Maria R Correia

List of Publications by Year
in descending order

104	2,542	257101 24	214527 47
papers	citations	h-index	g-index

107	107	107	3618
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Strain and composition distributions in wurtzite InGaN/GaN layers extracted from x-ray reciprocal space mapping. Applied Physics Letters, 2002, 80, 3913-3915.	1.5	209
2	Compositional pulling effects inInxGa1â^'xN/GaNlayers:â€ƒA combined depth-resolved cathodoluminescence and Rutherford backscattering/channeling study. Physical Review B, 2001, 64, .	1.1	176
3	Multifunctional Materials: A Case Study of the Effects of Metal Doping on ZnO Tetrapods with Bismuth and Tin Oxides. Advanced Functional Materials, 2017, 27, 1604676.	7.8	140
4	Large-area high-throughput synthesis of monolayer graphene sheet by Hot Filament Thermal Chemical Vapor Deposition. Scientific Reports, 2012, 2, 682.	1.6	138
5	Hybridization of Zinc Oxide Tetrapods for Selective Gas Sensing Applications. ACS Applied Materials & Interfaces, 2017, 9, 4084-4099.	4.0	135
6	Compositional dependence of the strain-free optical band gap in InxGa1â^'xN layers. Applied Physics Letters, 2001, 78, 2137-2139.	1.5	104
7	Structural and optical properties of InGaN/GaN layers close to the critical layer thickness. Applied Physics Letters, 2002, 81, 1207-1209.	1.5	94
8	Thermal conductivity of silicon bulk and nanowires: Effects of isotopic composition, phonon confinement, and surface roughness. Journal of Applied Physics, 2010, 107, 083503.	1.1	93
9	On the identification of Sb2Se3 using Raman scattering. MRS Communications, 2018, 8, 865-870.	0.8	73
10	Identifying Raman modes of Sb₂Se₃ and their symmetries using angle-resolved polarised Raman spectra. Journal of Materials Chemistry A, 2020, 8, 8337-8344.	5.2	62
11	Interpretation of double x-ray diffraction peaks from InGaN layers. Applied Physics Letters, 2001, 79, 1432-1434.	1.5	55
12	Raman study of the A1(LO) phonon in relaxed and pseudomorphic InGaN epilayers. Applied Physics Letters, 2003, 83, 4761-4763.	1.5	53
13	Optical studies of ZnO nanocrystals doped with Eu3+ ions. Applied Physics A: Materials Science and Processing, 2007, 88, 129-133.	1.1	53
14	Facile synthesis of hydrogenated reduced graphene oxide via hydrogen spillover mechanism. Journal of Materials Chemistry, 2012, 22, 10457.	6.7	52
15	Growth of <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si0020.gif" overflow="scroll"><mml:mrow><mml:msub><mml:mrow><mml:mi>Sb</mml:mi></mml:mrow><mml:mrow><mml:mn>2</mml:mn></mml:mrow></mml:msub></mml:mrow></mml:math> thin films by selenization of RF sputtered binary precursors. Solar Energy Materials and Solar Cells, 2018, 187, 219-226.	3.0	45
16	Buckminsterfullerene hybridized zinc oxide tetrapods: defects and charge transfer induced optical and electrical response. Nanoscale, 2018, 10, 10050-10062.	2.8	44
17	Effect of N2 and H2 plasma treatments on band edge emission of ZnO microrods. Scientific Reports, 2015, 5, 10783.	1.6	43
18	XPS analysis of ZnO:Ga films deposited by magnetron sputtering: Substrate bias effect. Applied Surface Science, 2018, 458, 1043-1049.	3.1	42

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19	Partial oxidation of methane over bimetallic nickelâ€“lanthanide oxides. Journal of Alloys and Compounds, 2010, 489, 316-323.	2.8	40
20	Green, red and infrared Er-related emission in implanted GaN:Er and GaN:Er,O samples. Journal of Applied Physics, 2001, 89, 6183-6188.	1.1	34
21	Directional dependence of AlN intrinsic complex dielectric function, optical phonon lifetimes, and decay channels measured by polarized infrared reflectivity. Journal of Applied Physics, 2009, 106, .	1.1	30
22	Chemisorption of Phosphoric Acid and Surface Characterization of As Passivated AlN Powder Against Hydrolysis. Langmuir, 2008, 24, 5359-5365.	1.6	27
23	Resonant Raman scattering in ZnO:Mn and ZnO:Mn:Al thin films grown by RF sputtering. Journal of Physics Condensed Matter, 2011, 23, 334205.	0.7	26
24	Structural and optical characterization of Mg-doped GaAs nanowires grown on GaAs and Si substrates. Journal of Applied Physics, 2013, 114, .	1.1	25
25	Partial oxidation of methane over bimetallic copper- and nickel-actinide oxides (Th, U). Journal of Alloys and Compounds, 2010, 497, 249-258.	2.8	24
26	Contribution of the decay of optical phonons into acoustic phonons to the thermal conductivity of AlN. Physical Review B, 2008, 77, .	1.1	23
27	Role of optical phonon in Ge thermal conductivity. Applied Physics Letters, 2008, 92, 211903.	1.5	22
28	Direct evidence for strain inhomogeneity in InxGa1â^'xN epilayers by Raman spectroscopy. Applied Physics Letters, 2004, 85, 2235-2237.	1.5	21
29	Splitting of X-ray diffraction and photoluminescence peaks in InGaN/GaN layers. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2002, 93, 163-167.	1.7	20
30	Defect studies on fast and thermal neutron irradiated GaN. Nuclear Instruments & Methods in Physics Research B, 2008, 266, 2780-2783.	0.6	20
31	Light-induced nonthermal population of optical phonons in nanocrystals. Physical Review B, 2017, 95, .	1.1	20
32	Photoluminescence study of GaAs thin films and nanowires grown on Si(111). Journal of Materials Science, 2013, 48, 1794-1798.	1.7	19
33	Luminescence studies on green emitting InGaN/GaN MQWs implanted with nitrogen. Scientific Reports, 2015, 5, 9703.	1.6	19
34	Photoluminescence studies of a perceived white light emission from a monolithic InGaN/GaN quantum well structure. Scientific Reports, 2015, 5, 13739.	1.6	19
35	Optical active centres in ZnO samples. Journal of Non-Crystalline Solids, 2006, 352, 1453-1456.	1.5	18
36	Probing surface states in C₆₀decorated ZnO microwires: detailed photoluminescence and cathodoluminescence investigations. Nanoscale Advances, 2019, 1, 1516-1526.	2.2	18

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37	Structure and properties of phosphorus-carbide thin solid films. Thin Solid Films, 2013, 548, 247-254.	0.8	17
38	Study of damage formation and annealing of implanted III-nitride semiconductors for optoelectronic devices. Nuclear Instruments & Methods in Physics Research B, 2016, 379, 251-254.	0.6	17
39	Phonons and free-carrier properties of binary, ternary, and quaternary group-III nitride layers measured by Infrared Spectroscopic Ellipsometry. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 1750-1769.	0.8	16
40	Investigations of p-type signal for ZnO thin films grown on (100) GaAs substrates by pulsed laser deposition. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 1038-1041.	0.8	16
41	Hydrothermal synthesis, structural, and spectroscopic studies of vanadium substituted ETS-4. Microporous and Mesoporous Materials, 2008, 110, 436-441.	2.2	16
42	Eu Activation inÎ²-Ga2O3MOVPE Thin Films by Ion Implantation. ECS Journal of Solid State Science and Technology, 2019, 8, Q3097-Q3102.	0.9	15
43	ZnAl2O4 decorated Al-doped ZnO tetrapodal 3D networks: microstructure, Raman and detailed temperature dependent photoluminescence analysis. Nanoscale Advances, 2020, 2, 2114-2126.	2.2	15
44	Synthesis, structural and optical characterization of ZnO crystals grown in the presence of silver. Thin Solid Films, 2012, 520, 4717-4721.	0.8	14
45	New insights into the temperature-dependent photoluminescence of Mg-doped GaAs nanowires and epilayers. Journal of Materials Chemistry C, 2014, 2, 7104.	2.7	14
46	Eu-Doped AlGaN/GaN Superlattice-Based Diode Structure for Red Lighting: Excitation Mechanisms and Active Sites. ACS Applied Nano Materials, 2018, 1, 3845-3858.	2.4	14
47	Electronic Conduction Mechanisms and Defects in Polycrystalline Antimony Selenide. Journal of Physical Chemistry C, 2020, 124, 7677-7682.	1.5	14
48	Structural and optical properties of Zn0.9Mn0.1O/ZnO core-shell nanowires designed by pulsed laser deposition. Journal of Applied Physics, 2009, 106, .	1.1	13
49	Resizing of Colloidal Gold Nanorods and Morphological Probing by SERS. Journal of Physical Chemistry C, 2013, 117, 20343-20350.	1.5	13
50	Disorder induced violet/blue luminescence in rfâ€deposited ZnO films. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 662-666.	0.8	13
51	Spectroscopic Analysis of Eu³⁺ Implanted and Annealed GaN Layers and Nanowires. Journal of Physical Chemistry C, 2015, 119, 17954-17964.	1.5	13
52	Fluctuating potentials in GaAs:Si nanowires: critical reduction of the influence of polytypism on the electronic structure. Nanoscale, 2018, 10, 3697-3708.	2.8	13
53	Optoelectronic Characterization of ZnO Nanorod Arrays Obtained by Pulse Electrodeposition. Journal of the Electrochemical Society, 2018, 165, D595-D603.	1.3	12
54	Effect of AlN content on the lattice site location of terbium ions in Al_xGa_{1â^'x}N compounds. Semiconductor Science and Technology, 2016, 31, 035026.	1.0	12

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55	Enhanced optical properties of Cdâ€“Mg-co-doped ZnO nanoparticles induced by low crystal structure distortion. Journal of Physics and Chemistry of Solids, 2020, 146, 109611.	1.9	11
56	Strain relaxation and compositional analysis of InGaN/GaN layers by Rutherford backscattering. Nuclear Instruments & Methods in Physics Research B, 2002, 190, 560-564.	0.6	10
57	Al1â^'xInxN/GaN bilayers: Structure, morphology, and optical properties. Physica Status Solidi (B): Basic Research, 2010, 247, 1740-1746.	0.7	10
58	Peculiar Magnetoelectric Coupling in BaTiO₃:Fe_{113Âppm} Nanoscopic Segregations. ACS Applied Materials & Interfaces, 2015, 7, 24741-24747.	4.0	9
59	Site Redistribution, Partial Frozen-in Defect Chemistry, and Electrical Properties of Ba1â€“x(Zr,Pr)O3â^'Î´. Inorganic Chemistry, 2016, 55, 8552-8563.	1.9	9
60	Structure and Electrical-Transport Relations in Ba(Zr,Pr)O_{3â^'Î´} Perovskites. Inorganic Chemistry, 2017, 56, 9120-9131.	1.9	9
61	Optical investigations of europium ion implanted in nitride-based diode structures. Surface and Coatings Technology, 2018, 355, 40-44.	2.2	9
62	Indium content determination related with structural and optical properties of InGaN layers. Journal of Crystal Growth, 2001, 230, 448-453.	0.7	8
63	Optical studies on the red luminescence of InGaN epilayers. Superlattices and Microstructures, 2004, 36, 625-632.	1.4	8
64	Multiple optical centers in Eu-implanted AlN nanowires for solid-state lighting applications. Applied Physics Letters, 2018, 113, 201905.	1.5	8
65	Enhancing the luminescence yield of Cr3+ in Î² -Ga2O3 by proton irradiation. Applied Physics Letters, 2022, 120, .	1.5	8
66	Depth Resolved Studies of Indium Content and Strain in InGaN Layers. Physica Status Solidi (B): Basic Research, 2001, 228, 59-64.	0.7	7
67	Analysis of Strain Depth Variations in an In0.19Ga0.81N Layer by Raman Spectroscopy. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 563-567.	0.8	7
68	Radiation hardness of GeSi heterostructures with thin Ge layers. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2008, 147, 191-194.	1.7	7
69	Electrical insulation properties of RF-sputtered LiPON layers towards electrochemical stability of lithium batteries. Journal Physics D: Applied Physics, 2016, 49, 485301.	1.3	7
70	Analysis of the Tb3+ recombination in ion implanted Al Ga1â^'N (0â‰¤xâ‰¤1) layers. Journal of Luminescence, 2016, 178, 249-258.	1.5	7
71	Substrate and Mg doping effects in GaAs nanowires. Beilstein Journal of Nanotechnology, 2017, 8, 2126-2138.	1.5	7
72	Hierarchical Aerographite 3D flexible networks hybridized by InP micro/nanostructures for strain sensor applications. Scientific Reports, 2018, 8, 13880.	1.6	7

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73	Preliminary investigations of infrared Er-related photoluminescence in ion-implanted In0.07Ga0.93N. Applied Physics Letters, 2002, 80, 4504-4506.	1.5	6
74	Effect of the Chloride Anions on the Formation of Self-Assembled Diphenylalanine Peptide Nanotubes. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 1563-1570.	1.7	6
75	Distribution of 1.68 eV emission from diamond films. Journal of Applied Physics, 1998, 84, 2207-2211.	1.1	5
76	Optical and structural properties of ZnO nanorods grown by pulsed laser deposition without a catalyst. Technical Physics, 2009, 54, 1607-1611.	0.2	5
77	Effect of oxygen pressure on the structural and magnetic properties of thin Zn_{0.98}Mn_{0.02}O films. EPJ Applied Physics, 2012, 57, 10301.	0.3	5
78	Correction to â€œSpectroscopic Analysis of Eu³⁺ Implanted and Annealed GaN Layers and Nanowiresâ€• Journal of Physical Chemistry C, 2016, 120, 6907-6908.	1.5	5
79	SiGe layer thickness effect on the structural and optical properties of well-organized SiGe/SiO2multilayers. Nanotechnology, 2017, 28, 345701.	1.3	5
80	Exploring swift-heavy ion irradiation of InGaN/GaN multiple quantum wells for green-emitters: the use of Raman and photoluminescence to assess the irradiation effects on the optical and structural properties. Journal of Materials Chemistry C, 2021, 9, 8809-8818.	2.7	5
81	Degradation of Structural and Optical Properties of InGaN/GaN Multiple Quantum Wells with Increasing Number of Wells. Physica Status Solidi C: Current Topics in Solid State Physics, 2003, 0, 302-306.	0.8	4
82	Structural, optical, electrical and morphological study of transparent p-NiO/n-ZnO heterojunctions grown by PLD. Proceedings of SPIE, 2015, , .	0.8	4
83	Strain and Compositional Analysis of InGaN/GaN Layers. Materials Research Society Symposia Proceedings, 2000, 639, 3521.	0.1	3
84	Annealing behavior and lattice site location of Er implanted InGaN. Nuclear Instruments & Methods in Physics Research B, 2003, 206, 1042-1046.	0.6	3
85	Comment on â€œDirect evidence of nanocluster-induced luminescence in InGaN epifilmsâ€•[Appl. Phys. Lett. 86, 021911 (2005)]. Applied Physics Letters, 2005, 87, 136101.	1.5	3
86	Raman scattering on overtones of fully symmetric LO phonons in Zn0.9Mn0.1O nanocrystals under resonance excitation conditions. Technical Physics Letters, 2009, 35, 1086-1089.	0.2	3
87	The Role of Edge Dislocations on the Red Luminescence of ZnO Films Deposited by RF-Sputtering. Journal of Nanomaterials, 2015, 2015, 1-11.	1.5	3
88	Diamondâ€SAW devices: a reverse fabrication method. Physica Status Solidi C: Current Topics in Solid State Physics, 2016, 13, 53-58.	0.8	3
89	Raman spectroscopy studies in InGaN/GaN wurtzite epitaxial films. Materials Research Society Symposia Proceedings, 2000, 639, 6101.	0.1	2
90	Optical studies on a coherent InGaN/GaN layer. Superlattices and Microstructures, 2006, 40, 452-457.	1.4	2

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91	Electronic properties of Ge islands embedded in multilayer and superlattice structures. Thin Solid Films, 2008, 517, 303-305.	0.8	2
92	Impact of composition and morphology on the optical properties of Si-NC/P3HT thin films processed from solution. Applied Physics A: Materials Science and Processing, 2013, 113, 439-446.	1.1	2
93	Impact of atomic layer deposited TiO₂ on the photocatalytic efficiency of TiO₂/w-VA-CNT nanocomposite materials. RSC Advances, 2022, 12, 16419-16430.	1.7	2
94	Coupling of plasmonic nanoparticles on a semiconductor substrate via a modified discrete dipole approximation method. Physical Chemistry Chemical Physics, 2022, 24, 19705-19715.	1.3	2
95	Steady-state and time-resolved luminescence in InGaN layers. Journal of Luminescence, 2000, 87-89, 1202-1205.	1.5	1
96	Photoluminescence and Raman study of a tensilely strained Si type-II quantum well on a relaxed SiGe graded buffer. IOP Conference Series: Materials Science and Engineering, 2009, 6, 012023.	0.3	1
97	Influence of RF-sputtering power on formation of vertically stacked Si_{1â^'x}Ge_xnanocrystals between ultra-thin amorphous Al₂O₃layers: structural and photoluminescence properties. Journal Physics D: Applied Physics, 2013, 46, 385301.	1.3	1
98	ZnO micro/nanocrystals grown by laser assisted flow deposition. , 2014, , .		1
99	Quantum well intermixing and radiation effects in InGaN/GaN multi quantum wells. , 2016, , .		1
100	Near band edge and defect emissions in wurtzite Cd0.025Mg0.10Zn0.875O nanocrystals. Optical Materials, 2021, 118, 111227.	1.7	1
101	Thermal conductance of the AlN/Si and AlN/SiC interfaces calculated with taking into account the detailed phonon spectra of the materials and the interface conditions. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 60-63.	0.8	0
102	Total reflectance and Raman studies in Al_yIn_xGa_{1â€xâ€y}N epitaxial layers. Physica Status Solidi C: Current Topics in Solid State Physics, 2010, 7, 56-59.	0.8	0
103	On the origin of strain relaxation in epitaxial CdZnO layers. , 2013, , .		0
104	Voids in Kesterites and the Influence of Lamellae Preparation by Focused Ion Beam for Transmission Electron Microscopy Analyses. IEEE Journal of Photovoltaics, 2019, 9, 565-570.	1.5	0