Mark Greenaway

List of Publications by Year
in descending order

44 papers	2,141 citations	394421 19 h-index	302126 39 g-index
46 all docs	46 docs citations	46 times ranked	3069 citing authors

#	Article	IF	Citations
1	Resonant tunnelling and negative differential conductance in graphene transistors. Nature Communications, 2013, 4, 1794.	12.8	542
2	Twist-controlled resonant tunnelling in graphene/boron nitride/graphene heterostructures. Nature Nanotechnology, 2014, 9, 808-813.	31.5	435
3	Magnon-assisted tunnelling in van der Waals heterostructures based on CrBr3. Nature Electronics, 2018, 1, 344-349.	26.0	239
4	Emergence and control of complex behaviors in driven systems of interacting qubits with dissipation. Npj Quantum Information, 2021, 7, .	6.7	92
5	Tuning the valley and chiral quantum state of Dirac electrons in van der Waals heterostructures. Science, 2016, 353, 575-579.	12.6	88
6	Phonon-Assisted Resonant Tunneling of Electrons in Grapheneâ€“Boron Nitride Transistors. Physical Review Letters, 2016, 116, 186603.	7.8	78
7	Universal mobility characteristics of graphene originating from charge scattering by ionised impurities. Communications Physics, 2021, 4, .	5.3	65
8	Resonant tunnelling between the chiral Landau states of twisted graphene lattices. Nature Physics, 2015, 11, 1057-1062.	16.7	64
9	Graphene-hexagonal boron nitride resonant tunneling diodes as high-frequency oscillators. Applied Physics Letters, 2015, 107, .	3.3	58
10	Controlling and enhancing terahertz collective electron dynamics in superlattices by chaos-assisted miniband transport. Physical Review B, 2009, 80, .	3.2	52
11	Subterahertz Chaos Generation by Coupling a Superlattice to a Linear Resonator. Physical Review Letters, 2014, 112, 116603.	7.8	48
12	Effect of temperature on resonant electron transport through stochastic conduction channels in superlattices. Physical Review B, 2011, 84, .	3.2	35
13	Out-of-equilibrium criticalities in graphene superlattices. Science, 2022, 375, 430-433.	12.6	34
14	Tunnel spectroscopy of localised electronic states in hexagonal boron nitride. Communications Physics, 2018, 1, .	5.3	33
15	Controlling High-Frequency Collective Electron Dynamics via Single-Particle Complexity. Physical Review Letters, 2012, 109, 024102.	7.8	29
16	Lyapunov stability of charge transport in miniband semiconductor superlattices. Physical Review B, 2013, 88, .	3.2	25
17	Strong magnetophonon oscillations in extra-large graphene. Nature Communications, 2019, 10, 3334.	12.8	25
18	Interâ€Flake Quantum Transport of Electrons and Holes in Inkjetâ€Printed Graphene Devices. Advanced Functional Materials, 2021, 31, 2007478.	14.9	25

#	Article	IF	Citations
19	Resonant tunnelling into the two-dimensional subbands of InSe layers. Communications Physics, 2020, 3, .	5.3	22
20	Using acoustic waves to induce high-frequency current oscillations in superlattices. Physical Review B, 2010, 81, .	3.2	17
21	Magnetophonon spectroscopy of Dirac fermion scattering by transverse and longitudinal acoustic phonons in graphene. Physical Review B, 2019, 100, .	3.2	16
22	Magnetic-field-induced miniband conduction in semiconductor superlattices. Physical Review B, 2007, 76, .	3.2	15
23	The effect of temperature on the nonlinear dynamics of charge in a semiconductor superlattice in the presence of a magnetic field. Journal of Experimental and Theoretical Physics, 2012, 114, 836-840.	0.9	15
24	Semiconductor charge transport driven by a picosecond strain pulse. Applied Physics Letters, 2008, 92, 232104.	3.3	14
25	Sub-terahertz amplification in a semiconductor superlattice with moving charge domains. Applied Physics Letters, 2015, 106, 043503.	3.3	13
26	Microwave Generation in Synchronized Semiconductor Superlattices. Physical Review Applied, 2017, 7, .	3.8	12
27	Nondestructive Picosecond Ultrasonic Probing of Intralayer and van der Waals Interlayer Bonding in Î±â€• and Î²â€•In₂Se₃. Advanced Functional Materials, 2021, 31, 2106206.	14.9	11
28	A Fast Converging Resonance-Free Global Multi-Trace Method for Scattering by Partially Coated Composite Structures. IEEE Transactions on Antennas and Propagation, 2022, 70, 9534-9543.	5.1	6
29	Resonant control of cold-atom transport through two optical lattices with a constant relative speed. Physical Review A, 2013, 87, .	2.5	5
30	Enhancing optoelectronic properties of SiC-grown graphene by a surface layer of colloidal quantum dots. 2D Materials, 2017, 4, 031001.	4.4	5
31	Grapheneâ€™s non-equilibrium fermions reveal Doppler-shifted magnetophonon resonances accompanied by Mach supersonic and Landau velocity effects. Nature Communications, 2021, 12, 6392.	12.8	5
32	Using sound to generate ultra-high-frequency electron dynamics in superlattices. Microelectronics Journal, 2009, 40, 725-727.	2.0	4
33	Studying transitions between different regimes of current oscillations generated in a semiconductor superlattice in the presence of a tilted magnetic field at various temperatures. Technical Physics Letters, 2015, 41, 768-770.	0.7	2
34	Effects of classical stochastic webs on the quantum dynamics of cold atomic gases in a moving optical lattice. Physical Review A, 2017, 96, .	2.5	2
35	An enriched RWG basis for enforcing global current conservation in EM modelling of capacitance extraction. , 2017, , .		2
36	Modeling of Resonant Tunneling Diode Oscillators Based on the Time-Domain Boundary Element Method. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2022, 7, 161-167.	2.2	2

#	Article	IF	Citations
37	III-V semiconductor waveguides for photonic functionality at 780 nm. , 2014, , .		1
38	Effect of interminiband tunneling on the generation of current in a semiconducting superlattice. Technical Physics, 2015, 60, 541-545.	0.7	1
39	Prospects for strongly coupled atom-photon quantum nodes. Scientific Reports, 2019, 9, 7798.	3.3	1
40	Ultrafast Strain-Induced Charge Transport in Semiconductor Superlattices. Physical Review Applied, 2020, 14, .	3.8	1
41	Effects of Dissipation and Noise on Chaotic Transport in Superlattices. Acta Physica Polonica A, 2009, 116, 733-740.	0.5	1
42	Sub-THz/THz amplification in a semiconductor superlattice. , 2015, , .		0
43	Chaos and hyperchaos in the chain of quantum coherent elements. , 2020, , .		0
44	Using Stochastic Webs to Control the Quantum Transport of Electrons in Semiconductor Superlattices. Nonlinear Physical Science, 2010, , 225-254.	0.2	0