

# Nuno P S L N F Franco

## List of Publications by Year in descending order

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109  
papers

2,285  
citations

304743

22  
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243625

44  
g-index

111  
all docs

111  
docs citations

111  
times ranked

2938  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effect of post-annealing on the properties of copper oxide thin films obtained from the oxidation of evaporated metallic copper. <i>Applied Surface Science</i> , 2008, 254, 3949-3954.	6.1	226
2	Strain and composition distributions in wurtzite InGaN/GaN layers extracted from x-ray reciprocal space mapping. <i>Applied Physics Letters</i> , 2002, 80, 3913-3915.	3.3	209
3	Anomalous Ion Channeling in AlInN/GaN Bilayers: Determination of the Strain State. <i>Physical Review Letters</i> , 2006, 97, 085501.	7.8	125
4	Structure of NiCrAlY coatings deposited on single-crystal alloy turbine blade material by laser cladding. <i>Acta Materialia</i> , 2009, 57, 5292-5302.	7.9	118
5	Compositional dependence of the strain-free optical band gap in In <sub>x</sub> Ga <sub>1-x</sub> N layers. <i>Applied Physics Letters</i> , 2001, 78, 2137-2139.	3.3	104
6	Structural and optical properties of InGaN/GaN layers close to the critical layer thickness. <i>Applied Physics Letters</i> , 2002, 81, 1207-1209.	3.3	94
7	Residual stresses and elastic modulus of thermal barrier coatings graded in porosity. <i>Surface and Coatings Technology</i> , 2004, 188-189, 120-128.	4.8	83
8	Electrical, structural and optical characterization of copper oxide thin films as a function of post annealing temperature. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2009, 206, 2143-2148.	1.8	67
9	Interpretation of double x-ray diffraction peaks from InGaN layers. <i>Applied Physics Letters</i> , 2001, 79, 1432-1434.	3.3	55
10	Radiation damage formation and annealing in GaN and ZnO. <i>Proceedings of SPIE</i> , 2011, , .	0.8	54
11	High Mobility a-IGZO Films Produced at Room Temperature and Their Application in TFTs. <i>Electrochemical and Solid-State Letters</i> , 2010, 13, H20.	2.2	52
12	Relaxation of compressively strained AlInN on GaN. <i>Journal of Crystal Growth</i> , 2008, 310, 4058-4064.	1.5	50
13	Hydrogen in InN: A ubiquitous phenomenon in molecular beam epitaxy grown material. <i>Applied Physics Letters</i> , 2010, 96, .	3.3	36
14	Depth-resolved analysis of spontaneous phase separation in the growth of lattice-matched AlInN. <i>Journal Physics D: Applied Physics</i> , 2010, 43, 055406.	2.8	33
15	Characterization of CoFeB electrodes for tunnel junctions. <i>Journal of Applied Physics</i> , 2005, 97, 10C916.	2.5	32
16	Reversible phase transformation of LaNiO <sub>3-x</sub> thin films studied in situ by spectroscopic ellipsometry. <i>Physical Review B</i> , 2007, 76, .	3.2	32
17	Ferromagnetism induced in rutile single crystals by argon and nitrogen implantation. <i>Journal of Physics Condensed Matter</i> , 2009, 21, 206002.	1.8	32
18	Single phase a-plane MgZnO epilayers for UV optoelectronics: substitutional behaviour of Mg at large contents. <i>CrystEngComm</i> , 2012, 14, 1637-1640.	2.6	29

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19	Characterisation of corrosion products in Cr implanted Mg surfaces. Surface and Coatings Technology, 2002, 158-159, 328-333.	4.8	27
20	Defect production in neutron irradiated GaN. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 358-361.	1.4	27
21	Colossal dielectric constant of poly- and single-crystalline CaCu <sub>3</sub> Ti <sub>4</sub> O <sub>12</sub> fibres grown by the laser floating zone technique. Acta Materialia, 2011, 59, 102-111.	7.9	27
22	Fe ion implantation in GaN: Damage, annealing, and lattice site location. Journal of Applied Physics, 2001, 90, 81-86.	2.5	24
23	X-ray absorption analysis of KDP optics. Journal of Electron Spectroscopy and Related Phenomena, 2001, 114-116, 873-878.	1.7	22
24	Room-Temperature Cospattered HfO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> Multicomponent Gate Dielectrics. Electrochemical and Solid-State Letters, 2009, 12, G65.	2.2	22
25	Enhanced red emission from praseodymium-doped GaN nanowires by defect engineering. Acta Materialia, 2013, 61, 3278-3284.	7.9	22
26	Direct evidence for strain inhomogeneity in In <sub>x</sub> Ga <sub>1-x</sub> N epilayers by Raman spectroscopy. Applied Physics Letters, 2004, 85, 2235-2237.	3.3	21
27	Structural anisotropy of nonpolar and semipolar InN epitaxial layers. Journal of Applied Physics, 2010, 108, .	2.5	21
28	Structural and thermal characterization of SiO <sub>2</sub> /P <sub>2</sub> O <sub>5</sub> sol-gel powders upon annealing at high temperatures. Journal of Non-Crystalline Solids, 2010, 356, 495-501.	3.1	21
29	Synergistic helium and deuterium blistering in tungsten-tantalum composites. Journal of Nuclear Materials, 2013, 442, 69-74.	2.7	21
30	Splitting of X-ray diffraction and photoluminescence peaks in InGaN/GaN layers. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 93, 163-167.	3.5	20
31	Defect studies on fast and thermal neutron irradiated GaN. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2780-2783.	1.4	20
32	Single and polycrystalline mullite fibres grown by laser floating zone technique. Journal of the European Ceramic Society, 2010, 30, 3311-3318.	5.7	20
33	Effects of helium and deuterium irradiation on SPS sintered W-Ta composites at different temperatures. Journal of Nuclear Materials, 2013, 442, S251-S255.	2.7	17
34	Exchange bias in ordered antiferromagnets by rapid thermal anneal without magnetic field. Journal Physics D: Applied Physics, 2005, 38, 2151-2155.	2.8	16
35	Structural and optical studies of Au doped titanium oxide films. Nuclear Instruments & Methods in Physics Research B, 2012, 272, 61-65.	1.4	16
36	Amorphization of GaN by ion implantation. Nuclear Instruments & Methods in Physics Research B, 2001, 178, 200-203.	1.4	15

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37	Anisotropic ferromagnetism induced in rutile single crystals by Co implantation. <i>European Physical Journal B</i> , 2007, 55, 253-260.	1.5	15
38	Investigation of different mechanisms of GaN growth induced on AlN and GaN nucleation layers. <i>Journal of Applied Physics</i> , 2009, 105, .	2.5	15
39	Influence of the AlN molar fraction on the structural and optical properties of praseodymium-doped $\text{Al}_x\text{Ga}_{1-x}\text{N}$ ( $0 \leq x \leq 1$ ) alloys. <i>Microelectronics Journal</i> , 2009, 40, 377-380.	2.0	15
40	Enhanced dynamic annealing and optical activation of Eu implanted a-plane GaN. <i>Europhysics Letters</i> , 2012, 97, 68004.	2.0	15
41	High temperature phase transitions and critical exponents of Samarium orthoferrite determined by <i>in situ</i> optical ellipsometry. <i>Journal of Applied Physics</i> , 2012, 111, .	2.5	15
42	Growth by LPCVD, crystallization and characterization of SiGe nanoparticles for nanoelectronic devices. <i>Physica Status Solidi (A) Applications and Materials Science</i> , 2006, 203, 1284-1290.	1.8	14
43	Synthesis of ZnO nanocrystals in sapphire by ion implantation and vacuum annealing. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2007, 257, 515-518.	1.4	14
44	High resolution backscattering studies of nanostructured magnetic and semiconducting materials. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2005, 241, 454-458.	1.4	13
45	Structural and optical properties of $\text{Zn}_{0.9}\text{Mn}_{0.1}\text{O}/\text{ZnO}$ core-shell nanowires designed by pulsed laser deposition. <i>Journal of Applied Physics</i> , 2009, 106, .	2.5	13
46	Characterisation of titanium beryllides with different microstructure. <i>Fusion Engineering and Design</i> , 2009, 84, 1136-1139.	1.9	12
47	Microstructural characterization of the ODS Eurofer 97 EU-batch. <i>Fusion Engineering and Design</i> , 2011, 86, 2386-2389.	1.9	12
48	Tuning of oxidation states in the $\text{LaNiO}_3$ perovskite around the insulator-metal transition. <i>Journal of Applied Physics</i> , 2008, 104, 103539.	2.5	11
49	Structural and optical properties of nitrogen doped ZnO films. <i>Vacuum</i> , 2009, 83, 1274-1278.	3.5	11
50	Formation and delamination of beryllium carbide films. <i>Journal of Nuclear Materials</i> , 2013, 442, S320-S324.	2.7	11
51	Strain relaxation and compositional analysis of InGaN/GaN layers by Rutherford backscattering. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2002, 190, 560-564.	1.4	10
52	Structural and optical properties on thulium-doped LHPG-grown $\text{Ta}_2\text{O}_5$ fibres. <i>Microelectronics Journal</i> , 2009, 40, 309-312.	2.0	10
53	$\text{Al}_{1-x}\text{In}_x\text{N}/\text{GaN}$ bilayers: Structure, morphology, and optical properties. <i>Physica Status Solidi (B): Basic Research</i> , 2010, 247, 1740-1746.	1.5	10
54	Validity of Vegard's rule for $\text{Al}_{1-x}\text{In}_x\text{N}$ ( $0.08 \leq x \leq 0.28$ ) thin films grown on GaN templates. <i>Physics D: Applied Physics</i> , 2017, 50, 205107.	2.8	10

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55	Optical and structural behaviour of Cu-implanted sapphire. Surface and Coatings Technology, 2007, 201, 8190-8196.	4.8	9
56	Characterization of mesoporous ZnO:SiO <sub>2</sub> films obtained by the sol-gel method. Thin Solid Films, 2010, 518, 7002-7006.	1.8	9
57	Comparative study of fusion relevant properties of Be <sub>12</sub> V and Be <sub>12</sub> Ti. Fusion Engineering and Design, 2011, 86, 2454-2457.	1.9	9
58	Structural and magnetic properties of thin films of BaFeO <sub>3</sub> - $\delta$ deposited by pulsed injection metal-organic chemical vapor deposition. Journal of Applied Physics, 2012, 111, .	2.5	9
59	The electronic transport mechanism in indium molybdenum oxide thin films RF sputtered at room temperature. Europhysics Letters, 2012, 97, 36002.	2.0	9
60	Magnetic and electrical characterization of TiO <sub>2</sub> single crystals co-implanted with iron and cobalt. Journal of Magnetism and Magnetic Materials, 2014, 364, 106-116.	2.3	9
61	Europium doping of zincblende GaN by ion implantation. Journal of Applied Physics, 2009, 105, 113507.	2.5	8
62	Depth Resolved Studies of Indium Content and Strain in InGaN Layers. Physica Status Solidi (B): Basic Research, 2001, 228, 59-64.	1.5	7
63	Analysis of Strain Depth Variations in an In <sub>0.19</sub> Ga <sub>0.81</sub> N Layer by Raman Spectroscopy. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 563-567.	0.8	7
64	Microstructural evolution in tungsten and copper probes under hydrogen irradiation at ISTTOK. Journal of Nuclear Materials, 2009, 390-391, 1039-1042.	2.7	7
65	Effect of Eu <sub>2</sub> O <sub>3</sub> doping on Ta <sub>2</sub> O <sub>5</sub> crystal growth by the laser-heated pedestal technique. Journal of Crystal Growth, 2010, 313, 62-67.	1.5	7
66	Microstructure and nanomechanical properties of Fe <sup>+</sup> implanted silicon. Applied Surface Science, 2013, 284, 533-539.	6.1	7
67	Formation of oriented nickel aggregates in rutile single crystals by Ni implantation. Journal of Magnetism and Magnetic Materials, 2013, 340, 102-108.	2.3	7
68	Composition, structure and morphology of Al <sub>x</sub> In <sub>x</sub> N thin films grown on Al <sub>y</sub> Ga <sub>y</sub> N templates with different GaN contents. Journal Physics D: Applied Physics, 2015, 48, 015103.	2.8	7
69	Application of high-resolution X-ray diffraction to study strain status in Si <sub>1-x</sub> Ge <sub>x</sub> /Si(001) heterostructures. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 91-92, 453-456.	3.5	6
70	Ion beam analysis of GaInAsSb films grown by MOVPE on GaSb. Nuclear Instruments & Methods in Physics Research B, 2005, 241, 326-330.	1.4	6
71	Microwave dielectric permittivity and photoluminescence of Eu <sub>2</sub> O <sub>3</sub> doped laser heated pedestal growth Ta <sub>2</sub> O <sub>5</sub> fibers. Applied Physics Letters, 2008, 92, 252904.	3.3	6
72	Influence of steering effects on strain detection in AlGaInN/GaN heterostructures by ion channelling. Journal Physics D: Applied Physics, 2009, 42, 065420.	2.8	6

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73	Effect of annealing on AlN/GaN quantum dot heterostructures: advanced ion beam characterization and X-ray study of low-dimensional structures. <i>Surface and Interface Analysis</i> , 2010, 42, 1552-1555.	1.8	6
74	Cd ion implantation in AlN. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2012, 289, 43-46.	1.4	6
75	Study of In distribution on GaInSb:Al crystals by ion beam techniques. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2016, 371, 278-282.	1.4	6
76	RBS ANALYSIS OF MBE GROWN SiGe/(001)Si HETEROSTRUCTURES WITH THIN HIGH Ge CONTENT SiGe CHANNELS FOR HMOS TRANSISTORS. <i>Modern Physics Letters B</i> , 2001, 15, 1297-1304.	1.9	5
77	Breakdown of anomalous channeling with ion energy for accurate strain determination in GaN-based heterostructures. <i>Applied Physics Letters</i> , 2009, 95, 051921.	3.3	5
78	New Approaches to Thermoelectric Materials. <i>NATO Science for Peace and Security Series B: Physics and Biophysics</i> , 2009, , 51-67.	0.3	5
79	Damage recovery and optical activity in europium implanted wide gap oxides. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2010, 268, 3137-3141.	1.4	5
80	Degradation of Structural and Optical Properties of InGaN/GaN Multiple Quantum Wells with Increasing Number of Wells. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2003, 0, 302-306.	0.8	4
81	XRD analysis of strained Ge/SiGe heterostructures on relaxed SiGe graded buffers grown by hybrid epitaxy on Si(001) substrates. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2005, 124-125, 123-126.	3.5	4
82	Beyond single scattering off flat samples. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2005, 241, 316-320.	1.4	4
83	Cascade of Peritectic Reactions in the B-Fe-U System. <i>Journal of Phase Equilibria and Diffusion</i> , 2010, 31, 104-112.	1.4	4
84	Formation of oriented nitrides by N+ ion implantation in iron single crystals. <i>Journal of Magnetism and Magnetic Materials</i> , 2014, 350, 129-134.	2.3	4
85	Structural characterization of dual ion implantation in silicon. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2015, 365, 39-43.	1.4	4
86	Retention behaviour of deuterium and helium in beryllium under single D+ and dual He+/D+ exposure. <i>Fusion Engineering and Design</i> , 2015, 98-99, 1362-1366.	1.9	4
87	Strain and Compositional Analysis of InGaN/GaN Layers. <i>Materials Research Society Symposia Proceedings</i> , 2000, 639, 3521.	0.1	3
88	Low-temperature molecular beam epitaxy of Ge on Si. <i>Materials Science in Semiconductor Processing</i> , 2005, 8, 35-39.	4.0	3
89	Compositional and structural characterisation of GaSb and GaInSb. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2005, 240, 360-364.	1.4	3
90	Influence of Deposition Pressure on N-doped ZnO Films by RF Magnetron Sputtering. <i>Journal of Nanoscience and Nanotechnology</i> , 2010, 10, 2674-2678.	0.9	3

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91	Optical and Structural Properties of an Eu Implanted Gallium Nitride Quantum Dots/Aluminium Nitride Superlattice. Journal of Nanoscience and Nanotechnology, 2010, 10, 2473-2478.	0.9	3
92	Coherent amorphization of Ge/Si multilayers with ion beams. Nuclear Instruments & Methods in Physics Research B, 2001, 178, 279-282.	1.4	2
93	Characterization and stability studies of titanium beryllides. Fusion Engineering and Design, 2005, 75-79, 759-763.	1.9	2
94	Structural and Oxidation Studies of Titanium Beryllides. Nuclear Technology, 2007, 159, 233-237.	1.2	2
95	Golden glazes analysis by PIGE and PIXE techniques. Nuclear Instruments & Methods in Physics Research B, 2011, 269, 3060-3062.	1.4	2
96	CdTe nano-structures for photovoltaic devices. Nuclear Instruments & Methods in Physics Research B, 2013, 306, 218-221.	1.4	2
97	Rutherford backscattering and X-ray reflectivity analysis of tunnel barriers. Nuclear Instruments & Methods in Physics Research B, 2005, 240, 365-370.	1.4	1
98	Optical and structural behaviour of Mn implanted sapphire. Nuclear Instruments & Methods in Physics Research B, 2006, 250, 90-94.	1.4	1
99	Damage behaviour of GaAs/AlAs multilayer structures. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 890-893.	1.4	1
100	Anisotropy effects on the formation of new phases in $\hat{\Gamma}$ -Al <sub>2</sub> O <sub>3</sub> by high fluence Zn implantation. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 3129-3132.	1.4	1
101	Influence of oxygen partial pressure on properties of N-doped ZnO films deposited by magnetron sputtering. Transactions of Nonferrous Metals Society of China, 2010, 20, 2326-2330.	4.2	1
102	Wettability and Nanotribological Response of Silicon Surfaces Functionalized by Ion Implantation. Materials Science Forum, 0, 730-732, 257-262.	0.3	1
103	Characterization of nanostructured HfO <sub>2</sub> films using RBS and PAC. Nuclear Instruments & Methods in Physics Research B, 2012, 273, 195-198.	1.4	1
104	Influence of RF-sputtering power on formation of vertically stacked Si <sub>1-x</sub> Ge <sub>x</sub> nanocrystals between ultra-thin amorphous Al <sub>2</sub> O <sub>3</sub> layers: structural and photoluminescence properties. Journal Physics D: Applied Physics, 2013, 46, 385301.	2.8	1
105	Analysis of nanolayered samples with a 4He beam. Nuclear Instruments & Methods in Physics Research B, 2005, 241, 361-364.	1.4	0
106	RBS and XRD analysis of SiGe/Ge heterostructures for p-HMOS applications. Nuclear Instruments & Methods in Physics Research B, 2006, 249, 878-881.	1.4	0
107	Irradiation-assisted photoelastic domain wall formation in X- and Y-cut lithium niobate. Solid State Communications, 2006, 137, 296-300.	1.9	0
108	Ion Beam Analysis of Iridium-Based TES for Microcalorimeter Detectors. , 2009, , .		0

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109	Carbon Deposition on Beryllium Substrates and Subsequent Delamination. Materials Science Forum, 2012, 730-732, 179-184.	0.3	0