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	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
2	Record Pure Zincblende Phase in GaAs Nanowires down to 5 nm in Radius. Nano Letters, 2014, 14, 3938-3944.	9.1	82
3	Ultralong and Defect-Free GaN Nanowires Grown by the HVPE Process. Nano Letters, 2014, 14, 559-562.	9.1	58
4	Fast Growth Synthesis of GaAs Nanowires with Exceptional Length. Nano Letters, 2010, 10, 1836-1841.	9.1	50
5	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
6	Catalyst-assisted hydride vapor phase epitaxy of GaN nanowires: exceptional length and constant rod-like shape capability. Nanotechnology, 2012, 23, 405601.	2.6	30
7	Si Doping of Vaporâ€“Liquidâ€“Solid GaAs Nanowires: n-Type or p-Type?. Nano Letters, 2019, 19, 4498-4504.	9.1	26
8	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
9	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
10	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
11	Superhydrophobicity of polymer films via fluorine atoms covalent attachment and surface nano-texturing. Journal of Fluorine Chemistry, 2017, 200, 123-132.	1.7	18
12	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
13	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
14	Study of the characteristics current-voltage and capacitance-voltage in nitride GaAs Schottky diode. EPJ Applied Physics, 2015, 72, 10102.	0.7	17
15	Dynamics of Gold Droplet Formation on SiO₂/Si(111) Surface. Journal of Physical Chemistry C, 2020, 124, 11946-11951.	3.1	17
16	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
17	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
18	XPS study of the formation of ultrathin GaN film on GaAs(100). Applied Surface Science, 2008, 254, 4150-4153.	6.1	14

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19	A study of the 42CrMo4 steel surface by quantitative XPS electron spectroscopy. Applied Surface Science, 2008, 254, 4738-4743.	6.1	14
20	Effect of surface roughness on EPES and AREPES measurements: Flat and crenels silicon surfaces. Surface Science, 2008, 602, 2114-2120.	1.9	13
21	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
22	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
23	Self-catalyzed GaAs nanowires on silicon by hydride vapor phase epitaxy. Nanotechnology, 2017, 28, 125602.	2.6	12
24	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
25	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
26	MDF treatment with a Dielectric Barrier Discharge (DBD) torch. International Journal of Adhesion and Adhesives, 2017, 79, 18-22.	2.9	11
27	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
28	XPS, EPMA and microstructural analysis of a defective industrial plasma-nitrided steel. Surface and Coatings Technology, 2008, 202, 5887-5894.	4.8	9
29	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
30	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
31	Optical and structural analysis of ultra-long GaAs nanowires after nitrogen-plasma passivation. Nano Express, 2020, 1, 020019.	2.4	8
32	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
33	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
34	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
35	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
36	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

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37	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
38	Advances in tailoring the water content in porous carbon aerogels using RT-pulsed fluorination. Journal of Fluorine Chemistry, 2020, 238, 109633.	1.7	6
39	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
40	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
41	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
42	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
43	Simulation and Experimental Studies of Illumination Effects on the Current Transport of Nitridated GaAs Schottky Diode. Semiconductors, 2018, 52, 1998-2006.	0.5	5
44	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
45	Investigation of N2 plasma GaAs surface passivation efficiency against air exposure: Towards an enhanced diode. Applied Surface Science, 2022, 579, 152191.	6.1	5
46	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
47	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
48	Thiol-functionalization of Mn 5 Ge 3 thin films. Applied Surface Science, 2018, 451, 191-197.	6.1	4
49	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
50	Study of the Characteristics Currentâ€“Voltage and Capacityâ€“Voltage of Hg/GaN/GaAs Structures. Sensor Letters, 2011, 9, 2268-2271.	0.4	4
51	XPS study of the O2/SF6 microwave plasma oxidation of (001) GaAs surfaces. Applied Surface Science, 2009, 256, 56-60.	6.1	3
52	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
53	Development of Monte-Carlo simulations for nano-patterning surfaces associated with MM-EPES analysis. Surface Science, 2013, 618, 72-77.	1.9	3
54	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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55	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
56	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
57	Conduction Mechanisms in Au/0.8 nmâ€“GaN/nâ€“GaAs Schottky Contacts in a Wide Temperature Range. Materials, 2021, 14, 5909.	2.9	2
58	Interaction of hydrogen with InN thin films elaborated on InP(100). Surface Science, 2007, 601, 3722-3725.	1.9	1
59	Self-catalyzed growth of GaAs nanowires on silicon by HVPE. , 2016, , .		1
60	Electrical Characterization and Electronic Transport Modelization in the InN/InP Structures. Sensor Letters, 2009, 7, 712-715.	0.4	1
61	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
62	Anomalous ambipolar transport in depleted GaAs nanowires. Physical Review B, 2022, 105, .	3.2	1
63	First stages of surface steel nitriding: X-ray photoelectron spectroscopy and electrical measurements. Applied Surface Science, 2009, 255, 9206-9210.	6.1	0
64	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
65	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