Francisco M Morales

List of Publications by Year
in descending order

109	1,221	393982	476904
papers	citations	19 h-index	29 g-index

112	112	112	1438
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effect of dislocations on electrical and electron transport properties of InN thin films. II. Density and mobility of the carriers. Journal of Applied Physics, 2006, 100, 094903.	1.1	74
2	Determination of the composition of InxGa1â^'xN from strain measurements. Acta Materialia, 2009, 57, 5681-5692.	3.8	65
3	Model for the thickness dependence of electron concentration in InN films. Applied Physics Letters, 2006, 89, 172109.	1.5	59
4	Microstructural and thermodynamic study of Î³-Ga₂O₃. International Journal of Materials Research, 2004, 95, 756-762.	0.8	48
5	Effect of dislocations on electrical and electron transport properties of InN thin films. I. Strain relief and formation of a dislocation network. Journal of Applied Physics, 2006, 100, 094902.	1.1	44
6	Near-infrared emitting In-rich InGaN layers grown directly on Si: Towards the whole composition range. Applied Physics Letters, 2015, 106, .	1.5	43
7	Cubic InN growth on sapphire (0001) using cubic indium oxide as buffer layer. Applied Physics Letters, 2007, 90, 091901.	1.5	37
8	The role of Si as surfactant and donor in molecular-beam epitaxy of AlN. Journal of Applied Physics, 2005, 98, 093508.	1.1	36
9	Raman studies of Ge-promoted stress modulation in 3Câ€“SiC grown on Si(111). Applied Physics Letters, 2005, 87, 041905.	1.5	35
10	Phase equilibria in the ZrO2â€“GdO1.5 system at 1400â€“1700Â°C. Journal of Alloys and Compounds, 2005, 398, 261-268.	2.8	31
11	Characterization of TiO2 deposited on textured silicon wafers by atmospheric pressure chemical vapour deposition. Solar Energy Materials and Solar Cells, 2005, 86, 299-308.	3.0	27
12	Coalescence aspects of III-nitride epitaxy. Journal of Applied Physics, 2007, 101, 054906.	1.1	27
13	Structural and compositional homogeneity of InAlN epitaxial layers nearly lattice-matched to GaN. Acta Materialia, 2010, 58, 4120-4125.	3.8	26
14	Ge-modified Si(100) substrates for the growth of 3C-SiC(100). Applied Physics Letters, 2006, 88, 211909.	1.5	25
15	Structural and optical characterization of Mg-doped GaAs nanowires grown on GaAs and Si substrates. Journal of Applied Physics, 2013, 114, .	1.1	25
16	Direct Measurement of Polarization-Induced Fields in GaN/AlN by Nano-Beam Electron Diffraction. Scientific Reports, 2016, 6, 28459.	1.6	25
17	Formation of discontinuous Al2O3 layers during high-temperature oxidation of RuAl alloys. Journal of Materials Research, 2006, 21, 276-286.	1.2	22
18	Growth mechanism and electronic properties of epitaxial In2O3films on sapphire. Journal of Applied Physics, 2011, 110, 093712.	1.1	22

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19	Stranski-Krastanov InN/InGaN quantum dots grown directly on Si(111). Applied Physics Letters, 2015, 106, .	1.5	21
20	Impact of silicon incorporation on the formation of structural defects in AlN. Journal of Applied Physics, 2006, 100, 113531.	1.1	19
21	Evaluation of interpolations of InN, AlN and GaN lattice and elastic constants for their ternary and quaternary alloys. Journal Physics D: Applied Physics, 2013, 46, 245502.	1.3	19
22	SiC voids, mosaic microstructure and dislocations distribution in Si carbonized layers. Diamond and Related Materials, 2003, 12, 1227-1230.	1.8	18
23	Threading dislocation propagation in AlGaN/GaN based HEMT structures grown on Si (111) by plasma assisted molecular beam epitaxy. Journal of Crystal Growth, 2012, 357, 35-41.	0.7	18
24	Improved Structural and Chemical Properties of Nearly Lattice-Matched Ternary and Quaternary Barriers for GaN-Based HEMTs. Crystal Growth and Design, 2011, 11, 2588-2591.	1.4	14
25	Selective ion-induced intermixing and damage in low-dimensional GaN/AlN quantum structures. Nanotechnology, 2013, 24, 505717.	1.3	14
26	Uniform Low-to-High In Composition InGaN Layers Grown on Si. Applied Physics Express, 2013, 6, 115503.	1.1	14
27	Spontaneous formation of InGaN nanowall network directly on Si. Applied Physics Letters, 2013, 102, .	1.5	12
28	Nanostructure and Physical Properties Control of Indium Tin Oxide Films Prepared at Room Temperature through Ion Beam Sputtering Deposition at Oblique Angles. Journal of Physical Chemistry C, 2019, 123, 14036-14046.	1.5	12
29	SIMS investigation of the influence of Ge pre-deposition on the interface quality between SiC and Si. Surface and Interface Analysis, 2004, 36, 969-972.	0.8	11
30	Defect morphology and strain of CVD grown 3C-SiC layers: effect of the carbonization process. Physica Status Solidi (A) Applications and Materials Science, 2005, 202, 561-565.	0.8	11
31	A Novel Route for the Easy Production of Thermochromic VO₂ Nanoparticles. Chemistry - A European Journal, 2021, 27, 16662-16669.	1.7	11
32	The role of Ge predeposition temperature in the MBE epitaxy of SiC on Ssilicon. Physica Status Solidi C: Current Topics in Solid State Physics, 2004, 1, 341-346.	0.8	10
33	Electronic and photoconductive properties of ultrathin InGaN photodetectors. Journal of Applied Physics, 2008, 103, 073715.	1.1	10
34	Microstructural improvements of InP on GaAs (001) grown by molecular beam epitaxy by in situ hydrogenation and postgrowth annealing. Applied Physics Letters, 2009, 94, 041919.	1.5	10
35	High-Resolution Electron Diffraction: Accounting for Radially and Angularly Invariant Distortions. Microscopy and Microanalysis, 2012, 18, 638-644.	0.2	10
36	Comprehensive (S)TEM characterization of polycrystalline GaN/AlN layers grown on LTCC substrates. Ceramics International, 2019, 45, 9114-9125.	2.3	10

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37	Correlation between structural and electrical properties of InN thin films prepared by molecular beam epitaxy. Superlattices and Microstructures, 2006, 40, 289-294.	1.4	9
38	InN/In₂O₃ heterostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1627-1629.	0.8	9
39	A comparison of ZnMgSSe and MgS wide bandgap semiconductors used as barriers: Growth, structure and luminescence properties. Journal of Crystal Growth, 2009, 311, 2099-2101.	0.7	9
40	Fabrication of Barbed-Shaped SnO@SnO₂ Core/Shell Nanowires. Journal of Physical Chemistry C, 2011, 115, 4495-4501.	1.5	9
41	N-type conductivity and properties of carbon-doped InN(0001) films grown by molecular beam epitaxy. Journal of Applied Physics, 2013, 113, 033501.	1.1	9
42	Unravelling the polarity of InN quantum dots using a modified approach of negative-spherical-aberration imaging. Nanoscale, 2019, 11, 13632-13638.	2.8	9
43	Towards perfect MWIR transparency using oblique angle deposition. Applied Surface Science, 2019, 470, 943-950.	3.1	9
44	Compositional and structural analysis of engineered stones and inorganic particles in silicotic nodules of exposed workers. Particle and Fibre Toxicology, 2021, 18, 41.	2.8	9
45	Surface oxidation of amorphous Si and Ge slanted columnar and mesoporous thin films: Evidence, scrutiny and limitations for infrared optics. Applied Surface Science, 2019, 493, 807-817.	3.1	8
46	Î±-SiCâ€“Î²-SiC heteropolytype structures on Si (111). Applied Physics Letters, 2005, 87, 201910.	1.5	7
47	Specific twin junctions in doped zirconia. Acta Crystallographica Section B: Structural Science, 2006, 62, 761-767.	1.8	7
48	Origin of n-type conductivity in nominally undoped InN. Materialwissenschaft Und Werkstofftechnik, 2006, 37, 924-928.	0.5	7
49	Defect reduction in heteroepitaxial InP on Si by epitaxial lateral overgrowth. Materials Express, 2014, 4, 41-53.	0.2	7
50	Porosity Control for Plasma-Assisted Molecular Beam Epitaxy of GaN Nanowires. Crystal Growth and Design, 2019, 19, 2461-2469.	1.4	7
51	Optical and nanostructural insights of oblique angle deposited layers applied for photonic coatings. Applied Surface Science, 2020, 520, 146312.	3.1	7
52	Nanocrystalline AlN:Si field emission arrays for vacuum electronics. Physica Status Solidi (A) Applications and Materials Science, 2006, 203, 1839-1844.	0.8	6
53	Simulation of quality of SiC/Si interface during MBE deposition of C on Si. Materialwissenschaft Und Werkstofftechnik, 2006, 37, 929-932.	0.5	6
54	Electron transport properties of indium oxide â€“ indium nitride metalâ€oxideâ€semiconductor heterostructures. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 495-498.	0.8	6

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55	Analysis of the stability of InGaN/GaN multiquantum wells against ion beam intermixing. Nanotechnology, 2015, 26, 425703.	1.3	6
56	Engineering of III-Nitride Semiconductors on Low Temperature Co-fired Ceramics. Scientific Reports, 2018, 8, 6879.	1.6	6
57	Controlled grain-size thermochromic VO2 coatings by the fast oxidation of sputtered vanadium or vanadium oxide films deposited at glancing angles. Surfaces and Interfaces, 2021, 27, 101581.	1.5	6
58	Anisotropic optical properties of indium tin oxide thin films prepared by ion beam sputtering under oblique angle deposition. Applied Surface Science, 2022, 595, 152945.	3.1	6
59	Reactivity of Vanadium Nanoparticles with Oxygen and Tungsten. Nanomaterials, 2022, 12, 1471.	1.9	6
60	SiC thin films obtained by Si carbonization. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2001, 80, 342-344.	1.7	5
61	Structural characterization of high-dose C++N+ ion-implanted (111) Si. Nuclear Instruments & Methods in Physics Research B, 2001, 184, 361-370.	0.6	5
62	Investigation of the interface manipulation in SiC(100) on Si(100) with isovalent impurities. Surface and Interface Analysis, 2006, 38, 444-447.	0.8	5
63	Phase mapping of aging process in InN nanostructures: oxygen incorporation and the role of the zinc blende phase. Nanotechnology, 2010, 21, 185706.	1.3	5
64	Formation mechanisms of single-crystalline InN quantum dots fabricated via droplet epitaxy. Journal of Crystal Growth, 2018, 493, 65-75.	0.7	5
65	(S)TEM methods contributions to improve the fabrication of InGaN thin films on Si, and InN nanostructures on flat Si and rough InGaN. Journal of Alloys and Compounds, 2019, 783, 697-708.	2.8	5
66	Simultaneous Optical and Electrical Characterization of GaN Nanowire Arrays by Means of Vis-IR Spectroscopic Ellipsometry. Journal of Physical Chemistry C, 2020, 124, 1535-1543.	1.5	5
67	On the importance of light scattering for high performances nanostructured antireflective surfaces. Acta Materialia, 2020, 188, 386-393.	3.8	5
68	Application of advanced (S)TEM methods for the study of nanostructured porous functional surfaces: A few working examples. Materials Characterization, 2022, 185, 111741.	1.9	5
69	Microstructural and thermodynamic study of Î³-Ga₂O₃. International Journal of Materials Research, 2022, 95, 756-762.	0.1	5
70	Comparative TEM Investigation of MBE and RTCVD Conversion of Si into SiC. Materials Science Forum, 2003, 433-436, 285-288.	0.3	4
71	Structural Study of Micro and Nanotubes Synthesized by Rapid Thermal Chemical Vapor Deposition. Mikrochimica Acta, 2004, 145, 129-132.	2.5	4
72	Structure of cubic polytype indium nitride layers on top of modified sapphire substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 514-517.	0.8	4

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73	Growth and characterization of InAlN layers nearly latticeâ€matched to GaN. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 2500-2502.	0.8	4
74	Si and Ge nanostructures epitaxy on a crystalline insulating LaAlO₃(001) substrate. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 657-662.	0.8	4
75	Atomically resolved tomographic reconstruction of nanoparticles from single projection: Influence of amorphous carbon support. Ultramicroscopy, 2021, 221, 113177.	0.8	4
76	Superficial Characteristics and Functionalization Effectiveness of Non-Toxic Glutathione-Capped Magnetic, Fluorescent, Metallic and Hybrid Nanoparticles for Biomedical Applications. Metals, 2021, 11, 383.	1.0	4
77	N+BF 2 and N+C+BF 2 high-dose co-implantation in silicon. Applied Physics A: Materials Science and Processing, 2003, 76, 791-800.	1.1	3
78	Preparation of Epitaxial Templates for Molecular Beam Epitaxy of III-Nitrides on Silicon Substrates. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 183-187.	0.8	3
79	Transmission electron microscopy study of simultaneous high-dose C++N+ co-implantation into (111)Si. Thin Solid Films, 2003, 426, 16-30.	0.8	3
80	Interfacial Strain and Defects in Si (001) Carbonization Layers for 3C-SiC Hetero-Epitaxy. Materials Science Forum, 2004, 457-460, 277-280.	0.3	3
81	Influence of the Ge Coverage Prior to Carbonization on the Structure of SiC Grown on Si(111). Materials Science Forum, 2004, 457-460, 297-300.	0.3	3
82	Growth Acceleration in FLASiC Assisted Short Time Liquid Phase Epitaxy by Melt Modification. Materials Science Forum, 2006, 527-529, 295-298.	0.3	3
83	Morphology and Stress Control in UHVCVD of 3C-SiC(100) on Si. Materials Science Forum, 2007, 556-557, 203-206.	0.3	3
84	Effect of island coalescence on structural and electrical properties of InN thin films. Journal of Crystal Growth, 2007, 300, 50-56.	0.7	3
85	Strain relief: Mainspring of Ge semiconducting nanostructures growth on LaAlO3(001). Acta Materialia, 2012, 60, 1929-1936.	3.8	3
86	Quantitative Chemical Mapping of InGaN Quantum Wells from Calibrated High-Angle Annular Dark Field Micrographs. Microscopy and Microanalysis, 2015, 21, 994-1005.	0.2	3
87	The Role of Edge Dislocations on the Red Luminescence of ZnO Films Deposited by RF-Sputtering. Journal of Nanomaterials, 2015, 2015, 1-11.	1.5	3
88	Inline electron holography and VEELS for the measurement of strain in ternary and quaternary (In,Al,Ga)N alloyed thin films and its effect on bandgap energy. Journal of Microscopy, 2016, 261, 27-35.	0.8	3
89	(S)TEM structural and compositional nanoanalyses of chemically synthesized glutathione-shelled nanoparticles. Applied Nanoscience (Switzerland), 2020, 10, 2295-2301.	1.6	3
90	Monolithic integration of a 10ÂÎ¼m cut-off wavelength InAs/GaSb type-II superlattice diode on GaAs platform. Scientific Reports, 2022, 12, .	1.6	3

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91	Transmission electron microscopy study of ultra-thin SiC layers obtained by rapid thermal carbonization of Si wafers. Physica Status Solidi A, 2003, 195, 116-121.	1.7	2
92	Local control of SiC polytypes. Physica Status Solidi (A) Applications and Materials Science, 2007, 204, 1056-1062.	0.8	2
93	LTCC as substrate - enabling semiconductor and packaging integration. , 2019, , .		2
94	High-Resolution Electron Microscopy of Semiconductor Heterostructures and Nanostructures. Springer Series in Materials Science, 2012, , 23-62.	0.4	2
95	Doping efficiency and segregation of Si in AlN grown by molecular beam epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1420-1424.	0.8	1
96	Evaluation of the influence of GaN and AlN as pseudosubstrates on the crystalline quality of InN layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 1454-1457.	0.8	1
97	Cubic and hexagonal InGaAsN dilute arsenides by unintentional homogeneous incorporation of As into InGaN. Scripta Materialia, 2012, 66, 351-354.	2.6	1
98	Low temperature epitaxial deposition of GaN on LTCC substrates. , 2017, , .		1
99	Atomically resolved 3D structural reconstruction of small quantum dots. Nanoscale, 2021, 13, 7550-7557.	2.8	1
100	Chemoheteroepitaxy of 3Câ€SiC(111) on Si(111): Influence of Predeposited Ge on Structure and Composition. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100399.	0.8	1
101	Estudio por microscopÃa electrÃ³nica y espectroscopÃa de infra-rojos de capas de SiC obtenidas mediante carburizaciÃ³n de obleas de Si. Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2004, 43, 363-366.	0.9	1
102	Unravelling the atomically resolved 3D shape of {111}, {010}, and {001} faceted small anatase nanoparticles. Materials Today Nano, 2022, 17, 100153.	2.3	1
103	Structural Study of GaN Layers Grown on Carbonized Si(111) Substrates. Materials Science Forum, 2003, 433-436, 1003-0.	0.3	0
104	Crystalline Inclusions Formed in C+N+BF 2 Coimplanted on Silicon (111). Mikrochimica Acta, 2004, 145, 165-169.	2.5	0
105	The role of Si impurities in the transient dopant segregation and precipitation in yttrium-doped alumina. International Journal of Materials Research, 2010, 101, 95-101.	0.1	0
106	Epitaxial growth of Fe islands on LaAlO3 (001) substrates. Journal of Crystal Growth, 2014, 391, 121-129.	0.7	0
107	Beta to alpha transition and defects on SiC on Si grown by CVD. , 2005, , 131-134.		0
108	Strain relaxation and void reduction in SiC on Si by Ge predeposition. , 2005, , 135-138.		0

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109	Study of microstructure and strain relaxation on thin InXGa1â^'xN epilayers with medium and high In contents. , 2008, , 77-78.		0