Fernando Jose Sanchez

List of Publications by Year in descending order

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66 papers 2,929 citations

257450 24 h-index 53 g-index

66 all docs 66
docs citations

66 times ranked 2304 citing authors

#	Article	IF	CITATIONS
1	Luminescence properties and defects in GaN nanocolumns grown by molecular beam epitaxy. Physical Review B, 2000, 62, 16826-16834.	3.2	345
2	The effect of the III/V ratio and substrate temperature on the morphology and properties of GaN- and AlN-layers grown by molecular beam epitaxy on Si(1 1 1). Journal of Crystal Growth, 1998, 183, 23-30.	1.5	303
3	High-performance GaN p-n junction photodetectors for solar ultraviolet applications. Semiconductor Science and Technology, 1998, 13, 1042-1046.	2.0	205
4	Yellow luminescence and related deep states in undoped GaN. Physical Review B, 1997, 55, 4689-4694.	3.2	203
5	Growth of III-nitrides on Si(111) by molecular beam epitaxy Doping, optical, and electrical properties. Journal of Crystal Growth, 1999, 201-202, 296-317.	1.5	189
6	High-speed, low-noise metal–semiconductor–metal ultraviolet photodetectors based on GaN. Applied Physics Letters, 1999, 74, 762-764.	3.3	175
7	Photoconductor gain mechanisms in GaN ultraviolet detectors. Applied Physics Letters, 1997, 71, 870-872.	3.3	163
8	High-quality visible-blind AlGaN p-i-n photodiodes. Applied Physics Letters, 1999, 74, 1171-1173.	3.3	145
9	Analysis and modeling of AlxGa1â^'xN-based Schottky barrier photodiodes. Journal of Applied Physics, 2000, 88, 2081-2091.	2.5	97
10	Effect of Ga/Si interdiffusion on optical and transport properties of GaN layers grown on Si(111) by molecular-beam epitaxy. Physical Review B, 1998, 58, 1550-1559.	3.2	92
11	Band-gap narrowing and potential fluctuation in Si-doped GaN. Applied Physics Letters, 1999, 74, 102-104.	3.3	88
12	Role of halogens in the mechanism of sensitization of uncooled PbSe infrared photodetectors. Journal of Applied Physics, 2003, 93, 1778-1784.	2.5	71
13	Growth kinetics and morphology of high quality AlN grown on Si(111) by plasma-assisted molecular beam epitaxy. Journal of Applied Physics, 1997, 82, 4681-4683.	2.5	62
14	The effect of Si doping on the defect structure of GaN/AlN/Si(111). Applied Physics Letters, 1999, 74, 3362-3364.	3.3	55
15	Exciton and donor - acceptor recombination in undoped GaN on Si(111). Semiconductor Science and Technology, 1997, 12, 1396-1403.	2.0	53
16	Experimental evidence for a Be shallow acceptor in GaN grown on Si(111) by molecular beam epitaxy. Semiconductor Science and Technology, 1998, 13, 1130-1133.	2.0	43
17	Thermal stability of Pt- and Ni-based Schottky contacts on GaN and Al0.31Ga0.69N. Semiconductor Science and Technology, 2002, 17, L47-L54.	2.0	40
18	Reactive ion etching of GaN layers using. Semiconductor Science and Technology, 1997, 12, 1654-1657.	2.0	37

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19	Growth optimization and doping with Si and Be of high quality GaN on Si(111) by molecular beam epitaxy. Journal of Electronic Materials, 1998, 27, 276-281.	2.2	37
20	Polycrystalline lead selenide: the resurgence of an old infrared detector. Opto-electronics Review, 2007, 15, .	2.4	32
21	Analysis of the Visible and UV Electroluminescence in Homojunction GaN LED's. MRS Internet Journal of Nitride Semiconductor Research, 1998, 3, 1.	1.0	30
22	Monolithic integration of spectrally selective uncooled lead selenide detectors for low cost applications. Applied Physics Letters, 2003, 83, 2751-2753.	3.3	25
23	Chemical compatibility study between ceramic breeder and EUROFER97 steel for HCPB-DEMO blanket. Journal of Nuclear Materials, 2017, 488, 196-203.	2.7	25
24	Efficient hydrogen and deuterium permeation reduction in Al ₂ O ₃ coatings with enhanced radiation tolerance and corrosion resistance. Nuclear Fusion, 2018, 58, 126007.	3.5	25
25	XPS study of Au/GaN and Pt/GaN contacts. MRS Internet Journal of Nitride Semiconductor Research, 1997, 2, 1.	1.0	23
26	Polycrystalline lead selenide x–y addressed uncooled focal plane arrays. Infrared Physics and Technology, 2003, 44, 281-287.	2.9	22
27	Radiation effects on deuterium permeation for PLD alumina coated Eurofer steel measured during 1.8†MeV electron irradiation. Journal of Nuclear Materials, 2018, 512, 118-125.	2.7	21
28	MBE growth of GaN and AlGaN layers on Si(111) substrates: doping effects. Journal of Crystal Growth, 1999, 201-202, 415-418.	1.5	20
29	Yellow Band and Deep levels in Undoped MOVPE GaN MRS Internet Journal of Nitride Semiconductor Research, 1996, 1, 1.	1.0	18
30	Reliability of Schottky Contacts on AlGaN. Physica Status Solidi A, 2001, 188, 367-370.	1.7	18
31	The effect of triple ion beam irradiation on cavity formation on pure EFDA iron. Journal of Nuclear Materials, 2016, 479, 100-111.	2.7	18
32	Polycrystalline PbSe x-y addressed uncooled FPAs. , 2003, , .		16
33	Monolithic uncooled IR detectors of polycrystalline PbSe: a real alternative. , 2007, 6542, 713.		16
34	Corrosion mechanisms of Eurofer produced by lithium ceramics under fusion relevant conditions. Nuclear Materials and Energy, 2018, 15, 110-114.	1.3	16
35	Corrosion characteristics of reduced activation ferritic-martensitic steel EUROFER by Li2TiO3 with excess Li. Nuclear Materials and Energy, 2018, 15, 190-194.	1.3	15
36	Study of high quality AlN layers grown on $\mathrm{Si}(111)$ substrates by plasma-assisted molecular beam epitaxy. MRS Internet Journal of Nitride Semiconductor Research, 1997, 2, 1.	1.0	14

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37	Characterization and Modeling of Photoconductive GaN Ultraviolet Detectors. MRS Internet Journal of Nitride Semiconductor Research, $1997, 2, 1$.	1.0	13
38	Optical absorption defects created in SiO2 by Si, O and He ion irradiation. Fusion Engineering and Design, 2014, 89, 1679-1683.	1.9	12
39	Nanoindentation and TEM to Study the Cavity Fate after Post-Irradiation Annealing of He Implanted EUROFER97 and EU-ODS EUROFER. Micromachines, 2018, 9, 633.	2.9	11
40	Study of damage in binary Fe85Cr15 alloys irradiated by ions and the effect of an external magnetic field during irradiation. Journal of Nuclear Materials, 2019, 517, 138-147.	2.7	11
41	Corrosion protective action of different coatings for the helium cooled pebble bed breeder concept. Journal of Nuclear Materials, 2019, 516, 160-168.	2.7	11
42	Low resistance Tiâ^•Alâ^•Ti–Wâ^•Au Ohmic contact to n-GaN for high temperature applications. Applied Physics Letters, 2007, 90, 083504.	3.3	10
43	Radiation induced deuterium absorption for RB-SiC, HP-SiC, silicon and graphite loaded during electron irradiation. Fusion Engineering and Design, 2014, 89, 2550-2553.	1.9	10
44	Yellow luminescence in Mg-doped GaN. MRS Internet Journal of Nitride Semiconductor Research, 1997, 2, 1.	1.0	9
45	Progress on uncooled PbSe detectors for low-cost applications. , 2004, , .		8
46	Progress on monolithic integration of cheap IR FPAs of polycrystalline PbSe., 2005,,.		8
47	A 32x32 array of polycrystalline PbSe opens up the market of very low cost MWIR sensitive photon detectors. , 2006, , .		8
48	Influence of an external magnetic field on damage by self-ion irradiation in Fe 90 Cr 10 alloy. Nuclear Materials and Energy, 2016, 9, 476-479.	1.3	8
49	Behavior of silicon-, sulfur-, and tellurium-relatedDXcenters in liquid-phase-epitaxy and vapor-phase-epitaxyGaAs1â^'xPxalloys. Physical Review B, 1996, 53, 7736-7741.	3.2	6
50	Displacement damage dose and implantation temperature effects on the trapping and release of deuterium implanted into SiC. Journal of Nuclear Materials, 2017, 493, 96-101.	2.7	6
51	Crystal Morphology and Optical Emissions of GaN layers grown on Si(111) substrates by Molecular Beam Epitaxy. MRS Internet Journal of Nitride Semiconductor Research, 1998, 3, 1.	1.0	5
52	Deep level transient spectroscopy assessment of silicon contamination in AlGaAs layers grown by metalorganic vapor phase epitaxy. Journal of Electronic Materials, 1995, 24, 1017-1022.	2.2	4
53	lonizing radiation effects on the thermal stability of deuterium trapping in reaction bonded SiC. Journal of Nuclear Materials, 2018, 508, 219-225.	2.7	4
54	Dislocation Loop Generation Differences between Thin Films and Bulk in EFDA Pure Iron under Self-Ion Irradiation at 20 MeV. Metals, 2021, 11, 2000.	2.3	4

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55	Voltage-tunable two-colour quantum well infrared detector with Al-graded triangular confinement barriers. Semiconductor Science and Technology, 2001, 16, 285-288.	2.0	3
56	Process technology to integrate polycrystalline uncooled PbSe infrared detectors on interference filters., 2004, 5251, 97.		3
57	Performance enhancement of ohmic contact on n-GaN using Ti–W as metal barrier. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2007, 143, 55-59.	3.5	3
58	Optimization of surface morphology and electrical properties of Ti/Al/Ti–W/Au ohmic contacts to n-GaN by two-step annealing method. Semiconductor Science and Technology, 2008, 23, 045021.	2.0	3
59	Fe ⁺ Implantation Induced Damage in Oxide Dispersion Strengthened Steels Investigated by Doppler Broadening Spectroscopy. Defect and Diffusion Forum, 0, 373, 113-116.	0.4	3
60	Optical and electrical characterization of GaN layers grown on silicon and sapphire substrates. Solid-State Electronics, 1996, 40, 81-84.	1.4	2
61	Neutron shielding assessment for the Remote Handling Lower Port rack of ITER. Fusion Engineering and Design, 2018, 135, 50-58.	1.9	2
62	Ion Beam Experiments to Emulate Nuclear Fusion Environment on Structural Materials at CMAM. , 2020, , .		2
63	Trapping and thermal diffusion for energetic deuterium implanted into SiC. Nuclear Materials and Energy, 2016, 9, 383-387.	1.3	1
64	Radiation induced deuterium absorption dependence on irradiation temperature, dose rate, and gas pressure for SiC. Fusion Engineering and Design, 2017, 124, 1127-1130.	1.9	1
65	Efecto del dopado con Si sobre la estructura de defectos en sistemas heteroepitaxiales GaN/AlN/Si(111). Boletin De La Sociedad Espanola De Ceramica Y Vidrio, 2000, 39, 468-471.	1.9	1
66	Effect of Dielectric Layers on the Performance of AlGaN-Based UV Schottky Photodiodes. Physica Status Solidi A, 2001, 188, 307-310.	1.7	0