Miguel Angel Vidal Borbolla

List of Publications by Year
in descending order

76 papers	1,255 citations	471509 17 h-index	377865 34 g-index
76 all docs	76 docs citations	76 times ranked	1688 citing authors

#	Article	IF	Citations
1	An interface clusters mixture model for the structure of amorphous silicon monoxide (SiO). Journal of Non-Crystalline Solids, 2003, 320, 255-280.	3.1	231
2	Optical characterization of vacuum evaporated cadmium sulfide films. Thin Solid Films, 1997, 305, 345-350.	1.8	92
3	Determination of the optical energy gap of Ge1â^'xSnx alloys with 0<x<0.14. Applied Physics Letters, 2004, 84, 4532-4534.	3.3	83
4	Controlling the dimensions, reactivity and crystallinity of multiwalled carbon nanotubes using low ethanol concentrations. Chemical Physics Letters, 2008, 453, 55-61.	2.6	66
5	Model for the linear electro-optic reflectance-difference spectrum of GaAs(001) aroundE1andE1+Î"1. Physical Review B, 1999, 59, 10234-10239.	3.2	49
6	High-Sensitivity Bolometers from Self-Oriented Single-Walled Carbon Nanotube Composites. ACS Applied Materials & Interfaces, 2011, 3, 3200-3204.	8.0	46
7	Growth of HfO2/TiO2 nanolaminates by atomic layer deposition and HfO2-TiO2 by atomic partial layer deposition. Journal of Applied Physics, 2017, 121, .	2.5	46
8	Ge1â^'xSnx alloys pseudomorphically grown on Ge(001). Applied Physics Letters, 2003, 83, 4942-4944.	3.3	45
9	Raman scattering study of photoluminescent spark-processed porous InP. Thin Solid Films, 2000, 379, 1-6.	1.8	44
10	Nonlinear behavior of the energy gap in Ge1â^'xSnx alloys at 4K. Applied Physics Letters, 2007, 91, .	3.3	43
11	Multiwall carbon nanotubes/polycaprolactone scaffolds seeded with human dental pulp stem cells for bone tissue regeneration. Journal of Materials Science: Materials in Medicine, 2016, 27, 35.	3.6	37
12	Liquid crystal behavior of single wall carbon nanotubes. Carbon, 2010, 48, 3531-3542.	10.3	35
13	Electron spin resonance on a two-dimensional electron gas. Physical Review B, 1997, 56, R4359-R4362.	3.2	34
14	Temperature dependence of the band gap of Cd1â^'xZnxTe alloys of low zinc concentrations. Journal of Applied Physics, 1996, 79, 7713-7717.	2.5	31
15	Bulk lattice parameter and band gap of cubic InXGa1â^'XN (001) alloys on MgO (100) substrates. Journal of Crystal Growth, 2015, 418, 120-125.	1.5	24
16	Refractive indices of zincblende structure Î²â€GaN(001) in the subbandâ€gap region (0.7â€"3.3 eV). Applied Physics Letters, 1996, 68, 441-443.	3.3	22
17	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
18	Monte Carlo simulation of the transport process in the growth ofaâ€Si:H prepared by cathodic reactive sputtering. Journal of Applied Physics, 1990, 67, 477-482.	2.5	17

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19	Epitaxial Growth of Strained Ge Films on GaAs(001). Thin Solid Films, 1999, 352, 269-272.	1.8	15
20	Observation of zinc-blende to diamond transition in metastable (GaAs)1â^'x(Ge2)x alloys by Raman scattering. Solid State Communications, 1999, 109, 295-300.	1.9	14
21	Dislocation densities in MBE grown ZnSe epitaxial layers on GaAs by HRXRD. Journal of Crystal Growth, 1998, 194, 301-308.	1.5	13
22	Physical properties of(GaAs)1â^'x(Ge2)x:â€ƒInfluence of growth direction. Physical Review B, 2001, 63, .	3.2	11
23	Critical thickness of Î²-InN/GaN/MgO structures. Journal of Applied Physics, 2010, 107, 083510.	2.5	11
24	Influence of growth direction on orderâ€“disorder transition in (GaAs)1â^'x(Ge)2x semiconductor alloys. Applied Physics Letters, 2000, 77, 2497-2499.	3.3	10
25	Dependence on the atmosphere of preparation of the luminescence of spark processed porous GaAs. Journal of Applied Physics, 2000, 87, 1270-1275.	2.5	10
26	In-plane and out-of-plane lattice parameters of [11n] epitaxial strained layers. Journal of Crystal Growth, 2006, 291, 340-347.	1.5	10
27	Tuning emission in violet, blue, green and red in cubic GaN/InGaN/GaN quantum wells. Journal of Crystal Growth, 2016, 435, 110-113.	1.5	10
28	Functionalization of nitrogen-doped carbon nanotubes with gallium to form Ga-CN_x-multi-wall carbon nanotube hybrid materials. Nanotechnology, 2012, 23, 325601.	2.6	9
29	Thermal annealing effects on amorphous radio frequency sputtered Cd0.95Fe0.05Te thin films. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1987, 5, 1798-1801.	2.1	8
30	Structural study of metastable (GaAs)1â^'X(Ge2)X thin films grown by RF magnetron sputtering. Journal of Crystal Growth, 1999, 197, 783-788.	1.5	8
31	Raman study of luminescent spark processed porous GaAs. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 622.	1.6	8
32	In situ measurements of the critical thickness for strain relaxation in Î²-GaN/MgO structures. Journal of Crystal Growth, 2009, 311, 1302-1305.	1.5	8
33	Determination of the Thermal Expansion Coefficient of Single-Wall Carbon Nanotubes by Raman Spectroscopy. Spectroscopy Letters, 2015, 48, 139-143.	1.0	8
34	Effects of Mg incorporation in cubic GaN films grown by PAMBE near Ga rich conditions. Materials Science in Semiconductor Processing, 2019, 93, 196-200.	4.0	8
35	STUDY OF STOICHIOMETRIC AND NON-STOICHIOMETRIC CADMIUM SELENIDE THIN FILMS. Modern Physics Letters B, 2001, 15, 741-744.	1.9	7
36	Processing of porous GaAs at low frequency sparking. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1999, 17, 624-629.	2.1	6

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37	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
38	Raman scattering study of (GaAs)1âˆ'x(Si2)x alloys epitaxially grown on GaAs. Journal of Applied Physics, 2001, 90, 4977-4980.	2.5	6
39	Study of the optical and structural properties of GaN films grown on Si substrates with a SiC layer. Thin Solid Films, 2003, 433, 68-72.	1.8	6
40	Complex refractive index of InXGa1-XN thin films grown on cubic (100) GaN/MgO. Thin Solid Films, 2017, 626, 55-59.	1.8	6
41	Elastic modulus and hardness of cubic GaN grown by molecular beam epitaxy obtained by nanoindentation. Thin Solid Films, 2020, 699, 137915.	1.8	6
42	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
43	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
44	Long-range orderâ€"disorder transition in (GaAs)1âˆ'(Ge2) grown on GaAs(001) and GaAs(111). Microelectronics Journal, 2000, 31, 439-441.	2.0	5
45	Structural study of ZnSe films grown on substrate with InxGa1-xAs and Al1-xGaxAs buffer layers: strain, relaxation and lattice parameter. Journal Physics D: Applied Physics, 2002, 35, 1408-1413.	2.8	5
46	Raman studies of aluminum induced microcrystallization of n+ Si:H films produced by PECVD. Thin Solid Films, 2003, 445, 32-37.	1.8	5
47	Structural and optical characterization of GaNAs layers grown by molecular beam epitaxy. Journal of Vacuum Science & Technology B, 2006, 24, 1591.	1.3	5
48	On the doping problem of CdTe films: The bismuth case. Thin Solid Films, 2008, 516, 7013-7015.	1.8	5
49	Luminescence of spark processed porous InP. Thin Solid Films, 1998, 322, 282-289.	1.8	4
50	Excitonic transitions in (GaAs)1âˆ'x(Ge2)x/GaAs multilayers grown by magnetron sputtering. Applied Physics Letters, 1998, 72, 94-96.	3.3	4
51	Growth of strained-layer GaAs/Ge superlattices by magnetron sputtering: Optical and structural characterization. Journal of Applied Physics, 2001, 89, 3209-3214.	2.5	4
52	Infrared study of the absorption edge of Î²-InN films grown on GaN/MgO structures. Journal of Applied Physics, 2010, 108, .	2.5	4
53	Cubic GaN films grown below the congruent sublimation temperature of (0 0 1) GaAs substrates by plasma-assisted molecular beam epitaxy. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, .	1.2	4
54	Influence of ion sputtering on the surface topography of GaAs. Applied Surface Science, 1998, 126, 205-212.	6.1	3

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55	Characterization of ZnSe films grown on GaAs substrates with InxGalâˆ’xAs and AlxGa1âˆ’xAs buffer layers. Thin Solid Films, 2000, 373, 37-40.	1.8	3
56	Study of the crystal quality and Ga-segregation in ZnSe films grown by molecular beam epitaxy on AlxGa1âˆ’xAs and InxGa1âˆ’xAs buffer layers on GaAs substrates. Journal of Crystal Growth, 2001, 227-228, 639-644.	1.5	3
57	Effects of the substrate tilting angle on the molecular beam epitaxial growth of GaAs on Si(110). Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 1567.	1.6	3
58	Photoluminescence and secondary ion mass spectrometry study of layer-by-layer grown Zn1âˆ’xCdxSe quantum wells. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2011, 29, 03C137.	1.2	3
59	Magnetic properties of GaAs:Mn self-assembled nanostructures grown at relatively high-temperature by Molecular Beam Epitaxy. Journal of Magnetism and Magnetic Materials, 2019, 475, 715-720.	2.3	3
60	Characterization of Sputtered Ge-Sn Thin Films by High Resolution Methods. Microscopy and Microanalysis, 2006, 12, 712-713.	0.4	2
61	High-quality InN films on MgO (100) substrates: The key role of 30Â° in-plane rotation. Applied Physics Letters, 2014, 104, 191904.	3.3	2
62	Structural characterization of AlGaAs:Si/GaAs (631) heterostructures as a function of As pressure. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, 02L119.	1.2	2
63	Characterization of GaAs grown by the close-spaced vapor transport technique, using atomic hydrogen as the reactant. Physica Status Solidi A, 2003, 198, 289-296.	1.7	1
64	AFM and FTIR characterization of microcrystalline Si obtained from isothermal annealing of Al/a-Si:H. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 1014-1017.	1.8	1
65	Low energy shifted photoluminescence of Er3+ incorporated in amorphous hydrogenated siliconâ€“germanium alloys. Journal of Non-Crystalline Solids, 2009, 355, 976-981.	3.1	1
66	Effect of hydrogen concentration on the bolometric performance of sputtered a-SixGe1âˆ’x:H films. Thin Solid Films, 2011, 519, 6522-6524.	1.8	1
67	Effects of growth temperature on the incorporation of nitrogen in GaNAs layers. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, .	1.2	1
68	Thickness and photocatalytic activity relation in TiO $$_{2}$$ 2 :N films grown by atomic layer deposition with methylene-blue and E. coli bacteria. Bulletin of Materials Science, 2017, 40, 1225-1230.	1.7	1
69	Bending stability of GaN grown on a metallic flexible substrate by plasma-assisted molecular beam epitaxy. Materials Research Express, 2017, 4, 085903.	1.6	1
70	Hydrogen detection in hydrogenated amorphous silicon by ionâ€induced Auger spectroscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1989, 7, 2625-2627.	2.1	0
71	Structural characterization of semi-strained layer (GaAs)1âˆ’x(Si2)x/GaAs multilayers grown by magnetron sputtering. Thin Solid Films, 2002, 416, 49-53.	1.8	0
72	Effect of structural imperfections on luminescence of ZnCdSe/ZnSe quantum wells. Journal of Alloys and Compounds, 2004, 371, 202-205.	5.5	0

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73	Infrared reflectance anisotropy of wurzite GaN. Journal of Applied Physics, 2009, 106, 063523.	2.5	0
74	Structural and Optical Properties of Ge1-XSnx Alloys Grown on GaAs (001) by R. F. Magnetron Sputtering. ECS Transactions, 2014, 64, 393-400.	0.5	0
75	The effect of the In concentration on the surface morphology of InGaAs-GaAs heterostructures grown by MBE on GaAs substrate. Journal of Physics: Conference Series, 2014, 480, 012038.	0.4	0
76	Self-Assembly of Î²GaN/MgO Nanobars. Advanced Science Letters, 2012, 16, 229-236.	0.2	0