Friedemann Reinhard

List of Publications by Year
in descending order

32	5,287	304743	454955
papers	citations	22 h-index	30 g-index

32	32	32	5134
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Dispersive readout of room-temperature ensemble spin sensors. Quantum Science and Technology, 2021, 6, 03LT01.	5.8	9
2	Decoherence mitigation by real-time noise acquisition. Journal of Applied Physics, 2021, 130, .	2.5	1
3	Robust all-optical single-shot readout of nitrogen-vacancy centers in diamond. Nature Communications, 2021, 12, 532.	12.8	40
4	Photoionization of negatively charged NV centers in diamond: Theory and ab initio calculations. Physical Review B, 2021, 104, .	3.2	25
5	Detection of cellular micromotion by advanced signal processing. Scientific Reports, 2020, 10, 20078.	3.3	0
6	Can surface-transfer doping and UV irradiation during annealing improve shallow implanted nitrogen-vacancy centers in diamond?. Applied Physics Letters, 2020, 117, 054003.	3.3	2
7	A Planar Scanning Probe Microscope. ACS Photonics, 2019, 6, 327-331.	6.6	8
8	Effect of ultraprecision polishing techniques on coherence times of shallow nitrogen-vacancy centers in diamond. Diamond and Related Materials, 2018, 85, 18-22.	3.9	6
9	Diamond defects detect what lies beneath. Nature Electronics, 2018, 1, 494-495.	26.0	0
10	Efficient Electrical Spin Readout of<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:msup><mml:mi>NV</mml:mi><mml:mo>â^'</mml:mo></mml:msup></mml:math>Centers in Diamond. Physical Review Letters, 2017, 118, 037601.	7.8	58
11	Quantum sensing. Reviews of Modern Physics, 2017, 89, .	45.6	1,911
12	Holography of Wi-fi Radiation. Physical Review Letters, 2017, 118, 183901.	7.8	47
13	Quantum sensing of weak radio-frequency signals by pulsed Mollow absorption spectroscopy. Nature Communications, 2017, 8, 964.	12.8	44
14	Nanoscale nuclear magnetic imaging with chemical contrast. Nature Nanotechnology, 2015, 10, 125-128.	31.5	105
15	Single-protein spin resonance spectroscopy under ambient conditions. Science, 2015, 347, 1135-1138.	12.6	283
16	Relaxometry and Dephasing Imaging of Superparamagnetic Magnetite Nanoparticles Using a Single Qubit. Nano Letters, 2015, 15, 4942-4947.	9.1	47
17	Probing molecular dynamics at the nanoscale via an individual paramagnetic centre. Nature Communications, 2015, 6, 8527.	12.8	81
18	Nanoengineered Diamond Waveguide as a Robust Bright Platform for Nanomagnetometry Using Shallow Nitrogen Vacancy Centers. Nano Letters, 2015, 15, 165-169.	9.1	137

#	Article	IF	Citations
19	Tracking Temperature-Dependent Relaxation Times of Ferritin Nanomagnets with a Wideband Quantum Spectrometer. Physical Review Letters, 2014, 113, 217204.	7.8	50
20	Addressing Single Nitrogen-Vacancy Centers in Diamond with Transparent in-Plane Gate Structures. Nano Letters, 2014, 14, 2359-2364.	9.1	45
21	Nuclear Magnetic Resonance Spectroscopy on a (5-Nanometer) ³ Sample Volume. Science, 2013, 339, 561-563.	12.6	674
22	Single Defect Center Scanning Near-Field Optical Microscopy on Graphene. Nano Letters, 2013, 13, 3152-3156.	9.1	83
23	Quantum logic readout and cooling of a single dark electron spin. Physical Review B, 2013, 87, .	3.2	23
24	High-Dynamic-Range Imaging of Nanoscale Magnetic Fields Using Optimal Control of a Single Qubit. Physical Review Letters, 2013, 111, 170801.	7.8	36
25	Tuning a Spin Bath through the Quantum-Classical Transition. Physical Review Letters, 2012, 108, 200402.	7.8	52
26	Enhancing the spin properties of shallow implanted nitrogen vacancy centers in diamond by epitaxial overgrowth. Applied Physics Letters, 2012, 101, .	3.3	52
27	Chemical control of the charge state of nitrogen-vacancy centers in diamond. Physical Review B, 2011, 83, .	3.2	272
28	Electric-field sensing using single diamond spins. Nature Physics, 2011, 7, 459-463.	16.7	942
29	Highly Efficient FRET from a Single Nitrogen-Vacancy Center in Nanodiamonds to a Single Organic Molecule. ACS Nano, 2011, 5, 7893-7898.	14.6	112
30	Compact frequency standard using atoms trapped on a chip. Advances in Space Research, 2011, 47, 247-252.	2.6	11
31	Increasing the coherence time of single electron spins in diamond by high temperature annealing. Applied Physics Letters, 2010, 97, .	3.3	115
32	g_permute: Permutation-reduced phase space density compaction. Computer Physics Communications, 2009, 180, 455-458.	7.5	16