

C R Pidgeon

List of Publications by Year in descending order

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113
papers

3,965
citations

117571

34
h-index

128225

60
g-index

118
all docs

118
docs citations

118
times ranked

1944
citing authors

#	ARTICLE	IF	CITATIONS
1	The multi-photon induced Fano effect. Nature Communications, 2021, 12, 454.	5.8	6
2	Spin preservation during THz orbital pumping of shallow donors in silicon. Journal of Physics Condensed Matter, 2019, 31, 435401.	0.7	0
3	Giant multiphoton absorption for THz resonances in silicon hydrogenic donors. Nature Photonics, 2018, 12, 179-184.	15.6	28
4	Radii of Rydberg states of isolated silicon donors. Physical Review B, 2018, 98, .	1.1	12
5	Competition between homogeneous and inhomogeneous broadening of orbital transitions in Si:Bi. Physical Review B, 2017, 96, .	1.1	7
6	Coherent superpositions of three states for phosphorous donors in silicon prepared using THz radiation. Nature Communications, 2017, 8, 16038.	5.8	11
7	The quadratic Zeeman effect used for state-radius determination in neutral donors and donor bound excitons in Si:P. Semiconductor Science and Technology, 2016, 31, 045007.	1.0	3
8	Weak probe readout of coherent impurity orbital superpositions in silicon. Physical Review B, 2016, 94, .	1.1	2
9	Quantitative analysis of electrically detected Ramsey fringes in P-doped Si. Physical Review B, 2015, 92, .	1.1	4
10	Coherent creation and destruction of orbital wavepackets in Si:P with electrical and optical read-out. Nature Communications, 2015, 6, 6549.	5.8	33
11	High-field impurity magneto-optics of Si:Se. Physical Review B, 2014, 90, .	1.1	5
12	Photon assisted tunneling in pairs of silicon donors. Physical Review B, 2014, 89, .	1.1	5
13	Si:P as a laboratory analogue for hydrogen on high magnetic field white dwarf stars. Nature Communications, 2013, 4, 1469.	5.8	50
14	Time-Resolved Dynamics of Shallow Acceptor Transitions in Silicon. Physical Review X, 2013, 3, .	2.8	17
15	Experimental determination of the Rashba coefficient in InSb/InAlSb quantum wells at zero magnetic field and elevated temperatures. Journal of Physics Condensed Matter, 2011, 23, 035801.	0.7	35
16	Coherent control of Rydberg states in silicon. Nature, 2010, 465, 1057-1061.	18.7	117
17	Strong dependence of spin dynamics on the orientation of an external magnetic field for InSb and InAs. Applied Physics Letters, 2010, 96, 111107.	1.5	18
18	Temperature dependence of the electron Landé factor in InSb and GaAs. Physical Review B, 2008, 77, .	1.1	50

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19	Silicon as a model ion trap: Time domain measurements of donor Rydberg states. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 10649-10653.	3.3	71
20	Temperature dependence of the electron spin $\langle \text{mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline">\rangle$ factor in GaAs. Physical Review B, 2008, 78, .	1.1	40
21	Density and Well-Width Dependence of the Spin Relaxation in n-InSb/AlInSb Quantum Wells. Springer Proceedings in Physics, 2008, , 19-21.	0.1	0
22	Direct determination of ultrafast intersubband hole relaxation times in voltage biased SiGe quantum wells by a density matrix interpretation of femtosecond resolved photocurrent experiments. New Journal of Physics, 2007, 9, 128-128.	1.2	4
23	Spin lifetime in high quality InSb epitaxial layers grown on GaAs. Journal of Applied Physics, 2007, 101, 083105.	1.1	14
24	Interwell relaxation times in $\text{p}^{\sim}\text{Si}^{\wedge}\cdot\text{SiGe}$ asymmetric quantum well structures: Role of interface roughness. Physical Review B, 2007, 75, .	1.1	32
25	Spin Dynamics in Narrow-Gap Semiconductor Epitaxial Layers. Journal of Superconductivity and Novel Magnetism, 2007, 20, 461-465.	0.8	8
26	Spin relaxation in n-InSb/AlInSb quantum wells. New Journal of Physics, 2006, 8, 49-49.	1.2	23
27	Spin Relaxation by Transient Monopolar and Bipolar Optical Orientation. Physical Review Letters, 2006, 96, 096603.	2.9	13
28	Spin lifetime in InAs epitaxial layers grown on GaAs. Physical Review B, 2006, 74, .	1.1	14
29	Vibrational relaxation pathways in porous silicon: A time-resolved infrared spectroscopic study. Physical Review B, 2006, 74, .	1.1	2
30	Direct monitoring of the excited state population in biased SiGe valence band quantum wells by femtosecond resolved photocurrent experiments. Applied Physics Letters, 2006, 89, 211111.	1.5	12
31	Pump-probe measurement of lifetime engineering in SiGe quantum wells below the optical phonon energy. Semiconductor Science and Technology, 2005, 20, L50-L52.	1.0	8
32	Temperature and doping dependence of spin relaxation in InAs. Physical Review B, 2005, 72, .	1.1	36
33	Excitonic signatures in the photoluminescence and terahertz absorption of a $\text{GaAs}_{1-x}\text{Al}_x\text{Ga}_1$ multiple quantum well. Physical Review B, 2005, 71, .	1.1	32
34	Intersubband lifetimes in $\text{p}^{\sim}\text{Si}^{\wedge}\cdot\text{SiGe}$ terahertz quantum cascade heterostructures. Physical Review B, 2005, 71, .	1.1	26
35	Terahertz Emission From Silicon-Germanium Quantum Cascades. , 2003, , 367-382.		4
36	Electron spin lifetimes in long-wavelength $\text{Hg}_{1-x}\text{Cd}_x\text{Te}$ and InSb at elevated temperature. Physical Review B, 2003, 67, .	1.1	20

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37	Suppression of Dâ€™yakonovâ€™Perel spin relaxation in InAs and InSb by n-type doping at 300 K. Applied Physics Letters, 2003, 83, 5220-5222.	1.5	17
38	Spin-galvanic effect due to optical spin orientation inn-type GaAs quantum well structures. Physical Review B, 2003, 68, .	1.1	68
39	Intersubband electroluminescence from Si/SiGe cascade emitters at terahertz frequencies. Applied Physics Letters, 2002, 81, 1543-1545.	1.5	130
40	Picosecond intersubband dynamics in p-Si/SiGe quantum-well emitter structures. Applied Physics Letters, 2002, 80, 1456-1458.	1.5	39
41	Band anticrossing in dilute In _x Sb _{1-\hat{x}} . Applied Physics Letters, 2002, 81, 256-258.	1.5	56
42	Auger recombination in long-wavelength infrared In _x Sb _{1-\hat{x}} alloys. Applied Physics Letters, 2001, 78, 1568-1570.	1.5	63
43	Suppression of Auger recombination in long-wavelength quantum well W-structure lasers. Physical Review B, 2000, 62, 10297-10300.	1.1	5
44	Double-resonance spectroscopy of InAs/GaAs self-assembled quantum dots. Physical Review B, 2000, 62, R7755-R7758.	1.1	23
45	Direct determination of Shockley-Read-Hall trap density in InSb/InAlSb detectors. Journal of Physics Condensed Matter, 2000, 12, L731-L734.	0.7	13
46	Auger recombination dynamics of In _x Ga _{1-x} Sb. Semiconductor Science and Technology, 1999, 14, 1026-1030.	1.0	10
47	Electron cooling times in PbTe Landau quantized wires and dots. Semiconductor Science and Technology, 1999, 14, 809-816.	1.0	1
48	Suppression of LO phonon scattering in Landau quantized quantum dots. Physical Review B, 1999, 59, R7817-R7820.	1.1	38
49	Auger recombination dynamics of lead salts under picosecond free-electron-laser excitation. Physical Review B, 1998, 58, 12908-12915.	1.1	145
50	Auger recombination dynamics of Hg _{0.795} Cd _{0.205} Te in the high excitation regime. Applied Physics Letters, 1997, 71, 491-493.	1.5	22
51	Direct observation of the LO phonon bottleneck in wide GaAs/Al _x Ga _{1-\hat{x}} As quantum wells. Physical Review B, 1997, 55, 5171-5176.	1.1	126
52	Band alignments and offsets in In(As,Sb)/InAs superlattices. Physical Review B, 1997, 55, 4589-4595.	1.1	27
53	Auger Recombination Dynamics in Highly Excited HgCdTe. Physica Status Solidi (B): Basic Research, 1997, 204, 121-124.	0.7	3
54	Landau Level Lifetimes in an InAs/AlSb Quantum Well Determined by a Picosecond Far-Infrared Pump-Probe Technique. Physica Status Solidi (B): Basic Research, 1997, 204, 155-158.	0.7	2

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55	Intersubband Dynamics below the Optical Phonon Energy for Single and Coupled Quantum Well Systems. <i>Physica Status Solidi (B): Basic Research</i> , 1997, 204, 208-211.	0.7	2
56	Direct observation of magnetophonon resonances in Landau-level lifetimes of a semiconductor heterostructure. <i>Physical Review B</i> , 1996, 53, 16481-16484.	1.1	56
57	Suppression of Auger recombination in arsenic-rich InAs _{1-x} Sbx strained layer superlattices. <i>Journal of Applied Physics</i> , 1996, 80, 2994-2997.	1.1	54
58	Time-Resolved Studies of Intersubband Relaxation Using the free Electron Laser. , 1996, , 31-36.		2
59	Third-order nonlinearities and coherent transient grating effects of narrow-gap semiconductors in the midinfrared. <i>Journal of Applied Physics</i> , 1995, 78, 3371-3375.	1.1	3
60	Determination of the intersubband lifetime in Si/SiGe quantum wells. <i>Applied Physics Letters</i> , 1995, 66, 3313-3315.	1.5	17
61	Determination of Landau level lifetimes in AlGaAs/GaAs heterostructures with a ps free electron laser. <i>Applied Physics Letters</i> , 1995, 67, 1110-1112.	1.5	16
62	Influence of electron temperature and carrier concentration on electron-LO-phonon intersubband scattering in wide GaAs/Al _x Ga _{1-x} As quantum wells. <i>Physical Review B</i> , 1995, 52, 1874-1881.	1.1	48
63	Excite-probe determination of the intersubband lifetime in wide GaAs/AlGaAs quantum wells using a far-infrared free-electron laser. <i>Semiconductor Science and Technology</i> , 1994, 9, 1554-1557.	1.0	47
64	Identification of VSe impurity pairs in ZnSe:N. <i>Applied Physics Letters</i> , 1994, 65, 1112-1114.	1.5	29
65	Infrared free-electron laser measurement of power limiting by two-photon absorption in InSb. <i>Optical and Quantum Electronics</i> , 1993, 25, 171-175.	1.5	7
66	Crossed-field hot-hole cyclotron resonance in p-Ge: nonparabolic and quantum effects. <i>Semiconductor Science and Technology</i> , 1993, 8, S313-S316.	1.0	2
67	Direct evidence for the role of streaming motion in the hot-hole p-Ge laser. <i>Semiconductor Science and Technology</i> , 1993, 8, 2053-2057.	1.0	3
68	Optically detected magnetic resonance of deep centers in molecular beam epitaxy ZnSe:N. <i>Applied Physics Letters</i> , 1993, 63, 2411-2413.	1.5	40
69	Complete bleaching of the intersubband absorption in GaAs/AlGaAs quantum wells using a far-infrared free-electron laser. <i>Applied Physics Letters</i> , 1993, 63, 3315-3317.	1.5	20
70	p-type Ge cyclotron-resonance laser: Theory and experiment. <i>Physical Review B</i> , 1993, 47, 4522-4531.	1.1	13
71	Far-infrared optically detected cyclotron resonance in GaAs layers and low-dimensional structures. <i>Semiconductor Science and Technology</i> , 1992, 7, 357-363.	1.0	38
72	Interband magneto-optics of InAs _{1-x} Sbx. <i>Semiconductor Science and Technology</i> , 1992, 7, 900-906.	1.0	19

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73	Direct measurement of the effective-mass renormalization in n-type modulation-doped $\text{Al}_{0.23}\text{Ga}_{0.77}\text{As}/\text{In}_{0.08}\text{Ga}_{0.92}\text{As}/\text{GaAs}$ quantum wells. <i>Physical Review B</i> , 1992, 46, 13611-13614.	1.1	5
74	Tunable cyclotron resonance-laser in p-Ge. <i>Semiconductor Science and Technology</i> , 1992, 7, B604-B609.	1.0	16
75	Electronic self-defocusing of nanosecond laser pulses in bulk ZnSe. <i>Journal of Applied Physics</i> , 1991, 69, 7351-7353.	1.1	10
76	Photogenerated carrier recombination time in bulk ZnSe. <i>Journal of Applied Physics</i> , 1991, 69, 2708-2710.	1.1	22
77	Exciton-binding-energy maximum in $\text{Ga}_{1-x}\text{In}_x\text{As}/\text{GaAs}$ quantum wells. <i>Physical Review B</i> , 1991, 43, 11944-11949.	1.1	30
78	Far-infrared optically detected cyclotron resonance observation of quantum effects in GaAs. <i>Semiconductor Science and Technology</i> , 1990, 5, 438-441.	1.0	36
79	Tunable cyclotron-resonance laser in germanium. <i>Physical Review Letters</i> , 1990, 64, 2277-2280.	2.9	41
80	Room-temperature optical nonlinearities of electronic origin in ZnSe. <i>Journal of the Optical Society of America B: Optical Physics</i> , 1990, 7, 868.	0.9	19
81	Dynamical Nonlinearity and Bistability of Narrow Gap Semiconductors. <i>Physica Status Solidi (B): Basic Research</i> , 1988, 150, 719-727.	0.7	3
82	Landau level electron scattering and lifetimes in n-GaAs and n-InP. <i>Journal of Physics C: Solid State Physics</i> , 1987, 20, 5217-5223.	1.5	6
83	Low-energy electronic excitations of the ferrous ion in $(\text{Fe}(\text{H}_2\text{O})_6)(\text{NH}_4)_2(\text{SO}_4)_2$ by far-infrared radiation. <i>Journal of Physics C: Solid State Physics</i> , 1986, 19, 3005-3011.	1.5	8
84	Impurity and Landau-level electron lifetimes in n-type GaAs. <i>Physical Review B</i> , 1985, 31, 3560-3567.	1.1	40
85	Free-electron lasers: Past the visible light barrier. <i>Nature</i> , 1984, 308, 772-773.	13.7	0
86	Power broadening and nonlinear FIR magneto-photoconductivity in n-GaAs. <i>Journal of Infrared, Millimeter and Terahertz Waves</i> , 1983, 4, 561-574.	0.6	10
87	The U.k. Free Electron Laser Project. <i>IEEE Transactions on Nuclear Science</i> , 1983, 30, 3091-3093.	1.2	10
88	Nonlinear Far-Infrared Magnetoabsorption and Optically Detected Magnetoimpurity Effect in n-GaAs. <i>Physical Review Letters</i> , 1983, 50, 1309-1312.	2.9	26
89	Dispersion in a cw optically pumped FIR laser. <i>Applied Physics B, Photophysics and Laser Chemistry</i> , 1982, 29, 131-134.	1.5	10
90	Two-photon light shift and Autler-Townes splitting in optically-pumped FIR lasers. <i>Journal of Infrared, Millimeter and Terahertz Waves</i> , 1981, 2, 207-214.	0.6	17

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91	Frequency dependence of two-photon absorption in InSb and Hg _{1-x} Cd _x Te. Physical Review B, 1980, 22, 825-831.	1.1	51
92	Application of an isotopically enriched ¹³ C ¹⁶ O ₂ laser to an optically pumped far-infrared laser. Optics Letters, 1980, 5, 153.	1.7	15
93	Two-photon absorption in InSb and Hg _{1-x} Cd _x Te. Journal of Physics C: Solid State Physics, 1979, 12, 4839-4849.	1.5	45
94	Two-Photon Absorption in Zinc-Blende Semiconductors. Physical Review Letters, 1979, 42, 1785-1788.	2.9	115
95	Recent developments in tunable lasers for spectroscopy. Nature, 1979, 279, 377-381.	13.7	7
96	Tunable lasers. Reports on Progress in Physics, 1975, 38, 329-460.	8.1	70
97	Electric dipole contributions to resonant far-infrared difference-frequency mixing in InSb. Physical Review B, 1974, 9, 711-715.	1.1	4
98	Kilowatt Spin-Flip Outputs in the 5 Åµm Region: Application to Chemical Spectroscopy and Resonant Non-Linear Mixing. , 1974, , 523-532.		0
99	Quantum Effects in Spin-Flip Scattering. , 1974, , 793-797.		0
100	Quantum oscillations and pump depletion effects in an efficient high-power tunable spin-flip laser. Journal of Physics C: Solid State Physics, 1973, 6, L144-L149.	1.5	9
101	Fundamental loss mechanisms of the spin-flip Raman laser. Journal of Physics C: Solid State Physics, 1972, 5, L73-L79.	1.5	10
102	HIGH-INTENSITY TUNABLE InSb SPIN-FLIP RAMAN LASER. Applied Physics Letters, 1971, 18, 383-385.	1.5	52
103	Tunable Coherent Radiation Source in the 5 Åµm Region. Applied Physics Letters, 1971, 19, 333-335.	1.5	25
104	Magnetic Ordering Effects in the Reflectance of EuO, EuS, EuSe, and EuTe. Journal of Applied Physics, 1970, 41, 1085-1085.	1.1	3
105	Optical Observation of Magnetic-Field-Induced Spin Alignment in Antiferromagnetic EuTe. Physical Review Letters, 1969, 23, 1391-1394.	2.9	30
106	Spin-Polarized Splittings in the Temperature-Dependent Reflectance of EuO. Physical Review Letters, 1969, 22, 1385-1388.	2.9	60
107	Inversion-Asymmetry and Warping-Induced Interband Magneto-Optical Transitions in InSb. Physical Review, 1969, 186, 824-833.	2.7	106
108	Interband Magneto-Optics in Small Band Gap Semiconductors and Semimetals. , 1969, , 47-67.		9

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109	Linear- k -Valence-Band Splitting in InSb. Physical Review Letters, 1968, 20, 1003-1007.	2.9	11
110	Interband Magnetoabsorption in InAs and InSb. Physical Review, 1967, 154, 737-742.	2.7	157
111	Interband Magnetoreflexion and Band Structure of HgTe. Physical Review, 1967, 161, 779-793.	2.7	190
112	Infrared Magnetolectroreflectance in Ge, GaSb, and InSb. Physical Review Letters, 1966, 17, 643-646.	2.9	43
113	Interband Magneto-Absorption and Faraday Rotation in InSb. Physical Review, 1966, 146, 575-583.	2.7	676