## **Alex Hamilton**

# List of Publications by Year in Descending Order

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58 4,400 202 34 h-index g-index citations papers 5.16 5,101 242 4.7 avg, IF L-index ext. citations ext. papers

#	Paper	IF	Citations
202	Optimizing topological switching in confined 2D-Xene nanoribbons via finite-size effects. <i>Applied Physics Reviews</i> , <b>2022</b> , 9, 011411	17.3	1
201	Understanding the Role of Defective Phases on the Conductivity Behavior of Strained Epitaxial LaNiO3 Thin Films. <i>ACS Applied Electronic Materials</i> , <b>2022</b> , 4, 1196-1205	4	
200	Lightly strained germanium quantum wells with hole mobility exceeding one million. <i>Applied Physics Letters</i> , <b>2022</b> , 120, 122104	3.4	3
199	Spin-Momentum Locking Induced Anisotropic Magnetoresistance in Monolayer WTe. <i>Nano Letters</i> , <b>2021</b> , 21, 9005-9011	11.5	0
198	Theory of hole-spin qubits in strained germanium quantum dots. <i>Physical Review B</i> , <b>2021</b> , 103,	3.3	8
197	Optimal operation points for ultrafast, highly coherent Ge hole spin-orbit qubits. <i>Npj Quantum Information</i> , <b>2021</b> , 7,	8.6	9
196	Electronfiole superfluidity in strained Si/Ge type II heterojunctions. <i>Npj Quantum Materials</i> , <b>2021</b> , 6,	5	3
195	Near-Field Excited Archimedean-like Tiling Patterns in Phonon-Polaritonic Crystals. <i>ACS Nano</i> , <b>2021</b> , 15, 9134-9142	16.7	8
194	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> , <b>2021</b> , 126, 256601	7.4	2
193	Anodic oxidation of epitaxial superconductor-semiconductor hybrids. <i>Physical Review Materials</i> , <b>2021</b> , 5,	3.2	2
192	New signatures of the spin gap in quantum point contacts. <i>Nature Communications</i> , <b>2021</b> , 12, 5	17.4	4
191	High electron mobility and low noise quantum point contacts in an ultra-shallow all-epitaxial metal gate GaAs/AlxGa1⊠As heterostructure. <i>Applied Physics Letters</i> , <b>2021</b> , 119, 063105	3.4	1
190	Geometric Control of Universal Hydrodynamic Flow in a Two-Dimensional Electron Fluid. <i>Physical Review X</i> , <b>2021</b> , 11,	9.1	1
189	Signatures of quantum mechanical Zeeman effect in classical transport due to topological properties of two-dimensional spin-32 holes. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	3
188	Experimental conditions for the observation of electron-hole superfluidity in GaAs heterostructures. <i>Physical Review B</i> , <b>2020</b> , 101,	3.3	7
187	Nonlinear spin filter for nonmagnetic materials at zero magnetic field. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	1
186	Improving reproducibility of quantum devices with completely undoped architectures. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 183101	3.4	4

## (2017-2020)

185	Two-dimensional lateral surface superlattices in GaAs heterostructures with independent control of carrier density and modulation potential. <i>Applied Physics Letters</i> , <b>2020</b> , 117, 032102	3.4	1
184	Three-dimensional electron-hole superfluidity in a superlattice close to room temperature. <i>Physical Review B</i> , <b>2020</b> , 102,	3.3	2
183	Quantum Anomalous Hall Effect in Magnetic Doped Topological Insulators and Ferromagnetic Spin-Gapless Semiconductors-A Perspective Review. <i>Small</i> , <b>2020</b> , 16, e1904322	11	13
182	g-factor and well-width fluctuations as a function of carrier density in the two-dimensional hole accumulation layer of transfer-doped diamond. <i>Physical Review B</i> , <b>2019</b> , 99,	3.3	8
181	A room-temperature ferroelectric semimetal. <i>Science Advances</i> , <b>2019</b> , 5, eaax5080	14.3	68
180	Antisymmetric magnetoresistance in van der Waals FeGeTe/graphite/FeGeTe trilayer heterostructures. <i>Science Advances</i> , <b>2019</b> , 5, eaaw0409	14.3	57
179	G-factor and well width variations for the two-dimensional hole gas in surface conducting diamond. <i>Applied Physics Letters</i> , <b>2018</b> , 112, 042102	3.4	15
178	Thickness-dependent electronic structure in WTe2 thin films. <i>Physical Review B</i> , <b>2018</b> , 98,	3.3	15
177	Multiband Mechanism for the Sign Reversal of Coulomb Drag Observed in Double Bilayer Graphene Heterostructures. <i>Physical Review Letters</i> , <b>2018</b> , 121, 036601	7.4	5
176	Spin and orbital structure of the first six holes in a silicon metal-oxide-semiconductor quantum dot. <i>Nature Communications</i> , <b>2018</b> , 9, 3255	17.4	26
175	Electrical Control of the Zeeman Spin Splitting in Two-Dimensional Hole Systems. <i>Physical Review Letters</i> , <b>2018</b> , 121, 077701	7.4	14
174	Strong Spin-Orbit Contribution to the Hall Coefficient of Two-Dimensional Hole Systems. <i>Physical Review Letters</i> , <b>2018</b> , 121, 087701	7.4	13
173	SpinBrbit coupling in silicon for electrons bound to donors. Npj Quantum Information, 2018, 4,	8.6	9
172	Spin-orbit interactions in inversion-asymmetric two-dimensional hole systems: A variational analysis. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	29
171	Zero-Energy Modes from Coalescing Andreev States in a Two-Dimensional Semiconductor-Superconductor Hybrid Platform. <i>Physical Review Letters</i> , <b>2017</b> , 119, 176805	7.4	129
170	Spin blockade in hole quantum dots: Tuning exchange electrically and probing Zeeman interactions. <i>Physical Review B</i> , <b>2017</b> , 95,	3.3	21
169	Mechanisms for Strong Anisotropy of In-Plane g-Factors in Hole Based Quantum Point Contacts. <i>Physical Review Letters</i> , <b>2017</b> , 119, 116803	7.4	12
168	Detection and Control of Spin-Orbit Interactions in a GaAs Hole Quantum Point Contact. <i>Physical Review Letters</i> , <b>2017</b> , 118, 146801	7.4	12

167	Electrical control of the sign of the g factor in a GaAs hole quantum point contact. <i>Physical Review B</i> , <b>2016</b> , 94,	3.3	9
166	Manifestation of a non-Abelian Berry phase in a p-type semiconductor system. <i>Physical Review B</i> , <b>2016</b> , 93,	3.3	10
165	Double-layer-gate architecture for few-hole GaAs quantum dots. <i>Nanotechnology</i> , <b>2016</b> , 27, 334001	3.4	4
164	Spin Control Without Magnetic Fields. <i>Physics Magazine</i> , <b>2016</b> , 9,	1.1	9
163	Anisotropic Pauli Spin Blockade of Holes in a GaAs Double Quantum Dot. <i>Nano Letters</i> , <b>2016</b> , 16, 7685-	76895	30
162	Strong and Tunable Spin-Orbit Coupling in a Two-Dimensional Hole Gas in Ionic-Liquid Gated Diamond Devices. <i>Nano Letters</i> , <b>2016</b> , 16, 3768-73	11.5	36
161	Using light and heat to controllably switch and reset disorder configuration in nanoscale devices. <i>Physical Review B</i> , <b>2015</b> , 91,	3.3	5
160	Landau level spin diode in a GaAs two dimensional hole system. <i>New Journal of Physics</i> , <b>2015</b> , 17, 03303	<b>35</b> 2.9	4
159	Pauli Spin Blockade of Heavy Holes in a Silicon Double Quantum Dot. <i>Nano Letters</i> , <b>2015</b> , 15, 7314-8	11.5	48
158	Dependence of the 0.7 anomaly on the curvature of the potential barrier in quantum wires. <i>Physical Review B</i> , <b>2015</b> , 91,	3.3	7
157	Bottom-up assembly of metallic germanium. Scientific Reports, 2015, 5, 12948	4.9	18
156	Transverse magnetic focussing of heavy holes in a (100) GaAs quantum well. <i>Semiconductor Science and Technology</i> , <b>2015</b> , 30, 102001	1.8	1
155	Fabrication and characterisation of gallium arsenide ambipolar quantum point contacts. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 183504	3.4	5
154	Hybrid architecture for shallow accumulation mode AlGaAs/GaAs heterostructures with epitaxial gates. <i>Applied Physics Letters</i> , <b>2015</b> , 106, 012105	3.4	7
153	Spin-orbit interaction in a two-dimensional hole gas at the surface of hydrogenated diamond. <i>Nano Letters</i> , <b>2015</b> , 15, 16-20	11.5	34
152	Radio-frequency reflectometry on an undoped AlGaAs/GaAs single electron transistor. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 012114	3.4	5
151	Transport in disordered monolayer MoS2 nanoflakesevidence for inhomogeneous charge transport. <i>Nanotechnology</i> , <b>2014</b> , 25, 375201	3.4	23
150	Probing the spin states of a single acceptor atom. <i>Nano Letters</i> , <b>2014</b> , 14, 1492-6	11.5	25

86,

2014, 7 149 Excitonic superfluidity and screening in electron-hole bilayer systems. Physical Review B, 2014, 89, 148 42 3.3 Noncollinear paramagnetism of a GaAs two-dimensional hole system. Physical Review Letters, 2014, 8 147 7.4 113, 236401 Determining the stability and activation energy of Si acceptors in AlGaAs using quantum 146 3.3 interference in an open hole quantum dot. Physical Review B, 2014, 89, Is it the boundaries or disorder that dominates electron transport in semiconductor [billiardsR. 145 5.7 10 Fortschritte Der Physik, 2013, 61, 332-347 High-temperature superfluidity in double-bilayer graphene. Physical Review Letters, 2013, 110, 146803 7.4 144 131 Influence of surface states on quantum and transport lifetimes in high-quality undoped 143 17 3.3 heterostructures. Physical Review B, 2013, 87, Single hole transport in a silicon metal-oxide-semiconductor quantum dot. Applied Physics Letters, 142 20 3.4 2013, 103, 163508 A study of transport suppression in an undoped AlGaAs/GaAs quantum dot single-electron 1.8 141 4 transistor. Journal of Physics Condensed Matter, 2013, 25, 505302 Using a tunable quantum wire to measure the large out-of-plane spin splitting of quasi 140 11.5 two-dimensional holes in a GaAs nanostructure. Nano Letters, 2013, 13, 148-52 Scaling of the Kondo zero-bias peak in a hole quantum dot at finite temperatures. Physical Review B 139 3.3 11 , **2013**, 87, Ultra-shallow quantum dots in an undoped GaAs/AlGaAs two-dimensional electron gas. Applied 138 3.4 14 Physics Letters, **2013**, 102, 103507 OUANTUM GLASS TRANSITION AT FINITE TEMPERATURE IN TWO-DIMENSIONAL ELECTRON 1.1 137 LAYERS. International Journal of Modern Physics B, 2013, 27, 1347004 Extreme sensitivity of the spin-splitting and 0.7 anomaly to confining potential in one-dimensional 136 11.5 18 nanoelectronic devices. Nano Letters, 2012, 12, 4495-502 Stacking of 2D electron gases in Ge probed at the atomic level and its correlation to 135 11.5 17 low-temperature magnetotransport. Nano Letters, 2012, 12, 4953-9 Fabrication and characterization of ambipolar devices on an undoped AlGaAs/GaAs 134 30 3.4 heterostructure. Applied Physics Letters, 2012, 100, 052101 Impact of small-angle scattering on ballistic transport in quantum dots. Physical Review Letters, 133 7.4 24 2012, 108, 196807 Origin of gate hysteresis in p-type Si-doped AlGaAs/GaAs heterostructures. Physical Review B, 2012, 132 3.3 12

131	Probing the sensitivity of electron wave interference to disorder-induced scattering in solid-state devices. <i>Physical Review B</i> , <b>2012</b> , 85,	3.3	6
130	Charge transport by modulating spin-orbit gauge fields for quasi-one-dimensional holes. <i>Applied Physics Letters</i> , <b>2011</b> , 98, 152101	3.4	1
129	Resistively detected nuclear magnetic resonance in n- and p-type GaAs quantum point contacts. <i>Nano Letters</i> , <b>2011</b> , 11, 3147-50	11.5	24
128	(100) GaAs/AlxGa1NAs heterostructures for Zeeman spin splitting studies of hole quantum wires. <i>Journal of Crystal Growth</i> , <b>2011</b> , 323, 48-51	1.6	
127	Compressibility measurements of quasi-one-dimensional quantum wires. <i>Physical Review Letters</i> , <b>2011</b> , 107, 126801	7.4	10
126	Observation of the Kondo effect in a spin-3/2 hole quantum dot. <i>Physical Review Letters</i> , <b>2011</b> , 107, 07	68045	23
125	Overlapping-Gate Architecture for Silicon Hall Bar MOSFET Devices in the Low Electron Density and High Magnetic Field Regime. <i>Materials Science Forum</i> , <b>2011</b> , 700, 93-95	0.4	
124	Electrometry using the quantum Hall effect in a bilayer two-dimensional electron system. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 212102	3.4	5
123	Field-orientation dependence of the Zeeman spin splitting in (In,Ga)As quantum point contacts. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	17
122	Anomalous transport in mesoscopic inhomogeneous two-dimensional electron systems at low temperature. <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	4
121	Overlapping-gate architecture for silicon Hall bar field-effect transistors in the low electron density regime. <i>Applied Physics Letters</i> , <b>2010</b> , 97, 152102	3.4	5
120	AlGaAs/GaAs single electron transistor fabricated without modulation doping. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 112104	3.4	20
119	Observation of orientation- andk-dependent Zeeman spin-splitting in hole quantum wires on (100)-oriented AlGaAs/GaAs heterostructures. <i>New Journal of Physics</i> , <b>2010</b> , 12, 033043	2.9	25
118	Velocity-modulation control of electron-wave propagation in graphene. <i>Physical Review B</i> , <b>2010</b> , 81,	3.3	95
117	Fabrication and characterization of an induced GaAs single hole transistor. <i>Applied Physics Letters</i> , <b>2010</b> , 96, 092103	3.4	20
116	Origin of the hysteresis in bilayer two-dimensional systems in the quantum Hall regime. <i>Physical Review B</i> , <b>2010</b> , 82,	3.3	3
115	Piezoelectric rotator for studying quantum effects in semiconductor nanostructures at high magnetic fields and low temperatures. <i>Review of Scientific Instruments</i> , <b>2010</b> , 81, 113905	1.7	17
114	Ground-plane screening of Coulomb interactions by a nearby two-dimensional system. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2010</b> , 42, 1228-1231	3	

#### (2008-2010)

113	Crystallographic anisotropy of the Zeeman splitting in 1D hole quantum wires. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2010</b> , 42, 967-970	3	
112	Radio-frequency reflectometry fast and sensitive measurement method for two-dimensional systems. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2010</b> , 42, 1192-1195	3	1
111	Ballistic induced hole quantum wires fabricated on a (100)-oriented AlGaAs/GaAs heterostructure. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2010</b> , 42, 1111-1113	3	2
110	Ground-plane screening of Coulomb interactions in two-dimensional systems: How effectively can one two-dimensional system screen interactions in another. <i>Physical Review B</i> , <b>2009</b> , 80,	3.3	12
109	Quantum tunnelling and hopping between metallic domains in disordered two-dimensional mesoscopic electron systems. <i>Journal of Physics A: Mathematical and Theoretical</i> , <b>2009</b> , 42, 214012	2	1
108	The interplay between one-dimensional confinement and two-dimensional crystallographic anisotropy effects in ballistic hole quantum wires. <i>New Journal of Physics</i> , <b>2009</b> , 11, 043018	2.9	20
107	Role of background impurities in the single-particle relaxation lifetime of a two-dimensional electron gas. <i>Physical Review B</i> , <b>2009</b> , 80,	3.3	32
106	Measuring the Charge and Spin States of Electrons on Individual Dopant Atoms in Silicon. <i>Topics in Applied Physics</i> , <b>2009</b> , 169-182	0.5	1
105	Impact of long- and short-range disorder on the metallic behaviour of two-dimensional systems. <i>Nature Physics</i> , <b>2008</b> , 4, 55-59	16.2	35
104	Atomic-scale silicon device fabrication. <i>International Journal of Nanotechnology</i> , <b>2008</b> , 5, 352	1.5	25
103	DREAMS VERSUS REALITY: PLENARY DEBATE SESSION ON QUANTUM COMPUTING. <i>Fluctuation and Noise Letters</i> , <b>2008</b> , 08, C27-C51	1.2	
102	TUNNELING AND HOPPING BETWEEN DOMAINS IN THE METAL-INSULATOR TRANSITION IN TWO-DIMENSIONS. <i>International Journal of Modern Physics B</i> , <b>2008</b> , 22, 4565-4571	1.1	2
101	The 0.7 anomaly in one-dimensional hole quantum wires. <i>Journal of Physics Condensed Matter</i> , <b>2008</b> , 20, 164205	1.8	8
100	Effect of screening long-range Coulomb interactions on the metallic behavior in two-dimensional hole systems. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	14
99	Enhanced Zeeman splitting in Ga0.25In0.75As quantum point contacts. <i>Applied Physics Letters</i> , <b>2008</b> , 93, 012105	3.4	22
98	Electron-electron interactions in highly disordered two-dimensional systems. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	35
97	Radio-frequency reflectometry on large gated two-dimensional systems. <i>Review of Scientific Instruments</i> , <b>2008</b> , 79, 123901	1.7	10
96	Ohmic conduction of sub-10nm P-doped silicon nanowires at cryogenic temperatures. <i>Applied Physics Letters</i> , <b>2008</b> , 92, 052101	3.4	11

95	Confinement properties of a Ga0.25In0.75AsIhP quantum point contact. <i>Physical Review B</i> , <b>2008</b> , 77,	3.3	13
94	0.7 Structure and zero bias anomaly in ballistic hole quantum wires. <i>Physical Review Letters</i> , <b>2008</b> , 100, 016403	7.4	26
93	Quantum transport in one-dimensional GaAs hole systems. <i>International Journal of Nanotechnology</i> , <b>2008</b> , 5, 318	1.5	1
92	0.7 Structure and zero bias anomaly in one-dimensional hole systems. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2008</b> , 40, 1501-1503	3	
91	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> , <b>2008</b> , 40, 1599-1601	3	
90	Screening long-range Coulomb interactions in 2D hole systems using a bilayer heterostructure. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2008</b> , 40, 1700-1702	3	1
89	Realization of atomically controlled dopant devices in silicon. Small, 2007, 3, 563-7	11	87
88	Atomically precise silicon device fabrication 2007,		1
87	An improved process for fabricating high-mobility organic molecular crystal field-effect transistors. Journal of Applied Physics, <b>2007</b> , 102, 084511	2.5	7
86	Use of low-temperature Hall effect to measure dopant activation: Role of electron-electron interactions. <i>Physical Review B</i> , <b>2007</b> , 76,	3.3	6
85	Electronic properties of atomically abrupt tunnel junctions in silicon. <i>Physical Review B</i> , <b>2007</b> , 75,	3.3	28
84	One-dimensional conduction properties of highly phosphorus-doped planar nanowires patterned by scanning probe microscopy. <i>Physical Review B</i> , <b>2007</b> , 76,	3.3	32
83	The effect of temperature and gas flow on the physical vapour growth of mm-scale rubrene crystals for organic FETs <b>2007</b> ,		3
82	Narrow, highly P-doped, planar wires in silicon created by scanning probe microscopy. <i>Nanotechnology</i> , <b>2007</b> , 18, 044023	3.4	23
81	Electrical Characterization of Ordered Si:P Dopant Arrays. <i>IEEE Nanotechnology Magazine</i> , <b>2007</b> , 6, 213	3-21.76	16
80	Single particle and momentum relaxation times in two-dimensional electron systems (updated May 14, 2008) <b>2007</b> ,		1
79	Zeeman splitting in ballistic hole quantum wires. <i>Physical Review Letters</i> , <b>2006</b> , 97, 026403	7.4	75
78	Electric-field-induced charge noise in doped silicon: Ionization of phosphorus donors. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 162117	3.4	1

## (2005-2006)

77	Ballistic transport in induced one-dimensional hole systems. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 092105	3.4	46
76	Fabrication of induced two-dimensional hole systems on (311)A GaAs. <i>Journal of Applied Physics</i> , <b>2006</b> , 99, 023707	2.5	25
75	Conductance quantization and the 0.72e2fl conductance anomaly in one-dimensional hole systems. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 012107	3.4	37
74	Controlled single electron transfer between Si:P dots. <i>Applied Physics Letters</i> , <b>2006</b> , 88, 192101	3.4	24
73	Influence of doping density on electronic transport in degenerate Si:P Edoped layers. <i>Physical Review B</i> , <b>2006</b> , 73,	3.3	45
72	Superconductivity in metal-mixed ion-implanted polymer films. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 15250	33.4	6
71	Electrically detected magnetic resonance in ion-implanted Si:P nanostructures. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 182115	3.4	73
70	Ballistic transport in one-dimensional bilayer hole systems. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2006</b> , 34, 550-552	3	2
69	Scanning probe microscopy for silicon device fabrication. <i>Molecular Simulation</i> , <b>2005</b> , 31, 505-515	2	42
68	Fabrication and characterization of a 2D hole system a in novel (311)A GaAs SISFET. <i>Microelectronics Journal</i> , <b>2005</b> , 36, 327-330	1.8	2
67	Single atom Si nanoelectronics using controlled single-ion implantation. <i>Microelectronic Engineering</i> , <b>2005</b> , 78-79, 279-286	2.5	7
66	Scaling of coherent tunneling adiabatic passage in solid-state coherent quantum systems 2005,		3
65	Donor activation and damage in SiBiO2from low-dose, low-energy ion implantation studied via electrical transport in MOSFETs. <i>Semiconductor Science and Technology</i> , <b>2005</b> , 20, 363-368	1.8	12
64	The use of etched registration markers to make four-terminal electrical contacts to STM-patterned nanostructures. <i>Nanotechnology</i> , <b>2005</b> , 16, 2446-9	3.4	23
63	Single-shot readout with the radio-frequency single-electron transistor in the presence of charge noise. <i>Applied Physics Letters</i> , <b>2005</b> , 86, 143117	3.4	27
62	Interaction correction to the longitudinal conductivity and Hall resistivity in high-quality two-dimensional GaAs electron and hole systems. <i>Physical Review B</i> , <b>2005</b> , 72,	3.3	10
61	Evolution of the bilayer ∄1 quantum Hall state under charge imbalance. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	14
60	Electrical readout of a spin qubit without double occupancy. <i>Physical Review B</i> , <b>2005</b> , 71,	3.3	20

59	Observing sub-microsecond telegraph noise with the radio frequency single electron transistor. Journal of Applied Physics, <b>2004</b> , 96, 6827-6830	2.5	20
58	Effect of encapsulation temperature on Si:P 탭oped layers. <i>Applied Physics Letters</i> , <b>2004</b> , 85, 4953-4955	3.4	39
57	Maximizing the Hilbert space for a finite number of distinguishable quantum states. <i>Physical Review Letters</i> , <b>2004</b> , 92, 097901	7.4	49
56	Coherent electronic transfer in quantum dot systems using adiabatic passage. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	218
55	Weak localization in high-quality two-dimensional systems. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	46
54	Charge shelving and bias spectroscopy for the readout of a charge qubit on the basis of superposition states. <i>Physical Review B</i> , <b>2004</b> , 70,	3.3	13
53	Development and operation of the twin radio frequency single electron transistor for cross-correlated charge detection. <i>Journal of Applied Physics</i> , <b>2004</b> , 96, 4508-4513	2.5	15
52	Stability of the bilayer ∄1 quantum Hall state under charge imbalance. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2004</b> , 22, 40-43	3	1
51	Toward Atomic-Scale Device Fabrication in Silicon Using Scanning Probe Microscopy. <i>Nano Letters</i> , <b>2004</b> , 4, 1969-1973	11.5	128
50	Charge-based quantum computing using single donors in semiconductors. <i>Physical Review B</i> , <b>2004</b> , 69,	3.3	237
49	Dreams Versus Reality: Plenary Debate Session on Quantum Computing. <i>Quantum Information Processing</i> , <b>2003</b> , 2, 449-472	1.6	2
48	The twin radio frequency single electron transistor for correlated charge detection on microsecond time-scales. <i>Microelectronic Engineering</i> , <b>2003</b> , 67-68, 775-781	2.5	7
47	Double-island single-electron transistor for noise-suppressed detection of charge transfer. <i>Microelectronic Engineering</i> , <b>2003</b> , 67-68, 826-831	2.5	5
46	Single electron devices for simulating read-out in a solid state quantum computer. <i>Surface Science</i> , <b>2003</b> , 532-535, 1199-1203	1.8	1
45	Progress in silicon-based quantum computing. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , <b>2003</b> , 361, 1451-71	3	49
44	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> , <b>2003</b> , 83, 4640-4642	3.4	6
43	Correlated charge detection for readout of a solid-state quantum computer. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 577-579	3.4	29
42	Localisation in Strongly Interacting 2D GaAs Systems. <i>Physica Status Solidi (B): Basic Research</i> , <b>2002</b> , 230, 81-87	1.3	2

41	Exchange-driven bilayer-to-monolayer charge transfer in an asymmetric double-quantum-well. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2002</b> , 12, 304-306	3	2
40	The fate of quantum Hall extended states as B-O and the possibility of a 2D metal. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2002</b> , 12, 646-649	3	3
39	Modelling of electrostatic gate operations in the Kane solid state quantum computer. <i>Microelectronics Journal</i> , <b>2002</b> , 33, 1053-1058	1.8	8
38	Density-dependent spin polarization in ultra-low-disorder quantum wires. <i>Physical Review Letters</i> , <b>2002</b> , 89, 246801	7.4	142
37	Encapsulation of phosphorus dopants in silicon for the fabrication of a quantum computer. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 3197-3199	3.4	83
36	Magnetic susceptibility of the normal-superconducting transition in high-purity single-crystal <code>Huranium</code> . <i>Physical Review B</i> , <b>2002</b> , 66,	3.3	4
35	Single-electron transistor architectures for charge motion detection in solid-state quantum computer devices. <i>Smart Materials and Structures</i> , <b>2002</b> , 11, 749-755	3.4	3
34	A self-aligned fabrication process for silicon quantum computer devices. <i>Nanotechnology</i> , <b>2002</b> , 13, 686	5- <b>6.2</b> 10	7
33	Localisation and the metalihsulator transition in two dimensions. <i>Physica B: Condensed Matter</i> , <b>2001</b> , 296, 21-31	2.8	13
32	Metallic behaviour and localisation in 2D GaAs hole systems. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , <b>2001</b> , 11, 161-166	3	3
31	Many-body spin-related phenomena in ultra low-disorder quantum wires. <i>Physical Review B</i> , <b>2001</b> , 63,	3.3	135
30	Metallic behavior in dilute two-dimensional hole systems. <i>Physical Review Letters</i> , <b>2001</b> , 87, 126802	7.4	27
29	Is there a true metallic state in two dimensions?. Springer Proceedings in Physics, 2001, 735-738	0.2	
28	Uranium Superconductivity Redux. Journal of Superconductivity and Novel Magnetism, 2000, 13, 833-835	5	6
27	Weak localization, hole-hole interactions, and the "Metal"-insulator transition in two dimensions. <i>Physical Review Letters</i> , <b>2000</b> , 84, 2489-92	7.4	90
26	Influence of Inversion Symmetry on the Metallic Behaviour in a Dilute Two-dimensional Hole System. <i>Australian Journal of Physics</i> , <b>2000</b> , 53, 523		2
25	Reentrant Insulator-Metal-Insulator Transition at B=0 in a Two-Dimensional Hole Gas. <i>Physical Review Letters</i> , <b>1999</b> , 82, 1542-1545	7.4	58
24	Anomalous integer quantum Hall states in coupled double quantum wells and the effect of Landau level broadening. <i>Journal of Physics Condensed Matter</i> , <b>1999</b> , 11, 3711-3728	1.8	

23	Metal-Insulator Transition at B=0 in a Dilute Two Dimensional GaAs-AlGaAs Hole Gas. <i>Physical Review Letters</i> , <b>1998</b> , 80, 1292-1295	7.4	219
22	Magnetization Instability in a Two-Dimensional System. <i>Physical Review Letters</i> , <b>1997</b> , 79, 4449-4452	7.4	49
21	Fabrication of high mobility in situ back-gated (311)A hole gas heterojunctions. <i>Applied Physics Letters</i> , <b>1997</b> , 70, 2750-2752	3.4	24
20	Enhanced g factors of a one-dimensional hole gas with quantized conductance. <i>Physical Review B</i> , <b>1997</b> , 55, R13409-R13412	3.3	44
19	The physics and fabrication of in situ back-gated (311)A hole gas heterojunctions. <i>Microelectronics Journal</i> , <b>1997</b> , 28, 795-801	1.8	1
18	Frictional drag between parallel two-dimensional electron gases in a perpendicular magnetic field.  Journal of Physics Condensed Matter, <b>1996</b> , 8, L557-L562	1.8	38
17	Integer quantum Hall states in coupled double electron gas systems at mismatched carrier densities. <i>Journal of Physics Condensed Matter</i> , <b>1996</b> , 8, L311-L318	1.8	6
16	Measurements of a composite fermion split-gate. <i>Surface Science</i> , <b>1996</b> , 361-362, 71-74	1.8	5
15	Probing the band structure of a two-dimensional hole gas using a one-dimensional superlattice. <i>Physical Review B</i> , <b>1996</b> , 54, R14273-R14276	3.3	4
14	Fractional quantum Hall effect in bilayer two-dimensional hole-gas systems. <i>Physical Review B</i> , <b>1996</b> , 54, R5259-R5262	3.3	27
13	Measurements of a composite fermion split-gate device. <i>Physical Review B</i> , <b>1996</b> , 53, R7596-R7598	3.3	11
12	The growth of high mobility heterostructures on (311)B GaAs. <i>Microelectronics Journal</i> , <b>1995</b> , 26, 897-90	<b>02</b> .8	2
11	Transition from one- to two-subband occupancy in the 2DEG of back-gated modulation-doped GaAs-AlxGa1-xAs heterostructures. <i>Physical Review B</i> , <b>1995</b> , 51, 17600-17604	3.3	10
10	The fabrication of back-gated high electron mobility transistors has novel approach using MBE regrowth on an in situ ion beam patterned epilayer. <i>Journal of Crystal Growth</i> , <b>1993</b> , 127, 41-45	1.6	7
9	. IEEE Transactions on Information Theory, <b>1993</b> , 39, 1043-1046	2.8	11
8	Back-gated split-gate transistor: A one-dimensional ballistic channel with variable Fermi energy. <i>Applied Physics Letters</i> , <b>1992</b> , 60, 2782-2784	3.4	30
7	Ultrahigh vacuum in situ fabrication of three-dimensional semiconductor structures using a combination of particle beams. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>1992</b> , 10, 2834		5
6	Quasi-one-dimensional transport in semiconductor microstructures. <i>Physica Scripta</i> , <b>1992</b> , T45, 200-205	2.6	4

#### LIST OF PUBLICATIONS

5	The growth and characterisation of back-gated high mobility two-dimensional electron gas structures. <i>Journal of Crystal Growth</i> , <b>1991</b> , 111, 300-304	1.6	9
4	The electronic structure of a back-gated high electron mobility transistor. <i>Semiconductor Science and Technology</i> , <b>1991</b> , 6, 201-207	1.8	13
3	Quantum-dot cellular automata: introduction and experimental overview		4
2	Ultra-Shallow All-Epitaxial Aluminum Gate GaAs/AlxGa1NAs Transistors with High Electron Mobility. <i>Advanced Functional Materials</i> ,2104213	15.6	1
1	A High-Mobility Hole Bilayer in a Germanium Double Quantum Well. <i>Advanced Quantum Technologies</i> ,2100167	4.3	1