. <i>Advanced Optical Materials</i> , 2021, 9, 2001739.	3.6	22
215	Parity-preserving and magnetic field-resilient superconductivity in InSb nanowires with Sn shells. <i>Science</i> , 2021, 372, 508-511.	6.0	50
216	Topological superconductivity in proximity to type-II superconductors. <i>Physical Review B</i> , 2021, 103, .	1.1	2
217	Many-body Majorana-like zero modes without gauge symmetry breaking. <i>Physical Review Research</i> , 2021, 3, .	1.3	3

#	ARTICLE	IF	CITATIONS
218	Materials challenges and opportunities for quantum computing hardware. <i>Science</i> , 2021, 372, .	6.0	196
219	Topological superconductivity in nanowires proximate to a diffusive superconductorâ€“magnetic-insulator bilayer. <i>Physical Review B</i> , 2021, 103, .	1.1	14
220	The hybrid topological longitudinal transmon qubit. <i>Materials for Quantum Technology</i> , 2021, 1, 021001.	1.2	0
221	Using Genetic Improvement to Retarget quantum Software on Differing Hardware. , 2021, , .		2
222	Thermoelectric Transport in a Double-Quantum-Dot Coupled to Majorana Zero Modes. <i>Journal of Nanoelectronics and Optoelectronics</i> , 2021, 16, 753-761.	0.1	1
223	Majorana signatures in charge transport through a topological superconducting double-island system. <i>Physical Review B</i> , 2021, 103, .	1.1	8
224	Photon-Assisted Seebeck Effect in a Quantum Dot Coupled to Majorana Zero Modes. <i>Frontiers in Physics</i> , 2021, 9, .	1.0	4
225	Editorial: Modeling and Applications of Optoelectronic Devices for Access Networks. <i>Frontiers in Physics</i> , 2021, 9, .	1.0	4
226	Readout of Majorana bound states via Landau-Zener transition. <i>Physical Review B</i> , 2021, 103, .	1.1	6
227	Spin coherent manipulation in Josephson weak links. <i>Physical Review Research</i> , 2021, 3, .	1.3	5
228	Heat Generation by Electrical Current in a Quantum Dot Hybridized to Majorana Nanowires. <i>Frontiers in Physics</i> , 2021, 9, .	1.0	4
229	Dynamical leakage of Majorana mode into side-attached quantum dot. <i>Physical Review B</i> , 2021, 103, .	1.1	7
230	Visibility of noisy quantum dot-based measurements of Majorana qubits. <i>SciPost Physics</i> , 2021, 10, .	1.5	6
231	Protocol Discovery for the Quantum Control of Majoranas by Differentiable Programming and Natural Evolution Strategies. <i>PRX Quantum</i> , 2021, 2, .	3.5	15
232	Cost of Universality: A Comparative Study of the Overhead of State Distillation and Code Switching with Color Codes. <i>PRX Quantum</i> , 2021, 2, .	3.5	27
233	Singleâ€“shot Fabrication of Semiconductingâ€“Superconducting Nanowire Devices. <i>Advanced Functional Materials</i> , 2021, 31, 2102388.	7.8	12
234	Multilevel effects in quantum dot based parity-to-charge conversion of Majorana box qubits. <i>Physical Review B</i> , 2021, 103, .	1.1	4
235	Reappearance of first Shapiro step in narrow topological Josephson junctions. <i>Science Advances</i> , 2021, 7, .	4.7	14

#	ARTICLE	IF	CITATIONS
236	Higher-order band topology. Nature Reviews Physics, 2021, 3, 520-532.	11.9	249
237	Bogoliubov quasiparticles in superconducting qubits. SciPost Physics Lecture Notes, 0, , .	0.0	22
238	Selective area epitaxy of III-V nanostructure arrays and networks: Growth, applications, and future directions. Applied Physics Reviews, 2021, 8, .	5.5	75
239	Zeeman-driven parity transitions in an Andreev quantum dot. Physical Review B, 2021, 103, .	1.1	11
240	Topological Josephson bifurcation amplifier: Semiclassical theory. Journal of Applied Physics, 2021, 129, 214302.	1.1	2
241	Majorana zero modes in impurity-assisted vortex of LiFeAs superconductor. Nature Communications, 2021, 12, 4146.	5.8	44
242	Topological kink states in graphene. Nanotechnology, 2021, 32, 402001.	1.3	6
243	Full parity phase diagram of a proximitized nanowire island. Physical Review B, 2021, 104, .	1.1	20
244	Tunable topological states hosted by unconventional superconductors with adatoms. Physical Review Research, 2021, 3, .	1.3	7
245	Tunable proximity effects and topological superconductivity in ferromagnetic hybrid nanowires. Physical Review B, 2021, 104, .	1.1	13
246	Skyrmion control of Majorana states in planar Josephson junctions. Communications Physics, 2021, 4, .	2.0	21
247	Rapid Microwave-Only Characterization and Readout of Quantum Dots Using Multiplexed Gigahertz-Frequency Resonators. Physical Review Applied, 2021, 16, .	1.5	14
248	Universal Platform for Scalable Semiconductor-Superconductor Nanowire Networks. Advanced Functional Materials, 2021, 31, 2103062.	7.8	10
249	Engineered platforms for topological superconductivity and Majorana zero modes. Nature Reviews Materials, 2021, 6, 944-958.	23.3	101
250	Topological Contextuality and Anyonic Statistics of Photonic-Encoded Parafermions. PRX Quantum, 2021, 2, .	3.5	8
251	Majorana bound states in semiconducting nanostructures. Journal of Applied Physics, 2021, 130, .	1.1	34
252	Shadow-wall lithography of ballistic superconductor-semiconductor quantum devices. Nature Communications, 2021, 12, 4914.	5.8	41
253	Dual Negative Differential of Heat Generation in a Strongly Correlated Quantum Dot Side-Coupled to Majorana Bound States. Frontiers in Physics, 2021, 9, .	1.0	5

#	ARTICLE	IF	CITATIONS
254	Measuring topological order. <i>Physical Review Research</i> , 2021, 3, .	1.3	5
255	Geometrical Rabi oscillations and Landau-Zener transitions in non-Abelian systems. <i>Physical Review Research</i> , 2021, 3, .	1.3	4
256	Evaluation of synthetic and experimental training data in supervised machine learning applied to charge-state detection of quantum dots. <i>Machine Learning: Science and Technology</i> , 2021, 2, 045023.	2.4	8
257	Experimental review on Majorana zero-modes in hybrid nanowires. <i>Science China: Physics, Mechanics and Astronomy</i> , 2021, 64, 1.	2.0	6
258	Simulating quantum materials with digital quantum computers. <i>Quantum Science and Technology</i> , 2021, 6, 043002.	2.6	32
259	Selective area growth rates of III-V nanowires. <i>Physical Review Materials</i> , 2021, 5, .	0.9	8
260	Symmetry Protected Quantum Computation. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 5, 554.	0.0	4
261	Z^4 parafermion modes in an interacting periodically driven superconducting chain. <i>Physical Review B</i> , 2021, 104, .	1.1	7
262	Topological phase transitions and Majorana zero modes in DNA double helix coupled to s-wave superconductors. <i>New Journal of Physics</i> , 2021, 23, 093047.	1.2	4
263	Measurement sequences for magic state distillation. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 5, 383.	0.0	1
264	Spontaneous Currents and Topologically Protected States in Superconducting Hybrid Structures with the Spin-Orbit Coupling (Brief Review). <i>JETP Letters</i> , 2021, 113, 34-46.	0.4	6
265	From high-quality semiconductor/superconductor nanowires to Majorana zero mode. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2021, 70, 058101.	0.2	2
266	Spin versus bond correlations along dangling edges of quantum critical magnets. <i>Physical Review B</i> , 2021, 103, .	1.1	11
267	Universal discriminative quantum neural networks. <i>Quantum Machine Intelligence</i> , 2021, 3, 1.	2.7	40
268	Combating quasiparticle poisoning with multiple Majorana fermions in a periodically-driven quantum wire. <i>Journal of Physics Condensed Matter</i> , 2020, 32, 435301.	0.7	8
269	Pumped heat and charge statistics from Majorana braiding. <i>Physical Review B</i> , 2020, 102, .	1.1	3
270	Contribution of top barrier materials to high mobility in near-surface InAs quantum wells grown on GaSb(001). <i>Physical Review Materials</i> , 2019, 3, .	0.9	12
271	Selective-area chemical beam epitaxy of in-plane InAs one-dimensional channels grown on InP(001), InP(111)B, and InP(011) surfaces. <i>Physical Review Materials</i> , 2019, 3, .	0.9	48

#	ARTICLE	IF	CITATIONS
272	Building fracton phases by Majorana manipulation. <i>Physical Review Research</i> , 2019, 1, .	1.3	24
273	Bandgap-assisted quantum control of topological edge states in a cavity. <i>Physical Review Research</i> , 2020, 2, .	1.3	15
274	Diagnosing quantum chaos in many-body systems using entanglement as a resource. <i>Physical Review Research</i> , 2020, 2, .	1.3	30
275	Interaction-driven Floquet engineering of topological superconductivity in Rashba nanowires. <i>Physical Review Research</i> , 2020, 2, .	1.3	4
276	Physical mechanisms for zero-bias conductance peaks in Majorana nanowires. <i>Physical Review Research</i> , 2020, 2, .	1.3	145
277	Multi-particle interferometry in the time-energy domain with localized topological quasiparticles. <i>Physical Review Research</i> , 2020, 2, .	1.3	4
278	Vortex Majorana braiding in a finite time. <i>Physical Review Research</i> , 2020, 2, .	1.3	14
279	Parity-to-charge conversion in Majorana qubit readout. <i>Physical Review Research</i> , 2020, 2, .	1.3	24
280	Readout of Majorana qubits. <i>Physical Review Research</i> , 2020, 2, .	1.3	31
281	Spin and charge currents driven by the Higgs mode in high-field superconductors. <i>Physical Review Research</i> , 2020, 2, .	1.3	6
282	Time-induced second-order topological superconductors. <i>Physical Review Research</i> , 2020, 2, .	1.3	35
283	Signatures of topological ground state degeneracy in Majorana islands. <i>Physical Review Research</i> , 2020, 2, .	1.3	7
284	Dispersive Readout of Majorana Qubits. <i>PRX Quantum</i> , 2020, 1, .	3.5	17
285	Thermoelectric Effect in a Correlated Quantum Dot Side-Coupled to Majorana Bound States. <i>Nanoscale Research Letters</i> , 2020, 15, 79.	3.1	22
286	A Short Introduction to Topological Quantum Computation. <i>SciPost Physics</i> , 2017, 3, .	1.5	142
287	Strictly local one-dimensional topological quantum error correction with symmetry-constrained cellular automata. <i>SciPost Physics</i> , 2018, 4, .	1.5	5
288	Dynamics of Majorana-based qubits operated with an array of tunable gates. <i>SciPost Physics</i> , 2018, 5, .	1.5	37
289	Electrical detection of the Majorana fusion rule for chiral edge vortices in a topological superconductor. , 2019, 6, .		9

#	ARTICLE	IF	CITATIONS
290	Spectral response of Josephson junctions with low-energy quasiparticles. <i>SciPost Physics</i> , 2019, 7, .	1.5	21
291	Reproducing topological properties with quasi-Majorana states. <i>SciPost Physics</i> , 2019, 7, .	1.5	164
292	Optimizing Clifford gate generation for measurement-only topological quantum computation with Majorana zero modes. <i>SciPost Physics</i> , 2020, 8, .	1.5	5
293	Search for non-Abelian Majorana braiding statistics in superconductors. <i>SciPost Physics Lecture Notes</i> , 0, , .	0.0	61
294	Fault-tolerant quantum computing in the Pauli or Clifford frame with slow error diagnostics. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 2, 43.	0.0	35
295	Flag fault-tolerant error correction with arbitrary distance codes. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 2, 53.	0.0	78
296	Lattice Surgery with a Twist: Simplifying Clifford Gates of Surface Codes. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 2, 62.	0.0	42
297	Codes and Protocols for Distilling T , controlled- S , and Toffoli Gates. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 2, 71.	0.0	38
298	Modeling noise and error correction for Majorana-based quantum computing. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 2, 88.	0.0	16
299	Optimizing Quantum Error Correction Codes with Reinforcement Learning. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 3, 215.	0.0	78
300	Optimization of the surface code design for Majorana-based qubits. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 4, 352.	0.0	18
301	Topological superconductivity in spin-orbit-coupled semiconducting nanowires. <i>Semiconductors and Semimetals</i> , 2021, 108, 125-194.	0.4	3
302	Minimal setup for non-Abelian braiding of Majorana zero modes. <i>Science China: Physics, Mechanics and Astronomy</i> , 2021, 64, .	2.0	11
303	Dynamically Generated Logical Qubits. <i>Quantum - the Open Journal for Quantum Science</i> , 0, 5, 564.	0.0	51
304	Helical liquids in semiconductors. <i>Semiconductor Science and Technology</i> , 2021, 36, 123003.	1.0	19
305	Non-abelian statistics of Majorana modes and the applications to topological quantum computation. <i>Wuli Xuebao/Acta Physica Sinica</i> , 2020, 69, 110302.	0.2	4
306	Ab initio modeling framework for Majorana transport in 2D materials: towards topological quantum computing. , 2020, , .		0
307	Holonomic implementation of CNOT gate on topological Majorana qubits. <i>SciPost Physics Core</i> , 2020, 3, .	0.9	5

#	ARTICLE	IF	CITATIONS
308	Double Braiding Majoranas for Quantum Computing and Hamiltonian Engineering. PRX Quantum, 2020, 1, .	3.5	10
309	Majorana quasi-particles and superconductor-semiconductor hybrid nanowires. Wuli Xuebao/Acta Physica Sinica, 2020, 69, 077303.	0.2	3
310	Topological Kondo Effect. Springer Proceedings in Physics, 2020, , 131-153.	0.1	0
311	Theory of Andreev blockade in a double quantum dot with a superconducting lead. SciPost Physics, 2021, 11, .	1.5	2
312	Electrostatic effects and topological superconductivity in semiconductor-superconductor-magnetic-insulator hybrid wires. Physical Review B, 2021, 104, .	1.1	10
313	Electrically controllable zero-energy states in Rashba oxide heterostructure with in-plane magnetic field cooling. Applied Physics Letters, 2021, 119, 192601.	1.5	0
314	Topological Kondo device for distinguishing quasi-Majorana and Majorana signatures. Physical Review B, 2021, 104, .	1.1	11
315	Manipulating Majorana qubit states without braiding. Physical Review B, 2021, 104, .	1.1	3
317	Signatures of Andreev Blockade in a Double Quantum Dot Coupled to a Superconductor. Physical Review Letters, 2022, 128, 046801.	2.9	11
318	Dephasing of Majorana qubits due to quasistatic disorder. Physical Review B, 2022, 105, .	1.1	2
319	Phase-Manipulation-Induced Majorana Mode and Braiding Realization in Iron-Based Superconductor Fe(Te,Se). Physical Review Letters, 2022, 128, 016402.	2.9	13
320	Interaction induced modifications of the fractional Josephson effect. Solid State Communications, 2022, 343, 114631.	0.9	0
321	Influence of Fluctuations in the Occupation of Higher Energy Levels on the Read-Out Process of Majorana Qubits. International Journal of Theoretical Physics, 2022, 61, 1.	0.5	0
322	Controlling Majorana modes by p -wave pairing in two-dimensional topological superconductors. Physical Review Research, 2022, 4, .	1.3	4
323	Non-Abelian statistics of Majorana zero modes in the presence of an Andreev bound state. Physical Review B, 2022, 105, .	1.1	7
324	Hybrid light-matter networks of Majorana zero modes. Npj Quantum Information, 2021, 7, .	2.8	7
325	Numerical study of PbTe-Pb hybrid nanowires for engineering Majorana zero modes. Physical Review B, 2022, 105, .	1.1	17
326	Sachdev-Ye-Kitaev Circuits for Braiding and Charging Majorana Zero Modes. Physical Review Letters, 2022, 128, 106805.	2.9	6

#	ARTICLE	IF	CITATIONS
327	Topological superconductivity induced by magnetic texture crystals. <i>Physical Review Research</i> , 2022, 4, .	1.3	13
328	Majorana-like end states in one-dimensional dimerized Kitaev topoelectrical circuit. <i>New Journal of Physics</i> , 2022, 24, 043032.	1.2	2
329	Stability of Floquet Majorana Box Qubits. <i>Physical Review Letters</i> , 2022, 128, 127702.	2.9	6
330	Gate-induced decoupling of surface and bulk state properties in selectively-deposited Bi ₂ Te ₃ nanoribbons. <i>SciPost Physics Core</i> , 2022, 5, .	0.9	8
331	Dynamics of quantum resources in regular and Majorana fermion systems. <i>Physical Review A</i> , 2022, 105, .	1.0	2
332	Scaling silicon-based quantum computing using CMOS technology. <i>Nature Electronics</i> , 2021, 4, 872-884.	13.1	84
333	Editorial: Physical Model and Applications of High-Efficiency Electro-Optical Conversion Devices. <i>Frontiers in Physics</i> , 2021, 9, .	1.0	1
334	Yu-Shiba-Rusinov Qubit. <i>PRX Quantum</i> , 2021, 2, .	3.5	14
335	Hybrid Exchangeâ€“Measurement-Based Qubit Operations in Semiconductor Double-Quantum-Dot Qubits. <i>Physical Review Applied</i> , 2021, 16, .	1.5	2
336	Dynamical approach to improving Majorana qubits and distinguishing them from trivial bound states. <i>Physical Review B</i> , 2022, 105, .	1.1	3
337	Supercurrent parity meter in a nanowire Cooper pair transistor. <i>Science Advances</i> , 2022, 8, eabm9896.	4.7	5
338	Fermion-Parity-Based Computation and Its Majorana-Zero-Mode Implementation. <i>Physical Review Letters</i> , 2022, 128, 180504.	2.9	2
339	Low-Temperature Characteristics of Nanowire Network Demultiplexer for Qubit Biasing. <i>Nano Letters</i> , 2022, 22, 3884-3888.	4.5	5
340	Spin-polarized Majorana zero modes in double zigzag honeycomb nanoribbons. <i>Physical Review B</i> , 2022, 105, .	1.1	2
341	Detecting and braiding higher-order Majorana corner states through their spin degree of freedom. <i>Physical Review B</i> , 2022, 105, .	1.1	9
342	Clean quantum point contacts in an InAs quantum well grown on a lattice-mismatched InP substrate. <i>Physical Review B</i> , 2022, 105, .	1.1	2
343	Controllable Majorana vortex states in iron-based superconducting nanowires. <i>National Science Review</i> , 2022, 9, .	4.6	2
344	Fusion rules in a Majorana single-charge transistor. <i>SciPost Physics</i> , 2022, 12, .	1.5	10

#	ARTICLE	IF	CITATIONS
345	Surface Code Compilation via Edge-Disjoint Paths. PRX Quantum, 2022, 3, .	3.5	9
346	Exploring Majorana zero modes in iron-based superconductors. Chinese Physics B, 2022, 31, 080301.	0.7	5
347	Implementation of Single-Qubit Gates via Parametric Modulation in the Majorana Transmon. PRX Quantum, 2022, 3, .	3.5	3
348	Quasiparticle poisoning in trivial and topological Josephson junctions. Physical Review B, 2022, 105, .	1.1	1
349	Observation of Aharonov-Bohm effect in PbTe nanowire networks. Physical Review B, 2022, 105, .	1.1	7
350	1D Majorana Goldstinos and partial supersymmetry breaking in quantum wires. Communications Physics, 2022, 5, .	2.0	6
351	Steering Majorana braiding via skyrmion-vortex pairs: A scalable platform. Physical Review B, 2022, 105, .	1.1	13
352	Transport probe of the nonadiabatic transition caused by moving Majorana zero modes. Physical Review B, 2022, 105, .	1.1	2
353	Dispersive one-dimensional Majorana modes with emergent supersymmetry in one-dimensional proximitized superconductors via spatially modulated potentials and magnetic fields. Physical Review B, 2022, 105, .	1.1	5
354	Cryogenic Electronics and Quantum Information Processing. , 2021, , .		2
355	Protected Hybrid Superconducting Qubit in an Array of Gate-Tunable Josephson Interferometers. PRX Quantum, 2022, 3, .	3.5	10
356	Singlet-Doublet Transitions of a Quantum Dot Josephson Junction Detected in a Transmon Circuit. PRX Quantum, 2022, 3, .	3.5	22
357	Manipulation of Majorana-Kramers qubit and its tolerance in time-reversal invariant topological superconductor. Physical Review B, 2022, 106, .	1.1	4
358	Majorana bound states with chiral magnetic textures. Journal of Applied Physics, 2022, 132, .	1.1	13
359	Classification of small triorthogonal codes. Physical Review A, 2022, 106, .	1.0	2
360	Achieving Fault Tolerance on Capped Color Codes with Few Ancillas. PRX Quantum, 2022, 3, .	3.5	3
361	Gaussian soft control for controlled-Z gate on superconducting qubits with unilateral external driving. Laser Physics Letters, 2022, 19, 095206.	0.6	2
362	Semiconductor-ferromagnet-superconductor planar heterostructures for 1D topological superconductivity. Npj Quantum Materials, 2022, 7, .	1.8	12

#	ARTICLE	IF	CITATIONS
363	Topological superconductivity in a two-dimensional Weyl SSH model. <i>Physical Review B</i> , 2022, 106, .	1.1	4
364	Entangling Transmons with Low-Frequency Protected Superconducting Qubits. <i>PRX Quantum</i> , 2022, 3, .	3.5	8
365	Some questions concerning Majorana fermions in 2D ($\text{ext}\{p\}+\text{ext}\{ip\}$) Fermi superfluids. , 2022, 1, .		2
366	Coupled superconducting spin qubits with spin-orbit interaction. <i>Physical Review B</i> , 2022, 106, .	1.1	8
367	Single-shot quantum error correction with the three-dimensional subsystem toric code. <i>Nature Communications</i> , 2022, 13, .	5.8	7
368	Selective Area Growth of PbTe Nanowire Networks on InP. <i>Advanced Functional Materials</i> , 2022, 32, .	7.8	10
369	Thermal transport of helical Majorana edge modes in a superconducting antiferromagnetic quantum spin Hall insulator. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2023, 146, 115555.	1.3	0
370	Anomalous universal conductance as a hallmark of non-locality in a Majorana-hosted superconducting island. <i>Nature Communications</i> , 2022, 13, .	5.8	0
371	Andreev reflection mediated by Majorana zero modes in T-shaped double quantum dots. <i>Frontiers in Physics</i> , 0, 10, .	1.0	0
372	Interference and parity blockade in transport through a Majorana box. <i>Physical Review B</i> , 2022, 106, .	1.1	3
373	First-principles study of topological surface states and pressure induced phase transitions in a novel noncentrosymmetric superconductor PbTiSe ₂ . <i>Computational Materials Science</i> , 2023, 218, 111982.	1.4	5
374	Quantum Computing with Majorana Kramers Pairs. <i>Physical Review Letters</i> , 2022, 129, .	2.9	7
375	Tunable Superconducting Coupling of Quantum Dots via Andreev Bound States in Semiconductor-Superconductor Nanowires. <i>Physical Review Letters</i> , 2022, 129, .	2.9	20
376	Multiterminal transport spectroscopy of subgap states in Coulomb-blockaded superconductors. <i>Physical Review B</i> , 2022, 106, .	1.1	5
377	Molecular beam epitaxy growth of quantum devices. <i>Chinese Physics B</i> , 2022, 31, 126804.	0.7	1
378	One-time memory from isolated Majorana islands. <i>New Journal of Physics</i> , 2022, 24, 123035.	1.2	0
379	Majorana nanowires for topological quantum computation. <i>Journal of Applied Physics</i> , 2022, 132, .	1.1	25
380	Selective Area Epitaxy of Quasi-1-Dimensional Topological Nanostructures and Networks. <i>Nanomaterials</i> , 2023, 13, 354.	1.9	5

#	ARTICLE	IF	CITATIONS
381	Field effect two-dimensional electron gases in modulation-doped InSb surface quantum wells. Applied Physics Letters, 2023, 122, 012103.	1.5	1
382	Performance of Planar Floquet Codes with Majorana-Based Qubits. PRX Quantum, 2023, 4, .	3.5	12
383	Variable and Orbital-Dependent Spin-Orbit Field Orientations in an InSb Double Quantum Dot Characterized via Dispersive Gate Sensing. Physical Review Applied, 2023, 19, .	1.5	7
384	Single-crystalline PbTe film growth through reorientation. Physical Review Materials, 2023, 7, .	0.9	3
385	Conductance spectroscopy of Majorana zero modes in superconductor-magnetic insulator nanowire hybrid systems. Communications Physics, 2023, 6, .	2.0	2
386	Detecting Majorana modes by readout of poisoning-induced parity flips. Physical Review B, 2023, 107, .	1.1	2
387	Gatemon Qubit Based on a Thin InAs-Al Hybrid Nanowire. Chinese Physics Letters, 2023, 40, 047302.	1.3	4
388	Control of Andreev Bound States Using Superconducting Phase Texture. Physical Review Letters, 2023, 130, .	2.9	8
389	Machine Learning Optimization of Majorana Hybrid Nanowires. Physical Review Letters, 2023, 130, .	2.9	3
390	Investigating the Individual Performances of Coupled Superconducting Transmon Qubits. Condensed Matter, 2023, 8, 29.	0.8	2
391	Optimizing the transport of Majorana zero modes in one-dimensional topological superconductors. Physical Review B, 2023, 107, .	1.1	2
392	Scanning Intrinsic Superconductivity and the Spin Hall Effect in Niobium Borides. Crystal Growth and Design, 2023, 23, 3562-3571.	1.4	2
393	Recent progress on Majorana in semiconductor-superconductor heterostructures—engineering and detection. Science China: Physics, Mechanics and Astronomy, 2023, 66, .	2.0	11
394	Recent progress on non-Abelian anyons: from Majorana zero modes to topological Dirac fermionic modes. Science China: Physics, Mechanics and Astronomy, 2023, 66, .	2.0	1
395	Roadmap of the iron-based superconductor Majorana platform. Science China: Physics, Mechanics and Astronomy, 2023, 66, .	2.0	2
396	Quantum information processing with superconducting circuits: A perspective. , 2024, , 246-267.		0
397	Dielectrics for Two-Dimensional Transition-Metal Dichalcogenide Applications. ACS Nano, 2023, 17, 9870-9905.	7.3	8
404	Hunting for Majoranas. Science, 2023, 380, .	6.0	10

#	ARTICLE	IF	CITATIONS
406	Non-Abelian anyons and non-Abelian vortices in topological superconductors. , 2024, , 755-794.		2