

Amir Yacoby

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5142246/publications.pdf>

Version: 2024-02-01

88
papers

8,392
citations

41344

49
h-index

51608

86
g-index

90
all docs

90
docs citations

90
times ranked

7731
citing authors

#	ARTICLE	IF	CITATIONS
1	Superconductivity in a quintuple-layer square-planar nickelate. <i>Nature Materials</i> , 2022, 21, 160-164.	27.5	117
2	Spectroscopic signatures of time-reversal symmetry breaking superconductivity. <i>Communications Physics</i> , 2022, 5, .	5.3	13
3	Thermodynamics of free and bound magnons in graphene. <i>Nature Physics</i> , 2022, 18, 37-41.	16.7	10
4	The Magnetic Genome of Two-Dimensional van der Waals Materials. <i>ACS Nano</i> , 2022, 16, 6960-7079.	14.6	149
5	Andreev Reflection in the Fractional Quantum Hall State. <i>Physical Review X</i> , 2022, 12, .	8.9	22
6	High-energy quasiparticle injection into mesoscopic superconductors. <i>Nature Nanotechnology</i> , 2021, 16, 404-408.	31.5	37
7	Nuclear spin assisted magnetic field angle sensing. <i>Npj Quantum Information</i> , 2021, 7, .	6.7	11
8	Aharonovâ€™Bohm effect in graphene-based Fabryâ€™Pérot quantum Hall interferometers. <i>Nature Nanotechnology</i> , 2021, 16, 563-569.	31.5	48
9	A magnon scattering platform. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	26
10	Phase-induced topological superconductivity in a planar heterostructure. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	13
11	Unconventional sequence of correlated Chern insulators in magic-angle twisted bilayer graphene. <i>Nature Physics</i> , 2021, 17, 1210-1215.	16.7	78
12	Imaging phonon-mediated hydrodynamic flow in WTe ₂ . <i>Nature Physics</i> , 2021, 17, 1216-1220.	16.7	72
13	The development of microfabricated solenoids with magnetic cores for micromagnetic neural stimulation. <i>Microsystems and Nanoengineering</i> , 2021, 7, 91.	7.0	12
14	Fractional Chern insulators in magic-angle twisted bilayer graphene. <i>Nature</i> , 2021, 600, 439-443.	27.8	158
15	Imaging viscous flow of the Dirac fluid in graphene. <i>Nature</i> , 2020, 583, 537-541.	27.8	213
16	Magnetic Field Fingerprinting of Integrated-Circuit Activity with a Quantum Diamond Microscope. <i>Physical Review Applied</i> , 2020, 14, .	3.8	37
17	Vector Electrometry in a Wide-Gap-Semiconductor Device Using a Spin-Ensemble Quantum Sensor. <i>Physical Review Applied</i> , 2020, 14, .	3.8	17
18	A cantilever torque magnetometry method for the measurement of Hall conductivity of highly resistive samples. <i>Review of Scientific Instruments</i> , 2020, 91, 045001.	1.3	7

#	ARTICLE	IF	CITATIONS
19	Nanoscale Detection of Magnon Excitations with Variable Wavevectors Through a Quantum Spin Sensor. Nano Letters, 2020, 20, 3284-3290.	9.1	50
20	Data-driven studies of magnetic two-dimensional materials. Scientific Reports, 2020, 10, 15795.	3.3	39
21	Microstructure Effect on LaPtBi Superconductivity. Microscopy and Microanalysis, 2019, 25, 948-949.	0.4	0
22	Tuning topological superconductivity in phase-controlled Josephson junctions with Rashba and Dresselhaus spin-orbit coupling. Physical Review B, 2019, 99, .	3.2	31
23	Topological superconductivity in a phase-controlled Josephson junction. Nature, 2019, 569, 93-98.	27.8	225
24	Proposal for the detection of magnetic monopoles in spin ice via nanoscale magnetometry. Physical Review B, 2018, 97, .	3.2	19
25	Crystallographic Orientation Dependent Reactive Ion Etching in Single Crystal Diamond. Advanced Materials, 2018, 30, 1705501.	21.0	41
26	Probing condensed matter physics with magnetometry based on nitrogen-vacancy centres in diamond. Nature Reviews Materials, 2018, 3, .	48.7	376
27	Tuning Methods for Semiconductor Spin Qubits. Physical Review Applied, 2018, 10, .	3.8	33
28	Electrical generation and detection of spin waves in a quantum Hall ferromagnet. Science, 2018, 362, 229-233.	12.6	43
29	Readout of singlet-triplet qubits at large magnetic field gradients. Physical Review B, 2018, 98, .	3.2	25
30	Inducing superconducting correlation in quantum Hall edge states. Nature Physics, 2017, 13, 693-698.	16.7	132
31	Scanning diamond NV center probes compatible with conventional AFM technology. Applied Physics Letters, 2017, 111, .	3.3	48
32	Observation of Electron Coherence and Fabry-Pérot Standing Waves at a Graphene Edge. Nano Letters, 2017, 17, 7380-7386.	9.1	26
33	Mach-Zehnder interferometry using spin- and valley-polarized quantum Hall edge states in graphene. Science Advances, 2017, 3, e1700600.	10.3	64
34	Electron spin-flip correlations due to nuclear dynamics in driven GaAs double dots. Physical Review B, 2017, 95, .	3.2	5
35	High-fidelity entangling gate for double-quantum-dot spin qubits. Npj Quantum Information, 2017, 3, .	6.7	174
36	Control and local measurement of the spin chemical potential in a magnetic insulator. Science, 2017, 357, 195-198.	12.6	192

#	ARTICLE	IF	CITATIONS
37	Topological Superconductivity in a Planar Josephson Junction. Physical Review X, 2017, 7, .	8.9	149
38	Controlled finite momentum pairing and spatially varying order parameter in proximitized HgTe quantum wells. Nature Physics, 2017, 13, 87-93.	16.7	70
39	NMR technique for determining the depth of shallow nitrogen-vacancy centers in diamond. Physical Review B, 2016, 93, .	3.2	107
40	Spin Superfluidity in the $\nu = 1/2$ Quantum Hall State of Graphene. Physical Review Letters, 2016, 116, 216801.	7.8	38
41	Decoherence imaging of spin ensembles using a scanning single-electron spin in diamond. Scientific Reports, 2015, 5, 8119.	3.3	36
42	Nanoscale NMR spectroscopy and imaging of multiple nuclear species. Nature Nanotechnology, 2015, 10, 129-134.	31.5	215
43	Detecting Majorana modes in one-dimensional wires by charge sensing. Physical Review B, 2015, 91, .	3.2	62
44	Single-cell magnetic imaging using a quantum diamond microscope. Nature Methods, 2015, 12, 736-738.	19.0	161
45	High-efficiency resonant amplification of weak magnetic fields for single spin magnetometry at room temperature. Nature Nanotechnology, 2015, 10, 541-546.	31.5	18
46	Nanometre-scale probing of spin waves using single electron spins. Nature Communications, 2015, 6, 7886.	12.8	136
47	Quenching of dynamic nuclear polarization by spin-orbit coupling in GaAs quantum dots. Nature Communications, 2015, 6, 7682.	12.8	59
48	Kramers pairs of Majorana fermions and parafermions in fractional topological insulators. Physical Review B, 2014, 90, .	3.2	111
49	Revealing Topological Superconductivity in Extended Quantum Spin Hall Josephson Junctions. Physical Review Letters, 2014, 113, 197001.	7.8	50
50	Induced superconductivity in the quantum spin Hall edge. Nature Physics, 2014, 10, 638-643.	16.7	292
51	Field-effect-induced two-dimensional electron gas utilizing modulation-doped ohmic contacts. Solid State Communications, 2014, 197, 20-24.	1.9	7
52	Superfluid spin transport through antiferromagnetic insulators. Physical Review B, 2014, 90, .	3.2	155
53	Fractional Quantum Hall Phase Transitions and Four-Flux States in Graphene. Physical Review Letters, 2013, 111, 076802.	7.8	90
54	Fractional and integer quantum Hall effects in the zeroth Landau level in graphene. Physical Review B, 2013, 88, .	3.2	58

#	ARTICLE	IF	CITATIONS
55	Wide-Field Magnetic Imaging using Nitrogen-Vacancy Color Centers in Diamond. Biophysical Journal, 2013, 104, 193a.	0.5	1
56	Nanoscale magnetometry with NV centers in diamond. MRS Bulletin, 2013, 38, 155-161.	3.5	153
57	Local spin susceptibilities of low-dimensional electron systems. Physical Review B, 2013, 88, .	3.2	31
58	Local compressibility measurement of the $\nu = 1/2$ Hall state in a bilayer electron system. Physical Review B, 2013, 87, .	3.2	13
59	Local thermometry of neutral modes on the quantum Hall edge. Nature Physics, 2012, 8, 676-681.	16.7	113
60	Integrated Diamond Networks for Quantum Nanophotonics. Nano Letters, 2012, 12, 1578-1582.	9.1	183
61	Coherent, Mechanical Control of a Single Electronic Spin. Nano Letters, 2012, 12, 3920-3924.	9.1	81
62	Unconventional Sequence of Fractional Quantum Hall States in Suspended Graphene. Science, 2012, 337, 1196-1199.	12.6	155
63	Long-Distance Spin-Spin Coupling via Floating Gates. Physical Review X, 2012, 2, .	8.9	74
64	Tri and tri again. Nature Physics, 2011, 7, 925-926.	16.7	68
65	Enhanced single-photon emission from a diamond-silver aperture. Nature Photonics, 2011, 5, 738-743.	31.4	171
66	Dephasing time of GaAs electron-spin qubits coupled to a nuclear bath exceeding 200 μ s. Nature Physics, 2011, 7, 109-113.	16.7	501
67	Local charge of the $\nu = 5/2$ fractional quantum Hall state. Nature, 2011, 469, 185-188.	27.8	89
68	Tunneling spectroscopy of disordered two-dimensional electron gas in the quantum Hall regime. Physical Review B, 2011, 84, .	3.2	0
69	Studies on electric triggering of the metal-insulator transition in VO ₂ thin films between 77 K and 300 K. Journal of Applied Physics, 2011, 110, .	2.5	62
70	Self-Aligned Nanoscale SQUID on a Tip. Nano Letters, 2010, 10, 1046-1049.	9.1	141
71	Electron liquids and solids in one dimension. Nature, 2010, 464, 209-216.	27.8	204
72	Graphene rests easy. Nature Nanotechnology, 2010, 5, 699-700.	31.5	46

#	ARTICLE	IF	CITATIONS
73	Interacting electrons in one dimension beyond the Luttinger-liquid limit. Nature Physics, 2010, 6, 489-493.	16.7	86
74	Enhancing the Coherence of a Spin Qubit by Operating it as a Feedback Loop That Controls its Nuclear Spin Bath. Physical Review Letters, 2010, 105, 216803.	7.8	225
75	Barometrically and Electrostatically Induced Strain in Suspended Graphene. , 2010, , .		0
76	Broken-symmetry states and divergent resistance in suspended bilayer graphene. Nature Physics, 2009, 5, 889-893.	16.7	291
77	Universal quantum control of two-electron spin quantum bits using dynamic nuclear polarization. Nature Physics, 2009, 5, 903-908.	16.7	350
78	Charge fractionalization in nonchiral Luttinger systems. Annals of Physics, 2008, 323, 3037-3058.	2.8	42
79	Charge fractionalization in quantum wires. Nature Physics, 2008, 4, 116-119.	16.7	157
80	Microscopic manifestation of the spin phase transition at filling factor $2/3$. Nature Physics, 2007, 3, 392-396.	16.7	29
81	Domain Patterns in the Microwave-Induced Zero-Resistance State. Journal of Statistical Physics, 2006, 125, 1093-1107.	1.2	14
82	Measurement of the conductance of single conjugated molecules. Nature, 2005, 436, 677-680.	27.8	379
83	Steady States of a Microwave-Irradiated Quantum-Hall Gas. Physical Review Letters, 2005, 94, 196801.	7.8	81
84	Localization of Fractionally Charged Quasi-Particles. Science, 2004, 305, 980-983.	12.6	120
85	Many-body dispersions in interacting ballistic quantum wires. Solid State Communications, 2004, 131, 657-663.	1.9	7
86	Nanoparticles and nanogaps: controlled positioning and fabrication. Physica E: Low-Dimensional Systems and Nanostructures, 2003, 17, 498-502.	2.7	20
87	Finite-Size Effects in Tunneling between Parallel Quantum Wires. Physical Review Letters, 2002, 89, 136805.	7.8	54
88	Fabrication of nanoscale gaps in integrated circuits. Applied Physics Letters, 2002, 81, 730-732.	3.3	65