Claude Weisbuch

List of Publications by Year
in descending order

26 papers	2,842 citations	393982 19 h-index	610482 24 g-index
27 all docs	27 docs citations	27 times ranked	2833 citing authors

#	Article	IF	Citations
1	Efficiency and Forward Voltage of Blue and Green Lateral LEDs with V-shaped Defects and Random Alloy Fluctuation in Quantum Wells. Physical Review Applied, 2022, 17, .	1.5	13
2	Wigner-Weyl description of light absorption in disordered semiconductor alloys using the localization landscape theory. Physical Review B, 2022, 105, .	1.1	7
3	Reviewâ€"On The Search for Efficient Solid State Light Emitters: Past, Present, Future. ECS Journal of Solid State Science and Technology, 2020, 9, 016022.	0.9	64
4	Disorder effects in nitride semiconductors: impact on fundamental and device properties. Nanophotonics, 2020, 10, 3-21.	2.9	23
5	Historical perspective on the physics of artificial lighting. Comptes Rendus Physique, 2018, 19, 89-112.	0.3	25
6	Auger-generated hot carrier current in photo-excited forward biased single quantum well blue light emitting diodes. Applied Physics Letters, 2018, 112, 141106.	1.5	9
7	Prospects for 100% wall-plug efficient III-nitride LEDs. Optics Express, 2018, 26, 16600.	1.7	36
8	Identification of low-energy peaks in electron emission spectroscopy of InGaN/GaN light-emitting diodes. Journal of Applied Physics, 2018, 124, .	1.1	10
9	Localization landscape theory of disorder in semiconductors. I. Theory and modeling. Physical Review B, 2017, 95, .	1.1	81
10	Localization landscape theory of disorder in semiconductors. III. Application to carrier transport and recombination in light emitting diodes. Physical Review B, 2017, 95, .	1.1	95
11	High wall-plug efficiency blue III-nitride LEDs designed for low current density operation. Optics Express, 2017, 25, 30696.	1.7	31
12	Localization landscape theory of disorder in semiconductors. II. Urbach tails of disordered quantum well layers. Physical Review B, 2017, 95, .	1.1	78
13	The efficiency challenge of nitride lightâ€emitting diodes for lighting. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 899-913.	0.8	112
14	Direct Measurement of Auger Electrons Emitted from a Semiconductor Light-Emitting Diode under Electrical Injection: Identification of the Dominant Mechanism for Efficiency Droop. Physical Review Letters, 2013, 110, 177406.	2.9	564
15	Photonic crystal light-emitting sources. Reports on Progress in Physics, 2012, 75, 126501.	8.1	71
16	High-brightness polarized light-emitting diodes. Light: Science and Applications, 2012, 1, e22-e22.	7.7	217
17	High internal and external quantum efficiency InGaN/GaN solar cells. Applied Physics Letters, 2011, 98, .	1.5	195
18	Direct measurement of internal quantum efficiency in light emitting diodes under electrical injection. Journal of Applied Physics, 2011, 109, .	1.1	39

#	Article	IF	Citations
19	High extraction efficiency light-emitting diodes based on embedded air-gap photonic-crystals. Applied Physics Letters, 2010, 96, 031108.	1.5	91
20	Interplay of cavity thickness and metal absorption in thin-film InGaN photonic crystal light-emitting diodes. Applied Physics Letters, 2010, 97, 061118.	1.5	9
21	Impact of photonic crystals on LED light extraction efficiency: approaches and limits to vertical structure designs. Journal Physics D: Applied Physics, 2010, 43, 354005.	1.3	90
22	Electroluminescent measurement of the internal quantum efficiency of light emitting diodes. Applied Physics Letters, 2009, 94, 181102.	1.5	27
23	Optimization of Light-Diffracting Photonic-Crystals for High Extraction Efficiency LEDs. Journal of Display Technology, 2007, 3, 133-148.	1.3	121
24	Recent results and latest views on microcavity LEDs. , 2004, 5366, 1.		8
25	Applications of Quantum Semiconductor Structures. , 1991, , 141-187.		346
26	kâ†'Â·pâ†'perturbation theory in III-V compounds and alloys: a reexamination. Physical Review B, 1977, 15, 823-833.	1.1	480