

John J L Morton

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/2821603/john-j-l-morton-publications-by-year.pdf>

Version: 2024-04-26

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

71
papers

4,927
citations

30
h-index

70
g-index

75
ext. papers

5,818
ext. citations

13.6
avg, IF

5.28
L-index

#	Paper	IF	Citations
71	Spin Readout of a CMOS Quantum Dot by Gate Reflectometry and Spin-Dependent Tunneling. <i>PRX Quantum</i> , 2021 , 2,	6.1	8
70	Dispersive readout of reconfigurable ambipolar quantum dots in a silicon-on-insulator nanowire. <i>Applied Physics Letters</i> , 2021 , 118, 164002	3.4	1
69	A sensitivity leap for X-band EPR using a probehead with a cryogenic preamplifier. <i>Journal of Magnetic Resonance</i> , 2021 , 322, 106876	3	5
68	Using Deep Learning to Understand and Mitigate the Qubit Noise Environment. <i>PRX Quantum</i> , 2021 , 2,	6.1	7
67	Functional basis of electron transport within photosynthetic complex I. <i>Nature Communications</i> , 2021 , 12, 5387	17.4	2
66	Multimode Storage of Quantum Microwave Fields in Electron Spins over 100µs. <i>Physical Review Letters</i> , 2020 , 125, 210505	7.4	5
65	Electron spin resonance spectroscopy with femtoliter detection volume. <i>Applied Physics Letters</i> , 2020 , 116, 184002	3.4	10
64	Fast Gate-Based Readout of Silicon Quantum Dots Using Josephson Parametric Amplification. <i>Physical Review Letters</i> , 2020 , 124, 067701	7.4	18
63	Hyperfine spectroscopy in a quantum-limited spectrometer. <i>Magnetic Resonance</i> , 2020 , 1, 315-330	2.9	2
62	Pulsed electron spin resonance spectroscopy in the Purcell regime. <i>Journal of Magnetic Resonance</i> , 2020 , 310, 106662	3	9
61	Self-Stimulated Pulse Echo Trains from Inhomogeneously Broadened Spin Ensembles. <i>Physical Review Letters</i> , 2020 , 125, 137702	7.4	5
60	Spin-enhanced nanodiamond biosensing for ultrasensitive diagnostics. <i>Nature</i> , 2020 , 587, 588-593	50.4	82
59	First-principles calculations of hyperfine interaction, binding energy, and quadrupole coupling for shallow donors in silicon. <i>Npj Computational Materials</i> , 2020 , 6,	10.9	9
58	Remote Capacitive Sensing in Two-Dimensional Quantum-Dot Arrays. <i>Nano Letters</i> , 2020 , 20, 7123-7128	11.5	5
57	Quantum registers hit the right wavelength. <i>Nature Materials</i> , 2020 , 19, 1259-1260	27	
56	Radiative cooling of a spin ensemble. <i>Nature Physics</i> , 2020 , 16, 751-755	16.2	8
55	A CMOS dynamic random access architecture for radio-frequency readout of quantum devices. <i>Nature Electronics</i> , 2019 , 2, 236-242	28.4	23

54	High-Cooperativity Coupling of a Rare-Earth Spin Ensemble to a Superconducting Resonator Using Yttrium Orthosilicate as a Substrate. <i>Physical Review Applied</i> , 2019 , 11,	4.3	8
53	Electron Spin Resonance of P Donors in Isotopically Purified Si Detected by Contactless Photoconductivity. <i>Physical Review Applied</i> , 2019 , 11,	4.3	1
52	Tuning high-Q superconducting resonators by magnetic field reorientation. <i>AIP Advances</i> , 2019 , 9, 125225	5	4
51	Storing quantum information in spins and high-sensitivity ESR. <i>Journal of Magnetic Resonance</i> , 2018 , 287, 128-139	3	22
50	Coherent spin dynamics of ytterbium ions in yttrium orthosilicate. <i>Physical Review B</i> , 2018 , 97,	3.3	15
49	Linear Hyperfine Tuning of Donor Spins in Silicon Using Hydrostatic Strain. <i>Physical Review Letters</i> , 2018 , 120, 167701	7.4	25
48	Radio-Frequency Capacitive Gate-Based Sensing. <i>Physical Review Applied</i> , 2018 , 10,	4.3	34
47	Primary thermometry of a single reservoir using cyclic electron tunneling to a quantum dot. <i>Communications Physics</i> , 2018 , 1,	5.4	9
46	Inductive-detection electron-spin resonance spectroscopy with 65 spins/ Hz sensitivity. <i>Applied Physics Letters</i> , 2017 , 111, 202604	3.4	44
45	Reaching the quantum limit of sensitivity in electron spin resonance. <i>Nature Nanotechnology</i> , 2016 , 11, 253-7	28.7	106
44	Controlling spin relaxation with a cavity. <i>Nature</i> , 2016 , 531, 74-7	50.4	95
43	²⁹ Si nuclear spins as a resource for donor spin qubits in silicon. <i>New Journal of Physics</i> , 2016 , 18, 023021	2.9	16
42	Pulse Techniques for Quantum Information Processing 2016 , 1515-1528		10
41	Coherent storage of microwave excitations in rare-earth nuclear spins. <i>Physical Review Letters</i> , 2015 , 114, 170503	7.4	55
40	Hybrid optical-electrical detection of donor electron spins with bound excitons in silicon. <i>Nature Materials</i> , 2015 , 14, 490-4	27	25
39	Synthesis and investigation of donor-porphyrin-acceptor triads with long-lived photo-induced charge-separate states. <i>Chemical Science</i> , 2015 , 6, 6468-6481	9.4	20
38	Classical nature of nuclear spin noise near clock transitions of Bi donors in silicon. <i>Physical Review B</i> , 2015 , 92,	3.3	16
37	Spin relaxation and donor-acceptor recombination of Se ⁺ in 28-silicon. <i>Physical Review B</i> , 2015 , 92,	3.3	7

36	Quantum information: Spin memories in for the long haul. <i>Nature</i> , 2015 , 517, 153-4	50.4	7
35	Quantum computing: Three of diamonds. <i>Nature Nanotechnology</i> , 2014 , 9, 167-9	28.7	4
34	Quantum-bath-driven decoherence of mixed spin systems. <i>Physical Review B</i> , 2014 , 89,	3.3	26
33	Quantum information. A gem of a quantum teleporter. <i>Science</i> , 2014 , 345, 510-1	33.3	1
32	Conditional control of donor nuclear spins in silicon using stark shifts. <i>Physical Review Letters</i> , 2014 , 113, 157601	7.4	24
31	Uncovering many-body correlations in nanoscale nuclear spin baths by central spin decoherence. <i>Nature Communications</i> , 2014 , 5, 4822	17.4	24
30	Stark shift and field ionization of arsenic donors in 28Si-silicon-on-insulator structures. <i>Applied Physics Letters</i> , 2014 , 104, 193502	3.4	15
29	Hyperfine Stark effect of shallow donors in silicon. <i>Physical Review B</i> , 2014 , 90,	3.3	36
28	Fast, low-power manipulation of spin ensembles in superconducting microresonators. <i>Applied Physics Letters</i> , 2014 , 104, 222407	3.4	48
27	Host isotope mass effects on the hyperfine interaction of group-V donors in silicon. <i>Physical Review B</i> , 2014 , 90,	3.3	5
26	Atomic clock transitions in silicon-based spin qubits. <i>Nature Nanotechnology</i> , 2013 , 8, 561-4	28.7	154
25	Room-temperature quantum bit storage exceeding 39 minutes using ionized donors in silicon-28. <i>Science</i> , 2013 , 342, 830-3	33.3	267
24	High-fidelity readout and control of a nuclear spin qubit in silicon. <i>Nature</i> , 2013 , 496, 334-8	50.4	348
23	Probing the $\text{C}\uparrow\text{triplet}$ state coupling to nuclear spins inside and out. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2013 , 371, 20120475	3	12
22	Geometric phase gates with adiabatic control in electron spin resonance. <i>Physical Review A</i> , 2013 , 87,	2.6	34
21	A single-atom electron spin qubit in silicon. <i>Nature</i> , 2012 , 489, 541-5	50.4	538
20	Quantum information storage for over 180 s using donor spins in a 28Si "semiconductor vacuum". <i>Science</i> , 2012 , 336, 1280-3	33.3	217
19	Electrical activation and electron spin resonance measurements of implanted bismuth in isotopically enriched silicon-28. <i>Applied Physics Letters</i> , 2012 , 100, 172104	3.4	41

18	Decoherence mechanisms of ^{209}Bi donor electron spins in isotopically pure ^{28}Si . <i>Physical Review B</i> , 2012 , 86,	3.3	26
17	Electron spin coherence exceeding seconds in high-purity silicon. <i>Nature Materials</i> , 2011 , 11, 143-7	27	456
16	Electron spin ensemble strongly coupled to a three-dimensional microwave cavity. <i>Applied Physics Letters</i> , 2011 , 98, 251108	3.4	63
15	Sustained quantum coherence and entanglement in the avian compass. <i>Physical Review Letters</i> , 2011 , 106, 040503	7.4	204
14	Embracing the quantum limit in silicon computing. <i>Nature</i> , 2011 , 479, 345-53	50.4	202
13	Entanglement in a solid-state spin ensemble. <i>Nature</i> , 2011 , 470, 69-72	50.4	109
12	Coherent state transfer between an electron and nuclear spin in $(^{15}\text{N})\text{C}(60)$. <i>Physical Review Letters</i> , 2011 , 106, 110504	7.4	30
11	Storage of multiple coherent microwave excitations in an electron spin ensemble. <i>Physical Review Letters</i> , 2010 , 105, 140503	7.4	135
10	Electron spin coherence and electron nuclear double resonance of Bi donors in natural Si. <i>Physical Review Letters</i> , 2010 , 105, 067601	7.4	75
9	Electron spin coherence of phosphorus donors in silicon: Effect of environmental nuclei. <i>Physical Review B</i> , 2010 , 82,	3.3	69
8	High-cooperativity coupling of electron-spin ensembles to superconducting cavities. <i>Physical Review Letters</i> , 2010 , 105, 140501	7.4	334
7	Quantum computing with an electron spin ensemble. <i>Physical Review Letters</i> , 2009 , 103, 070502	7.4	181
6	Solid-state quantum memory using the ^{31}P nuclear spin. <i>Nature</i> , 2008 , 455, 1085-1088	50.4	295
5	Nuclear relaxation effects in Davies ENDOR variants. <i>Journal of Magnetic Resonance</i> , 2008 , 191, 315-21	3	11
4	Electron spin relaxation of N@C60 in CS_2 in CS_2 . <i>Journal of Chemical Physics</i> , 2006 , 124, 14508	3.9	88
3	Coherence of spin qubits in silicon. <i>Journal of Physics Condensed Matter</i> , 2006 , 18, S783-S794	1.8	97
2	Davies electron-nuclear double resonance revisited: enhanced sensitivity and nuclear spin relaxation. <i>Journal of Chemical Physics</i> , 2006 , 124, 234508	3.9	32
1	A Silicon Surface Code Architecture Resilient Against Leakage Errors. <i>Quantum - the Open Journal for Quantum Science</i> , 3 , 212		6

