

# Gwendal Feve

## List of Publications by Year in descending order

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Version: 2024-02-01

69  
papers

4,022  
citations

136950

32  
h-index

114465

63  
g-index

70  
all docs

70  
docs citations

70  
times ranked

2431  
citing authors

#	ARTICLE	IF	CITATIONS
1	An On-Demand Coherent Single-Electron Source. <i>Science</i> , 2007, 316, 1169-1172.	12.6	460
2	Violation of Kirchhoff's Laws for a Coherent RC Circuit. <i>Science</i> , 2006, 313, 499-502.	12.6	305
3	Coherence and Indistinguishability of Single Electrons Emitted by Independent Sources. <i>Science</i> , 2013, 339, 1054-1057.	12.6	303
4	Fractional statistics in anyon collisions. <i>Science</i> , 2020, 368, 173-177.	12.6	225
5	Supercollision cooling in undoped graphene. <i>Nature Physics</i> , 2013, 9, 109-112.	16.7	179
6	Coupling a Quantum Dot, Fermionic Leads, and a Microwave Cavity on a Chip. <i>Physical Review Letters</i> , 2011, 107, 256804.	7.8	171
7	Electron quantum optics in ballistic chiral conductors. <i>Annalen Der Physik</i> , 2014, 526, 1-30.	2.4	162
8	Electron Quantum Optics: Partitioning Electrons One by One. <i>Physical Review Letters</i> , 2012, 108, 196803.	7.8	155
9	Hot Electron Cooling by Acoustic Phonons in Graphene. <i>Physical Review Letters</i> , 2012, 109, 056805.	7.8	120
10	Current correlations of an on-demand single-electron emitter. <i>Physical Review B</i> , 2010, 82, .	3.2	115
11	Separation of neutral and charge modes in one-dimensional chiral edge channels. <i>Nature Communications</i> , 2013, 4, 1839.	12.8	106
12	Hong-Ou-Mandel experiment for temporal investigation of single-electron fractionalization. <i>Nature Communications</i> , 2015, 6, 6854.	12.8	101
13	Single-electron quantum tomography in quantum Hall edge channels. <i>New Journal of Physics</i> , 2011, 13, 093007.	2.9	96
14	Current noise spectrum of a single-particle emitter: Theory and experiment. <i>Physical Review B</i> , 2012, 85, .	3.2	96
15	Noisy Kondo impurities. <i>Nature Physics</i> , 2009, 5, 208-212.	16.7	91
16	ELECTRON QUANTUM OPTICS IN QUANTUM HALL EDGE CHANNELS. <i>Modern Physics Letters B</i> , 2011, 25, 1053-1073.	1.9	88
17	Real-Time Decoherence of Landau and Levitov Quasiparticles in Quantum Hall Edge Channels. <i>Physical Review Letters</i> , 2014, 113, 166403.	7.8	76
18	Plasmon scattering approach to energy exchange and high-frequency noise in $\nu = 1/2$ quantum Hall edge channels. <i>Physical Review B</i> , 2010, 81, .	3.2	70

#	ARTICLE	IF	CITATIONS
19	Single Carbon Nanotube Transistor at GHz Frequency. Nano Letters, 2008, 8, 525-528.	9.1	68
20	Wigner function approach to single electron coherence in quantum Hall edge channels. Physical Review B, 2013, 88, .	3.2	67
21	Relaxation Time of a Chiral Quantum R <sup>∞</sup> L Circuit. Physical Review Letters, 2007, 98, 166806.	7.8	65
22	A graphene Zener K <sup>∞</sup> Klein transistor cooled by a hyperbolic substrate. Nature Nanotechnology, 2018, 13, 47-52.	31.5	64
23	Electron quantum optics as quantum signal processing. Physica Status Solidi (B): Basic Research, 2017, 254, 1600621.	1.5	53
24	Hanbury Brown Twiss Correlations to Probe the Population Statistics of GHz Photons Emitted by Conductors. Physical Review Letters, 2004, 93, 056801.	7.8	51
25	Decoherence and relaxation of single-electron excitations in quantum Hall edge channels. Physical Review B, 2009, 80, .	3.2	51
26	Decoherence and relaxation of a single electron in a one-dimensional conductor. Physical Review B, 2016, 94, .	3.2	51
27	A Klein-tunneling transistor with ballistic graphene. 2D Materials, 2014, 1, 011006.	4.4	48
28	A coherent RC circuit. Reports on Progress in Physics, 2012, 75, 126504.	20.1	43
29	Rashba effect within the coherent scattering formalism. Physical Review B, 2002, 66, .	3.2	42
30	Observation of Volkov-Pankratov states in topological HgTe heterojunctions using high-frequency compressibility. Physical Review B, 2017, 96, .	3.2	40
31	Quantum tomography of electrical currents. Nature Communications, 2019, 10, 3379.	12.8	35
32	Quantum detection of electronic flying qubits in the integer quantum Hall regime. Physical Review B, 2008, 77, .	3.2	33
33	Transport scattering time probed through rf admittance of a graphene capacitor. Physical Review B, 2011, 83, .	3.2	33
34	Conserved spin and orbital phase along carbon nanotubes connected with multiple ferromagnetic contacts. Physical Review B, 2010, 81, .	3.2	29
35	Shaping charge excitations in chiral edge states with a time-dependent gate voltage. Physical Review B, 2018, 97, .	3.2	25
36	Taming electronic decoherence in one-dimensional chiral ballistic quantum conductors. Physical Review B, 2018, 98, .	3.2	24

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37	Two-particle interferometry in quantum Hall edge channels. <i>Physica Status Solidi (B): Basic Research</i> , 2017, 254, 1600618.	1.5	21
38	Dielectric permittivity, conductivity and breakdown field of hexagonal boron nitride. <i>Materials Research Express</i> , 2022, 9, 065901.	1.6	21
39	High-Frequency Limits of Graphene Field-Effect Transistors with Velocity Saturation. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 446.	2.5	20
40	Contact gating at GHz frequency in graphene. <i>Scientific Reports</i> , 2016, 6, 21085.	3.3	19
41	Dynamical Separation of Bulk and Edge Transport in HgTe-Based 2D Topological Insulators. <i>Physical Review Letters</i> , 2020, 124, 076802.	7.8	18
42	Subnanosecond Single Electron Source in the Time-Domain. <i>Journal of Low Temperature Physics</i> , 2008, 153, 339-349.	1.4	17
43	Ultra-long wavelength Dirac plasmons in graphene capacitors. <i>JPhys Materials</i> , 2018, 1, 01LT02.	4.2	17
44	A high sensitivity ultralow temperature RF conductance and noise measurement setup. <i>Review of Scientific Instruments</i> , 2011, 82, 013904.	1.3	15
45	Microwave photons emitted by fractionally charged quasiparticles. <i>Nature Communications</i> , 2019, 10, 1708.	12.8	13
46	Onset of optical-phonon cooling in multilayer graphene revealed by RF noise and black-body radiation thermometries. <i>Journal of Physics Condensed Matter</i> , 2015, 27, 164208.	1.8	10
47	Anomalous metallic state in quasi-two-dimensional $\text{BaNiS}_2$ . <i>Physical Review B</i> , 2016, 93, .	3.8	10
48	rf Quantum Capacitance of the Topological Insulator $\text{Bi}_2\text{Te}_3$ in the Bulk Depleted Regime for Field-Effect Transistors. <i>Physical Review Applied</i> , 2018, 9, .	3.8	10
49	Importance of nonlocal electron correlation in the $\text{BaNiS}_2$ semimetal from quantum oscillations studies. <i>Physical Review B</i> , 2018, 97, .	3.2	10
50	Thermal shot noise in top-gated single carbon nanotube field effect transistors. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	9
51	Two-electron coherence and its measurement in electron quantum optics. <i>Physical Review B</i> , 2016, 93, .	3.2	9
52	Realization of a time-controlled subnanosecond single electron source for ballistic qubits. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 954-960.	2.7	7
53	A corner reflector of graphene Dirac fermions as a phonon-scattering sensor. <i>Nature Communications</i> , 2019, 10, 2428.	12.8	7
54	Phase-Coherent Dynamics of Quantum Devices with Local Interactions. <i>Entropy</i> , 2020, 22, 847.	2.2	7

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55	Graphene nanotransistors for RF charge detection. Journal Physics D: Applied Physics, 2014, 47, 094004.	2.8	6
56	Time dependent electronic transport in chiral edge channels. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 76, 12-27.	2.7	6
57	Landau Velocity for Collective Quantum Hall Breakdown in Bilayer Graphene. Physical Review Letters, 2018, 121, 136804.	7.8	6
58	Processing Quantum Signals Carried by Electrical Currents. PRX Quantum, 2021, 2, .	9.2	6
59	Characterization of helical Luttinger liquids in microwave stepped-impedance edge resonators. Physical Review Research, 2020, 2, .	3.6	5
60	A quantum mesoscopic RC circuit realized in a 2D electron gas. Physica E: Low-Dimensional Systems and Nanostructures, 2006, 34, 576-579.	2.7	4
61	Picosecond detection of electron motion. Nature Nanotechnology, 2019, 14, 1005-1006.	31.5	2
62	RF compressibility of topological surface and interface states in metal-hBN-Bi <sub>2</sub> Se <sub>3</sub> capacitors. JPhys Materials, 2019, 2, 044003.	4.2	2
63	Title is missing!. Journal of Superconductivity and Novel Magnetism, 2003, 16, 719-733.	0.5	1
64	Microwave surface transport in narrow-bandgap PdSe <sub>2</sub> -MOSFETs. 2D Materials, 2021, 8, 035035.	4.4	1
65	Hanbury Brown and Twiss Noise Correlations to Probe the Statistics of GHz Photons Emitted by Quantum Conductors. AIP Conference Proceedings, 2005, , .	0.4	0
66	Noise of a single electron emitter: Experiment. , 2011, , .		0
67	Graphene-based Klein tunneling transistor. , 2014, , .		0
68	Reprint of : Time dependent electronic transport in chiral edge channels. Physica E: Low-Dimensional Systems and Nanostructures, 2016, 82, 129-144.	2.7	0
69	The Generation and Detection of Single and Entangled Electrons in Mesoscopic 2DEG Systems. , 2003, , 275-296.		0