Victor Acosta

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/7209182/publications.pdf Version: 2024-02-01



#	Article	IF	CITATIONS
1	Nanoscale solid-state nuclear quadrupole resonance spectroscopy using depth-optimized nitrogen-vacancy ensembles in diamond. Applied Physics Letters, 2022, 120, .	3.3	11
2	Proposal for the search for new spin interactions at the micrometer scale using diamond quantum sensors. Physical Review Research, 2022, 4, .	3.6	6
3	Demonstration of diamond nuclear spin gyroscope. Science Advances, 2021, 7, eabl3840.	10.3	22
4	Robust optical readout and characterization of nuclear spin transitions in nitrogen-vacancy ensembles in diamond. Physical Review Research, 2020, 2, .	3.6	14
5	Diamond magnetometer enhanced by ferrite flux concentrators. Physical Review Research, 2020, 2, .	3.6	78
6	Two-dimensional nuclear magnetic resonance spectroscopy with a microfluidic diamond quantum sensor. Science Advances, 2019, 5, eaaw7895.	10.3	78
7	Achromatic Varifocal Metalens for the Visible Spectrum. ACS Photonics, 2019, 6, 2432-2440.	6.6	55
8	Stimulated Emission Depletion Microscopy with Diamond Silicon Vacancy Centers. ACS Photonics, 2019, 6, 2577-2582.	6.6	16
9	Diamond Magnetic Microscopy of Malarial Hemozoin Nanocrystals. Physical Review Applied, 2019, 11, .	3.8	48
10	Color Centers in Diamond as Novel Probes of Superconductivity. Journal of Superconductivity and Novel Magnetism, 2019, 32, 85-95.	1.8	18
11	Infrared laser threshold magnetometry with a NV doped diamond intracavity etalon. Optics Express, 2019, 27, 1706.	3.4	22
12	Solution nuclear magnetic resonance spectroscopy on a nanostructured diamond chip. Nature Communications, 2017, 8, 188.	12.8	60
13	High density nitrogen-vacancy sensing surface created via He+ ion implantation of 12C diamond. Applied Physics Letters, 2016, 108, .	3.3	63
14	Microwave-free magnetometry with nitrogen-vacancy centers in diamond. Applied Physics Letters, 2016, 109, .	3.3	88
15	Optically detected magnetic resonances of nitrogen-vacancy ensembles in <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mmultiscripts><mml:mi mathvariant="normal">C<mml:mprescripts></mml:mprescripts><mml:none /><mml:mn>13</mml:mn></mml:none </mml:mi </mml:mmultiscripts>-enriched diamond. Physical Review B, 2016,</mml:math 	3.2	6
16	Quantum memories: emerging applications and recent advances. Journal of Modern Optics, 2016, 63, 2005-2028.	1.3	294
17	Temperature shifts of the resonances of the < mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"> < mml:msup> < mml:mi mathvariant="normal">NV < mml:mo> â° < / mml:mo> < / mml:msup> < / mml:math> center in diamond. Physical Review B 2014 90	3.2	127
18	Microwave saturation spectroscopy of nitrogen-vacancy ensembles in diamond. Physical Review B, 2014, 89, .	3.2	36

VICTOR ACOSTA

#	Article	IF	CITATIONS
19	Raman quantum memory based on an ensemble of nitrogen-vacancy centers coupled to a microcavity. Physical Review A, 2014, 89, .	2.5	24
20	Diamond magnetometry of superconducting thin films. Physical Review B, 2014, 89, .	3.2	33
21	Strength of weak measurements. Nature Physics, 2014, 10, 187-188.	16.7	2
22	Cavity-Enhanced Room-Temperature Magnetometry Using Absorption by Nitrogen-Vacancy Centers in Diamond. Physical Review Letters, 2014, 112, 160802.	7.8	112
23	Diamond nitrogen-vacancy centers created by scanning focused helium ion beam and annealing. Applied Physics Letters, 2013, 103, 081906.	3.3	45
24	NV-Diamond Magnetometer Using Electron Irradiation. Materials Research Society Symposia Proceedings, 2013, 1511, 1.	0.1	3
25	Nitrogen-vacancy centers: Physics and applications. MRS Bulletin, 2013, 38, 127-130.	3.5	98
26	High-Sensitivity Magnetometry Based on Quantum Beats in Diamond Nitrogen-Vacancy Centers. Physical Review Letters, 2013, 110, 130802.	7.8	119
27	Magnetometry with nitrogen-vacancy ensembles in diamond based on infrared absorption in a doubly resonant optical cavity. Physical Review B, 2013, 87, .	3.2	57
28	Electromagnetically Induced Transparency in a Diamond Spin Ensemble Enables All-Optical Electromagnetic Field Sensing. Physical Review Letters, 2013, 110, 213605.	7.8	98
29	Quantum photonic devices in single-crystal diamond. New Journal of Physics, 2013, 15, 025010.	2.9	67
30	Microring resonator-based diamond optothermal switch: a building block for a quantum computing network. , 2013, , .		2
31	Light narrowing of magnetic resonances in ensembles of nitrogen-vacancy centers in diamond. Physical Review B, 2013, 87, .	3.2	89
32	Optical magnetometry with nitrogen-vacancy centers in diamond. , 2013, , 142-166.		6
33	Diamond Nitrogen-Vacancy Center Creation with Helium-Ion Microscope. , 2013, , .		0
34	High-Resolution Photoluminescence Spectroscopy of Near-Surface Nitrogen-Vacancy Centers in Diamond. , 2012, , .		0
35	Dynamic Stabilization of the Optical Resonances of Single Nitrogen-Vacancy Centers in Diamond. Physical Review Letters, 2012, 108, 206401.	7.8	113
36	Towards integrated optical quantum networks in diamond. Proceedings of SPIE, 2012, , .	0.8	1

VICTOR ACOSTA

#	Article	IF	CITATIONS
37	Quantum Optics with Cavity-coupled Spin Qubits in Diamond. , 2012, , .		0
38	Temperature- and Magnetic-Field-Dependent Longitudinal Spin Relaxation in Nitrogen-Vacancy Ensembles in Diamond. Physical Review Letters, 2012, 108, 197601.	7.8	280
39	Room-temperature operation of a radiofrequency diamond magnetometer near the shot-noise limit. Journal of Applied Physics, 2012, 112, .	2.5	39
40	Electron spin resonance shift and linewidth broadening of nitrogen-vacancy centers in diamond as a function of electron irradiation dose. Applied Physics Letters, 2012, 101, 082410.	3.3	28
41	Recent progress in diamond photonics. , 2012, , .		0
42	Optical and Spin Coherence Properties of Nitrogen-Vacancy Centers Placed in a 100 nm Thick Isotopically Purified Diamond Layer. Nano Letters, 2012, 12, 2083-2087.	9.1	161
43	Coupling of Nitrogen-Vacancy Centers to Photonic Crystal Cavities in Monocrystalline Diamond. Physical Review Letters, 2012, 109, 033604.	7.8	344
44	Near‣urface Spectrally Stable Nitrogen Vacancy Centres Engineered in Single Crystal Diamond. Advanced Materials, 2012, 24, 3333-3338.	21.0	25
45	Broadband magnetometry by infrared-absorption detection of diamond NV centers and associated temperature dependence. Proceedings of SPIE, 2011, , .	0.8	10
46	Search for plant biomagnetism with a sensitive atomic magnetometer. Journal of Applied Physics, 2011, 109, .	2.5	18
47	Detection of the Meissner effect with a diamond magnetometer. New Journal of Physics, 2011, 13, 025017.	2.9	40
48	Rubidium dimers in paraffin-coated cells. New Journal of Physics, 2010, 12, 083054.	2.9	4
49	Temperature Dependence of the Nitrogen-Vacancy Magnetic Resonance in Diamond. Physical Review Letters, 2010, 104, 070801.	7.8	478
50	Optical properties of the nitrogen-vacancy singlet levels in diamond. Physical Review B, 2010, 82, .	3.2	160
51	Broadband magnetometry by infrared-absorption detection of nitrogen-vacancy ensembles in diamond. Applied Physics Letters, 2010, 97, 174104.	3.3	128
52	Amplitude-modulated Magneto-Optical Rotation in Paraffin-coated Cells and Buffer Gas Cells. , 2010, , .		0
53	Cancellation of nonlinear Zeeman shifts with light shifts. Physical Review A, 2009, 79, .	2.5	48
54	Diamonds with a high density of nitrogen-vacancy centers for magnetometry applications. Physical Review B, 2009, 80, .	3.2	411

VICTOR ACOSTA

#	Article	IF	CITATIONS
55	Spin-exchange-relaxation-free magnetometry with Cs vapor. Physical Review A, 2008, 77, .	2.5	258
56	Production and detection of atomic hexadecapole at Earth's magnetic field. Optics Express, 2008, 16, 11423.	3.4	19
57	Nonlinear Magneto-Optical Rotation for Sensitive Measurement of Magnetic Fields. , 2008, , .		0
58	Detection of radio-frequency magnetic fields using nonlinear magneto-optical rotation. Physical Review A, 2007, 75, .	2.5	48
59	Novel Magnetic-Sensing Modalities with Nitrogen-Vacancy Centers in Diamond. , 0, , .		1