Alexander R Albrecht

List of Publications by Year in Descending Order

37 papers	510 citations	13 h-index	22 g-index
66 ext. papers	724 ext. citations	3.5 avg, IF	3.76 L-index

#	Paper	IF	Citations
37	Probing the ultrafast gain and refractive index dynamics of a VECSEL. *Applied Physics Letters*, **2021**, 119, 191105	3.4	1
36	Open-aperture Z-scan study for absorption saturation: accurate measurement of saturation intensity in YLF:Yb for optical refrigeration. *Optics Letters*, **2021**, 46, 1421-1424	3	3
35	Implementation of Laser-Induced Anti-Stokes Fluorescence Power Cooling of Ytterbium-Doped Silica Glass. *ACS Omega*, **2021**, 6, 8376-8381	3.9	7
34	Near-Unity External Quantum Efficiency in GaAs|AlGaAs Heterostructures Grown by Molecular Beam Epitaxy. *Physica Status Solidi - Rapid Research Letters*, **2021**, 15, 2100106	2.5	
33	In-Well Pumping of a Membrane External-Cavity Surface-Emitting Laser. *IEEE Journal of Selected Topics in Quantum Electronics*, **2021**, 1-1	3.8	1
32	Bridgman Growth of Laser-Cooling-Grade LiLuF4:Yb3+ Single Crystals. *Crystal Growth and Design*, **2021**, 21, 2142-2153	3.5	3
31	DBR -free Optically Pumped Semiconductor Disk Lasers **2021**, 175-196		1
30	Bridgman growth of LiYF4 and LiLuF4 crystals for radiation-balanced lasers **2019**,		2
29	Radiation-balanced Yb:YAG disk laser. *Optics Express*, **2019**, 27, 1392-1400	3.3	30
28	Optical refrigeration: the role of parasitic absorption at cryogenic temperatures. *Optics Express*, **2019**, 27, 29710-29718	3.3	14
27	Tm-doped crystals for mid-IR optical cryocoolers and radiation balanced lasers. *Optics Letters*, **2019**, 44, 1419-1422	3	10
26	Observation of optical refrigeration in a holmium-doped crystal. *Photonics Research*, **2019**, 7, 445	6	13
25	Investigation of radiation-balanced disk lasers **2018**,		1
24	Understanding the origin of parasitic absorption in GaAs double heterostructures **2018**,		1
23	16 W DBR-free membrane semiconductor disk laser with dual-SiC heatspreader. *Electronics Letters*, **2018**, 54, 430-432	1.1	20
22	First demonstration of an all-solid-state optical cryocooler. *Light: Science and Applications*, **2018**, 7, 15	16.7	37
21	Solid-state optical refrigeration to sub-100 Kelvin regime. *Scientific Reports*, **2016**, 6, 20380	4.9	85

20	80 nm tunable DBR-free semiconductor disk laser. *Applied Physics Letters*, **2016**, 109, 022101	3.4	12
19	Astigmatic Herriott cell for optical refrigeration. *Optical Engineering*, **2016**, 56, 011110	1.1	14
18	Broadly tunable DBR-free semiconductor disk laser **2016**,		1
17	Development of vertical external cavity surface emitting lasers (VECSELs) for use as monochromatic and polychromatic sodium guidestars **2016**,		2
16	DBR-free optically pumped semiconductor disk lasers **2015**,		4
15	Intracavity-enhanced optical refrigeration of Yb:YLF crystal to cryogenic temperatures **2015**,		1
14	Optically pumped DBR-free semiconductor disk lasers. *Optics Express*, **2015**, 23, 33164-9	3.3	26
13	Intra-cavity cryogenic optical refrigeration using high power vertical external-cavity surface-emitting lasers (VECSELs). *Optics Express*, **2014**, 22, 16232-40	3.3	13
12	Laser cooling in solids: Demonstration of 115K all-solid-state cryocooler **2013**,		1
11	Exploring ultrafast negative Kerr effect for mode-locking vertical external-cavity surface-emitting lasers. *Optics Express*, **2013**, 21, 28801-8	3.3	30
10	Progress towards cryogenic temperatures in intra-cavity optical refrigeration using a VECSEL **2013**,		2
9	Intracavity laser cooling using a VECSEL **2012**,		2
8	High-power 1.25 μm InAs QD VECSEL based on resonant periodic gain structure **2011**,		3
7	1220–1280-nm Optically Pumped InAs Quantum Dot-Based Vertical External-Cavity Surface-Emitting Laser. *IEEE Journal of Selected Topics in Quantum Electronics*, **2011**, 17, 1787-1793	3.8	8
6	High power 1.25 μm InAs quantum dot vertical external-cavity surface-emitting laser. *Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics*, **2011**, 29, 03C113	1.3	7
5	Multi-watt 1.25 [micro sign]m quantum dot VECSEL. *Electronics Letters*, **2010**, 46, 856	1.1	16
4	Optically Pumped Frequency Reconfigurable Antenna Design. *IEEE Antennas and Wireless Propagation Letters*, **2010**, 9, 280-283	3.8	82
3	Improved photoluminescence efficiency of patterned quantum dots incorporating a dots-in-the-well structure. *Nanotechnology*, **2008**, 19, 435710	3.4	16

2	Room-Temperature Operation of Buffer-Free GaSb/AlGaSb Quantum-Well Diode Lasers Grown on a GaAs Platform Emitting at 1.65 mum. *IEEE Photonics Technology Letters*, **2007**, 19, 1628-1630	2.2	23
1	Optical properties of patterned InAs quantum dot ensembles grown on GaAs nanopyramids. *Applied Physics Letters*, **2007**, 91, 243106	3.4	16