

Claude Weisbuch

List of Publications by Year in descending order

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Version: 2024-02-01

26
papers

2,842
citations

394286

19
h-index

610775

24
g-index

27
all docs

27
docs citations

27
times ranked

2833
citing authors

#	ARTICLE	IF	CITATIONS
1	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
2	δ -perturbation theory in III-V compounds and alloys: a reexamination. Physical Review B, 1977, 15, 823-833.	1.1	480
3	Applications of Quantum Semiconductor Structures. , 1991, , 141-187.		346
4	High-brightness polarized light-emitting diodes. Light: Science and Applications, 2012, 1, e22-e22.	7.7	217
5	High internal and external quantum efficiency InGaN/GaN solar cells. Applied Physics Letters, 2011, 98, .	1.5	195
6	Optimization of Light-Diffracting Photonic-Crystals for High Extraction Efficiency LEDs. Journal of Display Technology, 2007, 3, 133-148.	1.3	121
7	The efficiency challenge of nitride light-emitting diodes for lighting. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 899-913.	0.8	112
8	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
9	High extraction efficiency light-emitting diodes based on embedded air-gap photonic-crystals. Applied Physics Letters, 2010, 96, 031108.	1.5	91
10	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
11	Localization landscape theory of disorder in semiconductors. I. Theory and modeling. Physical Review B, 2017, 95, .	1.1	81
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	Photonic crystal light-emitting sources. Reports on Progress in Physics, 2012, 75, 126501.	8.1	71
14	Review "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
15	Direct measurement of internal quantum efficiency in light emitting diodes under electrical injection. Journal of Applied Physics, 2011, 109, .	1.1	39
16	Prospects for 100% wall-plug efficient III-nitride LEDs. Optics Express, 2018, 26, 16600.	1.7	36
17	High wall-plug efficiency blue III-nitride LEDs designed for low current density operation. Optics Express, 2017, 25, 30696.	1.7	31
18	Electroluminescent measurement of the internal quantum efficiency of light emitting diodes. Applied Physics Letters, 2009, 94, 181102.	1.5	27

#	ARTICLE	IF	CITATIONS
19	Historical perspective on the physics of artificial lighting. <i>Comptes Rendus Physique</i> , 2018, 19, 89-112.	0.3	25
20	Disorder effects in nitride semiconductors: impact on fundamental and device properties. <i>Nanophotonics</i> , 2020, 10, 3-21.	2.9	23
21	Efficiency and Forward Voltage of Blue and Green Lateral LEDs with V-shaped Defects and Random Alloy Fluctuation in Quantum Wells. <i>Physical Review Applied</i> , 2022, 17, .	1.5	13
22	Identification of low-energy peaks in electron emission spectroscopy of InGaN/GaN light-emitting diodes. <i>Journal of Applied Physics</i> , 2018, 124, .	1.1	10
23	Interplay of cavity thickness and metal absorption in thin-film InGaN photonic crystal light-emitting diodes. <i>Applied Physics Letters</i> , 2010, 97, 061118.	1.5	9
24	Auger-generated hot carrier current in photo-excited forward biased single quantum well blue light emitting diodes. <i>Applied Physics Letters</i> , 2018, 112, 141106.	1.5	9
25	Recent results and latest views on microcavity LEDs. , 2004, 5366, 1.		8
26	Wigner-Weyl description of light absorption in disordered semiconductor alloys using the localization landscape theory. <i>Physical Review B</i> , 2022, 105, .	1.1	7