

# Isaac Hernández-Calderón

## List of Publications by Year in descending order

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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	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
2	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
3	Estimation of the lateral dimensions of epitaxial submonolayer CdSe/ZnSe quantum dots. Nanotechnology, 2020, 31, 285001.	2.6	1
4	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
5	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
6	Observation of a non-constant Cd diffusion coefficient during the thermal annealing of Zn <sub>1-x</sub> Cd <sub>x</sub> Se quantum wells. Journal of Alloys and Compounds, 2020, 846, 155698.	5.5	1
7	Photoluminescence study of the excitation power dependence of the peak intensities of an asymmetric double quantum well. AIP Conference Proceedings, 2018, , .	0.4	0
8	Peculiar enhancement of the excitonic emission of CdSe/ZnSe quantum wells at $\approx 90$ K when excited with a HeCd laser. AIP Conference Proceedings, 2018, , .	0.4	0
9	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
10	Layer-by-Layer Growth of Thin Films of Ternary Alloys of II-VI Semiconductors by Submonolayer Pulsed Beam Epitaxy (SPBE). , 2018, , 315-326.		1
11	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
12	Rapid hydrothermal synthesis of SrMo <sub>1-x</sub> W <sub>x</sub> O <sub>4</sub> powders: Structure and luminescence characterization. Advanced Powder Technology, 2017, 28, 629-640.	4.1	10
13	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
14	Nearly lattice-matched Zn <sub>1-z</sub> Cd <sub>z</sub> Se/Zn <sub>1-x</sub> Cd <sub>x</sub> Se/Zn <sub>1-y</sub> Mg <sub>y</sub> Se ( $z > x$ ) quantum wells for yellow emission. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, 041225.	1.2	7
15	The low-loss EELS spectra from radiation damaged gold nanoparticles. Journal of Applied Physics, 2016, 120, 164302.	2.5	4
16	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
17	High Pressure Semiconductor Physics. Physica Status Solidi (B): Basic Research, 2015, 252, 651-652.	1.5	12
18	structural and electronic band structure study of MgSe. Physica Status Solidi (B): Basic Research, 2015, 252, 663-669.	1.5	13

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19	Study of the coupling of ultra-thin CdSe double quantum wells. Superlattices and Microstructures, 2015, 87, 47-52.	3.1	8
20	Photoluminescence study of the substitution of Cd by Zn during the growth by atomic layer epitaxy of alternate CdSe and ZnSe monolayers. , 2014, , .		0
21	Spectral photoresponse of ZnSe/GaAs(001) heterostructures with CdSe ultra-thin quantum well insertions. , 2014, , .		0
22	Epitaxial growth of thin films and quantum structures of II-VI visible-bandgap semiconductors. , 2013, , 311-346.		9
23	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
24	Photoluminescence and secondary ion mass spectrometry study of layer-by-layer grown Zn <sub>1-x</sub> Cd <sub>x</sub> Se quantum wells. Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics, 2011, 29, 03C137.	1.2	3
25	Quantum Wells in the Ternary System Zn(1-X)CdXSe by High Resolution Microscopy. Microscopy and Microanalysis, 2009, 15, 1222-1223.	0.4	0
26	Study of the recombination around the excitonic region of MBE ZnSe:Cl thin films. Microelectronics Journal, 2008, 39, 582-585.	2.0	2
27	Single-peak excitonic emission of CdSe ultra-thin quantum wells finished with fractional monolayers. Microelectronics Journal, 2008, 39, 594-596.	2.0	15
28	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
29	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
30	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
31	Symmetry properties and electronic band structure of ordered Zn <sub>0.5</sub> Cd <sub>0.5</sub> Se alloys. Microelectronics Journal, 2005, 36, 342-346.	2.0	2
32	Local structural characterization of Zn:Cd:Se ternary semiconductors. Thin Solid Films, 2005, 490, 165-167.	1.8	3
33	Cd desorption induced by Zn exposure during atomic layer epitaxy of Cd <sub>x</sub> Zn <sub>1-x</sub> Te. Physica Status Solidi (B): Basic Research, 2005, 242, 1946-1950.	1.5	5
34	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
35	Growth and characterization of ultra-thin quantum wells of II-VI semiconductors for optoelectronic applications. Physica Status Solidi (B): Basic Research, 2004, 241, 558-563.	1.5	22
36	Tuning of the alloy composition of Zn <sub>1-x</sub> Cd <sub>x</sub> 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

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37	Persistent photoconductivity in ZnCdSe MBE films grown on GaAs. Solid-State Electronics, 2003, 47, 759-762.	1.4	5
38	Photoluminescence properties of Tb <sup>3+</sup> and Eu <sup>3+</sup> ions hosted in TiO <sub>2</sub> matrix. Applied Surface Science, 2003, 212-213, 583-588.	6.1	41
39	Pressure dependence of optical phonons in ZnCdSe alloys. Physica Status Solidi (B): Basic Research, 2003, 235, 432-436.	1.5	8
40	XPS analysis of petroleum well tubing adherence. Surface and Interface Analysis, 2003, 35, 239-245.	1.8	35
41	Strain relaxation during the layer by layer growth of cubic CdSe onto ZnSe. Applied Physics Letters, 2003, 82, 43-45.	3.3	20
42	OPTICAL PROPERTIES OF CdTe/ZnTe ULTRATHIN QUANTUM WELLS GROWN BY ATOMIC LAYER EPITAXY. Surface Review and Letters, 2002, 09, 1667-1670.	1.1	7
43	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
44	<title>Photoluminescence study of CdTe/ZnTe ultra-thin quantum wells grown by pulsed beam epitaxy</title>. , 2002, , .		0
45	<title>Modeling of the photoluminescence spectra of localize excitons in Zn<math>1-x</math>/Cd<math>x</math>/Se quantum wells</title>. , 2002, , .		0
46	Raman spectroscopy and photoluminescence of ZnTe thin films grown on GaAs. Journal of Applied Physics, 2002, 92, 6014-6018.	2.5	32
47	Photoluminescence Study of Ultra-Thin CdSe Quantum Wells. Physica Status Solidi (B): Basic Research, 2002, 230, 331-334.	1.5	9
48	Temperature dependence of Raman scattering and luminescence of the disordered Zn <sub>0.5</sub> Cd <sub>0.5</sub> Se alloy. Microelectronics Journal, 2002, 33, 349-353.	2.0	12
49	Determination of the minimum island size for full exciton localization due to thickness fluctuations in Zn <sub>1-x</sub> Cd <sub>x</sub> Se quantum wells. Microelectronics Journal, 2002, 33, 337-339.	2.0	1
50	Photoluminescence properties of the Eu <sup>3+</sup> activator ion in the TiO <sub>2</sub> host matrix. Applied Physics Letters, 2001, 78, 3436-3438.	3.3	113
51	Photoluminescence of TiO <sub>2</sub> : Eu <sup>3+</sup> thin films obtained by sol-gel on Si and Corning glass substrates. Thin Solid Films, 2001, 401, 118-123.	1.8	63
52	LUMINESCENT PROPERTIES OF SOL-GEL DEPOSITED Eu:TiO <sub>2</sub> THIN FILMS. Modern Physics Letters B, 2001, 15, 769-773.	1.9	2
53	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
54	A Two-Level Model for Intra-Well Exciton Migration in Zn <sub>1-x</sub> Cd <sub>x</sub> Se Quantum Wells. Physica Status Solidi (B): Basic Research, 2000, 220, 27-31.	1.5	2

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55	Photoluminescence properties of intra-well exciton migration in Zn <sub>1-x</sub> Cd <sub>x</sub> Se quantum wells. <i>Microelectronics Journal</i> , 2000, 31, 443-450.	2.0	3
56	GaAs surface oxide desorption by annealing in ultra high vacuum. <i>Thin Solid Films</i> , 2000, 373, 159-163.	1.8	59
57	Strain in GaAs at the heterointerface of ZnSe/GaAs/GaAs. <i>Journal Physics D: Applied Physics</i> , 1999, 32, 1293-1301.	2.8	1
58	Disorder-induced phonon modes, built-in electric fields and structural properties of CdTe/GaAs heterostructures grown by MBE. <i>Semiconductor Science and Technology</i> , 1999, 14, 350-356.	2.0	5
59	Stress in GaAs at the hetero-interface of ZnSe/GaAs/GaAs: a possible effect of pit filling and difference in thermal expansion coefficients. <i>Applied Surface Science</i> , 1999, 151, 271-279.	6.1	6
60	Observation of the photovoltaic effect in n-ZnSe/p-GaAs heterostructures. <i>Journal of Crystal Growth</i> , 1999, 201-202, 971-974.	1.5	5
61	Near band-edge optical properties of GaAs at interfaces of ZnSe/GaAs/GaAs by phase selection in photoreflectance. <i>Journal of Applied Physics</i> , 1999, 86, 425-429.	2.5	5
62	Hillocks formation during the molecular beam epitaxial growth of ZnSe on GaAs substrates. <i>Journal of Crystal Growth</i> , 1998, 193, 528-534.	1.5	25
63	Dislocation densities in MBE grown ZnSe epitaxial layers on GaAs by HRXRD. <i>Journal of Crystal Growth</i> , 1998, 194, 301-308.	1.5	13
64	Observation of stress effects on GaAs at the interface of molecular beam epitaxy grown ZnSe/GaAs(100) heterostructures. <i>Applied Surface Science</i> , 1998, 134, 95-102.	6.1	5
65	Optical and structural characterization of ZnSe films grown by molecular beam epitaxy on GaAs substrates with and without GaAs buffer layers. <i>Journal of Applied Physics</i> , 1998, 84, 1551-1557.	2.5	20
66	Study of the Initial Growth Process of ZnSe on Si(111) by Molecular Beam Epitaxy. <i>Japanese Journal of Applied Physics</i> , 1997, 36, L1153-L1156.	1.5	0
67	Investigation of the structural properties of MBE grown heterostructures. <i>Journal of Crystal Growth</i> , 1997, 175-176, 571-576.	1.5	8
68	Optical and structural properties of ZnSe/GaAs interfaces. <i>Applied Surface Science</i> , 1997, 112, 165-170.	6.1	3
69	Photoreflectance and Photoluminescence Characterization of GaAs Quantum Wells Grown by Molecular Beam Epitaxy on Flat and Misoriented Substrates. <i>Japanese Journal of Applied Physics</i> , 1996, 35, 3923-3927.	1.5	5
70	Photoreflectance characterization of CdTe thin films grown by Molecular Beam Epitaxy on GaAs(100). <i>Applied Physics A: Solids and Surfaces</i> , 1994, 58, 219-222.	1.4	4
71	Anomalous Fermi level emission during the initial growth of epitaxial alpha-Sn/CdTe(111) heterostructures. <i>Journal of Physics Condensed Matter</i> , 1993, 5, A327-A328.	1.8	0
72	Differential photoreflectance and Raman studies of MBE-grown GaAs/Si/GaAs structures. <i>Journal of Physics Condensed Matter</i> , 1993, 5, A357-A358.	1.8	1

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73	Electronic structure of epitaxial $\text{In}_{1-x}\text{Ga}_x$ alloys. Journal of Electron Spectroscopy and Related Phenomena, 1990, 51, 613-621.	1.7	0
74	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
75	Experimental determination of the valence-band structure of molecular-beam-epitaxy-grown CdTe(110). Physical Review B, 1989, 40, 8370-8377.	3.2	28
76	Angle-resolved photoemission study of thin molecular-beam-epitaxy-grown $\text{In}_{1-x}\text{Sn}_x$ films with $x \approx 0.5$ . Physical Review B, 1989, 40, 9703-9708.	3.2	32
77	Angle-resolved photoemission study of the $\text{In}/\text{CdTe}(100)$ interface. Physical Review B, 1987, 36, 3336-3343.	3.2	22
78	Angle-resolved photoemission of $\text{In}/\text{Sn}(111)$ and the polar (111) and (110) surfaces of InSb. Surface Science, 1985, 152-153, 1035-1041.	1.9	21
79	Energy-loss-spectroscopy investigation of hydrogen adsorption on InSb surfaces. Surface Science, 1985, 152-153, 1130-1134.	1.9	10
80	Photoemission study of the surface electronic structure of InSb(110). Physical Review B, 1984, 30, 4528-4532.	3.2	15
81	Angular resolved photoemission of InSb(001) and heteroepitaxial films of $\text{In}_{1-x}\text{Sn}_x(001)$ . Surface Science, 1983, 126, 25-31.	1.9	66
82	New method for the analysis of reflection high-energy electron diffraction: $\text{In}_{1-x}\text{Sn}_x(001)$ and InSb(001) surfaces. Physical Review B, 1983, 27, 4961-4965.	3.2	57
83	Microscopic structure and electrical properties of heat treated coals and eucalyptus charcoal. Carbon, 1982, 20, 201-205.	10.3	29
84	11. Structure and electrical properties of heat treated coals. Carbon, 1982, 20, 126.	10.3	0
85	Observation of splitting of the $E_{2g}$ mode and two-phonon spectrum in graphites. Solid State Communications, 1978, 27, 507-510.	1.9	81
86	Raman scattering and luminescence in coal and graphite. Solid State Communications, 1977, 24, 809-812.	1.9	26
87	Calculation of the structure factor of metals with the complete multiphonon series. Physical Review B, 1976, 14, 2310-2313.	3.2	8
88	Room Temperature Yellow Emission of a High Cd Content ( $x \approx 0.70$ ), Highly Strained, Layer-by-Layer Grown $\text{Zn}_{1-x}\text{Cd}_x\text{Se}/\text{ZnSe}$ Quantum Well. Physica Status Solidi (B): Basic Research, 0, , 2100574.	1.5	1