Benjamin Dierre

List of Publications by Year
in descending order

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Version: 2024-02-01

57 papers	2,377 citations	236925 25 h-index	197818 49 g-index
58 all docs	58 docs citations	58 times ranked	3328 citing authors

#	Article	IF	Citations
1	Singleâ€Crystalline ZnS Nanobelts as Ultravioletâ€Light Sensors. Advanced Materials, 2009, 21, 2034-2039.	21.0	537
2	Structure and Cathodoluminescence of Individual ZnS/ZnO Biaxial Nanobelt Heterostructures. Nano Letters, 2008, 8, 2794-2799.	9.1	185
3	Solvothermal Synthesis, Cathodoluminescence, and Fieldâ€Emission Properties of Pure and Nâ€Doped ZnO Nanobullets. Advanced Functional Materials, 2009, 19, 131-140.	14.9	153
4	Characterization, Cathodoluminescence, and Fieldâ€Emission Properties of Morphologyâ€Tunable CdS Micro/Nanostructures. Advanced Functional Materials, 2009, 19, 2423-2430.	14.9	114
5	Bulk synthesis, growth mechanism and properties of highly pure ultrafine boron nitride nanotubes with diameters of sub-10 nm. Nanotechnology, 2011, 22, 145602.	2.6	97
6	Multiangular Branched ZnS Nanostructures with Needle-Shaped Tips:â€‰ Potential Luminescent and Field-Emitter Nanomaterial. Journal of Physical Chemistry C, 2008, 112, 4735-4742.	3.1	89
7	Blue emission of Ce3+ in lanthanide silicon oxynitride phosphors. Journal of Materials Research, 2007, 22, 1933-1941.	2.6	86
8	Cathodoluminescence Modulation of ZnS Nanostructures by Morphology, Doping, and Temperature. Advanced Functional Materials, 2013, 23, 3701-3709.	14.9	69
9	Origin of Yellow-Band Emission in Epitaxially Grown GaN Nanowire Arrays. ACS Applied Materials & Interfaces, 2014, 6, 14159-14166.	8.0	57
10	A novel and high brightness AlN:Mn2+ red phosphor for field emission displays. Dalton Transactions, 2014, 43, 6120.	3.3	55
11	Time-gated luminescence bioimaging with new luminescent nanocolloids based on [Mo₆I₈(C₂F₅COO)₆]^{2â^'}metal atom clusters. Physical Chemistry Chemical Physics, 2016, 18, 30166-30173.	2.8	53
12	Unpredicted Nucleation of Extended Zinc Blende Phases in Wurtzite ZnO Nanotetrapod Arms. ACS Nano, 2009, 3, 3158-3164.	14.6	49
13	Low-energy cathodoluminescence microscopy for the characterization of nanostructures. Science and Technology of Advanced Materials, 2010, 11, 043001.	6.1	49
14	Solution Growth and Cathodoluminescence of Novel SnO2 Coreâ^'Shell Homogeneous Microspheres. Journal of Physical Chemistry C, 2010, 114, 8235-8240.	3.1	48
15	Thin-walled boron nitride microtubes exhibiting intense band-edge UV emission at room temperature. Nanotechnology, 2009, 20, 085705.	2.6	45
16	Unipolar assembly of zinc oxide rods manifesting polarity-driven collective luminescence. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 13588-13592.	7.1	44
17	Solubility and crystallographic facet tailoring of (GaN)_{1â^'x}(ZnO)_x pseudobinary solid-solution nanostructures as promising photocatalysts. Nanoscale, 2016, 8, 3694-3703.	5.6	42
18	New ultra-violet and near-infrared blocking filters for energy saving applications: fabrication of tantalum metal atom cluster-based nanocomposite thin films by electrophoretic deposition. Journal of Materials Chemistry C, 2017, 5, 10477-10484.	5.5	41

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19	Role of Si in the Luminescence of AlN:Eu,Si Phosphors. Journal of the American Ceramic Society, 2009, 92, 1272-1275.	3.8	38
20	Enhancement of the core near-band-edge emission induced by an amorphous shell in coaxial one-dimensional nanostructure: the case of SiC/SiO₂core/shell self-organized nanowires. Nanotechnology, 2010, 21, 345702.	2.6	37
21	Mo₆ cluster-based compounds for energy conversion applications: comparative study of photoluminescence and cathodoluminescence. Science and Technology of Advanced Materials, 2017, 18, 458-466.	6.1	37
22	Inorganic Molybdenum Clusters as Lightâ€Harvester in All Inorganic Solar Cells: A Proof of Concept. ChemistrySelect, 2016, 1, 2284-2289.	1.5	35
23	Luminescence properties of SiC/SiO2 coreâ€“shell nanowires with different radial structure. Materials Letters, 2012, 71, 137-140.	2.6	34
24	Suppression of concentration quenching of Er-related luminescence in Er-doped GaN. Applied Physics Letters, 2010, 96, 181901.	3.3	33
25	Synthesis, Microstructure, and Cathodoluminescence of [0001]-Oriented GaN Nanorods Grown on Conductive Graphite Substrate. ACS Applied Materials & Interfaces, 2013, 5, 12066-12072.	8.0	33
26	Extended Study on Electrophoretic Deposition Process of Inorganic Octahedral Metal Clusters: Advanced Multifunctional Transparent Nanocomposite Thin Films. Bulletin of the Chemical Society of Japan, 2018, 91, 1763-1774.	3.2	26
27	Enhanced thermal degradation stability of the Sr₂Si₅N₈:Eu²⁺ phosphor by ultra-thin Al₂O₃ coating through the atomic layer deposition technique in a fluidized bed reactor. Journal of Materials Chemistry C, 2019, 7, 5772-5781.	5.5	26
28	Visible tunable lighting system based on polymer composites embedding ZnO and metallic clusters: from colloids to thin films. Science and Technology of Advanced Materials, 2016, 17, 443-453.	6.1	25
29	Investigation of emitting centers in SiO2 codoped with silicon nanoclusters and Er3+ ions by cathodoluminescence technique. Journal of Applied Physics, 2010, 108, 113504.	2.5	21
30	The synthesis, structure and cathodoluminescence of ellipsoid-shaped ZnGa₂O₄nanorods. Nanotechnology, 2009, 20, 365705.	2.6	20
31	Effect of Size-Dependent Thermal Instability on Synthesis of Zn2SiO4-SiO x Coreâ€“Shell Nanotube Arrays and Their Cathodoluminescence Properties. Nanoscale Research Letters, 2010, 5, 773-780.	5.7	19
32	352 nm ultraviolet emission from high-quality crystalline AlN whiskers. Nanotechnology, 2010, 21, 075708.	2.6	18
33	Local analysis of Eu²⁺emission in CaAlSiN₃. Science and Technology of Advanced Materials, 2013, 14, 064201.	6.1	18
34	Solid Solution, Phase Separation, and Cathodoluminescence of GaPâ€“ZnS Nanostructures. ACS Applied Materials & Interfaces, 2013, 5, 9199-9204.	8.0	16
35	Luminescence properties of a blue-emitting phosphor: (Sr1â^'xEux)Si9Al19ON31 (0<xâ‰¤1). Journal of Solid State Chemistry, 2013, 207, 49-54.	2.9	14
36	Electrophoretic Coating of Octahedral Molybdenum Metal Clusters for UV/NIR Light Screening. Coatings, 2017, 7, 114.	2.6	13

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37	Defects and luminescence control of AlN ceramic by Si-doping. Scripta Materialia, 2016, 110, 109-112.	5.2	12
38	Transition of Emission Colours as a Consequence of Heat-Treatment of Carbon Coated Ce3+-Doped YAG Phosphors. Materials, 2017, 10, 1180.	2.9	10
39	Positional-dependent luminescence property of Î²-SiAlON:Eu2+ phosphor particle. Applied Physics Letters, 2014, 104, .	3.3	8
40	Enhanced cathodoluminescence of green Î²-sialon:Eu2+ phosphor by In2O3 coating. Journal of Alloys and Compounds, 2017, 727, 1110-1114.	5.5	8
41	Single-crystal MgS nanotubes: synthesis and properties. CrystEngComm, 2010, 12, 1286-1289.	2.6	7
42	Eu²⁺â€doped AlNâ€”SiC solidâ€solution phosphors: Synthesis and cathodoluminescence properties. Journal of the Society for Information Display, 2011, 19, 627-630.	2.1	7
43	Spatially resolved cathodoluminescence of individual BN-coated CaS:Eu nanowires. Nanoscale, 2011, 3, 598-602.	5.6	6
44	Influence of Si on the particle growth of AlN ceramics. Applied Physics Express, 2014, 7, 115503.	2.4	6
45	Crystalline polarity of ZnO thin films deposited under dc external bias on various substrates. Journal of Crystal Growth, 2017, 463, 38-45.	1.5	6
46	Electronic Transport Properties Governed by Polarity Control through Tailoring of ZnO Bilayer Structures. Crystal Growth and Design, 2018, 18, 5824-5831.	3.0	6
47	Hydrogen released from bulk ZnO single crystals investigated by time-of-flight electron-stimulated desorption. Journal of Applied Physics, 2010, 108, 104902.	2.5	4
48	Influence of dislocations on indium diffusion in semi-polar InGaN/GaN heterostructures. AIP Advances, 2015, 5, .	1.3	4
49	Microanalysis of Calcium Codoped LaAl(Si_{6â^’z}Al_z)(N_{10â^’z}O_z) (z~1): Ce³⁺ Blue Phosphor. Journal of the American Ceramic Society, 2015, 98, 1253-1258.	3.8	4
50	Ternary In2S3/In2O3 heterostructures and their cathodoluminescence. RSC Advances, 2016, 6, 51089-51095.	3.6	4
51	Cathodoluminescence Properties of Blue Emitting <scp><scp>Eu</scp></scp>²⁺â€Doped <scp><scp>AlN</scp></scp>â€Polytypoids for Fieldâ€Emission Displays. Journal of the American Ceramic Society, 2014, 97, 339-341.	3.8	3
52	Low-energy Cathodoluminescence for (Oxy)Nitride Phosphors. Journal of Visualized Experiments, 2016, , .	0.3	2
53	Growthâ€Parameter Dependence of Polarity and Electronic Transports in ZnO Thin Films Deposited by Magnetron Sputtering. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700838.	1.8	2
54	Nature and Role of Various Si-Based Sensitizers for Er³⁺ Ions in Silicon-Rich Silicon Oxide Thin Films. Advanced Materials Research, 0, 324, 81-84.	0.3	1

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55	Emission Enhancement of SiC/SiO₂ Core/Shell Nanowires Induced by the Oxide Shell. Materials Science Forum, 2012, 717-720, 557-560.	0.3	1
56	UV Photodetectors: Single-Crystalline ZnS Nanobelts as Ultraviolet-Light Sensors (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 702	21.0	0
57	Textured Beta-Sialon:Eu²⁺ Phosphor Deposits Fabricated by Electrophoretic Deposition (EPD) Process within a Strong Magnetic Field: Preparation Process and Photoluminescence (PL) Properties Depending on Orientation. Key Engineering Materials, 0, 654, 268-273.	0.4	0