Chul Huh

List of Publications by Year
in descending order

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	Synergetic Resonance Matching of a Microphone and a Photoacoustic Cell. Sensors, 2017, 17, 804.	2.1	15
2	A Monolithic Silicon Nanocrystal Photonic Transducer for a Real-time Biomarker Detection. Procedia Engineering, 2016, 168, 546-549.	1.2	0
3	Sensitive â€œcapillary ELISAâ€•via vapor-phase surface modification. Sensors and Actuators B: Chemical, 2016, 233, 281-288.	4.0	8
4	A novel hand-held viscometer applicable for point-of-care. Sensors and Actuators B: Chemical, 2016, 234, 239-246.	4.0	11
5	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
6	Strong visible electroluminescence from silicon nanocrystals embedded in a silicon carbide film. Applied Physics Letters, 2015, 106, .	1.5	15
7	A Study on Information Granular-Driven Polynomial Neural Networks. , 2014, , .		0
8	Sensitivity response to coating material thickness for an optical resonant reflective biosensor based on a guided mode resonance filter. Biochip Journal, 2014, 8, 35-41.	2.5	5
9	Enhancement in electron transport and light emission efficiency of a Si nanocrystal light-emitting diode by a SiCN/SiC superlattice structure. Nanoscale Research Letters, 2013, 8, 14.	3.1	9
10	Seven emotion recognition by means of particle swarm optimization on physiological signals: Seven emotion recognition. , 2012, , .		3
11	In situ-grown hexagonal silicon nanocrystals in silicon carbide-based films. Nanoscale Research Letters, 2012, 7, 634.	3.1	12
12	Photo selective protein immobilization using bovine serum albumin. Applied Surface Science, 2012, 261, 880-889.	3.1	5
13	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
14	Effects of electron injection efficiency on performances of Si nanocrystal light-emitting diodes. AIP Conference Proceedings, 2011, , .	0.3	0
15	Green Emission of Silicon Quantum Dot Light-emitting Diodes caused by Enhanced Carrier Injection. Journal of the Korean Physical Society, 2011, 59, 2183-2186.	0.3	2
16	Enhancement in Light Emission Efficiency of a Silicon Nanocrystal Lightâ€Emitting Diode by Multipleâ€Luminescent Structures. Advanced Materials, 2010, 22, 5058-5062.	11.1	42
17	Response to Cardiac Markers in Human Serum Analyzed by Guided-Mode Resonance Biosensor. Analytical Chemistry, 2010, 82, 9686-9693.	3.2	44
18	A silicon nitride microdisk resonator with aâ€¨40-nm-thin horizontal air slot. Optics Express, 2010, 18, 11209.	1.7	30

#	Article	IF	Citations
19	Label-free optical biosensing using a horizontal air-slot SiN_x microdisk resonator. Optics Express, 2010, 18, 20638.	1.7	57
20	A Compact Tunable VCSEL and a Built-in Wavelength Meter for a Portable Optical Resonant Reflection Biosensor Reader. Journal of the Optical Society of Korea, 2010, 14, 395-402.	0.6	2
21	Enhancement of Electrical and Optical Properties of Silicon Quantum Dot Light-Emitting Diodes with ZnO Doping Layer. Japanese Journal of Applied Physics, 2009, 48, 105004.	0.8	0
22	Lightâ€emitting diode applications of colloidal CdSe/ZnS quantum dots embedded in TiO_{2â€“Î´} thin film. Physica Status Solidi (B): Basic Research, 2009, 246, 889-892.	0.7	16
23	Enhanced Protein Immobilization Efficiency on a TiO₂ Surface Modified with a Hydroxyl Functional Group. Langmuir, 2009, 25, 11692-11697.	1.6	45
24	Quantum-dot light-emitting diodes utilizing CdSeâˆ•ZnS nanocrystals embedded in TiO2 thin film. Applied Physics Letters, 2008, 93, .	1.5	27
25	Effects of an Undoped Si[sub 1â^'x]C[sub x] Buffer Layer on Performance of Si Nanocrystal Light-Emitting Diodes. Electrochemical and Solid-State Letters, 2008, 11, H189.	2.2	1
26	Influence of a Transparent SiCN Doping Layer on Performance of Silicon Nanocrystal LEDs. Electrochemical and Solid-State Letters, 2008, 11, H296.	2.2	4
27	Pyrolysis Synthesis of CdSe/ZnS Nanocrystal Quantum Dots and Their Application to Light-Emitting Diodes. Korean Journal of Materials Research, 2008, 18, 379-383.	0.1	2
28	Prediction of the limit of detection of an optical resonant reflection biosensor. Optics Express, 2007, 15, 8972.	1.7	17
29	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
30	Effects of Ag/indium tin oxide contact to a SiC doping layer on performance of Si nanocrystal light-emitting diodes. Applied Physics Letters, 2006, 88, 131913.	1.5	13
31	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
32	Improvement in Light-Output Power of InGaNâˆ•GaN LED by Formation of Nanosize Cavities on p-GaN Surface. Electrochemical and Solid-State Letters, 2005, 8, G327.	2.2	17
33	Electrical and Optical Characteristics of InGaN/GaN Microdisk LEDs. Electrochemical and Solid-State Letters, 2005, 8, G68.	2.2	3
34	Suppression of Leakage Current in InGaN/GaN Multiple-Quantum Well LEDs by N[sub 2]O Plasma Treatment. Electrochemical and Solid-State Letters, 2004, 7, G241.	2.2	7
35	Effects of Temperature on InGaN/GaN LEDs with Different MQW Structures. Electrochemical and Solid-State Letters, 2004, 7, G266.	2.2	12
36	Improved light-output and electrical performance of InGaN-based light-emitting diode by microroughening of thep-GaN surface. Journal of Applied Physics, 2003, 93, 9383-9385.	1.1	343

#	Article	IF	Citations
37	Effects of Transparent Pt Metal Layer on Performance of InGaN/GaN Multiple-Quantum Well Light-Emitting Diodes. Electrochemical and Solid-State Letters, 2003, 6, G79.	2.2	2
38	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
39	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
40	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
41	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
42	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
43	Dry etch damage in n-type GaN and its recovery by treatment with an N2 plasma. Journal of Applied Physics, 2000, 87, 7667-7670.	1.1	132
44	Modeling of a GaN-based light-emitting diode for uniform current spreading. Applied Physics Letters, 2000, 77, 1903.	1.5	95