

# Zachary Lochner

## List of Publications by Year in descending order

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24  
papers

676  
citations

687363

13  
h-index

677142

22  
g-index

25  
all docs

25  
docs citations

25  
times ranked

795  
citing authors

#	ARTICLE	IF	CITATIONS
1	Inverse-Tapered p-Waveguide for Vertical Hole Transport in High-[Al] AlGa <sub>N</sub> Emitters. IEEE Photonics Technology Letters, 2015, 27, 1768-1771.	2.5	9
2	Optically pumped deep-ultraviolet AlGa <sub>N</sub> multi-quantum-well lasers grown by metalorganic chemical vapor deposition. , 2014, , .		3
3	Optically pumped AlGa <sub>N</sub> quantum-well lasers at sub-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
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	AlGa <sub>N</sub> -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
6	Theoretical analysis of strategies for improving p-type conductivity in wurtzite III-nitride devices for high-power opto- and microelectronic applications. Physica Status Solidi C: Current Topics in Solid State Physics, 2014, 11, 828-831.	0.8	4
7	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
8	Deep-ultraviolet lasing at 243 nm from photo-pumped AlGa <sub>N</sub> /AlN heterostructure on AlN substrate. Applied Physics Letters, 2013, 102, .	3.3	77
9	Sub-250 nm low-threshold deep-ultraviolet AlGa <sub>N</sub> -based heterostructure laser employing HfO <sub>2</sub> /SiO <sub>2</sub> dielectric mirrors. Applied Physics Letters, 2013, 103, .	3.3	36
10	Improved Hole Transport by $\text{In}_x\text{Ga}_{1-x}\text{N}$ Layer in Multiple Quantum Wells of Visible LEDs. IEEE Photonics Technology Letters, 2013, 25, 1789-1792.	2.5	2
11	AlGa <sub>N</sub> -Based Lateral Current Injection Laser Diodes Using Regrown Ohmic Contacts. IEEE Photonics Technology Letters, 2013, 25, 313-316.	2.5	0
12	Bipolar III-N high-power electronic devices. , 2013, , .		2
13	Stimulated emission at 257 nm from optically-pumped AlGa <sub>N</sub> /AlN heterostructure on AlN substrate. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 1768-1770.	1.8	7
14	Polarization Matching in AlGa <sub>N</sub> -Based Multiple-Quantum-Well Deep Ultraviolet Laser Diodes on AlN Substrates Using Quaternary AlInGa <sub>N</sub> Barriers. Journal of Lightwave Technology, 2012, 30, 3017-3025.	4.6	8
15	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
16	NpN-GaN/In <sub>x</sub> Ga <sub>1-x</sub> N/GaN heterojunction bipolar transistor on free-standing GaN substrate. Applied Physics Letters, 2011, 99, .	3.3	21
17	Growth and characterization of NpN heterojunction bipolar transistors with In <sub>0.03</sub> Ga <sub>0.97</sub> N and In <sub>0.05</sub> Ga <sub>0.95</sub> N bases. Journal of Crystal Growth, 2011, 315, 278-282.	1.5	5
18	Performance characteristics of InAlGa <sub>N</sub> laser diodes depending on electron blocking layer and waveguiding layer design grown by metalorganic chemical vapor deposition. Journal of Crystal Growth, 2011, 315, 272-277.	1.5	8

#	ARTICLE	IF	CITATIONS
19	Effects of a step-graded Al <sub>x</sub> Ga <sub>1-x</sub> N electron blocking layer in InGaN-based laser diodes. Journal of Applied Physics, 2011, 109, .	2.5	38
20	High-Current-Gain Direct-Growth GaN/InGaN Double Heterojunction Bipolar Transistors. IEEE Transactions on Electron Devices, 2010, 57, 2964-2969.	3.0	22
21	Threshold voltage control of InAlN/GaN heterostructure field-effect transistors for depletion- and enhancement-mode operation. Applied Physics Letters, 2010, 96, .	3.3	24
22	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
23	Green light-emitting diodes with p-InGaN:Mg grown on c-plane sapphire and GaN substrates. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 750-753.	1.8	8
24	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