Luiz G Jacobsohn

List of Publications by Year
in descending order

123	2,316	201385	264894
papers	citations	27 h-index	42 g-index

126	126	126	2392
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	X-ray photoelectron spectroscopy investigation of boron carbide films deposited by sputtering. Surface Science, 2004, 572, 418-424.	0.8	155
2	Nanocomposite scintillators for radiation detection and nuclear spectroscopy. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 579, 15-18.	0.7	101
3	Y 2 O 3 : Bi nanophosphor: Solution combustion synthesis, structure, and luminescence. Journal of Applied Physics, 2008, 104, .	1.1	86
4	Systematic development of new thermoluminescence and optically stimulated luminescence materials. Journal of Luminescence, 2013, 133, 203-210.	1.5	86
5	Luminescent properties and reduced dimensional behavior of hydrothermally prepared Y2SiO5:Ce nanophosphors. Applied Physics Letters, 2006, 88, 103108.	1.5	84
6	Structural and mechanical characterization of fluorinated amorphous-carbon films deposited by plasma decomposition of CF[sub 4]â€“CH[sub 4] gas mixtures. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 2230.	0.9	77
7	Effects of Tb doping on the photoluminescence of Y2O3:Tb nanophosphors. Journal of Luminescence, 2007, 126, 838-842.	1.5	72
8	Luminescence properties of MgO produced by solution combustion synthesis and doped with lanthanides and Li. Journal of Luminescence, 2011, 131, 1058-1065.	1.5	64
9	Boron carbide films deposited by a magnetron sputterâ€“ion plating process: film composition and tribological properties. Diamond and Related Materials, 2000, 9, 489-493.	1.8	50
10	Multifunction Gd2O3:Eu nanocrystals produced by solution combustion synthesis: Structural, luminescent, and magnetic characterization. Journal of Applied Physics, 2008, 103, .	1.1	50
11	Film growth and relationship between microstructure and mechanical properties of a-C:H:F films deposited by PECVD. Diamond and Related Materials, 2001, 10, 125-131.	1.8	49
12	Preparation and Characterization of Rare Earth Doped Fluoride Nanoparticles. Materials, 2010, 3, 2053-2068.	1.3	47
13	Nanotribological Properties of Amorphous Carbon-Fluorine Films. Tribology Letters, 2003, 15, 177-180.	1.2	42
14	Synthesis of cobalt nanoparticles by ion implantation and effects of postimplantation annealing. Journal of Applied Physics, 2004, 96, 4444-4450.	1.1	41
15	Fluoride Nanoscintillators. Journal of Nanomaterials, 2011, 2011, 1-6.	1.5	40
16	Nanophosphor aluminum oxide: Luminescence response of a potential dosimetric material. Journal of Luminescence, 2010, 130, 825-831.	1.5	37
17	Luminescence properties of Ce-doped oxyorthosilicate nanophosphors and single crystals. Journal of Luminescence, 2010, 130, 2309-2316.	1.5	37
18	Quantum confinement contribution to porous silicon photoluminescence spectra. Journal of Applied Physics, 2004, 96, 197-203.	1.1	32

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19	Science and Application of Oxyorthosilicate Nanophosphors. IEEE Transactions on Nuclear Science, 2008, 55, 1532-1535.	1.2	32
20	Luminescent properties of nanophosphors. Radiation Measurements, 2007, 42, 675-678.	0.7	30
21	Luminescence of undoped commercial ZnS crystals: A critical review and new evidence on the role of impurities using photoluminescence and electrical transient spectroscopy. Journal of Applied Physics, 2019, 125, .	1.1	29
22	Raman spectroscopy and scanning electron microscopy investigation of annealed amorphous carbonâ€“germanium films deposited by d.c. magnetron sputtering. Diamond and Related Materials, 1999, 8, 668-672.	1.8	28
23	Comparative study of anneal-induced modifications of amorphous carbon films deposited by dc magnetron sputtering at different argon plasma pressures. Diamond and Related Materials, 2000, 9, 680-684.	1.8	28
24	Hard amorphous carbonâ€“fluorine films deposited by PECVD using C2H2â€“CF4 gas mixtures as precursor atmospheres. Diamond and Related Materials, 2003, 12, 2037-2041.	1.8	28
25	EPR and Luminescence of ${hbox {F}}^{+}$ Centers in Bulk and Nanophosphor Oxyorthosilicates. IEEE Transactions on Nuclear Science, 2008, 55, 1118-1122.	1.2	28
26	Luminescence and thermal lensing characterization of singly Eu3+ and Tm3+ doped Y2O3 transparent ceramics. Journal of Luminescence, 2015, 161, 306-312.	1.5	28
27	Progress and challenges towards the development of a new optically stimulated luminescence (OSL) material based on MgB4O7:Ce,Li. Journal of Luminescence, 2019, 212, 242-249.	1.5	28
28	Investigation on the chemical, structural and mechanical properties of carbon-germanium films deposited by dc-magnetron sputtering. Diamond and Related Materials, 1998, 7, 440-443.	1.8	27
29	Sputter-deposited boron carbide films: Structural and mechanical characterization. Surface and Coatings Technology, 2005, 200, 1472-1475.	2.2	27
30	Laser sintering of persistent luminescent CaAl2O4:Eu2+Dy3+ ceramics. Optical Materials, 2017, 68, 2-6.	1.7	27
31	Synthesis, luminescence and scintillation of rare earth doped lanthanum fluoride nanoparticles. Optical Materials, 2010, 33, 136-140.	1.7	26
32	Structural and optical properties of rare earthâ€“doped (Ba0.77Ca0.23)1â^'x(Sm, Nd, Pr, Yb)xTiO3. Journal of Applied Physics, 2011, 109, .	1.1	26
33	Plasma deposition of amorphous carbon films from CH4 atmospheres highly diluted in Ar. Thin Solid Films, 2002, 419, 46-53.	0.8	24
34	High-density scintillating glasses for a proton imaging detector. Optical Materials, 2017, 68, 58-62.	1.7	23
35	Fluorine incorporation into amorphous hydrogenated carbon films deposited by plasma-enhanced chemical vapor deposition: structural modifications investigated by X-ray photoelectron spectrometry and Raman spectroscopy. Diamond and Related Materials, 2001, 10, 910-914.	1.8	22
36	Insights into the Proton Transport Mechanism in TiO₂ Simple Oxides by In Situ Raman Spectroscopy. ACS Applied Materials & Interfaces, 2020, 12, 38012-38018.	4.0	22

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37	Rare earth-doped nanocrystalline MgF2: Synthesis, luminescence and thermoluminescence. Optical Materials, 2013, 35, 2461-2464.	1.7	21
38	Amorphous silicon nitride films of different composition deposited at room temperature by pulsed glow discharge plasma immersion ion implantation and deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 2342-2346.	0.9	20
39	Scintillation, luminescence and optical properties of Ce-Doped borosilicate glasses. Optical Materials, 2020, 104, 109847.	1.7	19
40	The role of trapped Ar atoms in the mechanical properties of boron carbide films deposited by dc-magnetron sputtering. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 1639-1643.	0.9	17
41	Spectral engineering of LaF3:Ce3+ nanoparticles: The role of Ce3+ in surface sites. Journal of Applied Physics, 2012, 111, .	1.1	17
42	Amorphous hydrogenated carbon films deposited by PECVD in methane atmospheres highly diluted in argon: effect of the substrate temperature. Diamond and Related Materials, 2004, 13, 1454-1458.	1.8	16
43	The effects of ion irradiation on porous silicon photoluminescence. Journal of Applied Physics, 2005, 97, 033528.	1.1	16
44	Investigation of Er-doped Sc2O3 transparent ceramics by positron annihilation spectroscopy. Journal of Materials Science, 2015, 50, 3183-3188.	1.7	16
45	Stability of Grafted Polymer Nanoscale Films toward Gamma Irradiation. ACS Applied Materials & Interfaces, 2015, 7, 19455-19465.	4.0	16
46	Role of intericosahedral chains on the hardness of sputtered boron carbide films. Applied Physics Letters, 2004, 84, 4173-4175.	1.5	15
47	A novel method for extracting oscillator strength of select rare-earth ion optical transitions in nanostructured dielectric materials. Solid State Communications, 2006, 139, 497-500.	0.9	15
48	Scintillation of rare earth doped fluoride nanoparticles. Applied Physics Letters, 2011, 99, .	1.5	15
49	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
50	Investigation of the magnetic susceptibility of nanocomposites obtained in zero-field-cooled conditions. Journal of Vacuum Science & Technology B, 2006, 24, 321.	1.3	14
51	Feasibility of using oxyorthosilicates as optically stimulated luminescence detectors. Radiation Measurements, 2010, 45, 681-683.	0.7	14
52	LaF 3 :Ce nanocomposite scintillator for gamma-ray detection. Proceedings of SPIE, 2007, , .	0.8	13
53	Luminescence and scintillation enhancement of Y2O3:Tm transparent ceramic through post-fabrication thermal processing. Journal of Luminescence, 2015, 165, 56-61.	1.5	13
54	Laser sintering and photoluminescence study of Tb-doped yttrium aluminum garnet ceramics. Ceramics International, 2019, 45, 3797-3802.	2.3	13

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55	Deposition of hard amorphous hydrogenated carbon films by radiofrequency parallel-plate hollow-cathode plasmas. Diamond and Related Materials, 2007, 16, 616-622.	1.8	12
56	Permeation and optical properties of YAG:Er3+ fiber membrane scintillators prepared by novel solâ€“gel/electrospinning method. Journal of Sol-Gel Science and Technology, 2017, 83, 35-43.	1.1	12
57	Luminescence investigation of Ce incorporation in garnet-type Li7La3Zr2O12. Optical Materials, 2017, 68, 7-10.	1.7	12
58	Thermoluminescence and radioluminescence of Î±-Al2O3:C,Mg at high temperatures. Journal of Luminescence, 2018, 204, 598-602.	1.5	12
59	Radioluminescence of Lu3Al5O12:Ce single crystal and transparent polycrystalline ceramic at high temperatures. Ceramics International, 2020, 46, 26335-26338.	2.3	12
60	Nanoporosity in plasma deposited amorphous carbon films investigated by small-angle X-ray scattering. Diamond and Related Materials, 2002, 11, 1946-1951.	1.8	11
61	Annealing effects on the photoluminescence yield of Gd2O3:Eu nanoparticles produced by solution combustion synthesis. Radiation Measurements, 2010, 45, 611-614.	0.7	11
62	Investigation of Ce3+ luminescence in borate-rich borosilicate glasses. Journal of Non-Crystalline Solids, 2017, 471, 357-361.	1.5	11
63	Fluorophosphate glasses doped with Eu3+ and Dy3+ for X-ray radiography. Journal of Alloys and Compounds, 2021, 863, 158382.	2.8	11
64	Fluorinated a-C:H films investigated by thermal-induced gas effusion. Diamond and Related Materials, 2002, 11, 1831-1836.	1.8	10
65	Synthesis and luminescent characteristics of one-dimensional europium doped Gd2O3 phosphors. Applied Physics A: Materials Science and Processing, 2010, 100, 1137-1142.	1.1	10
66	The effect of hydrostatic pressure on the combustion synthesis of Y2O3:Bi nanophosphor. Optical Materials, 2010, 32, 652-656.	1.7	10
67	Correlation between thermoluminescence and optically stimulated luminescence of Î±-Al2O3:C,Mg. Journal of Luminescence, 2019, 206, 298-301.	1.5	10
68	Low/intermediate temperature pyrolyzed polysiloxane derived ceramics with increased carbon for electrical applications. Journal of the European Ceramic Society, 2021, 41, 5882-5889.	2.8	10
69	Promising Tb3+-doped gallium tungsten-phosphate glass scintillator: Spectroscopy, energy transfer and UV/X-ray sensing. Journal of Alloys and Compounds, 2022, 904, 164016.	2.8	10
70	Thick Er-doped silica films sintered using CO2 laser for scintillation applications. Optical Materials, 2017, 68, 63-69.	1.7	9
71	Thermoluminescence and radioluminescence of alexandrite mineral. Journal of Luminescence, 2019, 206, 455-461.	1.5	9
72	Characterization of the optically stimulated luminescence (OSL) response of beta-irradiated alexandrite-polymer composites. Journal of Luminescence, 2020, 226, 117479.	1.5	9

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73	Magnesium aluminate spinel for optically stimulated luminescence dosimetry. Journal of Alloys and Compounds, 2021, 880, 160503.	2.8	9
74	Luminescence and structural properties of oxyorthosilicate and Al₂O₃ nanophosphors. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 904-909.	0.8	8
75	Fabrication and characterization of a composite dosimeter based on natural alexandrite. Optical Materials, 2018, 85, 281-286.	1.7	8
76	Thermoluminescence of UV-irradiated Î±-Al2O3:C,Mg. Journal of Luminescence, 2020, 223, 117195.	1.5	8
77	Structural, mechanical, and nanoscale tribological properties of nitrogen-incorporated fluorineâ€“carbon films. Thin Solid Films, 2005, 482, 109-114.	0.8	7
78	The role of the chemical nature of implanted species on quenching and recovery of photoluminescence in ion-irradiated porous silicon. Journal of Applied Physics, 2005, 98, 076108.	1.1	7
79	Positron annihilation spectroscopy of sputtered boron carbide films. Diamond and Related Materials, 2005, 14, 201-205.	1.8	7
80	Optical and structural characterization of nanostructured Y 2 O 3 :Tb. , 2006, , .		7
81	Array of cobalt nanoparticles in silica: Synthesis and effects of thermal annealing. Journal of Applied Physics, 2006, 99, 104307.	1.1	7
82	Direct inkjet printing of miniaturized luminescent YAG:Er3+ from sol-gel precursor. Optical Materials, 2017, 68, 11-18.	1.7	7
83	Amorphous carbon films deposited by direct current-magnetron sputtering: Void distribution investigated by gas effusion and small angle x-ray scattering experiments. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2000, 18, 2344.	0.9	6
84	Ion irradiation of porous silicon: The role of surface states. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 164-166.	0.6	6
85	Magnetic properties of cobalt nanoparticles obtained by ion implantation into amorphous silica. Nuclear Instruments & Methods in Physics Research B, 2007, 257, 447-450.	0.6	6
86	Radioluminescence and thermoluminescence of rare earth doped and co-doped YF3. Radiation Measurements, 2017, 106, 79-83.	0.7	6
87	Luminescence of Ce-doped aluminophosphate glasses. Journal of Materials Science: Materials in Electronics, 2019, 30, 16774-16780.	1.1	6
88	Incorporation of fluorine in hydrogenated silicon carbide films deposited by pulsed glow discharge. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 1223-1228.	0.9	5
89	Effects of thermal annealing on the structural, mechanical, and tribological properties of hard fluorinated carbon films deposited by plasma enhanced chemical vapor deposition. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2004, 22, 2321-2328.	0.9	5
90	Effects of thermal annealing and ageing on porous silicon photoluminescence. Philosophical Magazine, 2005, 85, 2611-2620.	0.7	5

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91	Effects of ion irradiation on cobalt nanocomposite. Nuclear Instruments & Methods in Physics Research B, 2006, 250, 201-205.	0.6	5
92	Synthesis, structure, and scintillation of Ce-doped gadolinium oxyorthosilicate nanoparticles prepared by solution combustion synthesis. Journal of Applied Physics, 2011, 110, .	1.1	5
93	Fabrication and characterization of ZnS:Ag-based ultrafiltration membrane scintillator. Optical Materials, 2019, 88, 424-428.	1.7	5
94	Effects of sintering temperature on the microstructure and luminescence of LuAG:Pr ceramics. Radiation Measurements, 2019, 122, 34-39.	0.7	5
95	Surface modifications in diamond-like carbon films submitted to low-energy nitrogen ion bombardment. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 699-704.	0.6	4
96	Formation of silicon nanocrystals in SiO[sub 2] by oxireduction reaction induced by impurity implantation and annealing. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 1669.	1.6	4
97	Effects of Sintering Temperature on Openâ€Volume Defects and Thermoluminescence of Yttria and Lutetia Ceramics. Journal of the American Ceramic Society, 2016, 99, 1449-1454.	1.9	4
98	Luminescence of undoped and Ce-doped hexagonal BiPO4. Journal of Luminescence, 2020, 228, 117626.	1.5	4
99	Luminescence of ZnS:Ag scintillator prepared by the hydrothermal reaction method: Effects of reaction temperature and time, Ag concentration, and co-doping with Al. Optical Materials, 2020, 107, 110015.	1.7	4
100	Comparative investigation of transparent polycrystalline ceramic and single crystal Lu3Al5O12:Ce scintillators: Microstructural and thermoluminescence analyses. Journal of Luminescence, 2021, 238, 118229.	1.5	4
101	Luminescence and Scintillation in the Niobium Doped Oxyfluoride Rb4Ge5O9F6:Nb. Inorganics, 2022, 10, 83.	1.2	4
102	Investigation on Dissipated Energy Distribution in Low Energy Electron Irradiated Buried Layer in LiF and NaF Films. Materials Science Forum, 1997, 239-241, 725-728.	0.3	3
103	Germanium implantation into amorphous carbon films. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 442-447.	0.6	3
104	Chemical bonding investigation of amorphous hydrogenated Siâ€“N alloys deposited by plasma immersion ion processing. Thin Solid Films, 2006, 494, 219-222.	0.8	3
105	Effects of ion beam irradiation on self-trapped defects in single-crystal Lu2SiO5. Journal of Luminescence, 2007, 124, 5-9.	1.5	3
106	Incorporation of Pr into LuAG ceramics. Optical Materials, 2017, 68, 53-57.	1.7	3
107	Synthesis of Hydrated Ternary Lanthanide-Containing Chlorides Exhibiting X-ray Scintillation and Luminescence. Inorganic Chemistry, 2021, 60, 15371-15382.	1.9	3
108	Luminescence and Scintillation of [Nb₂O₂F₉]^{3â€“}-Dimer-Containing Oxideâ€“Fluorides: Cs₁₀(Nb₂O₂F₉)₃F, Cs_{9.4}K_{0.6}(Nb₂O₂F₉)₃F, and Cs₁₀(Nb₂O₂F₉)₃Cl. Inorganic Chemistry, 2022, 61, 3256-3262.	1.9	3

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109	The kinetic parameters of the main thermoluminescence glow peak of Al2O3:C,Mg: A critical evaluation of different analytical methods. Journal of Luminescence, 2022, 247, 118848.	1.5	3
110	Microwave plasma enhanced chemical vapor deposition of diamond in silicon pores. Diamond and Related Materials, 2005, 14, 220-225.	1.8	2
111	Structural and optical characterization of fluorinated hydrogenated silicon carbide films deposited by pulsed glow discharge. Surface and Coatings Technology, 2006, 200, 6079-6082.	2.2	2
112	The central role of oxygen on H+-irradiated Lu2SiO5 luminescence. Journal of Luminescence, 2007, 124, 173-177.	1.5	2
113	Electron energy-loss spectroscopy investigation of dopant homogeneity in Tb-doped Y2O3 nanoparticles prepared by solution combustion synthesis. Optical Materials, 2012, 34, 671-674.	1.7	2
114	A glass neutron detector with machine learning capabilities. Journal of Instrumentation, 2019, 14, P06013-P06013.	0.5	2
115	OSL response of Î±-Al2O3:C, Mg exposed to beta and UVC radiation: A comparative investigation. Journal of Luminescence, 2021, 236, 118058.	1.5	2
116	Synthesis of metallic nanocrystals with size and depth control: A case study. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 1470.	1.6	1
117	Development and characterization of nanocomposite scintillators for gamma-ray detection. , 2008, , .		1
118	Radioluminescence Investigation of Ion-Irradiated Phosphors. , 2009, , .		1
119	Voids Investigation of Amorphous Carbon Films Deposited by DC-Magnetron Sputtering: A Small Angle x-ray Scattering and Gas Thermal Effusion Study. Materials Research Society Symposia Proceedings, 1999, 593, 383.	0.1	0
120	Scintillation of nanoparticles: Case study of rare earth doped fluorides. , 2010, , .		0
121	Investigation of Pr incorporation in LuAG powders and ceramics. , 2014, , .		0
122	The effects of thermal processing on the luminescence of Y2O3:Tm transparent ceramic. , 2014, , .		0
123	(Invited) Laser Sintering of Polycrystalline Ceramic Scintillators: The Case Study of YAG:Ce. ECS Meeting Abstracts, 2017, , .	0.0	0