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	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
2	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
3	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
4	Luminescence and Scintillation in the Niobium Doped Oxyfluoride Rb4Ge5O9F6:Nb. Inorganics, 2022, 10, 83.	1.2	4
5	Fluorophosphate glasses doped with Eu3+ and Dy3+ for X-ray radiography. Journal of Alloys and Compounds, 2021, 863, 158382.	2.8	11
6	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
7	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
8	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
9	Magnesium aluminate spinel for optically stimulated luminescence dosimetry. Journal of Alloys and Compounds, 2021, 880, 160503.	2.8	9
10	Synthesis of Hydrated Ternary Lanthanide-Containing Chlorides Exhibiting X-ray Scintillation and Luminescence. Inorganic Chemistry, 2021, 60, 15371-15382.	1.9	3
11	Radioluminescence of Lu3Al5O12:Ce single crystal and transparent polycrystalline ceramic at high temperatures. Ceramics International, 2020, 46, 26335-26338.	2.3	12
12	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
13	Luminescence of undoped and Ce-doped hexagonal BiPO4. Journal of Luminescence, 2020, 228, 117626.	1.5	4
14	Thermoluminescence of UV-irradiated Î±-Al2O3:C,Mg. Journal of Luminescence, 2020, 223, 117195.	1.5	8
15	Characterization of the optically stimulated luminescence (OSL) response of beta-irradiated alexandrite-polymer composites. Journal of Luminescence, 2020, 226, 117479.	1.5	9
16	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
17	Scintillation, luminescence and optical properties of Ce-Doped borosilicate glasses. Optical Materials, 2020, 104, 109847.	1.7	19
18	A glass neutron detector with machine learning capabilities. Journal of Instrumentation, 2019, 14, P06013-P06013.	0.5	2

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19	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
20	Luminescence of Ce-doped aluminophosphate glasses. Journal of Materials Science: Materials in Electronics, 2019, 30, 16774-16780.	1.1	6
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	Fabrication and characterization of ZnS:Ag-based ultrafiltration membrane scintillator. Optical Materials, 2019, 88, 424-428.	1.7	5
23	Laser sintering and photoluminescence study of Tb-doped yttrium aluminum garnet ceramics. Ceramics International, 2019, 45, 3797-3802.	2.3	13
24	Effects of sintering temperature on the microstructure and luminescence of LuAG:Pr ceramics. Radiation Measurements, 2019, 122, 34-39.	0.7	5
25	Correlation between thermoluminescence and optically stimulated luminescence of Î±-Al2O3:C,Mg. Journal of Luminescence, 2019, 206, 298-301.	1.5	10
26	Thermoluminescence and radioluminescence of alexandrite mineral. Journal of Luminescence, 2019, 206, 455-461.	1.5	9
27	Thermoluminescence and radioluminescence of Î±-Al2O3:C,Mg at high temperatures. Journal of Luminescence, 2018, 204, 598-602.	1.5	12
28	Fabrication and characterization of a composite dosimeter based on natural alexandrite. Optical Materials, 2018, 85, 281-286.	1.7	8
29	Direct inkjet printing of miniaturized luminescent YAG:Er3+ from sol-gel precursor. Optical Materials, 2017, 68, 11-18.	1.7	7
30	Thick Er-doped silica films sintered using CO2 laser for scintillation applications. Optical Materials, 2017, 68, 63-69.	1.7	9
31	Radioluminescence and thermoluminescence of rare earth doped and co-doped YF3. Radiation Measurements, 2017, 106, 79-83.	0.7	6
32	Investigation of Ce3+ luminescence in borate-rich borosilicate glasses. Journal of Non-Crystalline Solids, 2017, 471, 357-361.	1.5	11
33	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
34	High-density scintillating glasses for a proton imaging detector. Optical Materials, 2017, 68, 58-62.	1.7	23
35	Laser sintering of persistent luminescent CaAl2O4:Eu2+Dy3+ ceramics. Optical Materials, 2017, 68, 2-6.	1.7	27
36	Incorporation of Pr into LuAG ceramics. Optical Materials, 2017, 68, 53-57.	1.7	3

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37	Luminescence investigation of Ce incorporation in garnet-type Li7La3Zr2O12. Optical Materials, 2017, 68, 7-10.	1.7	12
38	(Invited) Laser Sintering of Polycrystalline Ceramic Scintillators: The Case Study of YAG:Ce. ECS Meeting Abstracts, 2017, , .	0.0	0
39	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
40	Investigation of Er-doped Sc2O3 transparent ceramics by positron annihilation spectroscopy. Journal of Materials Science, 2015, 50, 3183-3188.	1.7	16
41	Luminescence and thermal lensing characterization of singly Eu3+ and Tm3+ doped Y2O3 transparent ceramics. Journal of Luminescence, 2015, 161, 306-312.	1.5	28
42	Luminescence and scintillation enhancement of Y2O3:Tm transparent ceramic through post-fabrication thermal processing. Journal of Luminescence, 2015, 165, 56-61.	1.5	13
43	Stability of Grafted Polymer Nanoscale Films toward Gamma Irradiation. ACS Applied Materials & Interfaces, 2015, 7, 19455-19465.	4.0	16
44	Investigation of Pr incorporation in LuAG powders and ceramics. , 2014, , .		0
45	The effects of thermal processing on the luminescence of Y2O3:Tm transparent ceramic. , 2014, , .		0
46	Systematic development of new thermoluminescence and optically stimulated luminescence materials. Journal of Luminescence, 2013, 133, 203-210.	1.5	86
47	Rare earth-doped nanocrystalline MgF2: Synthesis, luminescence and thermoluminescence. Optical Materials, 2013, 35, 2461-2464.	1.7	21
48	Spectral engineering of LaF3:Ce3+ nanoparticles: The role of Ce3+ in surface sites. Journal of Applied Physics, 2012, 111, .	1.1	17
49	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
50	Synthesis, structure, and scintillation of Ce-doped gadolinium oxyorthosilicate nanoparticles prepared by solution combustion synthesis. Journal of Applied Physics, 2011, 110, .	1.1	5
51	Structural and optical properties of rare earthâ€“doped (Ba0.77Ca0.23)1âˆ’x(Sm, Nd, Pr, Yb)xTiO3. Journal of Applied Physics, 2011, 109, .	1.1	26
52	Fluoride Nanoscintillators. Journal of Nanomaterials, 2011, 2011, 1-6.	1.5	40
53	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
54	Scintillation of rare earth doped fluoride nanoparticles. Applied Physics Letters, 2011, 99, .	1.5	15

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55	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
56	Feasibility of using oxyorthosilicates as optically stimulated luminescence detectors. Radiation Measurements, 2010, 45, 681-683.	0.7	14
57	Annealing effects on the photoluminescence yield of Gd2O3:Eu nanoparticles produced by solution combustion synthesis. Radiation Measurements, 2010, 45, 611-614.	0.7	11
58	Nanophosphor aluminum oxide: Luminescence response of a potential dosimetric material. Journal of Luminescence, 2010, 130, 825-831.	1.5	37
59	Luminescence properties of Ce-doped oxyorthosilicate nanophosphors and single crystals. Journal of Luminescence, 2010, 130, 2309-2316.	1.5	37
60	The effect of hydrostatic pressure on the combustion synthesis of Y2O3:Bi nanophosphor. Optical Materials, 2010, 32, 652-656.	1.7	10
61	Synthesis, luminescence and scintillation of rare earth doped lanthanum fluoride nanoparticles. Optical Materials, 2010, 33, 136-140.	1.7	26
62	Scintillation of nanoparticles: Case study of rare earth doped fluorides. , 2010, , .		0
63	Preparation and Characterization of Rare Earth Doped Fluoride Nanoparticles. Materials, 2010, 3, 2053-2068.	1.3	47
64	Luminescence and structural properties of oxyorthosilicate and Al₂O₃ nanophosphors. Physica Status Solidi (A) Applications and Materials Science, 2009, 206, 904-909.	0.8	8
65	Radioluminescence Investigation of Ion-Irradiated Phosphors. , 2009, , .		1
66	Multifunction Gd2O3:Eu nanocrystals produced by solution combustion synthesis: Structural, luminescent, and magnetic characterization. Journal of Applied Physics, 2008, 103, .	1.1	50
67	Y 2 O 3 : Bi nanophosphor: Solution combustion synthesis, structure, and luminescence. Journal of Applied Physics, 2008, 104, .	1.1	86
68	Science and Application of Oxyorthosilicate Nanophosphors. IEEE Transactions on Nuclear Science, 2008, 55, 1532-1535.	1.2	32
69	Development and characterization of nanocomposite scintillators for gamma-ray detection. , 2008, , .		1
70	EPR and Luminescence of ${hbox {F}}^{+}$ Centers in Bulk and Nanophosphor Oxyorthosilicates. IEEE Transactions on Nuclear Science, 2008, 55, 1118-1122.	1.2	28
71	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
72	LaF 3 :Ce nanocomposite scintillator for gamma-ray detection. Proceedings of SPIE, 2007, , .	0.8	13

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73	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
74	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
75	Effects of ion beam irradiation on self-trapped defects in single-crystal Lu2SiO5. Journal of Luminescence, 2007, 124, 5-9.	1.5	3
76	The central role of oxygen on H+-irradiated Lu2SiO5 luminescence. Journal of Luminescence, 2007, 124, 173-177.	1.5	2
77	Effects of Tb doping on the photoluminescence of Y2O3:Tb nanophosphors. Journal of Luminescence, 2007, 126, 838-842.	1.5	72
78	Luminescent properties of nanophosphors. Radiation Measurements, 2007, 42, 675-678.	0.7	30
79	Optical and structural characterization of nanostructured Y 2 O 3 :Tb. , 2006, , .		7
80	Luminescent properties and reduced dimensional behavior of hydrothermally prepared Y2SiO5:Ce nanophosphors. Applied Physics Letters, 2006, 88, 103108.	1.5	84
81	Ion irradiation of porous silicon: The role of surface states. Nuclear Instruments & Methods in Physics Research B, 2006, 242, 164-166.	0.6	6
82	Effects of ion irradiation on cobalt nanocomposite. Nuclear Instruments & Methods in Physics Research B, 2006, 250, 201-205.	0.6	5
83	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
84	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
85	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
86	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
87	Array of cobalt nanoparticles in silica: Synthesis and effects of thermal annealing. Journal of Applied Physics, 2006, 99, 104307.	1.1	7
88	Structural, mechanical, and nanoscale tribological properties of nitrogen-incorporated fluorineâ€“carbon films. Thin Solid Films, 2005, 482, 109-114.	0.8	7
89	Sputter-deposited boron carbide films: Structural and mechanical characterization. Surface and Coatings Technology, 2005, 200, 1472-1475.	2.2	27
90	The effects of ion irradiation on porous silicon photoluminescence. Journal of Applied Physics, 2005, 97, 033528.	1.1	16

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91	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
92	Effects of thermal annealing and ageing on porous silicon photoluminescence. Philosophical Magazine, 2005, 85, 2611-2620.	0.7	5
93	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
94	Positron annihilation spectroscopy of sputtered boron carbide films. Diamond and Related Materials, 2005, 14, 201-205.	1.8	7
95	Microwave plasma enhanced chemical vapor deposition of diamond in silicon pores. Diamond and Related Materials, 2005, 14, 220-225.	1.8	2
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	Quantum confinement contribution to porous silicon photoluminescence spectra. Journal of Applied Physics, 2004, 96, 197-203.	1.1	32
98	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
99	Role of intericosahedral chains on the hardness of sputtered boron carbide films. Applied Physics Letters, 2004, 84, 4173-4175.	1.5	15
100	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
101	X-ray photoelectron spectroscopy investigation of boron carbide films deposited by sputtering. Surface Science, 2004, 572, 418-424.	0.8	155
102	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
103	Synthesis of cobalt nanoparticles by ion implantation and effects of postimplantation annealing. Journal of Applied Physics, 2004, 96, 4444-4450.	1.1	41
104	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
105	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
106	Nanotribological Properties of Amorphous Carbon-Fluorine Films. Tribology Letters, 2003, 15, 177-180.	1.2	42
107	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
108	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

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109	Fluorinated a-C:H films investigated by thermal-induced gas effusion. Diamond and Related Materials, 2002, 11, 1831-1836.	1.8	10
110	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
111	Plasma deposition of amorphous carbon films from CH4 atmospheres highly diluted in Ar. Thin Solid Films, 2002, 419, 46-53.	0.8	24
112	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
113	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
114	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
115	Germanium implantation into amorphous carbon films. Nuclear Instruments & Methods in Physics Research B, 2001, 175-177, 442-447.	0.6	3
116	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
117	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
118	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
119	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
120	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
121	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
122	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
123	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