Howard E Jackson

List of Publications by Year in Descending Order

109 papers	2,795 citations	26 h-index	50 g-index
117 ext. papers	3,042 ext. citations	5.3 avg, IF	4.14 L-index

#	Paper	IF	Citations
109	Band structure and polarization effects in photothermoelectric spectroscopy of a Bi2Se3 device. *Applied Physics Letters*, **2022**, 120, 122110	3.4	
108	A Raman probe of phonons and electron-phonon interactions in the Weyl semimetal NbIrTe. *Scientific Reports*, **2021**, 11, 8155	4.9	3
107	Ultrafast photoinduced band splitting and carrier dynamics in chiral tellurium nanosheets. *Nature Communications*, **2020**, 11, 3991	17.4	8
106	Exploring the band structure of Wurtzite InAs nanowires using photocurrent spectroscopy. *Nano Research*, **2020**, 13, 1586-1591	10	2
105	Strong Hot Carrier Effects in Single Nanowire Heterostructures. *Nano Letters*, **2019**, 19, 5062-5069	11.5	8
104	Revealing Optical Transitions and Carrier Recombination Dynamics within the Bulk Band Structure of BiSe. *Nano Letters*, **2018**, 18, 5875-5884	11.5	11
103	Thermal Delocalization of Excitons in GaAs/AlGaAs Quantum Well Tube Nanowires. *Nano Letters*, **2016**, 16, 1392-7	11.5	6
102	Optical Properties of Semiconductor Nanowires: Insights into Band Structure and Carrier Dynamics. *Semiconductors and Semimetals*, **2016**, 94, 17-74	0.6	
101	Emergence of localized states in narrow GaAs/AlGaAs nanowire quantum well tubes. *Nano Letters*, **2015**, 15, 1876-82	11.5	41
100	Zn3As2 nanowires and nanoplatelets: highly efficient infrared emission and photodetection by an earth abundant material. *Nano Letters*, **2015**, 15, 378-85	11.5	14
99	Antimony Induced {112}A Faceted Triangular GaAs1⊠Sbx/InP Core/Shell Nanowires and Their Enhanced Optical Quality. *Advanced Functional Materials*, **2015**, 25, 5300-5308	15.6	34
98	Quantum Confined Stark Effect in a GaAs/AlGaAs Nanowire Quantum Well Tube Device: Probing Exciton Localization. *Nano Letters*, **2015**, 15, 7847-52	11.5	21
97	Carrier thermalization dynamics in single zincblende and wurtzite InP Nanowires. *Nano Letters*, **2014**, 14, 7153-60	11.5	15
96	Tuning Band Energies in a Combined Axial and Radial GaAs/GaP Heterostructure. *Materials Research Society Symposia Proceedings*, **2014**, 1659, 139-142		
95	Localization of Excitons in Thin Core-Multi-Shell Quantum Well Tubes. *Materials Research Society Symposia Proceedings*, **2014**, 1659, 135-138		
94	Optical, structural, and numerical investigations of GaAs/AlGaAs core-multishell nanowire quantum well tubes. *Nano Letters*, **2013**, 13, 1016-22	11.5	94
93	Illuminating the second conduction band and spin-orbit energy in single wurtzite InP nanowires. *Nano Letters*, **2013**, 13, 5367-72	11.5	21

92	Transient Rayleigh scattering: a new probe of picosecond carrier dynamics in a single semiconductor nanowire. *Nano Letters*, **2012**, 12, 5389-95	11.5	17
91	Nonlinear Two-Photon Photocurrent Spectroscopy of CdS Nanosheets. *Materials Research Society Symposia Proceedings*, **2012**, 1439, 77-81		
90	Photomodulated Rayleigh Scattering from Single Semiconductor Nanowires. *Materials Research Society Symposia Proceedings*, **2012**, 1408, 11		
89	III-V semiconductor nanowires for optoelectronic device applications. *Progress in Quantum Electronics*, **2011**, 35, 23-75	9.1	215
88	Defect-Free GaAs/AlGaAs Core–Shell Nanowires on Si Substrates. *Crystal Growth and Design*, **2011**, 11, 3109-3114	3.5	40
87	Photomodulated rayleigh scattering of single semiconductor nanowires: probing electronic band structure. *Nano Letters*, **2011**, 11, 4329-36	11.5	17
86	Insights into single semiconductor nanowire heterostructures using time-resolved photoluminescence. *Semiconductor Science and Technology*, **2010**, 25, 024010	1.8	34
85	Direct measure of strain and electronic structure in GaAs/GaP core-shell nanowires. *Nano Letters*, **2010**, 10, 880-6	11.5	89
84	Carrier dynamics and quantum confinement in type II ZB-WZ InP nanowire homostructures. *Nano Letters*, **2009**, 9, 648-54	11.5	157
83	Raman stress mapping of CdS nanosheets. *Applied Physics Letters*, **2009**, 95, 083105	3.4	16
82	Unexpected benefits of rapid growth rate for III-V nanowires. *Nano Letters*, **2009**, 9, 695-701	11.5	114
81	Ultralong spin memory of optically excited single magnetic quantum dots. *Applied Physics Letters*, **2008**, 93, 153114	3.4	19
80	High Purity GaAs Nanowires Free of Planar Defects: Growth and Characterization. *Advanced Functional Materials*, **2008**, 18, 3794-3800	15.6	83
79	Grating Couplers Fabricated by Electron-Beam Lithography for Coupling Free-Space Light Into Nanophotonic Devices. *IEEE Nanotechnology Magazine*, **2007**, 6, 622-626	2.6	11
78	Resonant excitation and imaging of nonequilibrium exciton spins in single core-shell GaAs-AlGaAs nanowires. *Nano Letters*, **2007**, 7, 588-95	11.5	35
77	Dynamics of strongly degenerate electron-hole plasmas and excitons in single InP nanowires. *Nano Letters*, **2007**, 7, 3383-7	11.5	44
76	Pulse Propagation in End-Linked Poly(dimethylsiloxane) Networks. *Macromolecules*, **2003**, 36, 6127-6134	5.5	10
75	Photoluminescence of CdSe self-assembled quantum dots: Experiments and models. *Physical Review B*, **2003**, 68,	3.3	2

74	A Brillouin scattering study of end-linked poly(dimethylsiloxane) networks. *Journal of Chemical Physics*, **2002**, 117, 2968-2974	3.9	19
73	Near-field spectroscopic characterization of a 10 nm aperture selectively oxidized vertical cavity surface emitting laser. *Journal of Applied Physics*, **2002**, 92, 6837-6844	2.5	7
72	Characterization of residual stresses in a sapphire-fiber-reinforced glass-matrix composite by micro-fluorescence spectroscopy. *Composites Science and Technology*, **2001**, 61, 1639-1647	8.6	9
71	Mapping of local stress distributions in SiGe/Si optical channel waveguide. *Journal of Applied Physics*, **2001**, 90, 276-282	2.5	15
70	Optical observation of quantum-dot formation in sub-critical CdSe layers grown on ZnSe. *Journal of Crystal Growth*, **2000**, 214-215, 761-764	1.6	16
69	Near-field spectroscopy of selectively oxidized vertical cavity surface emitting lasers. *Applied Physics Letters*, **2000**, 76, 526-528	3.4	15
68	Origin of two types of excitons in CdSe dots on ZnSe. *Physical Review B*, **2000**, 61, R2405-R2408	3.3	22
67	Evidence for 2D precursors and interdiffusion in the evolution of self-assembled CdSe quantum dots on ZnSe. *Physical Review Letters*, **2000**, 85, 1124-7	7.4	86
66	Phonons and exciton recombination in CdSe/ZnSe self-assembled quantum dots. *Applied Physics Letters*, **2000**, 77, 1813	3.4	21
65	Raman scattering from CdSe/ZnSe self-assembled quantum dot structures. *Physical Review B*, **2000**, 61, 15641-15644	3.3	38
64	Quantum Dot Exciton Dynamics through a Nanoaperture: Evidence for Two Confined States. *Physical Review Letters*, **1999**, 83, 2797-2800	7.4	40
63	Temperature-dependent micro-photoluminescence of individual CdSe self-assembled quantum dots. *Applied Physics Letters*, **1999**, 75, 214-216	3.4	91
62	Imaging local index variations in an optical waveguide using a tapping-mode near-field scanning optical microscope. *Applied Physics Letters*, **1999**, 75, 1039-1041	3.4	22
61	Raman imaging of stress in a SiGe/Si photoelastic optical channel waveguide structure. *Applied Physics Letters*, **1999**, 75, 1287-1289	3.4	11
60	Spectrally-resolved near-field investigation of proton implanted vertical cavity surface emitting lasers. *Applied Physics Letters*, **1998**, 72, 3112-3114	3.4	19
59	Potential for size reduction of AlGaAs optical channel waveguide structures fabricated by focused ion beam implantation and oxidation. *Optics Communications*, **1998**, 150, 97-100	2	4
58	Spectroscopic characterization of the evolution of self-assembled CdSe quantum dots. *Applied Physics Letters*, **1998**, 73, 3399-3401	3.4	40
57	Channel optical waveguides formed by deuterium passivation in GaAs and InP. *Journal of Applied Physics*, **1997**, 82, 3205-3213	2.5	6

56	Modeling Interdiffusion in Superlattice Structures. *Materials Research Society Symposia Proceedings*, **1997**, 484, 437		
55	Polarized Raman Scattering Study of ZnGeP2 Single Crystals. *Materials Research Society Symposia Proceedings*, **1997**, 484, 543		0
54	A micro-Raman investigation of the SCS-6 SiC fiber. *Journal of Applied Physics*, **1997**, 82, 407-412	2.5	7
53	Interdiffusion in Quantum Wells: Mixing Mechanisms and Energy Levels. *Materials Research Society Symposia Proceedings*, **1996**, 450, 365		
52	Use of near-field scanning optical microscopy (NSOM) to characterize optical channel waveguide structures **1996**,		2
51	Observation of Si in SiC composite fibers: A micro-Raman investigation. *Applied Physics Letters*, **1996**, 68, 2352-2354	3.4	6
50	Near field scanning optical microscopy measurements of optical intensity distributions in semiconductor channel waveguides. *Applied Physics Letters*, **1996**, 69, 3471-3473	3.4	14
49	Photon scanning tunneling microscopy of optical channel waveguides. *Ultramicroscopy*, **1995**, 57, 124-129	3.1	9
48	Near field measurements of optical channel waveguide structures. *Ultramicroscopy*, **1995**, 61, 295-298	3.1	11
47	Plasma synthesis of diamond at low temperature with a pulse modulated magnetoactive discharge. *Applied Physics Letters*, **1995**, 66, 3380-3382	3.4	17
46	Low-temperature diamond growth in a pulsed microwave plasma. *Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films*, **1995**, 13, 1617-1618	2.9	16
45	GaAs quantum well distributed Bragg reflection laser with AlGaAs/GaAs superlattice gratings fabricated by focused ion beam mixing. *Applied Physics Letters*, **1995**, 67, 179-181	3.4	14
44	Phonon mode study of Si nanocrystals using micro-Raman spectroscopy. *Journal of Applied Physics*, **1995**, 78, 6705-6708	2.5	115
43	Near-field measurements of optical channel waveguides **1995**,		1
42	Near field measurements of optical channel waveguides and directional couplers. *Applied Physics Letters*, **1994**, 65, 947-949	3.4	58
41	Characterization of optical channel waveguides formed by FIB induced compositional mixing in AlGaAs MQWs. *Superlattices and Microstructures*, **1994**, 15, 421-425	2.8	2
40	Photon Scanning Tunneling Microscopy of Optical Wavegnide Structures. *Materials Research Society Symposia Proceedings*, **1994**, 332, 543		
39	Friction and wear of plasma-deposited diamond films. *Journal of Applied Physics*, **1993**, 74, 4446-4454	2.5	68

38	Raman investigation of the nonlinear optical phenomenon of polarization rotation in Ti:LiNbO3 channel waveguides. *Journal of Applied Physics*, **1993**, 74, 1492-1500	2.5	12
37	Raman study of the formation of tungsten silicide thin films. *Journal of Applied Physics*, **1993**, 73, 7887-7893	2.5	8
36	Characterization of Si3N4/SiO2 optical channel waveguides by photon scanning tunneling microscopy **1993**,		4
35	Raman and Photoluminescence Characterization of FIB Patterned AlGaAs/GaAs Multiple Quantum Wells. *Materials Research Society Symposia Proceedings*, **1993**, 324, 193		2
34	Time Resolved Photoluminescence from Patterned GaAs/AlGaAs Multiple Quantum Well Structures. *Materials Research Society Symposia Proceedings*, **1993**, 326, 531		2
33	Raman Scattering Characterization of Ultrathin Films of □SiC. *Materials Research Society Symposia Proceedings*, **1993**, 324, 267		
32	Optical waveguides fabricated by ion implantation of Si(+) and N(+) in SiO(2): a Raman investigation. *Applied Optics*, **1993**, 32, 313-7	1.7	4
31	Effects of oxygen and pressure on diamond synthesis in a magnetoactive microwave discharge. *Journal of Applied Physics*, **1992**, 71, 2918-2923	2.5	20
30	Optical Channel Waveguides in AlGaAs Multiple Quantum Well Structures Formed by Focused Ion Beam Induced Compositional Mixing. *Materials Research Society Symposia Proceedings*, **1992**, 281, 313		2
29	Raman Microprobe Spectroscopy and Photon Scanning Tunneling Spectroscopy: Applications to Optical Waveguides. *Materials Research Society Symposia Proceedings*, **1991**, 240, 673		
28	High-dose implantation of Si in SiO2: formation of Si crystallites after annealing. *Nuclear Instruments & Methods in Physics Research B*, **1991**, 59-60, 637-642	1.2	7
27	Raman and photon scanning tunnelling microscopy of optical waveguides. *Optical and Quantum Electronics*, **1991**, 23, S901-S907	2.4	1
26	Raman microprobe characterization of photorefractive nonlinearity in Ti:LiNbO3 channel waveguides. *Applied Physics Letters*, **1991**, 58, 672-674	3.4	12
25	Low temperature and low pressure diamond synthesis in a microwave electron cyclotron resonance discharge. *Applied Physics Letters*, **1991**, 59, 1170-1172	3.4	20
24	ECR Enhancement of Low Pressure PECVD Diamond Synthesis. *Materials Research Society Symposia Proceedings*, **1990**, 202, 253		
23	Photon scanning tunneling microscope study of optical waveguides. *Applied Physics Letters*, **1990**, 56, 1515-1517	3.4	60
22	Silicon crystallite formation in ion-implanted quartz. *Applied Physics Letters*, **1989**, 55, 1199-1201	3.4	6
21	Characterization of Ti:LiNbo3 Optical Channel Waveguides Fabricated using Rapid Thermal Annealing. *Materials Research Society Symposia Proceedings*, **1989**, 152, 277		2

20	Two-beam laser recrystallization of polycrystalline silicon on an insulating substrate. *Journal of Applied Physics*, **1988**, 64, 2069-2075	2.5	2
19	Optical response at 10.6 μm in tungsten silicide Schottky barrier diodes. *Journal of Applied Physics*, **1987**, 62, 3848-3852	2.5	
18	Raman scattering from rapid thermally annealed tungsten silicide. *Applied Physics Letters*, **1987**, 50, 323-325	3.4	5
17	Raman Scattering from Rapid Thermally Annealed Tungsten Silicide. *Materials Research Society Symposia Proceedings*, **1987**, 92, 213		
16	Characterization of the effects of different capping layer structures on the laser recrystallization of silicon by using electrical test structures and Raman spectroscopy. *Journal of Applied Physics*, **1986**, 60, 4273-4276	2.5	4
15	Two-Beam Laser Recrystallization of Silicon on an Insulating Substrate. *Materials Research Society Symposia Proceedings*, **1985**, 53, 71		2
14	Low loss optical waveguides fabricated by thermal nitridation of oxidized silicon. *Applied Physics Letters*, **1985**, 47, 353-355	3.4	28
13	Optical waveguide detection: Photodetector array formed on the waveguide utilizing laser recrystallized silicon. *Applied Physics Letters*, **1985**, 46, 498-500	3.4	12
12	Rutherford backscattering evidence for solid phase laser annealing of Corning 7059 glass and ZnO thin films. *Journal of Applied Physics*, **1983**, 54, 2125-2126	2.5	1
11	A low-scattering graded-index SiO2 planar optical waveguide thermally grown on silicon. *Applied Physics Letters*, **1983**, 42, 565-566	3.4	17
10	Brillouin scattering study of phonon-defect interactions in KCl: CN□*Physical Review B*, **1982**, 26, 5927-5931	3.3	5
9	Extremely low-loss glass thin-film optical waveguides utilizing surface coating and laser annealing. *Journal of Applied Physics*, **1981**, 52, 3873-3875	2.5	24
8	Scattering loss reduction in ZnO optical waveguides by laser annealing. *Applied Physics Letters*, **1981**, 39, 206-208	3.4	46
7	Reduction of scattering from a glass thin-film optical waveguide by CO2 laser annealing. *Applied Physics Letters*, **1980**, 37, 512-514	3.4	23
6	Distributed-feedback dye laser integrated with a channel waveguide formed on silicon. *Applied Physics Letters*, **1980**, 36, 721-723	3.4	20
5	Brillouin scattering observation of phonon renormalization in KC1:CN□*Solid State Communications*, **1979**, 32, 1271-1273	1.6	3
4	Elastic constants of krypton single crystals determined by Brillouin scattering. *Physical Review B*, **1976**, 13, 888-895	3.3	29
3	Observed Differences in Zero- and First-Sound Propagation in Solid Krypton. *Physical Review Letters* , **1973**, 31, 296-298	7.4	26

2	Thermal Conductivity, Second Sound, and Phonon-Phonon Interactions in NaF. *Physical Review B*, **1971**, 3, 1428-1439	3.3	212
1	Second Sound in NaF. *Physical Review Letters*, **1970**, 25, 26-28	7.4	172