Bernard Gelloz

List of Publications by Year
in descending order

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57	1,157	430874	395702
papers	citations	18 h-index	33 g-index

58	58	58	1010
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Electroluminescence with high and stable quantum efficiency and low threshold voltage from anodically oxidized thin porous silicon diode. Journal of Applied Physics, 2000, 88, 4319.	2.5	144
2	Mg doping induced high structural quality of solâ€“gel ZnO nanocrystals: Application in photocatalysis. Applied Surface Science, 2015, 349, 855-863.	6.1	104
3	Silver nanoparticles enhanced luminescence properties of Er3+ doped tellurite glasses: Effect of heat treatment. Journal of Applied Physics, 2014, 116, .	2.5	96
4	Mechanism of a remarkable enhancement in the light emission from nanocrystalline porous silicon annealed in high-pressure water vapor. Journal of Applied Physics, 2005, 98, 123509.	2.5	77
5	Surface plasmon resonance induced Er3+ photoluminescence enhancement in tellurite glass. Journal of Applied Physics, 2015, 117, .	2.5	61
6	Synthesis and Luminescence Properties of (N-Doped) ZnO Nanostructures from a Dimethylformamide Aqueous Solution. Journal of Physical Chemistry C, 2009, 113, 13643-13650.	3.1	50
7	Effect of high Fe doping on Raman modes and optical properties of hydrothermally prepared SnO 2 nanoparticles. Materials Science in Semiconductor Processing, 2018, 77, 31-39.	4.0	44
8	Iron addition induced tunable band gap and tetravalent Fe ion in hydrothermally prepared SnO2 nanocrystals: Application in photocatalysis. Materials Research Bulletin, 2016, 83, 481-490.	5.2	37
9	Operation of nanosilicon ballistic electron emitter in liquid water and hydrogen generation effect. Applied Physics Letters, 2007, 90, 163505.	3.3	34
10	Ballistic electron emission from quantum-sized nanosilicon diode and its applications. Current Opinion in Solid State and Materials Science, 2011, 15, 183-187.	11.5	32
11	Investigation of spectroscopic properties of Sm-Eu codoped phosphate glasses. Displays, 2017, 48, 61-67.	3.7	32
12	Long-lived blue phosphorescence of oxidized and annealed nanocrystalline silicon. Applied Physics Letters, 2009, 94, .	3.3	29
13	Nano-silver enhanced luminescence of Er³⁺ ions embedded in tellurite glass, vitro-ceramic and ceramic: impact of heat treatment. RSC Advances, 2016, 6, 31136-31145.	3.6	29
14	Specific Blue Light Emission from Nanocrystalline Porous Si Treated by High-Pressure Water Vapor Annealing. Japanese Journal of Applied Physics, 2009, 48, 04C119.	1.5	27
15	Enhancement of the intensity ratio of ultraviolet to visible luminescence with increased excitation in ZnO nanoparticles deposited on porous anodic alumina. Journal Physics D: Applied Physics, 2013, 46, 505104.	2.8	24
16	Si/SiO2 Core/Shell Luminescent Silicon Nanocrystals and Porous Silicon Powders With High Quantum Yield, Long Lifetime, and Good Stability. Frontiers in Physics, 2019, 7, .	2.1	22
17	Improvement of spectroscopic properties and luminescence of Er3+ions in phospho-tellurite glass ceramics by formation of ErPO4 nanocrystals. Journal of Luminescence, 2019, 216, 116753.	3.1	21
18	Enhanced Ultraviolet Luminescence of ZnO Nanorods Treated by High-Pressure Water Vapor Annealing (HWA). Journal of Physical Chemistry C, 2016, 120, 4571-4580.	3.1	20

#	Article	IF	Citations
19	Highly Efficient and Stable Photoluminescence of Nanocrystalline Porous Silicon by Combination of Chemical Modification and Oxidation under High Pressure. Japanese Journal of Applied Physics, 2007, 46, 2429-2433.	1.5	18
20	Stabilization and operation of porous silicon photonic structures from near-ultraviolet to near-infrared using high-pressure water vapor annealing. Thin Solid Films, 2010, 518, 3276-3279.	1.8	17
21	Thin Cu Film Deposition by Operation of Nanosilicon Ballistic Electron Emitter in Solution. Electrochemical and Solid-State Letters, 2010, 13, D73.	2.2	17
22	Luminescence of mesoporous silicon powders treated by high-pressure water vapor annealing. Nanoscale Research Letters, 2012, 7, 382.	5.7	17
23	Reduction in surface recombination and enhancement of light emission in silicon photonic crystals treated by high-pressure water-vapor annealing. Applied Physics Letters, 2010, 97, 121111.	3.3	16
24	Highly Enhanced Efficiency and Stability of Photo- and Electro-luminescence of Nano-crystalline Porous Silicon by High-Pressure Water Vapor Annealing. Japanese Journal of Applied Physics, 2006, 45, 3462-3465.	1.5	15
25	Impact of Ag species on luminescence and spectroscopic properties of Eu3+ doped fluoro-phosphate glasses. Journal of Non-Crystalline Solids, 2021, 570, 120938.	3.1	14
26	A Solid-State Multicolor Light-Emitting Device Based on Ballistic Electron Excitation. Japanese Journal of Applied Physics, 2004, 43, 2076-2079.	1.5	13
27	High Performance Electroluminescence from Nanocrystalline Silicon with Carbon Buffer. Japanese Journal of Applied Physics, 2004, 43, 1981-1985.	1.5	13
28	Polarization properties of scattered light from macrorough surfaces. Optics Letters, 2010, 35, 595.	3.3	13
29	Acoustic Wave Manipulation by Phased Operation of Two-Dimensionally Arrayed Nanocrystalline Silicon Ultrasonic Emitters. Japanese Journal of Applied Physics, 2008, 47, 3123-3126.	1.5	11
30	Measurement of diameter of cylindrical openings using a disk beam probe. Optical Review, 2018, 25, 656-662.	2.0	11
31	Copper deposition in microporous silicon using supercritical fluid. Thin Solid Films, 2014, 567, 82-86.	1.8	10
32	Extracting calibrated parameters from imaging ellipsometric measurement. Japanese Journal of Applied Physics, 2017, 56, 116602.	1.5	10
33	Impact of Ag2O Content on the Optical and Spectroscopic Properties of Fluoro-Phosphate Glasses. Materials, 2019, 12, 3516.	2.9	10
34	Energy transfer from phosphorescent blue-emitting oxidized porous silicon to rhodamine 110. Applied Physics Letters, 2010, 97, .	3.3	7
35	Supercritical fluid deposition of copper into mesoporous silicon. Thin Solid Films, 2013, 545, 357-360.	1.8	7
36	Polarization characteristics of scattered light from macroscopically rough surfaces. Optical Review, 2015, 22, 511-520.	2.0	6

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37	Measurement of Optical Constants of Wet Porous Silicon Using In Situ Photoconduction. ECS Journal of Solid State Science and Technology, 2016, 5, P190-P196.	1.8	6
38	Wet and dry porous silicon. Current Opinion in Colloid and Interface Science, 1999, 4, 309-313.	7.4	5
39	Electroluminescence Enhancement Assisted with Ballistic Electron Excitation in Nanocrystalline Silicon Diodes. Japanese Journal of Applied Physics, 2005, 44, 2676-2679.	1.5	5
40	Cavity Effect in Nanocrystalline Porous Silicon Ballistic Lighting Device. Japanese Journal of Applied Physics, 2008, 47, 2902-2905.	1.5	4
41	Optical properties of phosphorescent nanoâ€silicon electrochemically doped with terbium. Physica Status Solidi C: Current Topics in Solid State Physics, 2012, 9, 2318-2321.	0.8	4
42	Functional Device Applications of Nanosilicon. Key Engineering Materials, 0, 470, 20-26.	0.4	3
43	Photovoltaic effect with high open circuit voltage observed in electrochemically prepared nanocrystalline silicon membranes. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2014, 190, 33-40.	3.5	3
44	Polarization characteristics of diffraction scattering from metal rough surface. Applied Surface Science, 2017, 421, 565-570.	6.1	3
45	Imaging ellipsometry measurement noises associated with non-uniform retardation of the compensator. Optical Review, 2020, 27, 73-80.	2.0	3
46	Extraction of polarization properties of the individual components of a layered system by using spectroscopic Mueller matrix analysis. Optics Express, 2016, 24, 9757.	3.4	2
47	Photoetching of Porous Silicon Nanostructures in Hydrofluoric Acid Using Monochromatic Light. ECS Journal of Solid State Science and Technology, 2018, 7, P730-P735.	1.8	2
48	Structural and Optical Properties of Electropolymerized Poly(para-phenylene)vinylene Films on Si and Porous Si. ECS Transactions, 2009, 25, 121-130.	0.5	1
49	Low-Temperature Deposition of Thin Si, Ge, and SiGe Films Using Reducing Activity of Ballistic Hot Electrons. ECS Transactions, 2014, 64, 405-410.	0.5	1
50	Facile and Efficient Gas-Phase Pressure-Controlled Thermal Functionalization of Nanocrystalline Porous Silicon with 1-Hexene. ECS Journal of Solid State Science and Technology, 2019, 8, R109-R113.	1.8	1
51	(Invited) In-Situ Monitoring of Luminescence and Oxidation of Porous Silicon in Liquid Electrolytes with Photoconduction. ECS Transactions, 2020, 98, 63-74.	0.5	1
52	Effects of Amorphous Carbon Films on the Performance of Porous Silicon Electroluminescence. Materials Research Society Symposia Proceedings, 2002, 737, 594.	0.1	0
53	Improved Optoelectronic Characteristics of Nanocrystalline Porous Silicon by High-Pressure Water Vapor Annealing. Materials Research Society Symposia Proceedings, 2004, 832, 239.	0.1	0
54	Synthesis and Optical Properties of Silicon Oxide Nanowires. Materials Research Society Symposia Proceedings, 2006, 958, 1.	0.1	0

#	Article	IF	Citations
55	Hydrosilylation of High Porosity Porous Silicon with 1-Hexene in Supercritical CO2 Fluid. ECS Journal of Solid State Science and Technology, 0, , .	1.8	0
56	High Energy Limit of the Size-Tunable Photoluminescence of Hydrogen-Terminated Porous Silicon Nanostructures in HF. ECS Journal of Solid State Science and Technology, 0, , .	1.8	0
57	Electron Escape from Filled Band in Wet Porous Silicon Nanostructure Probed by Luminescence Quenching Dynamics. ECS Journal of Solid State Science and Technology, 0, , .	1.8	0