Stephen Giblin

List of Publications by Year
in descending order

30 papers	1,060 citations	567281 15 h-index	580821 25 g-index
30 all docs	30 docs citations	30 times ranked	662 citing authors

#	Article	IF	Citations
1	Towards a quantum representation of the ampere using single electron pumps. Nature Communications, 2012, 3, 930.	12.8	203
2	Gigahertz quantized charge pumping in graphene quantum dots. Nature Nanotechnology, 2013, 8, 417-420.	31.5	117
3	Clock-Controlled Emission of Single-Electron Wave Packets in a Solid-State Circuit. Physical Review Letters, 2013, 111, 216807.	7.8	112
4	Precision measurement of a potential-profile tunable single-electron pump. Metrologia, 2015, 52, 195-200.	1.2	86
5	Tunable Nonadiabatic Excitation in a Single-Electron Quantum Dot. Physical Review Letters, 2011, 106, 126801.	7.8	64
6	Gigahertz single-electron pumping in silicon with an accuracy better than 9.2 parts in 107. Applied Physics Letters, 2016, 109, .	3.3	57
7	An accurate high-speed single-electron quantum dot pump. New Journal of Physics, 2010, 12, 073013.	2.9	54
8	Stabilization of single-electron pumps by high magnetic fields. Physical Review B, 2012, 86, .	3.2	49
9	NbSi nanowire quantum phase-slip circuits: dc supercurrent blockade, microwave measurements, and thermal analysis. Physical Review B, 2013, 87, .	3.2	48
10	Evidence for universality of tunable-barrier electron pumps. Metrologia, 2019, 56, 044004.	1.2	40
11	High-accuracy current generation in the nanoampere regime from a silicon single-trap electron pump. Scientific Reports, 2017, 7, 45137.	3.3	34
12	Validation of the ultrastable low-noise current amplifier as travelling standard for small direct currents. Metrologia, 2015, 52, 756-763.	1.2	32
13	New Capability for Generating and Measuring Small DC Currents at NPL. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 326-330.	4.7	29
14	Robust operation of a GaAs tunable barrier electron pump. Metrologia, 2017, 54, 299-306.	1.2	27
15	Realisation of a quantum current standard at liquid helium temperature with sub-ppm reproducibility. Metrologia, 2020, 57, 025013.	1.2	23
16	High-resolution error detection in the capture process of a single-electron pump. Applied Physics Letters, 2016, 108, 023502.	3.3	15
17	Rectification in mesoscopic alternating current-gated semiconductor devices. Journal of Applied Physics, 2013, 114, 164505.	2.5	14
18	The next generation of current measurement for ionization chambers. Applied Radiation and Isotopes, 2020, 163, 109216.	1.5	12

#	Article	IF	Citations
19	Single- and few-electron dynamic quantum dots in a perpendicular magnetic field. Journal of Applied Physics, 2011, 109, .	2.5	11
20	Interlaboratory Nanoamp Current Comparison With Subpart-Per-Million Uncertainty. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 1996-2002.	4.7	8
21	Re-evaluation of uncertainty for calibration of 100 Mâ„¦ and 1 Gâ„¦ resistors at NPL. Metrologia, 2019, 56, 015014.	1.2	6
22	Sub-ppm measurements of single-electron pump currents. , 2014, , .		3
23	Introducing Joint Research Project Â«Quantum AmpereÂ» for the realisation of the new SI ampere. EPJ Web of Conferences, 2014, 77, 00004.	0.3	3
24	Exploring a new ammeter traceability route for ionisation chamber measurements. Review of Scientific Instruments, 2019, 90, 014705.	1.3	3
25	Results and model for single-gate ratchet charge pumping. Journal of Applied Physics, 2020, 127, 094301.	2.5	3
26	APPLIED PHYSICS: One Electron Makes Current Flow. Science, 2007, 316, 1130-1131.	12.6	2
27	Scaling the current from a GHz electron pump using a CCC. , 2016, , .		2
28	Inter-Laboratory Nanoamp Current Comparison with Sub-Part-Per-Million Uncertainty. , 2018, , .		2
29	Directly Comparing the Current from Two Electron Pumps. , 2020, , .		1
30	Calibration of Sensitive Ammeters Using a Noiseless Electron Pump. , 2020, , .		0