Giacinta Parish

List of Publications by Year
in descending order

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56 papers	688 citations	566801 15 h-index	610482 24 g-index
56 all docs	56 docs citations	56 times ranked	725 citing authors

#	Article	IF	Citations
1	Mercury(II) selective sensors based on AlGaN/GaN transistors. Analytica Chimica Acta, 2016, 943, 1-7.	2.6	71
2	Characterisation of Multiple Carrier Transport in Indium Nitride Grown by Molecular Beam Epitaxy. Japanese Journal of Applied Physics, 2006, 45, L1090-L1092.	0.8	43
3	Nitrate ion detection using AlGaN/GaN heterostructure-based devices without a reference electrode. Sensors and Actuators B: Chemical, 2013, 181, 301-305.	4.0	37
4	Ca 2+ detection utilising AlGaN/GaN transistors with ion-selective polymer membranes. Analytica Chimica Acta, 2017, 987, 105-110.	2.6	36
5	Ion versus pH sensitivity of ungated AlGaN/GaN heterostructure-based devices. Applied Physics Letters, 2010, 97, .	1.5	35
6	Synchrotron-based XPS studies of AlGaN and GaN surface chemistry and its relationship to ion sensor behaviour. Applied Surface Science, 2014, 314, 850-857.	3.1	35
7	Development of an Alkaline-Compatible Porous-Silicon Photolithographic Process. Journal of Microelectromechanical Systems, 2011, 20, 418-423.	1.7	32
8	Vertical carrier transport in strain-balanced InAs/InAsSb type-II superlattice material. Applied Physics Letters, 2020, 116, .	1.5	27
9	Phonon limited transport in graphene nanoribbon field effect transistors using full three dimensional quantum mechanical simulation. Journal of Applied Physics, 2012, 112, 094505.	1.1	25
10	Superlattice Barrier HgCdTe nBn Infrared Photodetectors: Validation of the Effective Mass Approximation. IEEE Transactions on Electron Devices, 2016, 63, 4811-4818.	1.6	20
11	Optimization of Superlattice Barrier HgCdTe nBn Infrared Photodetectors Based on an NEGF Approach. IEEE Transactions on Electron Devices, 2018, 65, 591-598.	1.6	20
12	Theoretical Study of Midwave Infrared HgCdTe nBn Detectors Operating at Elevated Temperatures. Journal of Electronic Materials, 2015, 44, 3044-3055.	1.0	19
13	Transport Studies of AlGaN/GaN Heterostructures of Different Al Mole Fractions With Variable $hbox{SiN}_{x}$ Passivation Stress. IEEE Transactions on Electron Devices, 2011, 58, 2589-2596.	1.6	18
14	Stress control of porous silicon films for microelectromechanical systems. Microporous and Mesoporous Materials, 2015, 218, 88-94.	2.2	17
15	Description of ionophore-doped membranes with a blocked interface. Sensors and Actuators B: Chemical, 2017, 250, 499-508.	4.0	16
16	Role of GaN cap layer for reference electrode free AlGaN/GaN-based pH sensors. Sensors and Actuators B: Chemical, 2019, 287, 250-257.	4.0	16
17	Multilayer porous silicon diffraction gratings operating in the infrared. Nanoscale Research Letters, 2012, 7, 645.	3.1	15
18	Method to Predict and Optimize Charge Sensitivity of Ungated AlGaN/GaN HEMT-Based Ion Sensor Without Use of Reference Electrode. IEEE Sensors Journal, 2015, 15, 5320-5326.	2.4	13

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19	Effect of MBE Growth Conditions on Multiple Electron Transport in InN. Journal of Electronic Materials, 2008, 37, 593-596.	1.0	12
20	Theoretical study of the influence of surface effects on GaN-based chemical sensors. Applied Surface Science, 2018, 452, 75-86.	3.1	12
21	Characterisation of multiple carrier transport in indium nitride grown by molecular beam epitaxy. Physica Status Solidi C: Current Topics in Solid State Physics, 2007, 4, 2423-2427.	0.8	11
22	Surface Morphology Control of Passivated Porous Silicon Using Reactive Ion Etching. Journal of Microelectromechanical Systems, 2012, 21, 756-761.	1.7	11
23	Density Functional Theory Simulations of Water Adsorption and Activation on the (â˜201) Î²â€Ga₂O₃ Surface. Chemistry - A European Journal, 2018, 24, 7445-7455.	1.7	11
24	Optimising porous silicon electrical properties for thermal sensing applications. Microporous and Mesoporous Materials, 2021, 312, 110767.	2.2	11
25	Engineering 1/f noise in porous silicon thin films for thermal sensing applications. Microporous and Mesoporous Materials, 2021, 324, 111302.	2.2	11
26	Evidence of Sub-Band Modulated Transport in Planar Fully Depleted Silicon-on-Insulator MOSFETs. IEEE Electron Device Letters, 2014, 35, 1082-1084.	2.2	9
27	Investigation of crystallized germanium thin films and germanium/silicon heterojunction devices for optoelectronic applications. Materials Science in Semiconductor Processing, 2015, 30, 413-419.	1.9	9
28	Localised defect-induced Schottky barrier lowering in n-GaN Schottky diodes. Solid-State Electronics, 2008, 52, 171-174.	0.8	8
29	Locallyâ€Strainâ€Induced Heavyâ€Holeâ€Band Splitting Observed in Mobility Spectrum of pâ€Type InAs Grown on GaAs. Physica Status Solidi - Rapid Research Letters, 2020, 14, 1900604.	1.2	8
30	Effect of pH and structure on the channel conductivity of AlGaN/GaN heterostructure based sensors. Sensors and Actuators B: Chemical, 2018, 269, 54-61.	4.0	7
31	Surface micromachining multilayer porous silicon for spectral filtering applications. Materials Science in Semiconductor Processing, 2022, 138, 106314.	1.9	7
32	Released micromachined beams utilizing laterally uniform porosity porous silicon. Nanoscale Research Letters, 2014, 9, 426.	3.1	6
33	Effect of CdS Processing Conditions on the Properties of CdS/Si Diodes and CdS/CdTe Thin-Film Solar Cells. IEEE Journal of Photovoltaics, 2015, 5, 1783-1790.	1.5	6
34	XPS/NEXAFS spectroscopic and conductance studies of glycine on AlGaN/GaN transistor devices. Applied Surface Science, 2018, 435, 23-30.	3.1	6
35	Compensating porosity gradient to produce flat, micromachined porous silicon structures. Microporous and Mesoporous Materials, 2019, 284, 427-433.	2.2	6
36	Simple wet etching of GaN. , 2001, , .		5

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37	Multiple carrier transport in Nâ€face indium nitride. Physica Status Solidi (B): Basic Research, 2008, 245, 907-909.	0.7	5
38	Xâ€Ray Reciprocal Space Mapping of MBE Grown HgCdTe on Alternative Substrates. Crystal Research and Technology, 2017, 52, 1700167.	0.6	5
39	pH-dependent surface properties of the gallium nitride â€“ Solution interface mapped by surfactant adsorption. Journal of Colloid and Interface Science, 2019, 556, 680-688.	5.0	4
40	pH-Dependent surface charge at the interfaces between aluminum gallium nitride (AlGaN) and aqueous solution revealed by surfactant adsorption. Journal of Colloid and Interface Science, 2021, 583, 331-339.	5.0	4
41	Dynamic Pressure/Temperature Behaviour of GaN-Based Chemical Sensors. IEEE Sensors Journal, 2021, 21, 18877-18886.	2.4	3
42	Effects of surface oxidation on the pH-dependent surface charge of oxidized aluminum gallium nitride. Journal of Colloid and Interface Science, 2021, 603, 604-614.	5.0	3
43	<title>Anomalous drain current-voltage characteristics in AlGaN/GaN MODFETs at low temperatures</title>. , 1999, , .		2
44	Investigations of ohmic contacts to reactive ion-etched p-type GaN. , 2004, , .		2
45	Cell growth and attachment to AlGaN surfaces for biosensor applications. , 2010, , .		2
46	Modeling and Design of a Thin-Film CdTe/Ge Tandem Solar Cell. Journal of Electronic Materials, 2012, 41, 2759-2765.	1.0	2
47	<title>60Co gamma-irradiation-induced defects in MOCVD n-GaN</title>. , 2001, , .		1
48	Determination of diffusion length of p-type GaN from spectral-response measurements. , 2006, , .		1
49	Reactive ion etching of porous silicon for MEMS applications. , 2010, , .		1
50	Stress control of porous silicon film for microelectromechanical systems. , 2014, , .		1
51	Substrate heating effects on properties of CdS thin films prepared by thermal evaporation for photovoltaic applications. , 2015, , .		1
52	Magnetoresistance characteristics of gamma-irradiated Al 0.35 Ga 0.65 N/GaN HFETs. , 2004, 5274, 152.		0
53	Characterisation of Electron Transport in MBE Grown Indium Nitride. , 2006, , .		0
54	Implantation angle periphery effects on non-alloyed Si-implanted ohmic contacts for AlGaN/GaN high electron mobility transistors. Solid-State Electronics, 2011, 56, 56-59.	0.8	0

#	Article	IF	Citations
55	Released all-porous-silicon microstructure for spectrometer applications. , 2018, , .		0
56	GaSb-based II-VI Semiconductors for Application in Next Generation Infrared Detectors. , 2018, , .		0