Isaac HernÃ¡ndez-CalderÃ³n

List of Publications by Year
in descending order

88 papers	1,104 citations	394421 19 h-index	434195 31 g-index
92 all docs	92 docs citations	92 times ranked	1031 citing authors

#	Article	IF	Citations
1	Photoluminescence properties of the Eu3+ activator ion in the TiO2 host matrix. Applied Physics Letters, 2001, 78, 3436-3438.	3.3	113
2	Observation of splitting of the E2g mode and two-phonon spectrum in graphites. Solid State Communications, 1978, 27, 507-510.	1.9	81
3	Angular resolved photoemission of InSb(001) and heteroepitaxial films of Î±-Sn(001). Surface Science, 1983, 126, 25-31.	1.9	66
4	Photoluminescence of TiO2: Eu3+ thin films obtained by solÃ¢Â€Â“gel on Si and Corning glass substrates. Thin Solid Films, 2001, 401, 118-123.	1.8	63
5	GaAs surface oxide desorption by annealing in ultra high vacuum. Thin Solid Films, 2000, 373, 159-163.	1.8	59
6	New method for the analysis of reflection high-energy electron diffraction:Î±â^'Sn(001)and InSb(001) surfaces. Physical Review B, 1983, 27, 4961-4965.	3.2	57
7	Photoluminescence properties of Tb3+ and Eu3+ ions hosted in TiO2 matrix. Applied Surface Science, 2003, 212-213, 583-588.	6.1	41
8	XPS analysis of petroleum well tubing adherence. Surface and Interface Analysis, 2003, 35, 239-245.	1.8	35
9	Angle-resolved photoemission study of thin molecular-beam-epitaxy-grownÎ±-Sn1â^'xGexfilms withxâ^¼0.5. Physical Review B, 1989, 40, 9703-9708.	3.2	32
10	Raman spectroscopy and photoluminescence of ZnTe thin films grown on GaAs. Journal of Applied Physics, 2002, 92, 6014-6018.	2.5	32
11	Microscopic structure and electrical properties of heat treated coals and eucalyptus charcoal. Carbon, 1982, 20, 201-205.	10.3	29
12	Experimental determination of the valence-band structure of molecular-beam-epitaxy-grown CdTe(110). Physical Review B, 1989, 40, 8370-8377.	3.2	28
13	Raman scattering and luminescence in coal and graphite. Solid State Communications, 1977, 24, 809-812.	1.9	26
14	Hillocks formation during the molecular beam epitaxial growth of ZnSe on GaAs substrates. Journal of Crystal Growth, 1998, 193, 528-534.	1.5	25
15	Angle-resolved photoemission study of theÎ±-Sn/CdTe(100) interface. Physical Review B, 1987, 36, 3336-3343.	3.2	22
16	Growth and characterization of ultra-thin quantum wells of IIâ€“VI semiconductors for optoelectronic applications. Physica Status Solidi (B): Basic Research, 2004, 241, 558-563.	1.5	22
17	Angle-resolved photoemission of Î±-Sn(111) and the polar (111) and () surfaces of InSb. Surface Science, 1985, 152-153, 1035-1041.	1.9	21
18	Optical and structural characterization of ZnSe films grown by molecular beam epitaxy on GaAs substrates with and without GaAs buffer layers. Journal of Applied Physics, 1998, 84, 1551-1557.	2.5	20

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19	Strain relaxation during the layer by layer growth of cubic CdSe onto ZnSe. Applied Physics Letters, 2003, 82, 43-45.	3.3	20
20	Photoemission study of the surface electronic structure of InSb(110). Physical Review B, 1984, 30, 4528-4532.	3.2	15
21	Single-peak excitonic emission of CdSe ultra-thin quantum wells finished with fractional monolayers. Microelectronics Journal, 2008, 39, 594-596.	2.0	15
22	Dislocation densities in MBE grown ZnSe epitaxial layers on GaAs by HRXRD. Journal of Crystal Growth, 1998, 194, 301-308.	1.5	13
23	<i>Ab initio</i> structural and electronic bandâ€structure study of MgSe. Physica Status Solidi (B): Basic Research, 2015, 252, 663-669.	1.5	13
24	INTERACTION BETWEEN Zn AND Cd ATOMS DURING THE ATOMIC LAYER EPITAXY GROWTH OF CdZnTe/ZnTe QUANTUM WELLS. Surface Review and Letters, 2002, 09, 1725-1728.	1.1	12
25	Temperature dependence of Raman scattering and luminescence of the disordered Zn0.5Cd0.5Se alloy. Microelectronics Journal, 2002, 33, 349-353.	2.0	12
26	High Pressure Semiconductor Physics. Physica Status Solidi (B): Basic Research, 2015, 252, 651-652.	1.5	12
27	Self-organised silicide nanodot patterning by medium-energy ion beam sputtering of Si(100): local correlation between the morphology and metal content. Nanotechnology, 2016, 27, 444001.	2.6	12
28	Tuning of the alloy composition of Zn1âˆ’x Cd x Se quantum wells by submonolayer pulsed beam epitaxy (SPBE). Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 819-822.	0.8	11
29	Energy-loss-spectroscopy investigation of hydrogen adsorption on InSb surfaces. Surface Science, 1985, 152-153, 1130-1134.	1.9	10
30	Rapid hydrothermal synthesis of SrMo1âˆ’xWxO4 powders: Structure and luminescence characterization. Advanced Powder Technology, 2017, 28, 629-640.	4.1	10
31	Photoluminescence Study of Ultra-Thin CdSe Quantum Wells. Physica Status Solidi (B): Basic Research, 2002, 230, 331-334.	1.5	9
32	Epitaxial growth of thin films and quantum structures of IIâ€“VI visible-bandgap semiconductors. , 2013, , 311-346.		9
33	Calculation of the structure factor of metals with the complete multiphonon series. Physical Review B, 1976, 14, 2310-2313.	3.2	8
34	Investigation of the structural properties of MBE grown heterostructures. Journal of Crystal Growth, 1997, 175-176, 571-576.	1.5	8
35	Pressure dependence of optical phonons in ZnCdSe alloys. Physica Status Solidi (B): Basic Research, 2003, 235, 432-436.	1.5	8
36	Study of the coupling of ultra-thin CdSe double quantum wells. Superlattices and Microstructures, 2015, 87, 47-52.	3.1	8

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37	OPTICAL PROPERTIES OF CdTe/ZnTe ULTRATHIN QUANTUM WELLS GROWN BY ATOMIC LAYER EPITAXY. Surface Review and Letters, 2002, 09, 1667-1670.	1.1	7
38	Fine tuning of the emission of ultra-thin quantum wells of CdSe and CdTe by modification of the growth temperature. Microelectronics Journal, 2005, 36, 985-988.	2.0	7
39	Thermal quenching of the self-activated band of ZnSe:Cl thin films grown by molecular beam epitaxy. Microelectronics Journal, 2005, 36, 527-530.	2.0	7
40	Nearly lattice-matched Zn1-zCdzSe/Zn1-xCdxSe/Zn1-yMgySe (z > x) quantum wells for yellow emission. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, 041225.	1.2	7
41	Stress in GaAs at the hetero-interface of ZnSe/GaAs/GaAs: a possible effect of pit filling and difference in thermal expansion coefficients. Applied Surface Science, 1999, 151, 271-279.	6.1	6
42	Photoreflectance and Photoluminescence Characterization of GaAs Quantum Wells Grown by Molecular Beam Epitaxy on Flat and Misoriented Substrates. Japanese Journal of Applied Physics, 1996, 35, 3923-3927.	1.5	5
43	Observation of stress effects on GaAs at the interface of molecular beam epitaxy grown ZnSe/GaAs(100) heterostructures. Applied Surface Science, 1998, 134, 95-102.	6.1	5
44	Disorder-induced phonon modes, built-in electric fields and structural properties of CdTe/GaAs heterostructures grown by MBE. Semiconductor Science and Technology, 1999, 14, 350-356.	2.0	5
45	Observation of the photovoltaic effect in n-ZnSe/p-GaAs heterostructures. Journal of Crystal Growth, 1999, 201-202, 971-974.	1.5	5
46	Near band-edge optical properties of GaAs at interfaces of ZnSe/GaAs/GaAs by phase selection in photoreflectance. Journal of Applied Physics, 1999, 86, 425-429.	2.5	5
47	Persistent photoconductivity in ZnCdSe MBE films grown on GaAs. Solid-State Electronics, 2003, 47, 759-762.	1.4	5
48	Cd desorption induced by Zn exposure during atomic layer epitaxy of CdxZn1-xTe. Physica Status Solidi (B): Basic Research, 2005, 242, 1946-1950.	1.5	5
49	Solution processed nanostructured hybrid materials based on PbS quantum dots and reduced graphene oxide with tunable optoelectronic properties. Nanotechnology, 2021, 32, 055604.	2.6	5
50	Photoreflectance characterization of CdTe thin films grown by Molecular Beam Epitaxy on GaAs(100). Applied Physics A: Solids and Surfaces, 1994, 58, 219-222.	1.4	4
51	The low-loss EELS spectra from radiation damaged gold nanoparticles. Journal of Applied Physics, 2016, 120, 164302.	2.5	4
52	Design of a quantum well based on a ZnCdSe/ZnTe type II heterostructure confined type I within ZnSe barriers. AIP Conference Proceedings, 2018, , .	0.4	4
53	Optical and structural properties of ZnSe/GaAs interfaces. Applied Surface Science, 1997, 112, 165-170.	6.1	3
54	Determination of the Exciton Binding Energy in ZnCdSe Quantum Wells by Resonant Raman Scattering. Physica Status Solidi (B): Basic Research, 2000, 220, 205-208.	1.5	3

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55	Photoluminescence properties of intra-well exciton migration in Zn1â^'xCdxSe quantum wells. Microelectronics Journal, 2000, 31, 443-450.	2.0	3
56	Anomalous temperature behavior of the excitonic emission of a 3 ML ultra-thin quantum well of CdSe. Microelectronics Journal, 2005, 36, 362-365.	2.0	3
57	Local structural characterization of Zn:Cd:Se ternary semiconductors. Thin Solid Films, 2005, 490, 165-167.	1.8	3
58	Quantum islands formation and optical properties of CdZnTe/ZnTe quantum wells grown by atomic layer epitaxy. Physica Status Solidi (B): Basic Research, 2005, 242, 1824-1828.	1.5	3
59	Photoluminescence and secondary ion mass spectrometry study of layer-by-layer grown Zn1â^'xCdxSe quantum wells. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 03C137.	1.2	3
60	A Two-Level Model for Intra-Well Exciton Migration in Zn1-xCdxSe Quantum Wells. Physica Status Solidi (B): Basic Research, 2000, 220, 27-31.	1.5	2
61	LUMINESCENT PROPERTIES OF SOL-GEL DEPOSITED Eu:TiO2 THIN FILMS. Modern Physics Letters B, 2001, 15, 769-773.	1.9	2
62	Symmetry properties and electronic band structure of ordered Zn0.5Cd0.5Se alloys. Microelectronics Journal, 2005, 36, 342-346.	2.0	2
63	Study of the recombination around the excitonic region of MBE ZnSe:Cl thin films. Microelectronics Journal, 2008, 39, 582-585.	2.0	2
64	Influence of ZnSe capping of CdSe layers in the growth mode of ZnCdMgSe/CdSe/ZnCdMgSe heterostructures. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, 041218.	1.2	2
65	Experimental determination of the valence band dispersion of MBE grown CdTe(110) by angle resolved photoemission spectroscopy. Physica Scripta, 1990, 41, 944-947.	2.5	1
66	Differential photoreflectance and Raman studies of MBE-grown GaAs/Si/GaAs structures. Journal of Physics Condensed Matter, 1993, 5, A357-A358.	1.8	1
67	Strain in GaAs at the heterointerface of ZnSe/GaAs/GaAs. Journal Physics D: Applied Physics, 1999, 32, 1293-1301.	2.8	1
68	Determination of the minimum island size for full exciton localization due to thickness fluctuations in Zn1â^'xCdxSe quantum wells. Microelectronics Journal, 2002, 33, 337-339.	2.0	1
69	Influence of the composition profile in the excitonic emission of thin graded ZnCdSe quantum wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 1787-1789.	0.8	1
70	Layer-by-Layer Growth of Thin Films of Ternary Alloys of IIâ€"VI Semiconductors by Submonolayer Pulsed Beam Epitaxy (SPBE). , 2018, , 315-326.		1
71	Growth and Characterization of Type I Quantum Wells Based on ZnCdSe/ZnTe Type II Heterostructures Confined within ZnSe Barriers. Journal of Electronic Materials, 2018, 47, 4399-4403.	2.2	1
72	Estimation of the lateral dimensions of epitaxial submonolayer CdSe/ZnSe quantum dots. Nanotechnology, 2020, 31, 285001.	2.6	1

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73	Observation of a non-constant Cd diffusion coefficient during the thermal annealing of Zn1-Cd Se quantum wells. Journal of Alloys and Compounds, 2020, 846, 155698.	5.5	1
74	Roomâ€Temperature Yellow Emission of a High Cd Content (x â€‰=â€‰0.70), Highly Strained, Layerâ€byâ€Layer Grown Zn 1âˆ’ x Cd x Se/ZnSe Quantum Well. Physica Status Solidi (B): Basic Research, 0, , 2100574.	1.5	1
75	11. Structure and electrical properties of heat treated coals. Carbon, 1982, 20, 126.	10.3	0
76	Electronic structure of epitaxial Î±-Sn1-xGex alloys. Journal of Electron Spectroscopy and Related Phenomena, 1990, 51, 613-621.	1.7	0
77	Anomalous Fermi level emission during the initial growth of epitaxial alpha -Sn/CdTe(111) heterostructures. Journal of Physics Condensed Matter, 1993, 5, A327-A328.	1.8	0
78	Study of the Initial Growth Process of ZnSe on Si(111) by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 1997, 36, L1153-L1156.	1.5	0
79	<title>Photoluminescence study of CdTe/ZnTe ultra-thin quantum wells grown by pulsed beam epitaxy</title>. , 2002, , .		0
80	<title>Modeling of the photoluminescence spectra of localize excitons in Zn<formula><inf><roman>1-x</roman></inf></formula> Cd<formula><inf><roman>x</roman></inf></formula>Se quantum wells</title>. , 2002, , .		0
81	Quantum Wells in the Ternary System Zn(1-X)CdXSe by High Rresolution Microscopy. Microscopy and Microanalysis, 2009, 15, 1222-1223.	0.4	0
82	Photoluminescence study of the substitution of Cd by Zn during the growth by atomic layer epitaxy of alternate CdSe and ZnSe monolayers. , 2014, , .		0
83	Spectral photoresponse of ZnSe/GaAs(001) heterostructures with CdSe ultra-thin quantum well insertions. , 2014, , .		0
84	Photoluminescence study of the excitation power dependence of the peak intensities of an asymmetric double quantum well. AIP Conference Proceedings, 2018, , .	0.4	0
85	Peculiar enhancement of the excitonic emission of CdSe/ZnSe quantum wells at âˆ¼ 90â€…K when excited with a HeCd laser. AIP Conference Proceedings, 2018, , .	0.4	0
86	Photoluminescence properties of epitaxial asymmetric triple CdSe quantum wells. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 042202.	1.2	0
87	Submonolayer epitaxy growth of fractional monolayer CdSe/ZnSe quantum dots. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2020, 38, 032209.	1.2	0
88	Yellow to green Excitonic Emission of Nearly Lattice-Matched Zn Cd Se/Zn Cd Se/Zn Mg Se (z >x) Quantum Wells grown on GaAs(001). Journal of Crystal Growth, 2022, , 126767.	1.5	0