

Alex Hamilton

List of Publications by Year in descending order

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papers

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242
all docs

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242
times ranked

4124
citing authors

#	ARTICLE	IF	CITATIONS
1	Charge-based quantum computing using single donors in semiconductors. Physical Review B, 2004, 69, .	1.1	271
2	Coherent electronic transfer in quantum dot systems using adiabatic passage. Physical Review B, 2004, 70, .	1.1	247
3	Metal-Insulator Transition at $B=0$ in a Dilute Two Dimensional GaAs-AlGaAs Hole Gas. Physical Review Letters, 1998, 80, 1292-1295.	2.9	233
4	Zero-Energy Modes from Coalescing Andreev States in a Two-Dimensional Semiconductor-Superconductor Hybrid Platform. Physical Review Letters, 2017, 119, 176805.	2.9	182
5	A room-temperature ferroelectric semimetal. Science Advances, 2019, 5, eaax5080.	4.7	176
6	High-Temperature Superfluidity in Double-Bilayer Graphene. Physical Review Letters, 2013, 110, 146803.	2.9	171
7	Density-Dependent Spin Polarization in Ultra-Low-Disorder Quantum Wires. Physical Review Letters, 2002, 89, 246801.	2.9	150
8	Toward Atomic-Scale Device Fabrication in Silicon Using Scanning Probe Microscopy. Nano Letters, 2004, 4, 1969-1973.	4.5	150
9	Many-body spin-related phenomena in ultra low-disorder quantum wires. Physical Review B, 2001, 63, .	1.1	139
10	Antisymmetric magnetoresistance in van der Waals Fe_3GeTe_2 /graphite/ Fe_3GeTe_2 trilayer heterostructures. Science Advances, 2019, 5, eaaw0409.	4.7	119
11	Realization of Atomically Controlled Dopant Devices in Silicon. Small, 2007, 3, 563-567.	5.2	108
12	Velocity-modulation control of electron-wave propagation in graphene. Physical Review B, 2010, 81, .	1.1	107
13	Weak Localization, Hole-Hole Interactions, and the "Metal-Insulator Transition in Two Dimensions. Physical Review Letters, 2000, 84, 2489-2492.	2.9	96
14	Encapsulation of phosphorus dopants in silicon for the fabrication of a quantum computer. Applied Physics Letters, 2002, 81, 3197-3199.	1.5	92
15	Zeeman Splitting in Ballistic Hole Quantum Wires. Physical Review Letters, 2006, 97, 026403.	2.9	85
16	Electrically detected magnetic resonance in ion-implanted Si:P nanostructures. Applied Physics Letters, 2006, 89, 1821-1825.	1.5	81
17	Maximizing the Hilbert Space for a Finite Number of Distinguishable Quantum States. Physical Review Letters, 2004, 92, 097901.	2.9	76
18	Pauli Spin Blockade of Heavy Holes in a Silicon Double Quantum Dot. Nano Letters, 2015, 15, 7314-7318.	4.5	68

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19	Influence of doping density on electronic transport in degenerate Si:P ⁻ -doped layers. <i>Physical Review B</i> , 2006, 73, .	1.1	62
20	Reentrant Insulator-Metal-Insulator Transition at $B=0$ in a Two-Dimensional Hole Gas. <i>Physical Review Letters</i> , 1999, 82, 1542-1545.	2.9	60
21	Progress in silicon-based quantum computing. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2003, 361, 1451-1471.	1.6	60
22	Spin-orbit interactions in inversion-asymmetric two-dimensional hole systems: A variational analysis. <i>Physical Review B</i> , 2017, 95, .	1.1	60
23	Ballistic transport in induced one-dimensional hole systems. <i>Applied Physics Letters</i> , 2006, 89, 092105.	1.5	55
24	Magnetization Instability in a Two-Dimensional System. <i>Physical Review Letters</i> , 1997, 79, 4449-4452.	2.9	51
25	Scanning probe microscopy for silicon device fabrication. <i>Molecular Simulation</i> , 2005, 31, 505-515.	0.9	50
26	Theory of hole-spin qubits in strained germanium quantum dots. <i>Physical Review B</i> , 2021, 103, .	1.1	50
27	Weak localization in high-quality two-dimensional systems. <i>Physical Review B</i> , 2004, 70, .	1.1	49
28	Excitonic superfluidity and screening in electron-hole bilayer systems. <i>Physical Review B</i> , 2014, 89, .	1.1	49
29	Enhanced g factors of a one-dimensional hole gas with quantized conductance. <i>Physical Review B</i> , 1997, 55, R13409-R13412.	1.1	47
30	Anisotropic Pauli Spin Blockade of Holes in a GaAs Double Quantum Dot. <i>Nano Letters</i> , 2016, 16, 7685-7689.	4.5	47
31	Strong and Tunable Spin-Orbit Coupling in a Two-Dimensional Hole Gas in Ionic-Liquid Gated Diamond Devices. <i>Nano Letters</i> , 2016, 16, 3768-3773.	4.5	45
32	Optimal operation points for ultrafast, highly coherent Ge hole spin-orbit qubits. <i>Npj Quantum Information</i> , 2021, 7, .	2.8	45
33	Effect of encapsulation temperature on Si:P ⁻ -doped layers. <i>Applied Physics Letters</i> , 2004, 85, 4953-4955.	1.5	44
34	Conductance quantization and the $0.7\hbar/2e^2$ conductance anomaly in one-dimensional hole systems. <i>Applied Physics Letters</i> , 2006, 88, 012107.	1.5	42
35	Spin and orbital structure of the first six holes in a silicon metal-oxide-semiconductor quantum dot. <i>Nature Communications</i> , 2018, 9, 3255.	5.8	42
36	Frictional drag between parallel two-dimensional electron gases in a perpendicular magnetic field. <i>Journal of Physics Condensed Matter</i> , 1996, 8, L557-L562.	0.7	40

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37	Electron-electron interactions in highly disordered two-dimensional systems. <i>Physical Review B</i> , 2008, 77, .	1.1	40
38	Impact of long- and short-range disorder on the metallic behaviour of two-dimensional systems. <i>Nature Physics</i> , 2008, 4, 55-59.	6.5	39
39	Spin-Orbit Interaction in a Two-Dimensional Hole Gas at the Surface of Hydrogenated Diamond. <i>Nano Letters</i> , 2015, 15, 16-20.	4.5	39
40	Fabrication and characterization of ambipolar devices on an undoped AlGaAs/GaAs heterostructure. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	37
41	Probing the Spin States of a Single Acceptor Atom. <i>Nano Letters</i> , 2014, 14, 1492-1496.	4.5	36
42	Correlated charge detection for readout of a solid-state quantum computer. <i>Applied Physics Letters</i> , 2003, 82, 577-579.	1.5	35
43	Role of background impurities in the single-particle relaxation lifetime of a two-dimensional electron gas. <i>Physical Review B</i> , 2009, 80, .	1.1	35
44	Generating a Topological Anomalous Hall Effect in a Nonmagnetic Conductor: An In-Plane Magnetic Field as a Direct Probe of the Berry Curvature. <i>Physical Review Letters</i> , 2021, 126, 256601.	2.9	35
45	One-dimensional conduction properties of highly phosphorus-doped planar nanowires patterned by scanning probe microscopy. <i>Physical Review B</i> , 2007, 76, .	1.1	33
46	Quantum Anomalous Hall Effect in Magnetic Doped Topological Insulators and Ferromagnetic Spinless Semiconductors—A Perspective Review. <i>Small</i> , 2020, 16, e1904322.	5.2	33
47	Back-gated split-gate transistor: A one-dimensional ballistic channel with variable Fermi energy. <i>Applied Physics Letters</i> , 1992, 60, 2782-2784.	1.5	32
48	Single-shot readout with the radio-frequency single-electron transistor in the presence of charge noise. <i>Applied Physics Letters</i> , 2005, 86, 143117.	1.5	32
49	Electronic properties of atomically abrupt tunnel junctions in silicon. <i>Physical Review B</i> , 2007, 75, .	1.1	31
50	Fractional quantum Hall effect in bilayer two-dimensional hole-gas systems. <i>Physical Review B</i> , 1996, 54, R5259-R5262.	1.1	30
51	Metallic Behavior in Dilute Two-Dimensional Hole Systems. <i>Physical Review Letters</i> , 2001, 87, 126802.	2.9	30
52	Fabrication of induced two-dimensional hole systems on (311)A GaAs. <i>Journal of Applied Physics</i> , 2006, 99, 023707.	1.1	30
53	Observation of orientation- and k -dependent Zeeman spin-splitting in hole quantum wires on (100)-oriented AlGaAs/GaAs heterostructures. <i>New Journal of Physics</i> , 2010, 12, 033043.	1.2	30
54	Impact of Small-Angle Scattering on Ballistic Transport in Quantum Dots. <i>Physical Review Letters</i> , 2012, 108, 196807.	2.9	29

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55	Transport in disordered monolayer MoS ₂ nanoflakes—evidence for inhomogeneous charge transport. Nanotechnology, 2014, 25, 375201.	1.3	29
56	Spin blockade in hole quantum dots: Tuning exchange electrically and probing Zeeman interactions. Physical Review B, 2017, 95, .	1.1	29
57	Geometric Control of Universal Hydrodynamic Flow in a Two-Dimensional Electron Fluid. Physical Review X, 2021, 11, .	2.8	29
58	Atomic-scale silicon device fabrication. International Journal of Nanotechnology, 2008, 5, 352.	0.1	28
59	Observation of the Kondo Effect in a Spin-3/2 Hole Quantum Dot. Physical Review Letters, 2011, 107, 076805.	2.9	28
60	Fabrication of high mobility in situ back-gated (311)A hole gas heterojunctions. Applied Physics Letters, 1997, 70, 2750-2752.	1.5	27
61	0.7 Structure and Zero Bias Anomaly in Ballistic Hole Quantum Wires. Physical Review Letters, 2008, 100, 016403.	2.9	27
62	Resistively Detected Nuclear Magnetic Resonance in n- and p-Type GaAs Quantum Point Contacts. Nano Letters, 2011, 11, 3147-3150.	4.5	27
63	Electrical Control of the Zeeman Spin Splitting in Two-Dimensional Hole Systems. Physical Review Letters, 2018, 121, 077701.	2.9	27
64	Strong Spin-Orbit Contribution to the Hall Coefficient of Two-Dimensional Hole Systems. Physical Review Letters, 2018, 121, 087701.	2.9	27
65	The use of etched registration markers to make four-terminal electrical contacts to STM-patterned nanostructures. Nanotechnology, 2005, 16, 2446-2449.	1.3	26
66	Controlled single electron transfer between Si:P dots. Applied Physics Letters, 2006, 88, 192101.	1.5	25
67	Enhanced Zeeman splitting in Ga _{0.25} In _{0.75} As quantum point contacts. Applied Physics Letters, 2008, 93, 012105.	1.5	25
68	Fabrication and characterization of an induced GaAs single hole transistor. Applied Physics Letters, 2010, 96, 092103.	1.5	25
69	Narrow, highly P-doped, planar wires in silicon created by scanning probe microscopy. Nanotechnology, 2007, 18, 044023.	1.3	24
70	Thickness-dependent electronic structure in WTe_2 thin films. Physical Review B, 2018, 98, .	1.1	24
71	AlGaAs/GaAs single electron transistor fabricated without modulation doping. Applied Physics Letters, 2010, 96, 112104.	1.5	23
72	Single hole transport in a silicon metal-oxide-semiconductor quantum dot. Applied Physics Letters, 2013, 103, .	1.5	23

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73	Electrical control of the $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \langle \text{mml:mi} \rangle \text{g} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ tensor of the first hole in a silicon MOS quantum dot. Physical Review B, 2021, 104, .	1.1	23
74	Electrical readout of a spin qubit without double occupancy. Physical Review B, 2005, 71, .	1.1	22
75	Extreme Sensitivity of the Spin-Splitting and 0.7 Anomaly to Confining Potential in One-Dimensional Nanoelectronic Devices. Nano Letters, 2012, 12, 4495-4502.	4.5	22
76	Lightly strained germanium quantum wells with hole mobility exceeding one million. Applied Physics Letters, 2022, 120, .	1.5	22
77	Observing sub-microsecond telegraph noise with the radio frequency single electron transistor. Journal of Applied Physics, 2004, 96, 6827-6830.	1.1	21
78	The interplay between one-dimensional confinement and two-dimensional crystallographic anisotropy effects in ballistic hole quantum wires. New Journal of Physics, 2009, 11, 043018.	1.2	21
79	Influence of surface states on quantum and transport lifetimes in high-quality undoped heterostructures. Physical Review B, 2013, 87, .	1.1	21
80	Using a Tunable Quantum Wire To Measure the Large out-of-Plane Spin Splitting of Quasi Two-Dimensional Holes in a GaAs Nanostructure. Nano Letters, 2013, 13, 148-152.	4.5	21
81	Bottom-up assembly of metallic germanium. Scientific Reports, 2015, 5, 12948.	1.6	21
82	Experimental conditions for the observation of electron-hole superfluidity in GaAs heterostructures. Physical Review B, 2020, 101, .	1.1	21
83	Near-Field Excited Archimedean-like Tiling Patterns in Phonon-Polaritonic Crystals. ACS Nano, 2021, 15, 9134-9142.	7.3	21
84	Piezoelectric rotator for studying quantum effects in semiconductor nanostructures at high magnetic fields and low temperatures. Review of Scientific Instruments, 2010, 81, 113905.	0.6	20
85	Development and operation of the twin radio frequency single electron transistor for cross-correlated charge detection. Journal of Applied Physics, 2004, 96, 4508-4513.	1.1	19
86	Field-orientation dependence of the Zeeman spin splitting in (In,Ga)As quantum point contacts. Physical Review B, 2010, 81, .	1.1	18
87	Mechanisms for Strong Anisotropy of In-Plane $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"} \text{display="inline"} \langle \text{mml:mi} \rangle \text{g} \langle \text{mml:mi} \rangle \langle \text{mml:math} \rangle$ -Factors in Hole Based Quantum Point Contacts. Physical Review Letters, 2017, 119, 116803.	2.9	18
88	Detection and Control of Spin-Orbit Interactions in a GaAs Hole Quantum Point Contact. Physical Review Letters, 2017, 118, 146801.	2.9	18
89	G-factor and well width variations for the two-dimensional hole gas in surface conducting diamond. Applied Physics Letters, 2018, 112, .	1.5	18
90	Electrical Characterization of Ordered Si:P Dopant Arrays. IEEE Nanotechnology Magazine, 2007, 6, 213-217.	1.1	17

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91	Stacking of 2D Electron Gases in Ge Probed at the Atomic Level and Its Correlation to Low-Temperature Magnetotransport. Nano Letters, 2012, 12, 4953-4959.	4.5	17
92	Ultra-shallow quantum dots in an undoped GaAs/AlGaAs two-dimensional electron gas. Applied Physics Letters, 2013, 102, 103507.	1.5	17
93	Spin-orbit coupling in silicon for electrons bound to donors. Npj Quantum Information, 2018, 4, .	2.8	17
94	Evolution of the bilayer $\nu=1$ quantum Hall state under charge imbalance. Physical Review B, 2005, 71, .	1.1	15
95	Chasing the Exciton Condensate. Physics Magazine, 0, 9, .	0.1	15
96	Effect of screening long-range Coulomb interactions on the metallic behavior in two-dimensional hole systems. Physical Review B, 2008, 77, .	1.1	14
97	Compressibility Measurements of Quasi-One-Dimensional Quantum Wires. Physical Review Letters, 2011, 107, 126801.	2.9	14
98	Manifestation of a non-Abelian Berry phase in a μ -type semiconductor system. Physical Review B, 2016, 93, .	1.1	14
99	The electronic structure of a back-gated high electron mobility transistor. Semiconductor Science and Technology, 1991, 6, 201-207.	1.0	13
100	Decoding the ternary Golay code. IEEE Transactions on Information Theory, 1993, 39, 1043-1046.	1.5	13
101	Localisation and the metal-insulator transition in two dimensions. Physica B: Condensed Matter, 2001, 296, 21-31.	1.3	13
102	Charge shelving and bias spectroscopy for the readout of a charge qubit on the basis of superposition states. Physical Review B, 2004, 70, .	1.1	13
103	Donor activation and damage in Si/SiO ₂ from low-dose, low-energy ion implantation studied via electrical transport in MOSFETs. Semiconductor Science and Technology, 2005, 20, 363-368.	1.0	13
104	Confinement properties of $\text{Ga}_{0.25}\text{In}_{0.75}\text{As}$ quantum dots. Physical Review B, 2009, 79, .	1.1	13
105	Ground-plane screening of Coulomb interactions in two-dimensional systems: How effectively can one two-dimensional system screen interactions in another. Physical Review B, 2009, 80, .	1.1	13
106	Transition from one- to two-subband occupancy in the 2DEG of back-gated modulation-doped GaAs-AlxGa _{1-x} As heterostructures. Physical Review B, 1995, 51, 17600-17604.	1.1	12
107	Measurements of a composite fermion split-gate device. Physical Review B, 1996, 53, R7596-R7598.	1.1	12
108	Radio-frequency reflectometry on large gated two-dimensional systems. Review of Scientific Instruments, 2008, 79, 123901.	0.6	12

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109	Ohmic conduction of sub-10nm P-doped silicon nanowires at cryogenic temperatures. Applied Physics Letters, 2008, 92, 052101.	1.5	12
110	Origin of gate hysteresis in p -type Si-doped AlGaAs/GaAs heterostructures. Physical Review B, 2012, 86, .	1.1	12
111	Scaling of the Kondo zero-bias peak in a hole quantum dot at finite temperatures. Physical Review B, 2013, 87, .	1.1	12
112	Electrical control of the sign of the g -factor in a GaAs hole quantum point contact. Physical Review B, 2016, 94, .	1.1	12
113	Is it the boundaries or disorder that dominates electron transport in semiconductor 'billiards'?. Fortschritte Der Physik, 2013, 61, 332-347.	1.5	11
114	g -factor and well-width fluctuations as a function of carrier density in the two-dimensional hole accumulation layer of transfer-doped diamond. Physical Review B, 2019, 99, .	1.1	11
115	The growth and characterisation of back-gated high mobility two-dimensional electron gas structures. Journal of Crystal Growth, 1991, 111, 300-304.	0.7	10
116	The fabrication of back-gated high electron mobility transistors – a novel approach using MBE regrowth on an in situ ion beam patterned epilayer. Journal of Crystal Growth, 1993, 127, 41-45.	0.7	10
117	Interaction correction to the longitudinal conductivity and Hall resistivity in high-quality two-dimensional GaAs electron and hole systems. Physical Review B, 2005, 72, .	1.1	10
118	An improved process for fabricating high-mobility organic molecular crystal field-effect transistors. Journal of Applied Physics, 2007, 102, 084511.	1.1	10
119	The 0.7 anomaly in one-dimensional hole quantum wires. Journal of Physics Condensed Matter, 2008, 20, 164205.	0.7	10
120	Dependence of the 0.7 anomaly on the curvature of the potential barrier in quantum wires. Physical Review B, 2015, 91, .	1.1	10
121	Quantum-dot cellular automata: introduction and experimental overview. , 0, , .		9
122	Single atom Si nanoelectronics using controlled single-ion implantation. Microelectronic Engineering, 2005, 78-79, 279-286.	1.1	9
123	Noncollinear Paramagnetism of a GaAs Two-Dimensional Hole System. Physical Review Letters, 2014, 113, 236401.	2.9	9
124	Signatures of quantum mechanical Zeeman effect in classical transport due to topological properties of two-dimensional spin-3/2 holes. Physical Review B, 2020, 101, .	1.1	9
125	Electron "hole" superfluidity in strained Si/Ge type II heterojunctions. Npj Quantum Materials, 2021, 6, .	1.8	9
126	Modelling of electrostatic gate operations in the Kane solid state quantum computer. Microelectronics Journal, 2002, 33, 1053-1058.	1.1	8

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127	Probing the sensitivity of electron wave interference to disorder-induced scattering in solid-state devices. <i>Physical Review B</i> , 2012, 85, .	1.1	8
128	Multiband Mechanism for the Sign Reversal of Coulomb Drag Observed in Double Bilayer Graphene Heterostructures. <i>Physical Review Letters</i> , 2018, 121, 036601.	2.9	8
129	Three-dimensional electron-hole superfluidity in a superlattice close to room temperature. <i>Physical Review B</i> , 2020, 102, .	1.1	8
130	Anodic oxidation of epitaxial superconductor-semiconductor hybrids. <i>Physical Review Materials</i> , 2021, 5, .	0.9	8
131	A self-aligned fabrication process for silicon quantum computer devices. <i>Nanotechnology</i> , 2002, 13, 686-690.	1.3	7
132	The twin radio frequency single electron transistor for correlated charge detection on microsecond time-scales. <i>Microelectronic Engineering</i> , 2003, 67-68, 775-781.	1.1	7
133	A study of transport suppression in an undoped AlGaAs/GaAs quantum dot single-electron transistor. <i>Journal of Physics Condensed Matter</i> , 2013, 25, 505302.	0.7	7
134	Radio-frequency reflectometry on an undoped AlGaAs/GaAs single electron transistor. <i>Applied Physics Letters</i> , 2014, 104, 012114.	1.5	7
135	Hybrid architecture for shallow accumulation mode AlGaAs/GaAs heterostructures with epitaxial gates. <i>Applied Physics Letters</i> , 2015, 106, 012105.	1.5	7
136	Spin-Momentum Locking Induced Anisotropic Magnetoresistance in Monolayer WTe ₂ . <i>Nano Letters</i> , 2021, 21, 9005-9011.	4.5	7
137	Optimizing topological switching in confined 2D-Xene nanoribbons via finite-size effects. <i>Applied Physics Reviews</i> , 2022, 9, .	5.5	7
138	Ultrahigh vacuum in situ fabrication of three-dimensional semiconductor structures using a combination of particle beams. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1992, 10, 2834.	1.6	6
139	Integer quantum Hall states in coupled double electron gas systems at mismatched carrier densities. <i>Journal of Physics Condensed Matter</i> , 1996, 8, L311-L318.	0.7	6
140	Real metals, 2D or not 2D?. <i>Nature</i> , 1999, 400, 715-717.	13.7	6
141	Uranium Superconductivity Redux. <i>Journal of Superconductivity and Novel Magnetism</i> , 2000, 13, 833-835.	0.5	6
142	Magnetic susceptibility of the normal-superconducting transition in high-purity single-crystal \pm -uranium. <i>Physical Review B</i> , 2002, 66, .	1.1	6
143	Double-island single-electron transistor for noise-suppressed detection of charge transfer. <i>Microelectronic Engineering</i> , 2003, 67-68, 826-831.	1.1	6
144	Current suppression in a double-island single-electron transistor for detection of degenerate charge configurations of a floating double-dot. <i>Applied Physics Letters</i> , 2003, 83, 4640-4642.	1.5	6

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145	Superconductivity in metal-mixed ion-implanted polymer films. Applied Physics Letters, 2006, 89, 152503.	1.5	6
146	Use of low-temperature Hall effect to measure dopant activation: Role of electron-electron interactions. Physical Review B, 2007, 76, .	1.1	6
147	Overlapping-gate architecture for silicon Hall bar field-effect transistors in the low electron density regime. Applied Physics Letters, 2010, 97, .	1.5	6
148	Fabrication and characterisation of gallium arsenide ambipolar quantum point contacts. Applied Physics Letters, 2015, 106, .	1.5	6
149	Using light and heat to controllably switch and reset disorder configuration in nanoscale devices. Physical Review B, 2015, 91, .	1.1	6
150	Two-dimensional lateral surface superlattices in GaAs heterostructures with independent control of carrier density and modulation potential. Applied Physics Letters, 2020, 117, .	1.5	6
151	New signatures of the spin gap in quantum point contacts. Nature Communications, 2021, 12, 5.	5.8	6
152	Gate voltage dependent Rashba spin splitting in hole transverse magnetic focusing. Physical Review B, 2022, 105, .	1.1	6
153	Measurements of a composite fermion split-gate. Surface Science, 1996, 361-362, 71-74.	0.8	5
154	Electrometry using the quantum Hall effect in a bilayer two-dimensional electron system. Applied Physics Letters, 2010, 96, 212102.	1.5	5
155	Double-layer-gate architecture for few-hole GaAs quantum dots. Nanotechnology, 2016, 27, 334001.	1.3	5
156	Improving reproducibility of quantum devices with completely undoped architectures. Applied Physics Letters, 2020, 117, .	1.5	5
157	Quasi-one-dimensional transport in semiconductor microstructures. Physica Scripta, 1992, T45, 200-205.	1.2	4
158	Probing the band structure of a two-dimensional hole gas using a one-dimensional superlattice. Physical Review B, 1996, 54, R14273-R14276.	1.1	4
159	Dreams Versus Reality: Plenary Debate Session on Quantum Computing. Quantum Information Processing, 2003, 2, 449-472.	1.0	4
160	Anomalous transport in mesoscopic inhomogeneous two-dimensional electron systems at low temperature. Physical Review B, 2010, 82, .	1.1	4
161	Origin of the hysteresis in bilayer two-dimensional systems in the quantum Hall regime. Physical Review B, 2010, 82, .	1.1	4
162	Landau level spin diode in a GaAs two dimensional hole system. New Journal of Physics, 2015, 17, 033035.	1.2	4

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163	Metallic behaviour and localisation in 2D GaAs hole systems. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2001, 11, 161-166.	1.3	3
164	Single-electron transistor architectures for charge motion detection in solid-state quantum computer devices. <i>Smart Materials and Structures</i> , 2002, 11, 749-755.	1.8	3
165	The fate of quantum Hall extended states as $\nu=0$ and the possibility of a 2D metal. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 12, 646-649.	1.3	3
166	Scaling of coherent tunneling adiabatic passage in solid-state coherent quantum systems. , 2005, , .		3
167	The effect of temperature and gas flow on the physical vapour growth of mm-scale rubrene crystals for organic FETs. <i>Proceedings of SPIE</i> , 2007, , .	0.8	3
168	Transverse magnetic focussing of heavy holes in a (100) GaAs quantum well. <i>Semiconductor Science and Technology</i> , 2015, 30, 102001.	1.0	3
169	Understanding the Role of Defective Phases on the Conductivity Behavior of Strained Epitaxial LaNiO_3 Thin Films. <i>ACS Applied Electronic Materials</i> , 2022, 4, 1196-1205.	2.0	3
170	A High-Mobility Hole Bilayer in a Germanium Double Quantum Well. <i>Advanced Quantum Technologies</i> , 0, , 2100167.	1.8	3
171	The growth of high mobility heterostructures on (311)B GaAs. <i>Microelectronics Journal</i> , 1995, 26, 897-902.	1.1	2
172	Localisation in Strongly Interacting 2D GaAs Systems. <i>Physica Status Solidi (B): Basic Research</i> , 2002, 230, 81-87.	0.7	2
173	Exchange-driven bilayer-to-monolayer charge transfer in an asymmetric double-quantum-well. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2002, 12, 304-306.	1.3	2
174	Fabrication and characterization of a 2D hole system in a novel (311)A GaAs SISFET. <i>Microelectronics Journal</i> , 2005, 36, 327-330.	1.1	2
175	Ballistic transport in one-dimensional bilayer hole systems. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2006, 34, 550-552.	1.3	2
176	TUNNELING AND HOPPING BETWEEN DOMAINS IN THE METAL-INSULATOR TRANSITION IN TWO-DIMENSIONS. <i>International Journal of Modern Physics B</i> , 2008, 22, 4565-4571.	1.0	2
177	Ballistic induced hole quantum wires fabricated on a (100)-oriented AlGaAs/GaAs heterostructure. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2010, 42, 1111-1113.	1.3	2
178	Nonlinear spin filter for nonmagnetic materials at zero magnetic field. <i>Physical Review B</i> , 2020, 102, .	1.1	2
179	High electron mobility and low noise quantum point contacts in an ultra-shallow all-epitaxial metal gate GaAs/Al _x Ga _{1-x} As heterostructure. <i>Applied Physics Letters</i> , 2021, 119, 063105.	1.5	2
180	Influence of Inversion Symmetry on the Metallic Behaviour in a Dilute Two-dimensional Hole System. <i>Australian Journal of Physics</i> , 2000, 53, 523.	0.6	2

#	ARTICLE	IF	CITATIONS
181	Effects of biased and unbiased illuminations on two-dimensional electron gases in dopant-free GaAs/AlGaAs. <i>Physical Review B</i> , 2022, 105, .	1.1	2
182	The physics and fabrication of in situ back-gated (311)A hole gas heterojunctions. <i>Microelectronics Journal</i> , 1997, 28, 795-801.	1.1	1
183	Single electron devices for simulating read-out in a solid state quantum computer. <i>Surface Science</i> , 2003, 532-535, 1199-1203.	0.8	1
184	Stability of the bilayer $\nu=1$ quantum Hall state under charge imbalance. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2004, 22, 40-43.	1.3	1
185	Nanofabrication of charge-based Si:P quantum computer devices using single-ion implantation. , 2005, , .		1
186	Single-electron transistor coupled to a silicon nano-MOSFET. , 2005, , .		1
187	Electric-field-induced charge noise in doped silicon: Ionization of phosphorus donors. <i>Applied Physics Letters</i> , 2006, 88, 162117.	1.5	1
188	Atomically precise silicon device fabrication. , 2007, , .		1
189	Single particle and momentum relaxation times in two-dimensional electron systems (updated May 14,) Tj ETQq1 1 0.784314 rgBT /O		1
190	Anisotropic Zeeman Splitting In Ballistic One-Dimensional Hole Systems. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	1
191	Screening long-range Coulomb interactions in 2D hole systems using a bilayer heterostructure. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 1700-1702.	1.3	1
192	Quantum transport in one-dimensional GaAs hole systems. <i>International Journal of Nanotechnology</i> , 2008, 5, 318.	0.1	1
193	Quantum tunnelling and hopping between metallic domains in disordered two-dimensional mesoscopic electron systems. <i>Journal of Physics A: Mathematical and Theoretical</i> , 2009, 42, 214012.	0.7	1
194	Radio-frequency reflectometryâ€”A fast and sensitive measurement method for two-dimensional systems. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2010, 42, 1192-1195.	1.3	1
195	Electrically controlled piezo-rotator for studying semiconductor nanostructures at milli-Kelvin temperatures and high magnetic fields. , 2010, , .		1
196	Charge transport by modulating spin-orbit gauge fields for quasi-one-dimensional holes. <i>Applied Physics Letters</i> , 2011, 98, 152101.	1.5	1
197	Mapping the anisotropy of the Zeeman spin splitting of one-dimensional heavy holes in a GaAs quantum point contact. , 2014, , .		1
198	Determining the stability and activation energy of Si acceptors in AlGaAs using quantum interference in an open hole quantum dot. <i>Physical Review B</i> , 2014, 89, .	1.1	1

#	ARTICLE	IF	CITATIONS
199	Ultra-shallow All-Epitaxial Aluminum Gate GaAs/Al _x Ga _{1-x} As Transistors with High Electron Mobility. <i>Advanced Functional Materials</i> , 0, , 2104213.	7.8	1
200	Measuring the Charge and Spin States of Electrons on Individual Dopant Atoms in Silicon. <i>Topics in Applied Physics</i> , 2009, , 169-182.	0.4	1
201	Anomalous integer quantum Hall states in coupled double quantum wells and the effect of Landau level broadening. <i>Journal of Physics Condensed Matter</i> , 1999, 11, 3711-3728.	0.7	0
202	Nanoscale single-electron transistor architectures for single spin detection in solid state quantum computer devices. , 2001, , .		0
203	Modeling of electrostatic gate operations in the Kane solid state quantum computer. , 2001, , .		0
204	The fabrication of devices in silicon using scanning probe microscopy. , 2005, , .		0
205	Electric Field Induced Charge Noise in Doped Silicon: Ionisation of Phosphorus Dopants. <i>AIP Conference Proceedings</i> , 2005, , .	0.3	0
206	An Improved Process for Fabricating High-Mobility Organic Molecular Crystal Field-Effect Transistors. , 2006, , .		0
207	Electrical properties of atomically controlled Si:P nanowires created by scanning probe microscopy. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	0
208	Conductance Quantisation In An Induced Hole Quantum Wire. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	0
209	0.7 Structure and zero bias anomaly in one-dimensional hole systems. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 1501-1503.	1.3	0
210	Metallic behavior in low-disorder two-dimensional hole systems in the presence of long- and short-range disorder. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2008, 40, 1599-1601.	1.3	0
211	DREAMS VERSUS REALITY: PLENARY DEBATE SESSION ON QUANTUM COMPUTING. <i>Fluctuation and Noise Letters</i> , 2008, 08, C27-C51.	1.0	0
212	Ground-plane screening of Coulomb interactions by a nearby two-dimensional system. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2010, 42, 1228-1231.	1.3	0
213	Crystallographic anisotropy of the Zeeman splitting in 1D hole quantum wires. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2010, 42, 967-970.	1.3	0
214	The Reduced Effective Interaction Parameter in Closely Spaced Two-dimensional Hole Systems. , 2010, , .		0
215	Fabrication and characterization of an undoped GaAs single hole transistor. , 2010, , .		0
216	Novel annealing processes for soluble acenes. , 2010, , .		0

#	ARTICLE	IF	CITATIONS
217	Nuclear magnetic resonance in GaAs-AlGaAs nanostructure devices. , 2010, , .		0
218	Fabrication of undoped AlGaAs/GaAs electron quantum dots. , 2010, , .		0
219	Can insulating the gates lead us to stable modulation-doped hole quantum devices?. , 2010, , .		0
220	Fabrication and characterisation of an induced ambipolar device on AlGaAs/GaAs Heterostructures. , 2010, , .		0
221	Fabrication of Undoped AlGaAs ⁺ GaAs Electron Quantum Dots. AIP Conference Proceedings, 2011, , .	0.3	0
222	(100) GaAs/Al _x Ga _{1-x} As heterostructures for Zeeman spin splitting studies of hole quantum wires. Journal of Crystal Growth, 2011, 323, 48-51.	0.7	0
223	Overlapping-Gate Architecture for Silicon Hall Bar MOSFET Devices in the Low Electron Density and High Magnetic Field Regime. Materials Science Forum, 0, 700, 93-95.	0.3	0
224	Low temperature transport on surface conducting diamond. , 2012, , .		0
225	“You need another gate, mate”; g-factor engineering in quantum wires and wrap-gated nanowires. , 2012, , .		0
226	Observation of the Kondo effect in a spin-3/2 hole quantum dot. , 2012, , .		0
227	The 1D g-factor and 0.7 anomaly in QPCs with independent control over density. , 2012, , .		0
228	The origin of gate hysteresis in p-type Si-doped AlGaAs/GaAs heterostructures. , 2012, , .		0
229	The influence of small-angle scattering on ballistic transport in quantum dots. , 2012, , .		0
230	Observation of the Kondo effect in a spin-3/2 hole quantum dot. , 2013, , .		0
231	QUANTUM GLASS TRANSITION AT FINITE TEMPERATURE IN TWO-DIMENSIONAL ELECTRON LAYERS. International Journal of Modern Physics B, 2013, 27, 1347004.	1.0	0
232	Fabrication and characterization of few-hole quantum dots in undoped GaAs/AlGaAs heterostructures. , 2014, , .		0
233	Observation of single hole transport in a highly tunable silicon quantum dot. , 2014, , .		0
234	Probing a single acceptor in a silicon nanotransistor. , 2014, , .		0

#	ARTICLE	IF	CITATIONS
235	Publisher's Note: Manifestation of a non-Abelian Berry phase in ap-type semiconductor system [Phys. Rev. B93, 205424 (2016)]. Physical Review B, 2016, 93, .	1.1	0
236	Publisher's Note: Electrical control of the sign of thegfactor in a GaAs hole quantum point contact [Phys. Rev. B94, 041406(R) (2016)]. Physical Review B, 2016, 94, .	1.1	0
237	Electron spin relaxation of single phosphorus donors and donor clusters in atomically engineered silicon devices. , 2017, , .		0
238	Is there a Metallic State in Two Dimensions?. Australian Journal of Physics, 2000, 53, 513.	0.6	0
239	Is there a true metallic state in two dimensions?. Springer Proceedings in Physics, 2001, , 735-738.	0.1	0
240	TUNNELING AND HOPPING BETWEEN DOMAINS IN THE METAL-INSULATOR TRANSITION IN TWO-DIMENSIONS. , 2008, , .		0
241	Anomalies in magneto-transport in spin-orbit coupled systems. , 2018, , .		0