

Leigh M Smith

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/4287045/leigh-m-smith-publications-by-year.pdf>

Version: 2024-04-20

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

112
papers

3,124
citations

33
h-index

52
g-index

138
ext. papers

3,375
ext. citations

5.4
avg, IF

4.3
L-index

#	Paper	IF	Citations
112	Band structure and polarization effects in photothermoelectric spectroscopy of a Bi ₂ Se ₃ device. <i>Applied Physics Letters</i> , 2022 , 120, 122110	3.4	
111	A Raman probe of phonons and electron-phonon interactions in the Weyl semimetal NbIrTe. <i>Scientific Reports</i> , 2021 , 11, 8155	4.9	3
110	Ultrafast photoinduced band splitting and carrier dynamics in chiral tellurium nanosheets. <i>Nature Communications</i> , 2020 , 11, 3991	17.4	8
109	Exploring the band structure of Wurtzite InAs nanowires using photocurrent spectroscopy. <i>Nano Research</i> , 2020 , 13, 1586-1591	10	2
108	Strong Hot Carrier Effects in Single Nanowire Heterostructures. <i>Nano Letters</i> , 2019 , 19, 5062-5069	11.5	8
107	Revealing Optical Transitions and Carrier Recombination Dynamics within the Bulk Band Structure of BiSe. <i>Nano Letters</i> , 2018 , 18, 5875-5884	11.5	11
106	Doping-enhanced radiative efficiency enables lasing in unpassivated GaAs nanowires. <i>Nature Communications</i> , 2016 , 7, 11927	17.4	57
105	Thermal Delocalization of Excitons in GaAs/AlGaAs Quantum Well Tube Nanowires. <i>Nano Letters</i> , 2016 , 16, 1392-7	11.5	6
104	Optical Properties of Semiconductor Nanowires: Insights into Band Structure and Carrier Dynamics. <i>Semiconductors and Semimetals</i> , 2016 , 94, 17-74	0.6	
103	Emergence of localized states in narrow GaAs/AlGaAs nanowire quantum well tubes. <i>Nano Letters</i> , 2015 , 15, 1876-82	11.5	41
102	Spatially Resolved Doping Concentration and Nonradiative Lifetime Profiles in Single Si-Doped InP Nanowires Using Photoluminescence Mapping. <i>Nano Letters</i> , 2015 , 15, 3017-23	11.5	37
101	Quantum confinement of excitons in wurtzite InP nanowires. <i>Journal of Applied Physics</i> , 2015 , 117, 194306	11.5	17
100	Zn ₃ As ₂ nanowires and nanoplatelets: highly efficient infrared emission and photodetection by an earth abundant material. <i>Nano Letters</i> , 2015 , 15, 378-85	11.5	14
99	Antimony Induced {112}A Faceted Triangular GaAs _{1-x} Sb _x /InP Core/Shell Nanowires and Their Enhanced Optical Quality. <i>Advanced Functional Materials</i> , 2015 , 25, 5300-5308	15.6	34
98	Quantum Confined Stark Effect in a GaAs/AlGaAs Nanowire Quantum Well Tube Device: Probing Exciton Localization. <i>Nano Letters</i> , 2015 , 15, 7847-52	11.5	21
97	Effects of surface passivation on twin-free GaAs nanosheets. <i>ACS Nano</i> , 2015 , 9, 1336-40	16.7	18
96	Polarized light absorption in wurtzite InP nanowire ensembles. <i>Nano Letters</i> , 2015 , 15, 998-1005	11.5	38

95	Carrier thermalization dynamics in single zincblende and wurtzite InP Nanowires. <i>Nano Letters</i> , 2014 , 14, 7153-60	11.5	15
94	Tuning Band Energies in a Combined Axial and Radial GaAs/GaP Heterostructure. <i>Materials Research Society Symposia Proceedings</i> , 2014 , 1659, 139-142		
93	Recent Advances in Semiconductor Nanowire Heterostructures. <i>ECS Transactions</i> , 2014 , 64, 1-5	1	2
92	Localization of Excitons in Thin Core-Multi-Shell Quantum Well Tubes. <i>Materials Research Society Symposia Proceedings</i> , 2014 , 1659, 135-138		
91	Optical, structural, and numerical investigations of GaAs/AlGaAs core-multishell nanowire quantum well tubes. <i>Nano Letters</i> , 2013 , 13, 1016-22	11.5	94
90	Illuminating the second conduction band and spin-orbit energy in single wurtzite InP nanowires. <i>Nano Letters</i> , 2013 , 13, 5367-72	11.5	21
89	Transient Rayleigh scattering: a new probe of picosecond carrier dynamics in a single semiconductor nanowire. <i>Nano Letters</i> , 2012 , 12, 5389-95	11.5	17
88	Nonlinear Two-Photon Photocurrent Spectroscopy of CdS Nanosheets. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1439, 77-81		
87	Growth and properties of III-V compound semiconductor heterostructure nanowires. <i>Semiconductor Science and Technology</i> , 2012 , 27, 059501	1.8	3
86	Photomodulated Rayleigh Scattering from Single Semiconductor Nanowires. <i>Materials Research Society Symposia Proceedings</i> , 2012 , 1408, 11		
85	Measuring the Energy Landscape in Single Semiconductor Nanowires. <i>Acta Physica Polonica A</i> , 2012 , 122, 316-320	0.6	
84	Photocurrent spectroscopy of single CdS nanosheets: Valence band structure and two photon absorption. <i>Applied Physics Letters</i> , 2011 , 98, 143102	3.4	7
83	Direct imaging of the spatial diffusion of excitons in single semiconductor nanowires. <i>Applied Physics Letters</i> , 2011 , 99, 263110	3.4	12
82	Probing the valence band structure of wurtzite InP nanowires by photoluminescence excitation spectroscopy 2011 ,		2
81	III-V semiconductor nanowires for optoelectronic device applications. <i>Progress in Quantum Electronics</i> , 2011 , 35, 23-75	9.1	215
80	Defect-Free GaAs/AlGaAs Core-Shell Nanowires on Si Substrates. <i>Crystal Growth and Design</i> , 2011 , 11, 3109-3114	3.5	40
79	Photomodulated rayleigh scattering of single semiconductor nanowires: probing electronic band structure. <i>Nano Letters</i> , 2011 , 11, 4329-36	11.5	17
78	III-V COMPOUND SEMICONDUCTOR NANOWIRES FOR OPTOELECTRONIC DEVICE APPLICATIONS. <i>International Journal of High Speed Electronics and Systems</i> , 2011 , 20, 131-141	0.5	1

77	The morphology and evolution of bipyramidal gold nanoparticles. <i>Nanotechnology</i> , 2011 , 22, 275607	3.4	12
76	Growth and properties of III/V compound semiconductor heterostructure nanowires. <i>Semiconductor Science and Technology</i> , 2011 , 26, 014035	1.8	25
75	Insights into single semiconductor nanowire heterostructures using time-resolved photoluminescence. <i>Semiconductor Science and Technology</i> , 2010 , 25, 024010	1.8	34
74	Probing valence band structure in wurtzite InP nanowires using excitation spectroscopy. <i>Applied Physics Letters</i> , 2010 , 97, 023106	3.4	42
73	Novel growth and properties of GaAs nanowires on Si substrates. <i>Nanotechnology</i> , 2010 , 21, 035604	3.4	31
72	Selective excitation of exciton transitions in PTCDA crystals and films. <i>Physical Review B</i> , 2010 , 81,	3.3	24
71	Direct measure of strain and electronic structure in GaAs/GaP core-shell nanowires. <i>Nano Letters</i> , 2010 , 10, 880-6	11.5	89
70	Vertical Integration of Nanotechnology Education. <i>ACS Symposium Series</i> , 2010 , 49-64	0.4	2
69	Room temperature photocurrent spectroscopy of single zincblende and wurtzite InP nanowires. <i>Applied Physics Letters</i> , 2009 , 94, 193115	3.4	48
68	Nanowires for optoelectronic device applications. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2009 , 6, 2678-2682		4
67	Carrier dynamics and quantum confinement in type II ZB-WZ InP nanowire homostructures. <i>Nano Letters</i> , 2009 , 9, 648-54	11.5	157
66	Raman stress mapping of CdS nanosheets. <i>Applied Physics Letters</i> , 2009 , 95, 083105	3.4	16
65	Unexpected benefits of rapid growth rate for III-V nanowires. <i>Nano Letters</i> , 2009 , 9, 695-701	11.5	114
64	III-V compound semiconductor nanowires 2009 ,		2
63	The effect of V/III ratio and catalyst particle size on the crystal structure and optical properties of InP nanowires. <i>Nanotechnology</i> , 2009 , 20, 225606	3.4	86
62	Nearly intrinsic exciton lifetimes in single twin-free GaAs/AlGaAs core-shell nanowire heterostructures. <i>Applied Physics Letters</i> , 2008 , 93, 053110	3.4	91
61	Tuning spin properties of excitons in single CdTe quantum dots by annealing. <i>Nanotechnology</i> , 2008 , 19, 125706	3.4	5
60	Ultralong spin memory of optically excited single magnetic quantum dots. <i>Applied Physics Letters</i> , 2008 , 93, 153114	3.4	19

59	Spatially resolved photoluminescence mapping of single CdS nanosheets. <i>Applied Physics Letters</i> , 2008 , 92, 013111	3.4	8
58	Polarized photoluminescence and time-resolved photoluminescence from single CdS nanosheets. <i>Applied Physics Letters</i> , 2008 , 92, 143112	3.4	10
57	High Purity GaAs Nanowires Free of Planar Defects: Growth and Characterization. <i>Advanced Functional Materials</i> , 2008 , 18, 3794-3800	15.6	83
56	Resonant excitation and imaging of nonequilibrium exciton spins in single core-shell GaAs-AlGaAs nanowires. <i>Nano Letters</i> , 2007 , 7, 588-95	11.5	35
55	Spatially-resolved Photoluminescence Imaging of CdS and GaAs/AlGaAs Nanowires. <i>AIP Conference Proceedings</i> , 2007 ,	0	1
54	Dynamics of strongly degenerate electron-hole plasmas and excitons in single InP nanowires. <i>Nano Letters</i> , 2007 , 7, 3383-7	11.5	44
53	Polarization and temperature dependence of photoluminescence from zincblende and wurtzite InP nanowires. <i>Applied Physics Letters</i> , 2007 , 91, 263104	3.4	175
52	Resonant photoluminescence imaging and the origin of excited states in self-assembled quantum dots. <i>Physical Review B</i> , 2007 , 76,	3.3	13
51	Relaxation dynamics of bimodally distributed CdSe quantum dots. <i>Physical Review B</i> , 2007 , 75,	3.3	12
50	Temperature dependent photoluminescence of single CdS nanowires. <i>Applied Physics Letters</i> , 2006 , 89, 123123	3.4	51
49	Temperature dependence of photoluminescence from single core-shell GaAs/AlGaAs nanowires. <i>Applied Physics Letters</i> , 2006 , 89, 173126	3.4	134
48	Low-temperature photoluminescence imaging and time-resolved spectroscopy of single CdS nanowires. <i>Applied Physics Letters</i> , 2006 , 89, 053119	3.4	35
47	Resonant Raman scattering from CdS nanowires. <i>Applied Physics Letters</i> , 2006 , 88, 043118	3.4	32
46	Probing the excited state distributions of CdTe/ZnTe self-assembled quantum dots using resonant Raman scattering. <i>Applied Physics Letters</i> , 2005 , 87, 183104	3.4	4
45	Exciton-controlled magnetization in single magnetic quantum dots. <i>Applied Physics Letters</i> , 2005 , 87, 072502	3.4	31
44	Sensitivity of exciton spin relaxation in quantum dots to confining potential. <i>Applied Physics Letters</i> , 2005 , 86, 103101	3.4	15
43	Exciton spin relaxation in quasiresonantly excited CdTe/ZnTe self-assembled quantum dots. <i>Physical Review B</i> , 2004 , 70,	3.3	18
42	Resonant spectroscopy of II-VI self-assembled quantum dots: Excited states and exciton/longitudinal optical phonon coupling. <i>Physical Review B</i> , 2004 , 70,	3.3	29

41	Optically-induced magnetization of CdMnTe self-assembled quantum dots. <i>Applied Physics Letters</i> , 2004 , 84, 3337-3339	3.4	61
40	Tuning the optical and magnetic properties of II $\bar{\text{V}}$ I quantum dots by post-growth rapid thermal annealing. <i>Physica Status Solidi (B): Basic Research</i> , 2004 , 241, 652-655	1.3	5
39	Optically controlled magnetization of zero-dimensional magnetic polarons in CdMnTe self-assembled quantum dots. <i>Physica Status Solidi (B): Basic Research</i> , 2004 , 241, 656-659	1.3	1
38	Optical studies of spin relaxation in CdTe self-assembled quantum dots. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004 , 1, 937-940		2
37	Exciton-LO phonon interaction in II $\bar{\text{V}}$ I self-assembled quantum dots. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2004 , 1, 767-770		5
36	Subwavelength multichannel imaging using a solid immersion lens: Spectroscopy of excitons in single quantum dots. <i>Applied Physics Letters</i> , 2004 , 85, 5463-5465	3.4	16
35	Optical studies of zero-field magnetization of CdMnTe quantum dots: Influence of average size and composition of quantum dots. <i>Journal of Applied Physics</i> , 2004 , 96, 7407-7413	2.5	16
34	Optical properties of annealed CdTe self-assembled quantum dots. <i>Applied Physics Letters</i> , 2003 , 83, 254-256	3.4	26
33	Tuning the properties of magnetic CdMnTe quantum dots. <i>Applied Physics Letters</i> , 2003 , 83, 3575-3577	3.4	35
32	Photoluminescence of CdSe self-assembled quantum dots: Experiments and models. <i>Physical Review B</i> , 2003 , 68,	3.3	2
31	Exciton spin relaxation time in quantum dots measured by continuous-wave photoluminescence spectroscopy. <i>Applied Physics Letters</i> , 2003 , 83, 5524-5526	3.4	41
30	Optical Properties of Semimagnetic Quantum Dots. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 737, 242		
29	Resonant photoluminescence and excitation spectroscopy of CdSe/ZnSe and CdTe/ZnTe self-assembled quantum dots. <i>Materials Research Society Symposia Proceedings</i> , 2002 , 737, 248		
28	Probing CdSe/ZnSe self-assembled quantum dots by cw and time-resolved photoluminescence. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2001 , 11, 59-62	3	4
27	Interface Phonons in CdSe/ZnSe Self-Assembled Quantum Dot Structures. <i>Physica Status Solidi (B): Basic Research</i> , 2001 , 224, 165-168	1.3	6
26	Excited State Dynamics in In _{0.5} Al _{0.04} Ga _{0.46} As/Al _{0.08} Ga _{0.92} As Self-Assembled Quantum Dots. <i>Physica Status Solidi (B): Basic Research</i> , 2001 , 224, 447-451	1.3	
25	Using Exciton Dynamics to Probe the Internal Structure of CdSe/ZnSe Self-Assembled Quantum Dots. <i>Physica Status Solidi (B): Basic Research</i> , 2000 , 221, 55-58	1.3	1
24	Optical observation of quantum-dot formation in sub-critical CdSe layers grown on ZnSe. <i>Journal of Crystal Growth</i> , 2000 , 214-215, 761-764	1.6	16

23	Origin of two types of excitons in CdSe dots on ZnSe. <i>Physical Review B</i> , 2000 , 61, R2405-R2408	3-3	22
22	Evidence for 2D precursors and interdiffusion in the evolution of self-assembled CdSe quantum dots on ZnSe. <i>Physical Review Letters</i> , 2000 , 85, 1124-7	7-4	86
21	Phonons and exciton recombination in CdSe/ZnSe self-assembled quantum dots. <i>Applied Physics Letters</i> , 2000 , 77, 1813	3-4	21
20	Quantum Dot Exciton Dynamics through a Nanoaperture: Evidence for Two Confined States. <i>Physical Review Letters</i> , 1999 , 83, 2797-2800	7-4	40
19	Temperature-dependent micro-photoluminescence of individual CdSe self-assembled quantum dots. <i>Applied Physics Letters</i> , 1999 , 75, 214-216	3-4	91
18	Exciton spin thermalization in strained and relaxed Zn _{1-x} MnxSe epilayers. <i>Physical Review B</i> , 1999 , 59, 7610-7619	3-3	11
17	Time-dependent heterointerfacial band bending and quasi-two-dimensional excitonic transport in GaAs structures. <i>Physical Review B</i> , 1998 , 58, 4728-4732	3-3	4
16	Spectroscopic characterization of the evolution of self-assembled CdSe quantum dots. <i>Applied Physics Letters</i> , 1998 , 73, 3399-3401	3-4	40
15	Thermal relaxation of excitons in ZnSe and Zn _{1-x} MnxSe diluted magnetic semiconductors. <i>Physical Review B</i> , 1997 , 55, 5062-5064	3-3	13
14	Driven Spin-Transport of Exciton Magnetic Polarons in Zn _{0.86} Mn _{0.14} Se/ZnSe Quantum Wells. <i>Physica Status Solidi A</i> , 1997 , 164, 547-551		3
13	Mott ionization of excitons in n-type Zn _{1-x} MnxSe epilayers. <i>Applied Physics Letters</i> , 1995 , 67, 3150-3152	3-4	
12	Time-resolved study of electron-hole plasmas near the liquid-gas critical point in Si: Evidence for a second condensed phase. <i>Physical Review B</i> , 1995 , 51, 7521-7543	3-3	38
11	Observation of long-lived exciton magnetic polarons in Zn _{1-x} MnxSe/ZnSe multiple quantum wells. <i>Physical Review B</i> , 1994 , 50, 18662-18665	3-3	19
10	Time Resolved Photoluminescence from Patterned GaAs/AlGaAs Multiple Quantum Well Structures. <i>Materials Research Society Symposia Proceedings</i> , 1993 , 326, 531		2
9	Intrinsic recombination and interface characterization in surface-free GaAs structures. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1991 , 9, 2369		29
8	Radiative recombination in surface-free n ⁺ /n ⁺ GaAs homostructures. <i>Applied Physics Letters</i> , 1990 , 57, 1572-1574	3-4	6
7	Photoexcited carrier lifetimes and spatial transport in surface-free GaAs homostructures. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1990 , 8, 787		17
6	Phonon-wind-driven transport of photoexcited carriers in a semiconductor quantum well. <i>Physical Review B</i> , 1989 , 39, 1862-1870	3-3	53

5	Radiative Recombination and Carrier Lifetimes in Surface-Free GaAs Homostructures. <i>Materials Research Society Symposia Proceedings</i> , 1989 , 163, 95		6
4	Picosecond imaging of photoexcited carriers in quantum wells: Anomalous lateral confinement at high densities. <i>Physical Review B</i> , 1988 , 38, 5788-5791	3-3	59
3	Smith and Wolfe respond. <i>Physical Review Letters</i> , 1987 , 58, 2823	7-4	3
2	Second condensed phase of electron-hole plasma in Si. <i>Physical Review Letters</i> , 1986 , 57, 2314-2317	7-4	26
1	Magnetic interference effect in the electrical resistivity of amorphous simple metal alloys: Mg-Zn(Gd). <i>Journal of Physics F: Metal Physics</i> , 1982 , 12, L101-L106		5