

Chul Huh

List of Publications by Year in descending order

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44
papers

1,330
citations

430442

18
h-index

329751

37
g-index

44
all docs

44
docs citations

44
times ranked

1455
citing authors

#	ARTICLE	IF	CITATIONS
1	Improved light-output and electrical performance of InGaN-based light-emitting diode by microroughening of the p-GaN surface. Journal of Applied Physics, 2003, 93, 9383-9385.	1.1	343
2	Dry etch damage in n-type GaN and its recovery by treatment with an N ₂ plasma. Journal of Applied Physics, 2000, 87, 7667-7670.	1.1	132
3	Modeling of a GaN-based light-emitting diode for uniform current spreading. Applied Physics Letters, 2000, 77, 1903.	1.5	95
4	Improvement in light-output efficiency of InGaN/GaN multiple-quantum well light-emitting diodes by current blocking layer. Journal of Applied Physics, 2002, 92, 2248-2250.	1.1	77
5	Label-free optical biosensing using a horizontal air-slot SiN _x microdisk resonator. Optics Express, 2010, 18, 20638.	1.7	57
6	Physics and Device Structures of Highly Efficient Silicon Quantum Dots Based Silicon Nitride Light-Emitting Diodes. IEEE Journal of Selected Topics in Quantum Electronics, 2006, 12, 1545-1555.	1.9	46
7	Enhanced Protein Immobilization Efficiency on a TiO ₂ Surface Modified with a Hydroxyl Functional Group. Langmuir, 2009, 25, 11692-11697.	1.6	45
8	Response to Cardiac Markers in Human Serum Analyzed by Guided-Mode Resonance Biosensor. Analytical Chemistry, 2010, 82, 9686-9693.	3.2	44
9	Effective sulfur passivation of an n-type GaN surface by an alcohol-based sulfide solution. Journal of Applied Physics, 2000, 87, 4591-4593.	1.1	43
10	Enhancement in Light Emission Efficiency of a Silicon Nanocrystal Light-Emitting Diode by Multiple Luminescent Structures. Advanced Materials, 2010, 22, 5058-5062.	11.1	42
11	Dry-etch damage and its recovery in InGaN/GaN multi-quantum-well light-emitting diodes. Semiconductor Science and Technology, 2003, 18, 530-534.	1.0	32
12	InGaN/GaN multiple quantum well light-emitting diodes with highly transparent Pt thin film contact on p-GaN. Journal of Applied Physics, 2000, 87, 4464-4466.	1.1	31
13	A silicon nitride microdisk resonator with a 40-nm-thin horizontal air slot. Optics Express, 2010, 18, 11209.	1.7	30
14	Enhancement in light emission efficiency of Si nanocrystal light-emitting diodes by a surface plasmon coupling. Applied Physics Letters, 2012, 100, 181108.	1.5	28
15	Highly sensitive detection of cardiac troponin I in human serum using gold nanoparticle-based enhanced sandwich immunoassay. Sensors and Actuators B: Chemical, 2015, 221, 537-543.	4.0	28
16	Quantum-dot light-emitting diodes utilizing CdSe/ZnS nanocrystals embedded in TiO ₂ thin film. Applied Physics Letters, 2008, 93, .	1.5	27
17	Interfacial reaction and Fermi level movement induced by sequentially deposited metals on GaN: Au/Ni/GaN. Physical Review B, 2000, 61, 10966-10971.	1.1	26
18	Enhancement of light extraction from a silicon quantum dot light-emitting diode containing a rugged surface pattern. Applied Physics Letters, 2006, 89, 191120.	1.5	23

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19	Improvement in Light-Output Power of InGaN/GaN LED by Formation of Nanosize Cavities on p-GaN Surface. <i>Electrochemical and Solid-State Letters</i> , 2005, 8, G327.	2.2	17
20	Prediction of the limit of detection of an optical resonant reflection biosensor. <i>Optics Express</i> , 2007, 15, 8972.	1.7	17
21	Light-emitting diode applications of colloidal CdSe/ZnS quantum dots embedded in TiO ₂ thin film. <i>Physica Status Solidi (B): Basic Research</i> , 2009, 246, 889-892.	0.7	16
22	Strong visible electroluminescence from silicon nanocrystals embedded in a silicon carbide film. <i>Applied Physics Letters</i> , 2015, 106, .	1.5	15
23	Synergetic Resonance Matching of a Microphone and a Photoacoustic Cell. <i>Sensors</i> , 2017, 17, 804.	2.1	15
24	Effects of Ag/indium tin oxide contact to a SiC doping layer on performance of Si nanocrystal light-emitting diodes. <i>Applied Physics Letters</i> , 2006, 88, 131913.	1.5	13
25	Effects of Temperature on InGaN/GaN LEDs with Different MQW Structures. <i>Electrochemical and Solid-State Letters</i> , 2004, 7, G266.	2.2	12
26	In situ-grown hexagonal silicon nanocrystals in silicon carbide-based films. <i>Nanoscale Research Letters</i> , 2012, 7, 634.	3.1	12
27	A novel hand-held viscometer applicable for point-of-care. <i>Sensors and Actuators B: Chemical</i> , 2016, 234, 239-246.	4.0	11
28	Enhancement in electron transport and light emission efficiency of a Si nanocrystal light-emitting diode by a SiCN/SiC superlattice structure. <i>Nanoscale Research Letters</i> , 2013, 8, 14.	3.1	9
29	Sensitive capillary ELISA via vapor-phase surface modification. <i>Sensors and Actuators B: Chemical</i> , 2016, 233, 281-288.	4.0	8
30	Suppression of Leakage Current in InGaN/GaN Multiple-Quantum Well LEDs by N ₂ O Plasma Treatment. <i>Electrochemical and Solid-State Letters</i> , 2004, 7, G241.	2.2	7
31	Photo selective protein immobilization using bovine serum albumin. <i>Applied Surface Science</i> , 2012, 261, 880-889.	3.1	5
32	Sensitivity response to coating material thickness for an optical resonant reflective biosensor based on a guided mode resonance filter. <i>Biochip Journal</i> , 2014, 8, 35-41.	2.5	5
33	Influence of a Transparent SiCN Doping Layer on Performance of Silicon Nanocrystal LEDs. <i>Electrochemical and Solid-State Letters</i> , 2008, 11, H296.	2.2	4
34	Electrical and Optical Characteristics of InGaN/GaN Microdisk LEDs. <i>Electrochemical and Solid-State Letters</i> , 2005, 8, G68.	2.2	3
35	Seven emotion recognition by means of particle swarm optimization on physiological signals: Seven emotion recognition. , 2012, , .		3
36	Effects of Transparent Pt Metal Layer on Performance of InGaN/GaN Multiple-Quantum Well Light-Emitting Diodes. <i>Electrochemical and Solid-State Letters</i> , 2003, 6, G79.	2.2	2

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37	A Compact Tunable VCSEL and a Built-in Wavelength Meter for a Portable Optical Resonant Reflection Biosensor Reader. <i>Journal of the Optical Society of Korea</i> , 2010, 14, 395-402.	0.6	2
38	Pyrolysis Synthesis of CdSe/ZnS Nanocrystal Quantum Dots and Their Application to Light-Emitting Diodes. <i>Korean Journal of Materials Research</i> , 2008, 18, 379-383.	0.1	2
39	Green Emission of Silicon Quantum Dot Light-emitting Diodes caused by Enhanced Carrier Injection. <i>Journal of the Korean Physical Society</i> , 2011, 59, 2183-2186.	0.3	2
40	Effects of an Undoped Si _{1-x} C _x Buffer Layer on Performance of Si Nanocrystal Light-Emitting Diodes. <i>Electrochemical and Solid-State Letters</i> , 2008, 11, H189.	2.2	1
41	Enhancement of Electrical and Optical Properties of Silicon Quantum Dot Light-Emitting Diodes with ZnO Doping Layer. <i>Japanese Journal of Applied Physics</i> , 2009, 48, 105004.	0.8	0
42	Effects of electron injection efficiency on performances of Si nanocrystal light-emitting diodes. <i>AIP Conference Proceedings</i> , 2011, , .	0.3	0
43	A Study on Information Granular-Driven Polynomial Neural Networks. , 2014, , .		0
44	A Monolithic Silicon Nanocrystal Photonic Transducer for a Real-time Biomarker Detection. <i>Procedia Engineering</i> , 2016, 168, 546-549.	1.2	0