E S Bielejec

List of Publications by Year
in descending order

41 papers	1,920 citations	567281 15 h-index	276875 41 g-index
41 all docs	41 docs citations	41 times ranked	2270 citing authors

#	Article	IF	Citations
1	An integrated diamond nanophotonics platform for quantum-optical networks. Science, 2016, 354, 847-850.	12.6	570
2	Large-scale integration of artificial atoms in hybrid photonic circuits. Nature, 2020, 583, 226-231.	27.8	248
3	Photon-mediated interactions between quantum emitters in a diamond nanocavity. Science, 2018, 362, 662-665.	12.6	189
4	Strain engineering of the silicon-vacancy center in diamond. Physical Review B, 2018, 97, .	3.2	171
5	Scalable focused ion beam creation of nearly lifetime-limited single quantum emitters in diamond nanostructures. Nature Communications, 2017, 8, 15376.	12.8	141
6	Fiber-Coupled Diamond Quantum Nanophotonic Interface. Physical Review Applied, 2017, 8, .	3.8	115
7	Initial Assessment of the Effects of Radiation on the Electrical Characteristics of ${m TaO}_{m x}$ Memristive Memories. IEEE Transactions on Nuclear Science, 2012, 59, 2987-2994.	2.0	69
8	Field-Tuned Superconductor-Insulator Transition with and without Current Bias. Physical Review Letters, 2002, 88, 206802.	7.8	46
9	Ion implantation for deterministic single atom devices. Review of Scientific Instruments, 2017, 88, 123301.	1.3	41
10	Defect-driven gain bistability in neutron damaged, silicon bipolar transistors. Applied Physics Letters, 2007, 90, 172105.	3.3	38
11	A Comparison of the Radiation Response of ${m TaO}_{m x}$ and ${m TiO}_2$ Memristors. IEEE Transactions on Nuclear Science, 2013, 60, 4512-4519.	2.0	37
12	Bright nanowire single photon source based on SiV centers in diamond. Optics Express, 2018, 26, 80.	3.4	37
13	Damage Equivalence of Heavy Ions in Silicon Bipolar Junction Transistors. IEEE Transactions on Nuclear Science, 2006, 53, 3681-3686.	2.0	23
14	Optical activation and detection of charge transport between individual colour centres in diamond. Nature Electronics, 2021, 4, 717-724.	26.0	23
15	Electron Glass in Ultrathin Granular Al Films at Low Temperatures. Physical Review Letters, 2001, 87, 256601.	7.8	22
16	Metrics for Comparison Between Displacement Damage due to Ion Beam and Neutron Irradiation in Silicon BJTs. IEEE Transactions on Nuclear Science, 2007, 54, 2282-2287.	2.0	14
17	Irradiation Effects on Perpendicular Anisotropy Spinâ€“Orbit Torque Magnetic Tunnel Junctions. IEEE Transactions on Nuclear Science, 2021, 68, 665-670.	2.0	13
18	Nanoscale solid-state nuclear quadrupole resonance spectroscopy using depth-optimized nitrogen-vacancy ensembles in diamond. Applied Physics Letters, 2022, 120, .	3.3	11

#	Article	IF	Citations
19	Hidden Silicon-Vacancy Centers in Diamond. Physical Review Letters, 2021, 126, 213601.	7.8	10
20	Continuous distribution of defect states and band gap narrowing in neutron irradiated GaAs. Journal of Applied Physics, 2010, 107, .	2.5	9
21	Heavy-Ion-Induced Displacement Damage Effects in Magnetic Tunnel Junctions With Perpendicular Anisotropy. IEEE Transactions on Nuclear Science, 2021, 68, 581-587.	2.0	9
22	Controlling light emission by engineering atomic geometries in silicon photonics. Optics Letters, 2020, 45, 1631.	3.3	9
23	Imaging dark charge emitters in diamond via carrier-to-photon conversion. Science Advances, 2022, 8, eabl9402.	10.3	9
24	Training a Neural Network on Analog TaO_{<italic>x</italic>} ReRAM Devices Irradiated With Heavy Ions: Effects on Classification Accuracy Demonstrated With CrossSim. IEEE Transactions on Nuclear Science, 2019, 66, 54-60.	2.0	8
25	Investigating Heavy-Ion Effects on 14-nm Process FinFETs: Displacement Damage Versus Total Ionizing Dose. IEEE Transactions on Nuclear Science, 2021, 68, 724-732.	2.0	8
26	Impact of Surface Recombination on Single-Event Charge Collection in an SOI Technology. IEEE Transactions on Nuclear Science, 2021, 68, 305-311.	2.0	7
27	Comparison Between Experimental and Simulation Results for Ion Beam and Neutron Irradiations in Silicon Bipolar Junction Transistors. IEEE Transactions on Nuclear Science, 2008, 55, 3055-3059.	2.0	6
28	Tunneling and nonlinear transport in a low-dimensional vertically coupled GaAs/AlGaAs system. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 34, 433-436.	2.7	5
29	Mapping of Radiation-Induced Resistance Changes and Multiple Conduction Channels in <formula formulatype="inline"> <tex Notation="TeX">${\rm TaO}_{\rm x}$</tex></formula> Memristors. IEEE Transactions on Nuclear Science, 2014, 61, 2965-2971.	2.0	5
30	Nonlinear resonant tunneling in low-dimensional systems in a magnetic field: Energy dispersion. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 34, 425-428.	2.7	4
31	Lithium source for focused ion beam implantation and analysis. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2021, 39, .	1.2	4
32	Tunneling spectroscopy in vertically coupled quantum wires. Solid State Communications, 2008, 147, 79-82.	1.9	3
33	Stochastic Gain Degradation in IIIâ€“V Heterojunction Bipolar Transistors Due to Single Particle Displacement Damage. IEEE Transactions on Nuclear Science, 2018, 65, 206-210.	2.0	3
34	Sub-Micron Resolution of Localized Ion Beam Induced Charge Reduction in Silicon Detectors Damaged by Heavy Ions. IEEE Transactions on Nuclear Science, 2015, 62, 2919-2925.	2.0	2
35	Comparison of Radiation Effects in Custom and Commercially Fabricated Resistive Memory Devices. IEEE Transactions on Nuclear Science, 2019, 66, 2398-2407.	2.0	2
36	Failure Thresholds in CBRAM Due to Total Ionizing Dose and Displacement Damage Effects. IEEE Transactions on Nuclear Science, 2019, 66, 69-76.	2.0	2

#	Article	IF	Citations
37	Using silicon-vacancy centers in diamond to probe the full strain tensor. Journal of Applied Physics, 2021, 130, 024301.	2.5	2
38	Coherent Interactions between Silicon-Vacancy Centers in Diamond. Physical Review Letters, 2022, 128, .	7.8	2
39	0.7 structure in long quantum wires. Superlattices and Microstructures, 2003, 34, 493-496.	3.1	1
40	Experimental Study of Defect Formations in GaAs Devices Using Gain, Photoluminescence and Deep Level Transient Spectroscopy. IEEE Transactions on Nuclear Science, 2013, 60, 219-223.	2.0	1
41	Photocurrent From Single Collision 14-MeV Neutrons in GaN and GaAs. IEEE Transactions on Nuclear Science, 2020, 67, 221-227.	2.0	1