Olivier Durand

List of Publications by Year
in descending order

25 papers	1,213 citations	623188 14 h-index	610482 24 g-index
25 all docs	25 docs citations	25 times ranked	2574 citing authors

#	Article	IF	Citations
1	Light-induced lattice expansion leads to high-efficiency perovskite solar cells. Science, 2018, 360, 67-70.	6.0	554
2	Critical Role of Interface and Crystallinity on the Performance and Photostability of Perovskite Solar Cell on Nickel Oxide. Advanced Materials, 2018, 30, 1703879.	11.1	198
3	Quantitative experimental assessment of hot carrier-enhanced solar cells at room temperature. Nature Energy, 2018, 3, 236-242.	19.8	86
4	Experimental evidence of hot carriers solar cell operation in multi-quantum wells heterostructures. Applied Physics Letters, 2015, 106, .	1.5	55
5	Room temperature operation of GaAsP(N)/GaP(N) quantum well based light-emitting diodes: Effect of the incorporation of nitrogen. Applied Physics Letters, 2011, 98, 251110.	1.5	40
6	Defects limitation in epitaxial GaP on bistepped Si surface using UHVCVDâ€“MBE growth cluster. Journal of Crystal Growth, 2013, 380, 157-162.	0.7	37
7	X-ray study of antiphase domains and their stability in MBE grown GaP on Si. Journal of Crystal Growth, 2011, 323, 409-412.	0.7	34
8	Thermodynamic evolution of antiphase boundaries in GaP/Si epilayers evidenced by advanced X-ray scattering. Applied Surface Science, 2012, 258, 2808-2815.	3.1	29
9	Optical absorption and thermal conductivity of GaAsPN absorbers grown on GaP in view of their use in multijunction solar cells. Solar Energy Materials and Solar Cells, 2015, 141, 291-298.	3.0	23
10	Antiphase domain tailoring for combination of modal and 4Â¯ -quasi-phase matching in gallium phosphide microdisks. Optics Express, 2016, 24, 14608.	1.7	20
11	Abrupt GaP/Si hetero-interface using bistepped Si buffer. Applied Physics Letters, 2015, 107, .	1.5	19
12	Theoretical study of optical properties of anti phase domains in GaP. Journal of Applied Physics, 2014, 115, .	1.1	17
13	Quantitative evaluation of microtwins and antiphase defects in GaP/Si nanolayers for a IIIâ€“V photonics platform on silicon using a laboratory X-ray diffraction setup. Journal of Applied Crystallography, 2015, 48, 702-710.	1.9	16
14	Nitrogen-related intermediate band in P-rich GaNxPyAs1âˆ’xâˆ’y alloys. Scientific Reports, 2017, 7, 15703.	1.6	16
15	Al4SiC4 wurtzite crystal: Structural, optoelectronic, elastic, and piezoelectric properties. APL Materials, 2015, 3, .	2.2	14
16	Electronic wave functions and optical transitions in (In,Ga)As/GaP quantum dots. Physical Review B, 2016, 94, .	1.1	10
17	Monolithic Integration of Diluted-Nitride IIIâ€“V-N Compounds on Silicon Substrates: Toward the IIIâ€“V/Si Concentrated Photovoltaics. Energy Harvesting and Systems, 2014, 1, .	1.7	9
18	Second harmonic generation in gallium phosphide microdisks on silicon: from strict $ar{4}$ to random quasi-phase matching. Semiconductor Science and Technology, 2017, 32, 065004.	1.0	9

#	Article	IF	Citations
19	Studies of oxide-based thin-layered heterostructures by X-ray scattering methods. Thin Solid Films, 2007, 515, 6360-6367.	0.8	6
20	Al₄SiC₄ vibrational properties: density functional theory calculations compared to Raman and infrared spectroscopy measurements. Journal of Raman Spectroscopy, 2017, 48, 891-896.	1.2	5
21	GaP/Si-Based Photovoltaic Devices Grown by Molecular Beam Epitaxy. , 2018, , 637-648.		5
22	Quantitative study of microtwins in GaP/Si thin film and GaAsPN quantum wells grown on silicon substrates. Journal of Crystal Growth, 2013, 378, 25-28.	0.7	3
23	Electrical characteristics and hot carrier effects in quantum well solar cells. Proceedings of SPIE, 2017, , .	0.8	3
24	Epitaxial growth of CIGSe layers on GaP/Si(001) pseudo-substrate for tandem CIGSe/Si solar cells. Solar Energy Materials and Solar Cells, 2021, 233, 111385.	3.0	3
25	A study of the strain distribution by scanning X-ray diffraction on GaP/Si for IIIâ€“V monolithic integration on silicon. Journal of Applied Crystallography, 2019, 52, 809-815.	1.9	2