Jean-Philippe Tetienne

List of Publications by Year
in descending order

74	11,323	185998 28	118652 62
papers	citations	h-index	g-index

77	77	77	9799
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Light Propagation with Phase Discontinuities: Generalized Laws of Reflection and Refraction. Science, 2011, 334, 333-337.	6.0	7,240
2	Magnetometry with nitrogen-vacancy defects in diamond. Reports on Progress in Physics, 2014, 77, 056503.	8.1	882
3	Flat Optics: Controlling Wavefronts With Optical Antenna Metasurfaces. IEEE Journal of Selected Topics in Quantum Electronics, 2013, 19, 4700423-4700423.	1.9	258
4	Magnetic-field-dependent photodynamics of single NV defects in diamond: an application to qualitative all-optical magnetic imaging. New Journal of Physics, 2012, 14, 103033.	1.2	242
5	Large Enhancement of Nonlinear Optical Phenomena by Plasmonic Nanocavity Gratings. Nano Letters, 2010, 10, 4880-4883.	4.5	207
6	Quantum imaging of current flow in graphene. Science Advances, 2017, 3, e1602429.	4.7	185
7	The nature of domain walls in ultrathin ferromagnets revealed by scanning nanomagnetometry. Nature Communications, 2015, 6, 6733.	5.8	183
8	Nanoscale magnetic field mapping with a single spin scanning probe magnetometer. Applied Physics Letters, 2012, 100, .	1.5	177
9	Nanoscale imaging and control of domain-wall hopping with a nitrogen-vacancy center microscope. Science, 2014, 344, 1366-1369.	6.0	158
10	Spin relaxometry of single nitrogen-vacancy defects in diamond nanocrystals for magnetic noise sensing. Physical Review B, 2013, 87, .	1.1	139
11	Stray-field imaging of magnetic vortices with a single diamond spin. Nature Communications, 2013, 4, 2279.	5.8	124
12	Perfect preferential orientation of nitrogen-vacancy defects in a synthetic diamond sample. Applied Physics Letters, 2014, 104, .	1.5	96
13	Scanning Nanospin Ensemble Microscope for Nanoscale Magnetic and Thermal Imaging. Nano Letters, 2016, 16, 326-333.	4.5	79
14	Spatial mapping of band bending in semiconductor devices using in situ quantum sensors. Nature Electronics, 2018, 1, 502-507.	13.1	77
15	Spin properties of dense near-surface ensembles of nitrogen-vacancy centers in diamond. Physical Review B, 2018, 97, .	1.1	76
16	Magneto-optical imaging of thin magnetic films using spins in diamond. Scientific Reports, 2016, 6, 22797.	1.6	75
17	Evidence for Primal sp² Defects at the Diamond Surface: Candidates for Electron Trapping and Noise Sources. Advanced Materials Interfaces, 2019, 6, 1801449.	1.9	75
18	Competition between electric field and magnetic field noise in the decoherence of a single spin in diamond. Physical Review B, 2016, 93, .	1.1	69

#	Article	IF	Citations
19	Direct measurement of interfacial Dzyaloshinskii-Moriya interaction in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>X</mml:mi><mml:mo>|</mml:mo></mml:mrow><mml:m with a scanning NV magnetometer<mml:math		

#	Article	IF	Citations
37	Quantum sensors go flat. Nature Physics, 2021, 17, 1074-1075.	6.5	20
38	Polarization Transfer to External Nuclear Spins Using Ensembles of Nitrogen-Vacancy Centers. Physical Review Applied, 2021, 15, .	1.5	19
39	Prospects for nuclear spin hyperpolarization of molecular samples using nitrogen-vacancy centers in diamond. Physical Review B, 2021, 103, .	1.1	19
40	Proximity-Induced Artefacts in Magnetic Imaging with Nitrogen-Vacancy Ensembles in Diamond. Sensors, 2018, 18, 1290.	2.1	18
41	Imaging Graphene Field-Effect Transistors on Diamond Using Nitrogen-Vacancy Microscopy. Physical Review Applied, 2019, 12, .	1.5	18
42	Injection of midinfrared surface plasmon polaritons with an integrated device. Applied Physics Letters, 2010, 97, .	1.5	16
43	Rapid, Highâ€Resolution Magnetic Microscopy of Single Magnetic Microbeads. Small, 2019, 15, 1805159.	5.2	16
44	Intrinsic fluorescence from cellulose nanofibers and nanoparticles at cell friendly wavelengths. APL Photonics, 2019, 4, 020803.	3.0	15
45	Design of an integrated coupler for the electrical generation of surface plasmon polaritons. Optics Express, 2011, 19, 18155.	1.7	14
46	Apparent delocalization of the current density in metallic wires observed with diamond nitrogen-vacancy magnetometry. Physical Review B, 2019, 99, .	1.1	14
47	Real-time detection and identification of nematode eggs genus and species through optical imaging. Scientific Reports, 2020, 10, 7219.	1.6	14
48	Comparison of different methods of nitrogen-vacancy layer formation in diamond for wide-field quantum microscopy. Physical Review Materials, 2020, 4, .	0.9	14
49	Quantum magnetic imaging of iron organelles within the pigeon cochlea. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	14
50	Nonvanishing effect of detuning errors in dynamical-decoupling-based quantum sensing experiments. Physical Review A, 2019, 99, .	1.0	13
51	Nitrogen-vacancy-center imaging of bubble domains in a 6-Ã… film of cobalt with perpendicular magnetization. Journal of Applied Physics, 2014, 115, .	1.1	10
52	Magnetic noise from ultrathin abrasively deposited materials on diamond. Physical Review Materials, 2018, 2, .	0.9	10
53	Enhancement of optical processes in coupled plasmonic nanocavities [Invited]. Applied Optics, 2011, 50, G56.	2.1	9
54	Imaging Current Paths in Silicon Photovoltaic Devices with a Quantum Diamond Microscope. Physical Review Applied, 2022, 18, .	1.5	9

#	Article	IF	Citations
55	Sub-wavelength energy concentration with electrically generated mid-infrared surface plasmons. Optics Express, 2012, 20, 13738.	1.7	8
56	Environmentally Mediated Coherent Control of a Spin Qubit in Diamond. Physical Review Letters, 2017, 118, 167204.	2.9	8
57	High precision single qubit tuning via thermo-magnetic field control. Applied Physics Letters, 2018, 112, .	1.5	8
58	Manipulating the Quantum Coherence of Optically Trapped Nanodiamonds. ACS Photonics, 2018, 5, 4491-4496.	3.2	8
59	Quantum Bath Control with Nuclear Spin State Selectivity via Pulse-Adjusted Dynamical Decoupling. Physical Review Letters, 2019, 123, 210401.	2.9	8
60	Recent developments in the manipulation of magnetic domain walls in CoFeBâ€“MgO wires for applications to high-density nonvolatile memories. , 2015, , 333-378.		5
61	An integrated widefield probe for practical diamond nitrogen-vacancy microscopy. Applied Physics Letters, 2021, 119, .	1.5	5
62	Investigation of charge carrier trapping in H-terminated diamond devices. Applied Physics Letters, 2020, 117, 143507.	1.5	4
63	Coupled Nanocavity-Grating Resonances: Large Plasmonic Enhancement of Nonlinear Optical Phenomena. , 2011, , .		0
64	Off-axis and multi-directional plasmonic lenses. , 2011, , .		0
65	Molding Optical Wavefronts Using Phase Discontinuities. , 2011, , .		0
66	Near-field microscopy study of propagation and focusing of designer's surface plasmons polaritons at mid-infrared wavelength. , 2011, , .		0
67	Mid-infrared field concentration of electrically generated surface plasmons polaritons. , 2012, , .		0
68	Magnetic Materials: Rapid, Highâ€Resolution Magnetic Microscopy of Single Magnetic Microbeads (Small) Tj ETQq0 0 0 rgBT /Overlock	5.2	0
69	Mid-infrared direct coupling of surface-plasmon polaritons. , 2010, , .		0
70	A semiconductor device for surface-plasmon generation. , 2010, , .		0
71	Quantum Cascade Lasers with Integrated Multi-Beam Plasmonic Collimators. , 2011, , .		0
72	Mid-infrared direct injection and sub-wavelength focusing of designer’s surface plasmons polaritons. , 2011, , .		0

#	Article	IF	Citations
73	Infrared induced photo-dynamics of NV centres in optically trapped nanodiamond. , 2018, , .		0
74	Imaging with NV ensembles: beyond magnetometry. , 2019, , .		0