

Antonio R Zanatta

List of Publications by Year in descending order

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citing authors

#	ARTICLE	IF	CITATIONS
1	Gradual and selective achievement of Rutile-TiO ₂ by thermal annealing amorphous Ti _x O _y N _z films. Journal of Non-Crystalline Solids, 2022, 579, 121375.	1.5	1
2	The optical bandgap of lithium niobate (LiNbO ₃) and its dependence with temperature. Results in Physics, 2022, 39, 105736.	2.0	11
3	Assessing the amount of the anatase and rutile phases of TiO ₂ by optical reflectance measurements. Results in Physics, 2021, 22, 103864.	2.0	5
4	Reducible oxide and allotropic transition induced by hydrogen annealing: synthesis routes of TiO ₂ thin films to tailor optical response. Journal of Materials Research and Technology, 2021, 12, 1623-1637.	2.6	12
5	On the relationship between the Raman scattering features and the Ti-related chemical states of Ti _x O _y N _z films. Journal of Materials Research and Technology, 2021, 14, 864-870.	2.6	6
6	A sensitive temperature probe based on Er ³⁺ -doped GeO _x films. Results in Physics, 2020, 16, 102871.	2.0	2
7	Role of Rare Earth Elements and Entropy on the Anatase-To-Rutile Phase Transformation of TiO ₂ Thin Films Deposited by Ion Beam Sputtering. ACS Omega, 2020, 5, 28027-28036.	1.6	12
8	Temperature-dependent Raman scattering of the Ge ⁴⁺ -GeO _x system and its potential as an optical thermometer. Results in Physics, 2020, 19, 103500.	2.0	12
9	Revisiting the optical bandgap of semiconductors and the proposal of a unified methodology to its determination. Scientific Reports, 2019, 9, 11225.	1.6	215
10	Influence of the Anatase and Rutile phases on the luminescent properties of rare-earth-doped TiO ₂ films. Journal of Alloys and Compounds, 2019, 780, 491-497.	2.8	13
11	Self-organized nickel nanoparticles on nanostructured silicon substrate intermediated by a titanium oxynitride (Ti _x O _y) interface. AIP Advances, 2018, 8, 015025.	0.6	8
12	Whitish light-emitting ZnO micro-flakes: their production and optical properties. Optical Materials Express, 2018, 8, 270.	1.6	2
13	A suitable (wide-range + linear) temperature sensor based on Tm ³⁺ ions. Scientific Reports, 2017, 7, 14113.	1.6	15
14	A fast-reliable methodology to estimate the concentration of rutile or anatase phases of TiO ₂ . AIP Advances, 2017, 7, .	0.6	44
15	Coexistence of Sm ³⁺ and Sm ²⁺ ions in amorphous SiO _x : origin, main light emission lines and excitation-recombination mechanisms. Optical Materials Express, 2016, 6, 2108.	1.6	12
16	An alternative experimental approach to produce rare-earth-doped SiO _x films. Journal of Applied Physics, 2016, 119, .	1.1	9
17	Temperature dependence of photoluminescence from Γ^6_1 and Γ^6_2 minibands in lattice matched InGaAs/InP superlattices. Journal Physics D: Applied Physics, 2015, 48, 465101.	1.3	2
18	Single-Walled Carbon Nanotubes Functionalized with Carboxylic Acid for Fabricating Polymeric Composite Microstructures. Journal of Nanoscience and Nanotechnology, 2015, 15, 9797-9801.	0.9	6

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19	Photoluminescence and compositional-structural properties of ion-beam sputter deposited Er-doped TiO ₂ xNx films: Their potential as a temperature sensor. Journal of Applied Physics, 2015, 117, .	1.1	16
20	On the structural-optical properties of Al-containing amorphous Si thin films and the metal-induced crystallization phenomenon. Journal of Applied Physics, 2014, 116, 073511.	1.1	7
21	Influence of Ni concentration on the crystallization of amorphous Si films and on the development of different Ni-silicide phases. Journal of Applied Physics, 2014, 116, 123508.	1.1	3
22	Concentration quenching of the green photoluminescence from terbium ions embedded in AlN and SiC matrices. Journal of Luminescence, 2013, 137, 73-76.	1.5	16
23	Concentration quenching and thermal activation of the luminescence from terbium-doped SiC:H and SiC:AlN thin films. Physica Status Solidi C: Current Topics in Solid State Physics, 2013, 10, 68-71.	0.8	8
24	The Thermo Optic Coefficient of Amorphous SiN Films in the Near-Infrared and Visible Regions and Its Experimental Determination. Applied Physics Express, 2013, 6, 042402.	1.1	18
25	Efficient 1535 nm light emission from an all-Si-based optical micro-cavity containing Er ³⁺ and Yb ³⁺ ions. Optics Express, 2013, 21, 28394.	1.7	3
26	A simple-versatile approach to achieve all-Si-based optical micro-cavities. Journal of Applied Physics, 2013, 113, .	1.1	4
27	RAMAN SPECTROSCOPY OF TEMPERATURE INDUCED EFFECTS IN FOUR CARBON ALLOTROPES. Modern Physics Letters B, 2013, 27, 1350203.	1.0	2
28	Quantum-plasmonic interaction: emission enhancement of Er ³⁺ - Tm ³⁺ -co-doped tellurite glass via tuning nanobowtie. , 2013, , .		3
29	Visible light emission and energy transfer processes in Sm-doped nitride films. Journal of Applied Physics, 2012, 111, .	1.1	8
30	Enhancement of optical absorption by modulation of the oxygen flow of TiO ₂ films deposited by reactive sputtering. Journal of Applied Physics, 2012, 111, .	1.1	28
31	Surface plasmon propagation in novel multilayered metallic thin films. , 2012, , .		2
32	Integrated hybrid plasmonic cavity with in-plane photon-plasmon coupling for luminescence enhancement. , 2012, , .		0
33	Luminescence enhancement of Er ³⁺ ions from electric multipole nanostructure arrays. , 2012, , .		4
34	Focusing surface plasmons on Er ³⁺ ions through gold planar plasmonic lenses. Applied Physics A: Materials Science and Processing, 2012, 109, 1037-1041.	1.1	11
35	Tailored SERS substrates obtained with cathodic arc plasma ion implantation of gold nanoparticles into a polymer matrix. Physical Chemistry Chemical Physics, 2012, 14, 2050.	1.3	21
36	Exponential depletion of neutral dangling bonds density (D ₀) by rare-earth doping in amorphous Si films. Physica B: Condensed Matter, 2012, 407, 3222-3224.	1.3	1

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37	Integrated plasmonic Moiré cavity in photonic crystal cavity for luminescence enhancement. , 2012, , .		1
38	Focusing surface plasmons on Er ³⁺ ions with convex/concave plasmonic lenses. , 2012, , .		4
39	Effect of O ₂ ⁺ , H ₂ ⁺⁺ and N ₂ ⁺⁺ ion-beam irradiation on the field emission properties of carbon nanotubes. Journal of Applied Physics, 2011, 109, 114317.	1.1	6
40	Influence of film thickness on the optical transmission through subwavelength single slits in metallic thin films. Applied Optics, 2011, 50, G11.	2.1	18
41	Development of the MnSi _{1.7} phase in Mn-containing Si films. Materials Chemistry and Physics, 2011, 129, 148-153.	2.0	12
42	Structural and electronic aspects related to the near-infrared light emission of Fe-doped silicon films. Solid State Communications, 2011, 151, 587-590.	0.9	0
43	Raman spectroscopy analysis of structural photoinduced changes in GeS ₂ +Ga ₂ O ₃ thin films. Current Applied Physics, 2010, 10, 1411-1415.	1.1	5
44	Effect of Mn concentration and atomic structure on the magnetic properties of Ge thin films. Journal of Applied Physics, 2010, 108, 113922.	1.1	7
45	Influence of chromium concentration on the optical and electronic properties of ruby microstructures. Journal Physics D: Applied Physics, 2010, 43, 015302.	1.3	7
46	Structural, optical and morphological characterization of amorphous Ge _{100-x} Mn _x films deposited by sputtering. Journal Physics D: Applied Physics, 2009, 42, 035005.	1.3	10
47	Evidence of magnetic vortices formation in Mn-based sub-micrometre structures embedded in Si-Mn films. Journal Physics D: Applied Physics, 2009, 42, 132002.	1.3	6
48	Effect of thermal annealing treatments on the optical properties of rare-earth-doped AlN films. Journal Physics D: Applied Physics, 2009, 42, 025109.	1.3	27
49	Electrophoretic deposition of Ba _{0.77} Ca _{0.23} TiO ₃ nanopowders. Journal of Materials Processing Technology, 2008, 203, 526-531.	3.1	8
50	Resonant excitation of Mn local vibrational modes in the higher order Raman spectra of nanocrystalline Ga _{1-x} Mn _x N films. Journal of Physics Condensed Matter, 2008, 20, 252201.	0.7	5
51	Influence of film thickness on the crystallization of Ni-doped amorphous silicon samples. Journal of Applied Physics, 2008, 104, .	1.1	8
52	Aluminium-induced nanocrystalline Ge formation at low temperatures. Journal of Physics Condensed Matter, 2007, 19, 076206.	0.7	12
53	Red-green-blue light emission and energy transfer processes in amorphous SiN films doped with Sm and Tb. Journal of Physics Condensed Matter, 2007, 19, 436230.	0.7	7
54	Crystallization, stress, and stress-relieve due to nickel in amorphous silicon thin films. Journal of Applied Physics, 2007, 102, .	1.1	11

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55	Amorphous BeN as a new solid host for rare-earth-related luminescent materials. <i>Physica Status Solidi - Rapid Research Letters</i> , 2007, 1, 153-155.	1.2	4
56	Thermally synthesized ruby microstructures and luminescence centers. <i>Journal of Applied Physics</i> , 2006, 100, 113112.	1.1	5
57	Spectroscopic investigation of Nd-doped amorphous SiN films. <i>Journal of Non-Crystalline Solids</i> , 2006, 352, 1286-1289.	1.5	0
58	Metal-induced nanocrystalline structures in Ni-containing amorphous silicon thin films. <i>Journal of Applied Physics</i> , 2006, 100, 094311.	1.1	26
59	Thermal activation, cathodo- and photoluminescence measurements of rare earth doped (Tm,Tb,Dy,Eu,Sm,Yb) amorphous/nanocrystalline AlN thin films prepared by reactive rf-sputtering. <i>Optical Materials</i> , 2006, 28, 790-793.	1.7	48
60	Crystallization, texture and second-harmonic generation in TiO ₂ -BaB ₂ O ₃ glasses. <i>Optical Materials</i> , 2006, 28, 935-943.	1.7	20
61	Optical properties of Er and Er+Yb doped hydrogenated amorphous silicon films. <i>Journal of Physics Condensed Matter</i> , 2006, 18, 7709-7716.	0.7	5
62	Effect of the initial structure of silicon surface on the generation of multiple structural phases by cyclic microindentation. <i>Applied Physics Letters</i> , 2006, 89, 031917.	1.5	16
63	Annealing effects on crystallized Al-doped a-Ge:H thin films. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2005, 2, 3750-3753.	0.8	0
64	Annealing crystallization of a-Ge/Al/Si and a-Ge/Si thin films. <i>Physica Status Solidi (B): Basic Research</i> , 2005, 242, 1906-1909.	0.7	1
65	Low-temperature Al-induced crystallization of amorphous Ge. <i>Journal of Applied Physics</i> , 2005, 97, 094914.	1.1	45
66	Optoelectronic and structural characteristics of Er-doped amorphous AlN films. <i>Journal of Applied Physics</i> , 2005, 98, 093514.	1.1	19
67	Formation of silicon nanocrystals in SiO ₂ by oxireduction reaction induced by impurity implantation and annealing. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2004, 22, 1669.	1.6	4
68	Spectroscopic study of Nd-doped amorphous SiN films. <i>Journal of Applied Physics</i> , 2004, 96, 1068-1073.	1.1	16
69	Synthesis and Characterization of the $\hat{\text{A}}\text{-BaB}_2\text{O}_4$ Phase Obtained by the Polymeric Precursor Method. <i>Journal of Sol-Gel Science and Technology</i> , 2004, 29, 89-96.	1.1	17
70	$\hat{\text{I}}\text{-BaB}_2\text{O}_4$ nanometric powder obtained from the ternary BaO-B ₂ O ₃ -TiO ₂ system using the polymeric precursor method. <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2004, 107, 33-38.	1.7	12
71	Synthesis and characterization of beta barium borate thin films obtained from the BaO-B ₂ O ₃ -TiO ₂ ternary system. <i>Thin Solid Films</i> , 2004, 457, 246-252.	0.8	7
72	Laser-induced generation of micrometer-sized luminescent patterns on rare-earth-doped amorphous films. <i>Journal of Applied Physics</i> , 2004, 96, 5977-5981.	1.1	17

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73	Comprehensive spectroscopic study of nitrogenated carbon nanotubes. Physical Review B, 2004, 69, .	1.1	65
74	Photoluminescence of a-GeN alloys doped with different rare-earth ions. Journal of Non-Crystalline Solids, 2004, 338-340, 469-472.	1.5	5
75	Photon and electron excitation of rare-earth-doped amorphous SiN films. Journal of Non-Crystalline Solids, 2004, 338-340, 473-476.	1.5	10
76	Amorphous hydrogenated carbon films deposited by PECVD: influence of the substrate temperature on film growth and microstructure. Journal of Non-Crystalline Solids, 2004, 338-340, 503-508.	1.5	14
77	Thermal lens and non-linear optical absorption study of a-SiH films. Journal of Non-Crystalline Solids, 2004, 348, 230-234.	1.5	5
78	Neutral dangling bond depletion in amorphous SiN films induced by magnetic rare-earth elements. Solid State Communications, 2003, 128, 47-50.	0.9	1
79	Unusual Interactions Binding Iron Tetrasulfonated Phthalocyanine and Poly(allylamine) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 50	1.2	100
80	X-ray photoelectron spectroscopic study of rare-earth-doped amorphous silicon-nitrogen films. Journal of Applied Physics, 2003, 93, 1948-1953.	1.1	9
81	Photoluminescence quenching in Er-doped compounds. Applied Physics Letters, 2003, 82, 1395-1397.	1.5	50
82	Magnetic properties of amorphous Si films doped with rare-earth elements. Physical Review B, 2003, 68, .	1.1	8
83	Synthesis and spectroscopic investigation of ruby microstructures. Applied Physics Letters, 2003, 83, 2336-2338.	1.5	4
84	Laser Interference Structuring of a-GeN for the Production of Optical Diffraction Gratings. Materials Research Society Symposia Proceedings, 2003, 762, 1741.	0.1	0
85	Laser interference structuring of a-Ge films on GaAs. Journal of Applied Physics, 2002, 91, 2916-2920.	1.1	4
86	Optical diffraction gratings produced by laser interference structuring of amorphous germanium-nitrogen alloys. Applied Physics Letters, 2002, 81, 2731-2733.	1.5	5
87	Structural properties of aluminum-nitrogen films prepared at low temperature. Applied Physics Letters, 2002, 81, 1005-1007.	1.5	24
88	Comment on "O ₂ -assisted pulsed laser deposition of aluminum nitride thin films" [J. Appl. Phys. 87, 1540 (2000)]. Journal of Applied Physics, 2002, 92, 6349-6350.	1.1	1
89	Pulsed laser crystallization and structuring of a-Ge on GaAs. Journal of Non-Crystalline Solids, 2002, 299-302, 137-142.	1.5	2
90	Microscopic mechanisms behind the Al-induced crystallization of a-Ge:H films. Journal of Non-Crystalline Solids, 2002, 299-302, 143-147.	1.5	8

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91	X-ray photoelectron spectroscopy of amorphous AlN alloys prepared by reactive rf sputtering. Journal of Non-Crystalline Solids, 2002, 299-302, 323-327.	1.5	4
92	Red and Green Light Emission From Samarium-Doped Amorphous Aluminum Nitride Films. Advanced Materials, 2002, 14, 1154.	11.1	15
93	Plasma deposition of amorphous carbon films from CH ₄ atmospheres highly diluted in Ar. Thin Solid Films, 2002, 419, 46-53.	0.8	24
94	Magnetic properties of gadolinium-doped amorphous silicon films. Brazilian Journal of Physics, 2002, 32, 409-411.	0.7	4
95	Structural properties of hydrogenated carbon-nitride films produced by ion-beam-assisted evaporation of the molecular precursor C ₄ N ₆ H ₄ . Journal of Applied Physics, 2001, 89, 7852-7859.	1.1	2
96	Visible luminescence from a-SiN films doped with Er and Sm. Applied Physics Letters, 2001, 79, 488-490.	1.5	33
97	Epitaxial pulsed laser crystallization of amorphous germanium on GaAs. Journal of Applied Physics, 2001, 90, 2575-2581.	1.1	9
98	Aluminum-induced crystallization of hydrogenated amorphous germanium thin films. Applied Physics Letters, 2001, 79, 3233-3235.	1.5	39
99	Optoelectronic and structural properties of Er-doped sputter-deposited gallium-arsenic-nitrogen films. Journal of Applied Physics, 2001, 90, 2321-2328.	1.1	3
100	Effects of SiH ₂ Cl ₂ on the Deposition and Properties of Amorphous and Microcrystalline Silicon Fabricated from Very High Frequency Glow Discharges. Journal of the Electrochemical Society, 2000, 147, 1829.	1.3	6
101	Optical study of thermally annealed Er-doped hydrogenated a-Si films. Physical Review B, 2000, 62, 2016-2020.	1.1	16
102	Infrared photoluminescence from Er-doped a-GaAsN alloys. Journal of Non-Crystalline Solids, 2000, 266-269, 854-858.	1.5	1
103	Microcrystalline silicon with high electron field-effect mobility deposited at 230°C. Journal of Non-Crystalline Solids, 2000, 266-269, 1260-1264.	1.5	31
104	Photoelectron spectroscopic study of amorphous GaAsN films. Applied Physics Letters, 2000, 76, 2211-2213.	1.5	10
105	Visible photoluminescence from Er ³⁺ ions in a-SiN alloys. Physical Review B, 1999, 59, 10091-10098.	1.1	20
106	1540 nm light emission from Er-doped amorphous GaAsN films. Applied Physics Letters, 1999, 75, 3279-3281.	1.5	13
107	Optical and structural properties of laser annealed Er-doped amorphous silicon thin films. Journal of Applied Physics, 1999, 86, 701-703.	1.1	15
108	Optical excitation of Er ³⁺ ions in a-SiN alloys. Journal of Applied Physics, 1999, 86, 338-341.	1.1	13

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109	1.54 μm photoluminescence of Er-containing N-doped a-Si:H. Journal of Non-Crystalline Solids, 1998, 227-230, 389-393.	1.5	3
110	Erbium luminescence in a-Si:H. Journal of Non-Crystalline Solids, 1998, 227-230, 399-402.	1.5	7
111	Green photoluminescence from Er-containing amorphous SiN thin films. Applied Physics Letters, 1998, 72, 3127-3129.	1.5	70
112	Optical spectroscopy of Er ³⁺ and Yb ³⁺ co-doped fluorindate glasses. Journal of Applied Physics, 1998, 83, 2256-2260.	1.1	49
113	Nitrogen in germanium. Journal of Applied Physics, 1998, 84, 1-30.	1.1	102
114	Exponential absorption edge and disorder in Column IV amorphous semiconductors. Journal of Applied Physics, 1998, 84, 5184-5190.	1.1	31
115	Infrared spectroscopy of Er-containing amorphous silicon thin films. Applied Physics Letters, 1997, 71, 3679-3681.	1.5	16
116	Erbium luminescence from hydrogenated amorphous silicon-erbium prepared by cosputtering. Applied Physics Letters, 1997, 70, 511-513.	1.5	59
117	Electronic structure of amorphous germanium-nitrogen alloys: a UV photoelectron spectroscopy study. Journal of Non-Crystalline Solids, 1996, 198-200, 136-139.	1.5	2
118	Absorption edge, band tails, and disorder of amorphous semiconductors. Physical Review B, 1996, 53, 3833-3836.	1.1	156
119	XPS study of non-stoichiometric amorphous GeN alloys (a-GeN _x , 0 \leq x \leq 0.3). AIP Conference Proceedings, 1996, , .	0.3	3
120	Valence band structure of amorphous germanium-nitrogen alloys. AIP Conference Proceedings, 1996, , .	0.3	2
121	Bond distribution and structure of amorphous germanium-nitrogen alloys. Physica Status Solidi (B): Basic Research, 1996, 193, 399-410.	0.7	6
122	Study of structural changes in amorphous germanium-nitrogen alloys by optical techniques. Journal of Applied Physics, 1996, 79, 433-438.	1.1	10
123	The Perspectives of Hydrogenated Amorphous Germanium as an Electronic Material. Physica Status Solidi (B): Basic Research, 1995, 192, 241-251.	0.7	5
124	Local electronegativity and chemical shift in Si and Ge based molecules and alloys. Solid State Communications, 1995, 95, 207-210.	0.9	12
125	Study of amorphous germanium-nitrogen alloys through x-ray photoelectron and Auger electron spectroscopies. Applied Physics Letters, 1995, 66, 1258-1260.	1.5	10
126	Photoelectron spectroscopy of shallow core levels using He II(40.8 eV) excitation. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1995, 13, 2278-2280.	0.9	2

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127	Photoconductivity of intrinsic and nitrogen-doped hydrogenated amorphous germanium thin films. Journal of Applied Physics, 1994, 75, 4662-4667.	1.1	12
128	Infrared absorption and composition of amorphous germanium-nitrogen alloys. Journal of Physics Condensed Matter, 1993, 5, A313-A314.	0.7	1
129	On the doping efficiency of nitrogen in hydrogenated amorphous germanium. Applied Physics Letters, 1993, 62, 58-60.	1.5	19
130	Nitrogen in the amorphous-germanium network: From high dilution to the alloy phase. Physical Review B, 1993, 48, 4560-4570.	1.1	34
131	Transport properties of nitrogen-doped hydrogenated amorphous germanium films. Physical Review B, 1992, 46, 2119-2125.	1.1	30
132	Extended x-ray-absorption fine-structure investigation of short-range order in a-Ge _{1-x} Sn _x alloys. Physical Review B, 1992, 46, 6718-6723.	1.1	15