Zachary Lochner

List of Publications by Year
in descending order

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24	676	687363 13	677142 22
papers	citations	h-index	g-index

25	25	25	795
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Control of Quantum-Confined Stark Effect in InGaN-Based Quantum Wells. IEEE Journal of Selected Topics in Quantum Electronics, 2009, 15, 1080-1091.	2.9	233
2	Deep-ultraviolet lasing at 243â€‰nm from photo-pumped AlGaN/AlN heterostructure on AlN substrate. Applied Physics Letters, 2013, 102, .	3.3	77
3	Origins of unintentional incorporation of gallium in AlInN layers during epitaxial growth, part I: Growth of AlInN on AlN and effects of prior coating. Journal of Crystal Growth, 2014, 388, 137-142.	1.5	45
4	Origins of unintentional incorporation of gallium in InAlN layers during epitaxial growth, part II: Effects of underlying layers and growth chamber conditions. Journal of Crystal Growth, 2014, 388, 143-149.	1.5	44
5	Effects of a step-graded AlxGa1â^'xN electron blocking layer in InGaN-based laser diodes. Journal of Applied Physics, 2011, 109, .	2.5	38
6	Sub-250â€‰nm low-threshold deep-ultraviolet AlGaN-based heterostructure laser employing HfO2/SiO2 dielectric mirrors. Applied Physics Letters, 2013, 103, .	3.3	36
7	Design and Analysis of 250-nm AlInN Laser Diodes on AlN Substrates Using Tapered Electron Blocking Layers. IEEE Journal of Quantum Electronics, 2012, 48, 703-711.	1.9	34
8	Threshold voltage control of InAlN/GaN heterostructure field-effect transistors for depletion- and enhancement-mode operation. Applied Physics Letters, 2010, 96, .	3.3	24
9	High-Current-Gain Direct-Growth GaN/InGaN Double Heterojunction Bipolar Transistors. IEEE Transactions on Electron Devices, 2010, 57, 2964-2969.	3.0	22
10	NpN-GaN/InxGa1â^'xN/GaN heterojunction bipolar transistor on free-standing GaN substrate. Applied Physics Letters, 2011, 99, .	3.3	21
11	Effect of Silicon Doping in the Quantum-Well Barriers on the Electrical and Optical Properties of Visible Green Light-Emitting Diodes. IEEE Photonics Technology Letters, 2008, 20, 1769-1771.	2.5	18
12	AlGaN-Based Vertical Injection Laser Diodes Using Inverse Tapered p-Waveguide for Efficient Hole Transport. IEEE Journal of Quantum Electronics, 2014, 50, 166-173.	1.9	14
13	Optically pumped AlGaN quantumâ€‰well lasers at subâ€‰250 nm grown by MOCVD on AlN substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 258-260.	0.8	13
14	Inverse-Tapered p-Waveguide for Vertical Hole Transport in High-[Al] AlGaN Emitters. IEEE Photonics Technology Letters, 2015, 27, 1768-1771.	2.5	9
15	Green lightâ€‰emitting diodes with pâ€‰InGaN:Mg grown on c â€‰plane sapphire and GaN substrates. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 750-753.	1.8	8
16	Performance characteristics of InAlGaN laser diodes depending on electron blocking layer and waveguiding layer design grown by metalorganic chemical vapordeposition. Journal of Crystal Growth, 2011, 315, 272-277.	1.5	8
17	Polarization Matching in AlGaN-Based Multiple-Quantum-Well Deep Ultraviolet Laser Diodes on AlN Substrates Using Quaternary AlInGaN Barriers. Journal of Lightwave Technology, 2012, 30, 3017-3025.	4.6	8
18	Stimulated emission at 257â€‰nm from optically-pumped AlGaN/AlN heterostructure on AlN substrate. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1768-1770.	1.8	7

#	Article	IF	Citations
19	Growth and characterization of NpN heterojunction bipolar transistors with In0.03Ga0.97N and In0.05Ga0.95N bases. Journal of Crystal Growth, 2011, 315, 278-282.	1.5	5
20	Theoretical analysis of strategies for improving pâ€type conductivity in wurtzite IIIâ€nitride devices for highâ€power optoâ€and microelectronic applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 828-831.	0.8	4
21	Optically pumped deep-ultraviolet AlGaN multi-quantum-well lasers grown by metalorganic chemical vapor deposition. , 2014, , .		3
22	Improved Hole Transport by ${m p}hbox{-}{m In}_{x}{m Ga}_{1-x}{m N}$ Layer in Multiple Quantum Wells of Visible LEDs. IEEE Photonics Technology Letters, 2013, 25, 1789-1792.	2.5	2
23	Bipolar III-N high-power electronic devices. , 2013, , .		2
24	AlGaN-Based Lateral Current Injection Laser Diodes Using Regrown Ohmic Contacts. IEEE Photonics Technology Letters, 2013, 25, 313-316.	2.5	0