Guillaume Monier

List of Publications by Year
in descending order

65 papers	844 citations	567281 15 h-index	552781 26 g-index
65 all docs	65 docs citations	65 times ranked	1091 citing authors

#	Article	IF	Citations
1	Investigation of N2 plasma GaAs surface passivation efficiency against air exposure: Towards an enhanced diode. Applied Surface Science, 2022, 579, 152191.	6.1	5
2	A new approach to studying the electrical behavior and the inhomogeneities of the Schottky barrier height. European Physical Journal Plus, 2022, 137, .	2.6	1
3	Anomalous ambipolar transport in depleted GaAs nanowires. Physical Review B, 2022, 105, .	3.2	1
4	Charge and spin transport over record distances in GaAs metallic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>n</mml:mi></mml:math> -type nanowires. Physical Review B, 2021, 103, .	3.2	3
5	Effect of metallic contacts diffusion on Au/GaAs and Au/GaN/GaAs SBDs electrical quality during their fabrication process. Journal of Alloys and Compounds, 2021, 876, 159596.	5.5	5
6	An investigation of adhesion mechanisms between plasma-treated PMMA support and aluminum thin films deposited by PVD. Applied Surface Science, 2021, 564, 150322.	6.1	9
7	Conduction Mechanisms in Au/0.8 nmâ€“GaN/nâ€“GaAs Schottky Contacts in a Wide Temperature Range. Materials, 2021, 14, 5909.	2.9	2
8	The effect of nitridation on the optical properties of InAs quantum dots grown on GaAs substrate by MBE. Vacuum, 2020, 172, 109097.	3.5	4
9	Tailoring the structural and optical properties of bismuth oxide films deposited by reactive magnetron sputtering for photocatalytic application. Materials Chemistry and Physics, 2020, 243, 122580.	4.0	19
10	A new model of thermionic emission mechanism for non-ideal Schottky contacts and a method of extracting electrical parameters. European Physical Journal Plus, 2020, 135, 1.	2.6	6
11	Advances in tailoring the water content in porous carbon aerogels using RT-pulsed fluorination. Journal of Fluorine Chemistry, 2020, 238, 109633.	1.7	6
12	Dynamics of Gold Droplet Formation on SiO₂/Si(111) Surface. Journal of Physical Chemistry C, 2020, 124, 11946-11951.	3.1	17
13	Insights into the Structure and the Electrochemical Reactivity of Cobalt-Manganese Layered Double Hydroxides: Application to H₂O₂ Sensing. Journal of Physical Chemistry C, 2020, 124, 15585-15599.	3.1	15
14	Optical and structural analysis of ultra-long GaAs nanowires after nitrogen-plasma passivation. Nano Express, 2020, 1, 020019.	2.4	8
15	Study of GaN layer crystallization on GaAs(100) using electron cyclotron resonance or glow discharge N2 plasma sources for the nitriding process. Applied Surface Science, 2019, 495, 143586.	6.1	9
16	Comparative study of ionic bombardment and heat treatment on the electrical behavior of Au/GaN/n-GaAs Schottky diodes. Superlattices and Microstructures, 2019, 135, 106276.	3.1	11
17	Si Doping of Vaporâ€“Liquidâ€“Solid GaAs Nanowires: n-Type or p-Type?. Nano Letters, 2019, 19, 4498-4504.	9.1	26
18	DFT and experimental FTIR investigations of early stages of (0â€¯0â€¯1) and (1â€¯1â€¯1)B GaAs surface nitridation. Applied Surface Science, 2019, 465, 787-794.	6.1	3

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19	Composition and optical properties tunability of hydrogenated silicon carbonitride thin films deposited by reactive magnetron sputtering. Applied Surface Science, 2018, 444, 293-302.	6.1	18
20	Multi-Mode Elastic Peak Electron Microscopy (MM-EPEM): A new imaging technique with an ultimate in-depth resolution for surface analysis. Ultramicroscopy, 2018, 188, 13-18.	1.9	0
21	Thiol-functionalization of Mn 5 Ge 3 thin films. Applied Surface Science, 2018, 451, 191-197.	6.1	4
22	Combined angle-resolved X-ray photoelectron spectroscopy, density functional theory and kinetic study of nitridation of gallium arsenide. Applied Surface Science, 2018, 427, 662-669.	6.1	18
23	Simulation and Experimental Studies of Illumination Effects on the Current Transport of Nitridated GaAs Schottky Diode. Semiconductors, 2018, 52, 1998-2006.	0.5	5
24	Influence of Silicon on the Nucleation Rate of GaAs Nanowires on Silicon Substrates. Journal of Physical Chemistry C, 2018, 122, 19230-19235.	3.1	15
25	Self-catalyzed GaAs nanowires on silicon by hydride vapor phase epitaxy. Nanotechnology, 2017, 28, 125602.	2.6	12
26	MDF treatment with a Dielectric Barrier Discharge (DBD) torch. International Journal of Adhesion and Adhesives, 2017, 79, 18-22.	2.9	11
27	Atomic layer deposition of $$ext {HfO}_2$$ HfO2 for integration into three-dimensional metalâ€“insulatorâ€“metal devices. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	2.3	5
28	Superhydrophobicity of polymer films via fluorine atoms covalent attachment and surface nano-texturing. Journal of Fluorine Chemistry, 2017, 200, 123-132.	1.7	18
29	Study of the surface state density and potential in MIS diode Schottky using the surface photovoltage method. Molecular Crystals and Liquid Crystals, 2016, 627, 66-73.	0.9	7
30	Synthesis and Study of Stable and Size-Controlled ZnOâ€“SiO₂ Quantum Dots: Application as a Humidity Sensor. Journal of Physical Chemistry C, 2016, 120, 11652-11662.	3.1	47
31	Spontaneous formation of GaN/AlN coreâ€“shell nanowires on sapphire by hydride vapor phase epitaxy. Journal of Crystal Growth, 2016, 454, 1-5.	1.5	5
32	Self-catalyzed growth of GaAs nanowires on silicon by HVPE. , 2016, , .		1
33	Study of the characteristics current-voltage and capacitance-voltage in nitride GaAs Schottky diode. EPJ Applied Physics, 2015, 72, 10102.	0.7	17
34	Effects of the GaN layers and the annealing on the electrical properties in the Schottky diodes based on nitrated GaAs. Superlattices and Microstructures, 2015, 83, 827-833.	3.1	19
35	XPS combined with MM-EPES technique for in situ study of ultra thin film deposition: Application to an Au/SiO2/Si structure. Applied Surface Science, 2015, 357, 1268-1273.	6.1	7
36	Vapor liquid solid-hydride vapor phase epitaxy (VLS-HVPE) growth of ultra-long defect-free GaAs nanowires: Ab initio simulations supporting center nucleation. Journal of Chemical Physics, 2014, 140, 194706.	3.0	11

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37	Energy dependence of the energy loss function parametrization of indium in the Drudeâ€“Lindhard model. Surface and Interface Analysis, 2014, 46, 283-288.	1.8	4
38	New method for the determination of the correction function of a hemisperical electron analyser based on elastic electron images. Journal of Electron Spectroscopy and Related Phenomena, 2014, 197, 80-87.	1.7	13
39	Ultralong and Defect-Free GaN Nanowires Grown by the HVPE Process. Nano Letters, 2014, 14, 559-562.	9.1	58
40	Record Pure Zincblende Phase in GaAs Nanowires down to 5 nm in Radius. Nano Letters, 2014, 14, 3938-3944.	9.1	82
41	Real Time Infra-Red Absorption Analysis of Nitridation of GaAs(001) by Hydrazine Solutions. Journal of the Electrochemical Society, 2013, 160, H229-H236.	2.9	3
42	Development of Monte-Carlo simulations for nano-patterning surfaces associated with MM-EPES analysis. Surface Science, 2013, 618, 72-77.	1.9	3
43	Hydride VPE: the unexpected process for the fast growth of GaAs and GaN nanowires with record aspect ratio and polytypism-free crystalline structure. , 2013, , .		0
44	Catalyst-assisted hydride vapor phase epitaxy of GaN nanowires: exceptional length and constant rod-like shape capability. Nanotechnology, 2012, 23, 405601.	2.6	30
45	Passivation of GaAs(001) surface by the growth of high quality c-GaN ultra-thin film using low power glow discharge nitrogen plasma source. Surface Science, 2012, 606, 1093-1099.	1.9	25
46	Carbon diffusion and reactivity in Mn₅Ge₃ thin films. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 1374-1377.	0.8	5
47	Comparison of InP Schottky diodes based on Au or Pd sensing electrodes for NO2 and O3 sensing. Solid-State Electronics, 2012, 72, 29-37.	1.4	6
48	Physical and chemical characterizations of nanometric indigo layers as efficient ozone filter for gas sensor devices. Thin Solid Films, 2011, 520, 971-977.	1.8	12
49	Study of the Characteristics Currentâ€“Voltage and Capacityâ€“Voltage of Hg/GaN/GaAs Structures. Sensor Letters, 2011, 9, 2268-2271.	0.4	4
50	The dc Electrical Characterization of Hg/Î´-GaN/n-GaAs Devices, with Different Thicknesses of the GaN Thin Layers. Sensor Letters, 2011, 9, 2211-2214.	0.4	7
51	Monte Carlo simulation for Multi-Mode Elastic Peak Electron Spectroscopy of crystalline materials: Effects of surface structure and excitation. Surface Science, 2010, 604, 217-226.	1.9	6
52	Further insights into the photodegradation of poly(3-hexylthiophene) by means of X-ray photoelectron spectroscopy. Thin Solid Films, 2010, 518, 7113-7118.	1.8	89
53	Fast Growth Synthesis of GaAs Nanowires with Exceptional Length. Nano Letters, 2010, 10, 1836-1841.	9.1	50
54	SEM and XPS studies of nanohole arrays on InP(100) surfaces created by coupling AAO templates and low energy Ar+ ion sputtering. Surface Science, 2009, 603, 2923-2927.	1.9	11

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55	First stages of surface steel nitriding: X-ray photoelectron spectroscopy and electrical measurements. Applied Surface Science, 2009, 255, 9206-9210.	6.1	0
56	On the use of a O2:SF6 plasma treatment on GaAs processed surfaces for molecular beam epitaxial regrowth. Applied Surface Science, 2009, 255, 3897-3901.	6.1	5
57	XPS study of the O2/SF6 microwave plasma oxidation of (001) GaAs surfaces. Applied Surface Science, 2009, 256, 56-60.	6.1	3
58	Electrical Characterization and Electronic Transport Modelization in the InN/InP Structures. Sensor Letters, 2009, 7, 712-715.	0.4	1
59	XPS, EPMA and microstructural analysis of a defective industrial plasma-nitrided steel. Surface and Coatings Technology, 2008, 202, 5887-5894.	4.8	9
60	Effect of surface roughness on EPES and AREPES measurements: Flat and crenels silicon surfaces. Surface Science, 2008, 602, 2114-2120.	1.9	13
61	XPS study of the formation of ultrathin GaN film on GaAs(100). Applied Surface Science, 2008, 254, 4150-4153.	6.1	14
62	A study of the 42CrMo4 steel surface by quantitative XPS electron spectroscopy. Applied Surface Science, 2008, 254, 4738-4743.	6.1	14
63	Study of porous IIIâ€“V semiconductors by electron spectroscopies (AES and XPS) and optical spectroscopy (PL): Effect of ionic bombardment and nitridation process. Surface Science, 2007, 601, 4531-4535.	1.9	2
64	Combined EELS, LEED and SR-XPS study of ultra-thin crystalline layers of indium nitride on InP(100)â€"Effect of annealing at 450Â°C. Applied Surface Science, 2007, 253, 4445-4449.	6.1	4
65	Interaction of hydrogen with InN thin films elaborated on InP(100). Surface Science, 2007, 601, 3722-3725.	1.9	1