

Liam Hall

List of Publications by Year in descending order

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37
papers

2,571
citations

236912

25
h-index

361001

35
g-index

38
all docs

38
docs citations

38
times ranked

2300
citing authors

#	ARTICLE	IF	CITATIONS
1	Quantum measurement and orientation tracking of fluorescent nanodiamonds inside living cells. Nature Nanotechnology, 2011, 6, 358-363.	31.5	552
2	Magnetic spin imaging under ambient conditions with sub-cellular resolution. Nature Communications, 2013, 4, 1607.	12.8	248
3	Dynamical decoupling of a single-electron spin at room temperature. Physical Review B, 2011, 83, .	3.2	210
4	High spatial and temporal resolution wide-field imaging of neuron activity using quantum NV-diamond. Scientific Reports, 2012, 2, 401.	3.3	141
5	Sensing of Fluctuating Nanoscale Magnetic Fields Using Nitrogen-Vacancy Centers in Diamond. Physical Review Letters, 2009, 103, 220802.	7.8	127
6	Detection of atomic spin labels in a lipid bilayer using a single-spin nanodiamond probe. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10894-10898.	7.1	113
7	Non-Neurotoxic Nanodiamond Probes for Intraneuronal Temperature Mapping. ACS Nano, 2017, 11, 12077-12086.	14.6	113
8	Monitoring ion-channel function in real time through quantum decoherence. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18777-18782.	7.1	112
9	Detection of nanoscale electron spin resonance spectra demonstrated using nitrogen-vacancy centre probes in diamond. Nature Communications, 2016, 7, 10211.	12.8	89
10	Spin properties of dense near-surface ensembles of nitrogen-vacancy centers in diamond. Physical Review B, 2018, 97, .	3.2	76
11	Magneto-optical imaging of thin magnetic films using spins in diamond. Scientific Reports, 2016, 6, 22797.	3.3	75
12	Electron paramagnetic resonance microscopy using spins in diamond under ambient conditions. Nature Communications, 2017, 8, 458.	12.8	65
13	Ambient nanoscale sensing with single spins using quantum decoherence. New Journal of Physics, 2013, 15, 073042.	2.9	61
14	Ultrasensitive diamond magnetometry using optimal dynamic decoupling. Physical Review B, 2010, 82, .	3.2	58
15	Quantum probe hyperpolarisation of molecular nuclear spins. Nature Communications, 2018, 9, 1246.	12.8	53
16	Tuning a Spin Bath through the Quantum-Classical Transition. Physical Review Letters, 2012, 108, 200402.	7.8	52
17	Wide-band nanoscale magnetic resonance spectroscopy using quantum relaxation of a single spin in diamond. Physical Review B, 2016, 94, .	3.2	44
18	In vivo imaging and tracking of individual nanodiamonds in drosophila melanogaster embryos. Biomedical Optics Express, 2014, 5, 1250.	2.9	43

#	ARTICLE	IF	CITATIONS
19	Analytic solutions to the central-spin problem for nitrogen-vacancy centers in diamond. <i>Physical Review B</i> , 2014, 90, .	3.2	42
20	Anticrossing Spin Dynamics of Diamond Nitrogen-Vacancy Centers and All-Optical Low-Frequency Magnetometry. <i>Physical Review Applied</i> , 2016, 6, .	3.8	28
21	Quantum Magnetic Imaging of Iron Biomineralization in Teeth of the Chiton <i><i>Acanthopleura hirtosa</i></i> . <i>Small Methods</i> , 2020, 4, 1900754.	8.6	27
22	Nanoscale magnetometry through quantum control of nitrogenâ€“vacancy centres in rotationally diffusing nanodiamonds. <i>New Journal of Physics</i> , 2013, 15, 013041.	2.9	26
23	Towards single-molecule NMR detection and spectroscopy using single spins in diamond. <i>Physical Review B</i> , 2014, 89, .	3.2	26
24	A quantum spin-probe molecular microscope. <i>Nature Communications</i> , 2016, 7, 12667.	12.8	26
25	Microwave-free nuclear magnetic resonance at molecular scales. <i>Nature Communications</i> , 2017, 8, 15950.	12.8	26
26	Nanoscale sensing and imaging in biology using the nitrogen-vacancy center in diamond. <i>MRS Bulletin</i> , 2013, 38, 162-167.	3.5	22
27	Prospects for nuclear spin hyperpolarization of molecular samples using nitrogen-vacancy centers in diamond. <i>Physical Review B</i> , 2021, 103, .	3.2	19
28	Proximity-Induced Artefacts in Magnetic Imaging with Nitrogen-Vacancy Ensembles in Diamond. <i>Sensors</i> , 2018, 18, 1290.	3.8	18
29	Rapid, Highâ€“Resolution Magnetic Microscopy of Single Magnetic Microbeads. <i>Small</i> , 2019, 15, 1805159.	10.0	16
30	Quantum magnetic imaging of iron organelles within the pigeon cochlea. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	14
31	Nonvanishing effect of detuning errors in dynamical-decoupling-based quantum sensing experiments. <i>Physical Review A</i> , 2019, 99, .	2.5	13
32	Acoustomicrofluidic Concentration and Signal Enhancement of Fluorescent Nanodiamond Sensors. <i>Analytical Chemistry</i> , 2021, 93, 16133-16141.	6.5	12
33	High precision single qubit tuning via thermo-magnetic field control. <i>Applied Physics Letters</i> , 2018, 112, .	3.3	8
34	Quantum Bath Control with Nuclear Spin State Selectivity via Pulse-Adjusted Dynamical Decoupling. <i>Physical Review Letters</i> , 2019, 123, 210401.	7.8	8
35	Re-examining ferritin-bound iron: current and developing clinical tools. <i>Clinical Chemistry and Laboratory Medicine</i> , 2021, 59, 459-471.	2.3	8
36	Quantum measurement in living cells: Fluorescent diamond nanocrystals for biology. , 2011, , .		0

#	ARTICLE	IF	CITATIONS
37	Magnetic Materials: Rapid, High-Resolution Magnetic Microscopy of Single Magnetic Microbeads (Small) Tj ETQq1 1.0.784314 rgBT	10.0	0