Julien C Cardin

List of Publications by Year
in descending order

77 papers	946 citations	430754 18 h-index	501076 28 g-index
77 all docs	77 docs citations	77 times ranked	1285 citing authors

#	Article	IF	Citations
1	Structural and optical characterization of pure Si-rich nitride thin films. Nanoscale Research Letters, 2013, 8, 31.	3.1	83
2	Photochemical Preparation of Silver Nanoparticles Supported on Zeolite Crystals. Langmuir, 2014, 30, 6250-6256.	1.6	78
3	Growth and characterization of gallium oxide thin films by radiofrequency magnetron sputtering. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 1943-1946.	0.8	54
4	On the nature of the stretched exponential photoluminescence decay for silicon nanocrystals. Nanoscale Research Letters, 2011, 6, 106.	3.1	49
5	Determination of refractive index, thickness, and the optical losses of thin films from prism-film coupling measurements. Applied Optics, 2008, 47, 894.	2.1	43
6	Highly Efficient Infrared Quantum Cutting in Tb³⁺â^'Yb³⁺ Codoped Silicon Oxynitride for Solar Cell Applications. Advanced Optical Materials, 2013, 1, 855-862.	3.6	43
7	Sodalite cages of EMT zeolite confined neutral molecular-like silver clusters. Microporous and Mesoporous Materials, 2017, 244, 74-82.	2.2	32
8	Annealing effects on the photoluminescence of terbium doped zinc oxide films. Thin Solid Films, 2014, 553, 52-57.	0.8	31
9	SiNx:Tb3+â€“Yb3+, an efficient down-conversion layer compatible with a silicon solar cell process. Solar Energy Materials and Solar Cells, 2016, 145, 84-92.	3.0	31
10	Thermal stability of high-kSi-rich HfO₂layers grown by RF magnetron sputtering. Nanotechnology, 2010, 21, 285707.	1.3	30
11	Effect of annealing and Nd concentration on the photoluminescence of Nd3+ ions coupled with silicon nanoparticles. Journal of Applied Physics, 2010, 108, 113114.	1.1	27
12	Towards an optimum coupling between Er ions and Si-based sensitizers for integrated active photonics. Journal of Applied Physics, 2009, 106, .	1.1	26
13	Sensitization of Er³⁺ Infrared Photoluminescence Embedded in a Hybrid Organicâ€inorganic Copolymer containing Octahedral Molybdenum Clusters. Advanced Functional Materials, 2013, 23, 4821-4825.	7.8	24
14	Correlation between matrix structural order and compressive stress exerted on silicon nanocrystals embedded in silicon-rich silicon oxide. Nanoscale Research Letters, 2013, 8, 40.	3.1	22
15	High Energy Excitation Transfer from Silicon Nanocrystals to Neodymium Ions in Silicon-Rich Oxide Film. Electrochemical and Solid-State Letters, 2010, 13, K26.	2.2	21
16	Efficient energy transfer from Si-nanoclusters to Er ions in silica induced by substrate heating during deposition. Journal of Applied Physics, 2010, 108, .	1.1	19
17	Structural and emission properties of Tb³⁺-doped nitrogen-rich silicon oxynitride films. Nanotechnology, 2017, 28, 115710.	1.3	19
18	Optical properties of PZT thin films deposited on a ZnO buffer layer. Optical Materials, 2007, 29, 1871-1877.	1.7	18

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19	Copper-Fluorenephosphonate CuÂ{PO3-C13H9)Â·H2O: A Layered Antiferromagnetic Hybrid. European Journal of Inorganic Chemistry, 2016, 2016, 266-271.	1.0	18
20	Optically active Er3+ ions in SiO2 codoped with Si nanoclusters. Journal of Applied Physics, 2009, 106, 093107.	1.1	16
21	Localized Plasmonic Resonances of Prolate Nanoparticles in a Symmetric Environment: Experimental Verification of the Accuracy of Numerical and Analytical Models. Physical Review Applied, 2018, 9, .	1.5	14
22	The nitrogen concentration effect on Ce doped SiO_xN_y emission: towards optimized Ce³⁺ for LED applications. Nanoscale, 2018, 10, 3823-3837.	2.8	13
23	Optical characterization of PZT thin films for waveguide applications. Journal of the European Ceramic Society, 2005, 25, 2913-2916.	2.8	12
24	Cathodoluminescence andÂphotoluminescence comparative study of erbium-doped silicon-rich silicon oxide. Journal of Nanophotonics, 2011, 5, 051504.	0.4	12
25	Effect of the Si excess on the structure and the optical properties of Nd-doped Si-rich silicon oxide. Journal of Luminescence, 2012, 132, 3118-3121.	1.5	12
26	SiO x /SiN y multilayers for photovoltaic and photonic applications. Nanoscale Research Letters, 2012, 7, 124.	3.1	12
27	Monolithic crystalline silicon solar cells with SiN layers doped with Tb3+ and Yb3+ rare-earth ions. Journal of Rare Earths, 2019, 37, 515-519.	2.5	12
28	Effect of the Nd content on the structural and photoluminescence properties of silicon-rich silicon dioxide thin films. Nanoscale Research Letters, 2011, 6, 161.	3.1	11
29	Down-shifting Si-based layer for Si solar applications. Solar Energy Materials and Solar Cells, 2017, 169, 132-144.	3.0	11
30	Excimer and Red Luminescence Due to Aggregationâ€Induced Emission in Naphthalene Based Zinc Phosphonate. European Journal of Inorganic Chemistry, 2018, 2018, 3095-3103.	1.0	10
31	Influence of neodymium concentration on excitation and emission properties of Nd doped gallium oxide nanocrystalline films. Journal of Applied Physics, 2010, 108, 063535.	1.1	8
32	Theoretical investigation of the more suitable rare earth to achieve high gain in waveguide based on silica containing silicon nanograins doped with either Nd^3+ or Er^3+ ions. Optics Express, 2014, 22, 12296.	1.7	8
33	Highly Transparent and Conductive Indiumâ€Free Vanadates Crystallized at Reduced Temperature on Glass Using a 2D Transparent Nanosheet Seed Layer. Advanced Functional Materials, 2022, 32, 2108047.	7.8	8
34	Impact of the annealing temperature on the optical performances of Er-doped Si-rich silica systems. IOP Conference Series: Materials Science and Engineering, 2009, 6, 012021.	0.3	7
35	Long lifetime and efficient emission from Er3+ ions coupled to Si nanoclusters in Si-rich SiO2 layers. Journal of Luminescence, 2009, 129, 1519-1523.	1.5	7
36	First down converter multilayers integration in an industrial <scp>Si</scp> solar cell process. Progress in Photovoltaics: Research and Applications, 2019, 27, 152-162.	4.4	7

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37	Optical and structural properties of Mn-doped magnesium titanates fabricated with excess MgO. Materials Today Communications, 2021, 27, 102373.	0.9	7
38	Growth and study of Tb3+ doped Nb2O5 thin films by radiofrequency magnetron sputtering: Photoluminescence properties. Applied Surface Science, 2022, 597, 153711.	3.1	7
39	Wet Chemical Etching of Pb(ZrTi)O 3 Ferroelectric Thin Films for Optical Waveguide Application. Ferroelectrics, 2003, 288, 303-313.	0.3	6
40	A method to retrieve optical and geometrical characteristics of three layer waveguides from m-lines measurements. Journal of Applied Physics, 2008, 103, 063110.	1.1	6
41	Towards an enhanced coupling between the Er ions and Si nanoclusters. Physica E: Low-Dimensional Systems and Nanostructures, 2009, 41, 1048-1051.	1.3	6
42	Î²-Amyloid peptide interactions with biomimetic membranes: A multiparametric characterization. International Journal of Biological Macromolecules, 2021, 181, 769-777.	3.6	6
43	Structural and optical characteristics of Er-doped SRSO layers deposited by the confocal sputtering technique. Physica E: Low-Dimensional Systems and Nanostructures, 2009, 41, 1067-1070.	1.3	5
44	New Si-based multilayers for solar cell applications. Nanoscale Research Letters, 2011, 6, 156.	3.1	5
45	Evidence of two sensitization processes of Nd3+ ions in Nd-doped SiOx films. Journal of Applied Physics, 2013, 114, 033103.	1.1	5
46	Modeling of the electromagnetic field and level populations in a waveguide amplifier: a multi-scale time problem. Optics Express, 2013, 21, 24171.	1.7	4
47	Fluorenyl Zinc Phosphonate Zn(H2O)PO3-C13H9Â·H2O: Hybrid Columnar Structure with Strong C-HÂ·Â·Â·Ï€ Interactions. Zeitschrift Fur Anorganische Und Allgemeine Chemie, 2017, 643, 250-255.	0.6	4
48	Thermally induced evolution of optical and structural properties of Er2O3 films grown on Si substrates by thermal atomic layer deposition. Materials Letters, 2020, 263, 127216.	1.3	4
49	The role of excess MgO in the intensity increase of red emission of Mn4+-activated Mg2TiO4 phosphors. Journal of Materials Science: Materials in Electronics, 2020, 31, 7555-7564.	1.1	4
50	Widely tunable directional coupler filters with 1D photonic crystal. , 0, , .		3
51	Optical Characterisation of a Three Layer Waveguide Structure by m-Lines Spectroscopy. Ferroelectrics, 2007, 352, 50-60.	0.3	3
52	Influence of rapid thermal annealing temperature on the photoluminescence of Tb ions embedded in silicon nitride films. Thin Solid Films, 2019, 675, 5-10.	0.8	3
53	M(H₂O)(PO₃C₁₀H₆OH)Â·(H₂O)_{0.5} (M = Co, Mn, Zn, Cu): a new series of layered metallophosphonate compounds obtained from 6-hydroxy-2-naphthylphosphonic acid. Dalton Transactions, 2020, 49, 3877-3891.	1.6	3
54	Enhanced fraction of coupled Er in silicon-rich silicon oxide layers grown by magnetron co-sputtering. Journal of Luminescence, 2009, 129, 1886-1889.	1.5	2

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55	Electromagnetic modeling of waveguide amplifier based on Nd3+ Si-rich SiO2 layers by means of the ADE-FDTD method. Nanoscale Research Letters, 2011, 6, 278.	3.1	2
56	Texture effect of neodymium doped gallium oxide thin films on their optical properties. Optical Materials, 2011, 33, 1131-1134.	1.7	2
57	Optical and Structural Properties of Mn⁴⁺â€Activated (Zn_xMg_{1â€“x})₂TiO₄ Red Phosphors. Physica Status Solidi (A) Applications and Materials Science, 2022, 219, 2100509.	0.8	2
58	<title>Pb(Zr,Ti)O<formula><inf><roman>3</roman></inf></formula> ceramic thick films for optical device applications</title>. , 2003, , .		1
59	<title>Synthesis and characterization of polymers for nonlinear optical applications</title>. , 2003, , .		1
60	Optical and structural properties of SiO 2 co-doped with Si-nc and Er3+ions. , 2010, , .		1
61	Enhancing The Optical And Electrical Properties of Si-based Nanostructured Materials. Energy Procedia, 2011, 10, 161-166.	1.8	1
62	Effects of the thickness on the properties of erbium-doped silicon-rich silicon oxide thin films. Physica Status Solidi C: Current Topics in Solid State Physics, 2011, 8, 1027-1032.	0.8	1
63	Effect of annealing treatment on Nd-SiO x thin film properties. Proceedings of SPIE, 2012, , .	0.8	1
64	Enhancing Blue Emission in Ce Doped Silicon Oxynitrides Based Electroluminescent Devices. ECS Journal of Solid State Science and Technology, 2019, 8, R157-R163.	0.9	1
65	Correlation between composition, microstructure, and emission properties in Nd-doped Si-rich Si oxynitride films: investigation into the nature of the sensitizer. Nanotechnology, 2019, 30, 045702.	1.3	1
66	Silver quasi-nanoparticles: bridging the gap between molecule-like clusters and plasmonic nanoparticles. Materials Advances, 2021, 2, 5453-5464.	2.6	1
67	Photoluminescence Activity of Neodymium-Doped Gallium Oxide Thin Films. Materials Research Society Symposia Proceedings, 2008, 1111, 1.	0.1	0
68	Near-field optical imaging of plasmonic waveguides using heterodyne optical feedback on Er doped DFB fibre laser. , 2011, , .		0
69	Optical and Electrical Properties of Si-Based Multilayer Structures for Solar Cell Applications. ECS Transactions, 2011, 35, 273-285.	0.3	0
70	Modeling of optical amplifier waveguide based on silicon nanostructures and rare earth ions doped silica matrix gain media by a finite-difference time-domain method: comparison of achievable gain with Er³⁺or Nd³⁺ions dopants. Proceedings of SPIE, 2015, , .	0.8	0
71	Frequency Conversion Layers for Si Solar Cell Efficiency Improvement. Lecture Notes in Electrical Engineering, 2017, , 85-91.	0.3	0
72	Impact of the Growth Mechanisms on Si and Glass Substrates on the Structural, Optical and Electrical Properties of Anatase TiO2 Thin Films Synthetized By ALD Technique (Oral). ECS Meeting Abstracts, 2021, MA2021-01, 2092-2092.	0.0	0

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73	Near-field optical imaging of plasmonic devices using heterodyne optical feedback on Er doped DFB fiber laser. , 2011, , .		0
74	Rare Earth-Doped Si-Based Thin Films. ECS Meeting Abstracts, 2014, , .	0.0	0
75	(Invited) Luminescence of Rare Earth Doped Si Based Nanofilms for LED and Photovoltaic Applications. ECS Meeting Abstracts, 2020, MA2020-01, 1064-1064.	0.0	0
76	(Invited) Rare Earth Doped Layers Fabricated By Atomic Layer Deposition. ECS Meeting Abstracts, 2020, MA2020-01, 1066-1066.	0.0	0
77	Surface-Enhanced Luminescence of Cr³⁺â€'doped ZnAl₂O₄ and MgAl₂O₄ using Ag@SiO₂ and Au@SiO₂ core-shell nanoparticles. Materials Advances, 0, , .	2.6	0