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	Quantum sensing. Reviews of Modern Physics, 2017, 89, .	45.6	1,911
2	Electric-field sensing using single diamond spins. Nature Physics, 2011, 7, 459-463.	16.7	942
3	Nuclear Magnetic Resonance Spectroscopy on a (5-Nanometer) ³ Sample Volume. Science, 2013, 339, 561-563.	12.6	674
4	Single-protein spin resonance spectroscopy under ambient conditions. Science, 2015, 347, 1135-1138.	12.6	283
5	Chemical control of the charge state of nitrogen-vacancy centers in diamond. Physical Review B, 2011, 83, .	3.2	272
6	Nanoengineered Diamond Waveguide as a Robust Bright Platform for Nanomagnetometry Using Shallow Nitrogen Vacancy Centers. Nano Letters, 2015, 15, 165-169.	9.1	137
7	Increasing the coherence time of single electron spins in diamond by high temperature annealing. Applied Physics Letters, 2010, 97, .	3.3	115
8	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
9	Nanoscale nuclear magnetic imaging with chemical contrast. Nature Nanotechnology, 2015, 10, 125-128.	31.5	105
10	Single Defect Center Scanning Near-Field Optical Microscopy on Graphene. Nano Letters, 2013, 13, 3152-3156.	9.1	83
11	Probing molecular dynamics at the nanoscale via an individual paramagnetic centre. Nature Communications, 2015, 6, 8527.	12.8	81
12	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
13	Tuning a Spin Bath through the Quantum-Classical Transition. Physical Review Letters, 2012, 108, 200402.	7.8	52
14	Enhancing the spin properties of shallow implanted nitrogen vacancy centers in diamond by epitaxial overgrowth. Applied Physics Letters, 2012, 101, .	3.3	52
15	Tracking Temperature-Dependent Relaxation Times of Ferritin Nanomagnets with a Wideband Quantum Spectrometer. Physical Review Letters, 2014, 113, 217204.	7.8	50
16	Relaxometry and Dephasing Imaging of Superparamagnetic Magnetite Nanoparticles Using a Single Qubit. Nano Letters, 2015, 15, 4942-4947.	9.1	47
17	Holography of Wi-fi Radiation. Physical Review Letters, 2017, 118, 183901.	7.8	47
18	Addressing Single Nitrogen-Vacancy Centers in Diamond with Transparent in-Plane Gate Structures. Nano Letters, 2014, 14, 2359-2364.	9.1	45

#	Article	IF	Citations
19	Quantum sensing of weak radio-frequency signals by pulsed Mollow absorption spectroscopy. Nature Communications, 2017, 8, 964.	12.8	44
20	Robust all-optical single-shot readout of nitrogen-vacancy centers in diamond. Nature Communications, 2021, 12, 532.	12.8	40
21	High-Dynamic-Range Imaging of Nanoscale Magnetic Fields Using Optimal Control of a Single Qubit. Physical Review Letters, 2013, 111, 170801.	7.8	36
22	Photoionization of negatively charged NV centers in diamond: Theory and ab initio calculations. Physical Review B, 2021, 104, .	3.2	25
23	Quantum logic readout and cooling of a single dark electron spin. Physical Review B, 2013, 87, .	3.2	23
24	g_permute: Permutation-reduced phase space density compaction. Computer Physics Communications, 2009, 180, 455-458.	7.5	16
25	Compact frequency standard using atoms trapped on a chip. Advances in Space Research, 2011, 47, 247-252.	2.6	11
26	Dispersive readout of room-temperature ensemble spin sensors. Quantum Science and Technology, 2021, 6, 03LT01.	5.8	9
27	A Planar Scanning Probe Microscope. ACS Photonics, 2019, 6, 327-331.	6.6	8
28	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
29	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
30	Decoherence mitigation by real-time noise acquisition. Journal of Applied Physics, 2021, 130, .	2.5	1
31	Diamond defects detect what lies beneath. Nature Electronics, 2018, 1, 494-495.	26.0	0
32	Detection of cellular micromotion by advanced signal processing. Scientific Reports, 2020, 10, 20078.	3.3	0