

Bertrand Lacroix

List of Publications by Year in descending order

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48
papers

692
citations

516710
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48
all docs

48
docs citations

48
times ranked

1055
citing authors

#	ARTICLE	IF	CITATIONS
1	A mechanism for damage formation in GaN during rare earth ion implantation at medium range energy and room temperature. Journal of Applied Physics, 2011, 109, 109101. Crystal defects and related stress in Yb_2O_3 thin films: Mechanisms of damage formation in Eu-implanted GaN probed by X-ray diffraction. Europhysics Letters, 2011, 96, 46002.	2.5	47
2	Direct imaging of rare-earth ion clusters in Yb_2O_3 thin films. Physical Review B, 2014, 90, .	3.2	46
3	Polarity determination of polar and semipolar $(112\bar{2})$ -InN and GaN layers by valence band photoemission spectroscopy. Journal of Applied Physics, 2013, 114, .	2.5	30
4	Ion irradiation-induced phase transformation mechanisms in Y_2O_3 thin films. Nuclear Instruments & Methods in Physics Research B, 2013, 311, 86-92.	1.4	29
5	STEM-EELS analysis reveals stable high-density He in nanopores of amorphous silicon coatings deposited by magnetron sputtering. Nanotechnology, 2015, 26, 075703.	2.6	29
6	Nonlinear absorption of InN/InGaN multiple-quantum-well structures at optical telecommunication wavelengths. Applied Physics Letters, 2011, 98, .	3.3	27
7	Mechanisms of damage formation in Eu-implanted AlN. Journal of Applied Physics, 2012, 112, .	2.5	27
8	Biodegradable double cross-linked chitosan hydrogels for drug delivery: Impact of chemistry on rheological and pharmacological performance. International Journal of Biological Macromolecules, 2020, 165, 2205-2218.	7.5	27
9	Disorder-order phase transformation in a fluorite-related oxide thin film: In-situ X-ray diffraction and modelling of the residual stress effects. Thin Solid Films, 2016, 601, 84-88.	1.8	22
10	Yttrium oxide thin films: Influence of the oxygen vacancy network organization on the microstructure. Thin Solid Films, 2007, 515, 6385-6390.	1.8	21
11	Efficient blocking of planar defects by prismatic stacking faults in semipolar $(112\bar{2})$ -GaN layers on m-sapphire by epitaxial lateral overgrowth. Applied Physics Letters, 2011, 98, 121916.	3.3	21
12	Stabilisation of gold nanoparticles by N-heterocyclic thiones. Dalton Transactions, 2017, 46, 8367-8371.	3.3	19
13	Platinum nanoparticles stabilized by N-heterocyclic thiones. Synthesis and catalytic activity in mono- and di-hydroboration of alkynes. Nanoscale, 2020, 12, 6821-6831.	5.6	18
14	Phase transformations in Y_2O_3 thin films under swift Xe ions irradiation. Nuclear Instruments & Methods in Physics Research B, 2013, 310, 6-9.	1.4	16
15	Effects of electronic and nuclear stopping power on disorder induced in GaN under swift heavy ion irradiation. Nuclear Instruments & Methods in Physics Research B, 2016, 381, 39-44.	1.4	16
16	Manganese Dioxide Supported on Porous Biomorphic Carbons as Hybrid Materials for Energy Storage Devices. ACS Applied Materials & Interfaces, 2016, 8, 30890-30898.	8.0	15

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19	Microstructural and conductivity changes induced by annealing of ZnO:B thin films deposited by chemical vapour deposition. Journal of Physics Condensed Matter, 2011, 23, 334209.	1.8	13
20	The high sensitivity of InN under rare earth ion implantation at medium range energy. Journal Physics D: Applied Physics, 2011, 44, 295402.	2.8	13
21	Fabrication of Optical Multilayer Devices from Porous Silicon Coatings with Closed Porosity by Magnetron Sputtering. ACS Applied Materials & Interfaces, 2015, 7, 13889-13897.	8.0	13
22	The nanostructure of porous cobalt coatings deposited by magnetron sputtering in helium atmosphere. Micron, 2018, 108, 49-54.	2.2	13
23	Core cross-linked nanoparticles from self-assembling polyfma-based micelles. Encapsulation of lipophilic molecules. European Polymer Journal, 2017, 89, 406-418.	5.4	12
24	Nanostructure and Physical Properties Control of Indium Tin Oxide Films Prepared at Room Temperature through Ion Beam Sputtering Deposition at Oblique Angles. Journal of Physical Chemistry C, 2019, 123, 14036-14046.	3.1	12
25	Surface and crystal structure of nitridated sapphire substrates and their effect on polar InN layers. Applied Surface Science, 2014, 307, 461-467.	6.1	11
26	Growth of nanocolumnar thin films on patterned substrates at oblique angles. Plasma Processes and Polymers, 2019, 16, 1800135.	3.0	11
27	Defect evolution and interplay in n-type InN. Applied Physics Letters, 2012, 100, 091907.	3.3	10
28	Nitrogen Nanobubbles in a-SiO _x /N _y Coatings: Evaluation of Its Physical Properties and Chemical Bonding State by Spatially Resolved Electron Energy-Loss Spectroscopy. Journal of Physical Chemistry C, 2016, 120, 5651-5658.	3.1	10
29	Exchange bias and two steps magnetization reversal in porous Co/CoO layer. Materials and Design, 2019, 171, 107691.	7.0	10
30	Towards perfect MWIR transparency using oblique angle deposition. Applied Surface Science, 2019, 470, 943-950.	6.1	9
31	Surface oxidation of amorphous Si and Ge slanted columnar and mesoporous thin films: Evidence, scrutiny and limitations for infrared optics. Applied Surface Science, 2019, 493, 807-817.	6.1	8
32	Porosity Control for Plasma-Assisted Molecular Beam Epitaxy of GaN Nanowires. Crystal Growth and Design, 2019, 19, 2461-2469.	3.0	7
33	Optical and nanostructural insights of oblique angle deposited layers applied for photonic coatings. Applied Surface Science, 2020, 520, 146312.	6.1	7
34	Engineering of III-Nitride Semiconductors on Low Temperature Co-fired Ceramics. Scientific Reports, 2018, 8, 6879.	3.3	6
35	Controlled grain-size thermochromic VO ₂ coatings by the fast oxidation of sputtered vanadium or vanadium oxide films deposited at glancing angles. Surfaces and Interfaces, 2021, 27, 101581.	3.0	6
36	Anisotropic optical properties of indium tin oxide thin films prepared by ion beam sputtering under oblique angle deposition. Applied Surface Science, 2022, 595, 152945.	6.1	6

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37	Simultaneous Optical and Electrical Characterization of GaN Nanowire Arrays by Means of Vis-IR Spectroscopic Ellipsometry. Journal of Physical Chemistry C, 2020, 124, 1535-1543.	3.1	5
38	On the importance of light scattering for high performances nanostructured antireflective surfaces. Acta Materialia, 2020, 188, 386-393.	7.9	5
39	Application of advanced (S)TEM methods for the study of nanostructured porous functional surfaces: A few working examples. Materials Characterization, 2022, 185, 111741.	4.4	5
40	Reduction of N ₂ O with hydrosilanes catalysed by RuSNS nanoparticles. Chemical Communications, 2022, 58, 7176-7179.	4.1	5
41	Infrared photoluminescence of high In-content InN/InGaN multiple quantum wells. Physica Status Solidi (A) Applications and Materials Science, 2012, 209, 17-20.	1.8	4
42	Ion irradiation-induced phase transformations in bixbyite-fluorite related oxides: The role of dislocation loop nucleation. Nuclear Instruments & Methods in Physics Research B, 2012, 277, 18-20.	1.4	3
43	Synthesis, structuring and characterization of rare earth oxide thin films: Modeling of the effects of stress and defects on the phase stability. Thin Solid Films, 2014, 553, 43-46.	1.8	3
44	Ion irradiation-induced diffusion in bixbyite-fluorite related oxides: Dislocations and phase transformation. Nuclear Instruments & Methods in Physics Research B, 2014, 327, 44-46.	1.4	1
45	Low temperature epitaxial deposition of GaN on LTCC substrates. , 2017, , .		1
46	Study of defects and structural transformations induced by ion irradiation of Y2O3 thin films deposited by Ion Beam Sputtering. Materials Research Society Symposia Proceedings, 2008, 1122, 4.	0.1	0
47	Damage formation in GaN under medium energy range implantation of rare earth ions: a combined TEM, XRD and RBS/C investigation. Materials Research Society Symposia Proceedings, 2011, 1342, 35.	0.1	0
48	Fundamental aspects about the first steps of irradiation-induced phase transformations in fluorite-related oxides. Acta Materialia, 2018, 153, 303-313.	7.9	0