Abram L Falk

List of Publications by Year
in descending order

32 papers	2,498 citations	430874 18 h-index	552781 26 g-index
32 all docs	32 docs citations	32 times ranked	3811 citing authors

#	Article	IF	Citations
1	Gate-Activated Photoresponse in a Graphene pâ€“n Junction. Nano Letters, 2011, 11, 4134-4137.	9.1	379
2	Isolated electron spins in silicon carbide with millisecond coherence times. Nature Materials, 2015, 14, 160-163.	27.5	362
3	Polytype control of spin qubits in silicon carbide. Nature Communications, 2013, 4, 1819.	12.8	292
4	Near-field electrical detection of optical plasmons and single-plasmon sources. Nature Physics, 2009, 5, 475-479.	16.7	290
5	Electrically and Mechanically Tunable Electron Spins in Silicon Carbide Color Centers. Physical Review Letters, 2014, 112, 187601.	7.8	152
6	Current-Driven Phase Oscillation and Domain-Wall Propagation in WxV1-xO2Nanobeams. Nano Letters, 2007, 7, 363-366.	9.1	133
7	Quantum decoherence dynamics of divacancy spins in silicon carbide. Nature Communications, 2016, 7, 12935.	12.8	128
8	High-speed logic integrated circuits with solution-processed self-assembled carbon nanotubes. Nature Nanotechnology, 2017, 12, 861-865.	31.5	125
9	Optical Polarization of Nuclear Spins in Silicon Carbide. Physical Review Letters, 2015, 114, 247603.	7.8	109
10	Quantum entanglement at ambient conditions in a macroscopic solid-state spin ensemble. Science Advances, 2015, 1, e1501015.	10.3	79
11	Minimum Voltage for Threshold Switching in Nanoscale Phase-Change Memory. Nano Letters, 2008, 8, 3429-3433.	9.1	76
12	Theoretical model of dynamic spin polarization of nuclei coupled to paramagnetic point defects in diamond and silicon carbide. Physical Review B, 2015, 92, .	3.2	59
13	Tunable Hyperbolic Metamaterials Based on Self-Assembled Carbon Nanotubes. Nano Letters, 2019, 19, 3131-3137.	9.1	56
14	Strong and Broadly Tunable Plasmon Resonances in Thick Films of Aligned Carbon Nanotubes. Nano Letters, 2017, 17, 5641-5645.	9.1	42
15	Stabilization of point-defect spin qubits by quantum wells. Nature Communications, 2019, 10, 5607.	12.8	42
16	Coherent Plasmon and Phonon-Plasmon Resonances in Carbon Nanotubes. Physical Review Letters, 2017, 118, 257401.	7.8	41
17	Intrinsically ultrastrong plasmonâ€“exciton interactions in crystallized films of carbon nanotubes. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 12662-12667.	7.1	36
18	Magnetic switching of phase-slip dissipation inNbSe2nanoribbons. Physical Review B, 2007, 75, .	3.2	20

#	Article	IF	Citations
19	Spatially Selective, High-Density Placement of Polyfluorene-Sorted Semiconducting Carbon Nanotubes in Organic Solvents. ACS Nano, 2017, 11, 7697-7701.	14.6	17
20	Multiple Tunable Hyperbolic Resonances in Broadband Infrared Carbon-Nanotube Metamaterials. Physical Review Applied, 2020, 14, .	3.8	17
21	High-Fidelity Bidirectional Nuclear Qubit Initialization in SiC. Physical Review Letters, 2016, 117, 220503.	7.8	16
22	Mid-IR and UV-Vis-NIR Mueller matrix ellipsometry characterization of tunable hyperbolic metamaterials based on self-assembled carbon nanotubes. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 014015.	1.2	14
23	Emergent Properties of Macroscale Assemblies of Carbon Nanotubes. Advanced Functional Materials, 2020, 30, 1909448.	14.9	5
24	First Principles Identification of Divacancy Related Photoluminescence Lines in 4H and 6H-SiC. Materials Science Forum, 2016, 858, 322-325.	0.3	4
25	Spins charge ahead. Nature Photonics, 2013, 7, 510-511.	31.4	2
26	Addressing spin states with infrared light. Science, 2017, 357, 649-649.	12.6	2
27	Optical Nuclear Spin Polarization of Divacancies in SiC. Materials Science Forum, 2016, 858, 287-290.	0.3	0
28	Mid-infrared Hyperbolic Plasmons in Aligned Carbon Nanotube Metamaterials. , 2019, , .		0
29	Tunable Hyperbolic Plasmons in Self-Assembled Carbon Nanotube Metamaterials. , 2019, , .		0
30	Highly confined plasmons in individual single-walled carbon nanotube nanoantennas. , 2020, , .		0
31	Broadband Mid-Infrared Resonances in Aligned Carbon Nanotube Films. , 2020, , .		0
32	Ultrafast infrared plasmon switching in aligned carbon-nanotube optical resonators. Journal of Optics (United Kingdom), 2022, 24, 044009.	2.2	0