

Toshihiro Nakamura

List of Publications by Year in descending order

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74
papers

1,176
citations

331538

21
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454834

30
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76
all docs

76
docs citations

76
times ranked

1473
citing authors

#	ARTICLE	IF	CITATIONS
1	Enhancement of Dye Fluorescence by Gold Nanoparticles: Analysis of Particle Size Dependence. Japanese Journal of Applied Physics, 2005, 44, 6833-6837.	0.8	75
2	Size dependence of photoluminescence quantum efficiency of Si nanocrystals. Physical Review B, 2006, 73, .	1.1	68
3	Editors' Choice Rb ₂ SiF ₆ :Mn ⁴⁺ and Rb ₂ TiF ₆ :Mn ⁴⁺ Red-Emitting Phosphors. ECS Journal of Solid State Science and Technology, 2016, 5, R206-R210.	0.9	45
4	Synthesis and Photoluminescence Properties of BaSnF ₆ :Mn ⁴⁺ Red Phosphor. ECS Journal of Solid State Science and Technology, 2016, 5, R37-R43.	0.9	41
5	Blue-light-emitting ZnSe random laser. Optics Letters, 2009, 34, 3923.	1.7	38
6	Synthesis and properties of Rb ₂ GeF ₆ :Mn ⁴⁺ red-emitting phosphors. Japanese Journal of Applied Physics, 2018, 57, 022601.	0.8	36
7	Electron-hole plasma lasing in a ZnO random laser. Physical Review B, 2012, 86, .	1.1	34
8	Modification of energy transfer from Si nanocrystals to Er ³⁺ near a Au thin film. Physical Review B, 2005, 72, .	1.1	31
9	Enhancement and suppression of energy transfer from Si nanocrystals to Er ions through a control of the photonic mode density. Physical Review B, 2006, 74, .	1.1	30
10	Phosphorus and boron codoping of silicon nanocrystals by ion implantation: Photoluminescence properties. Physical Review B, 2012, 85, .	1.1	30
11	Surface plasmon polariton mediated photoluminescence from excitons in silicon nanocrystals. Applied Physics Letters, 2006, 89, 101907.	1.5	28
12	Electron-hole plasma induced band gap renormalization in ZnO microlaser cavities. Optics Express, 2014, 22, 28831.	1.7	27
13	High-yield preparation of blue-emitting colloidal Si nanocrystals by selective laser ablation of porous silicon in liquid. Nanotechnology, 2014, 25, 275602.	1.3	27
14	Resonant energy transfer in (Eu ³⁺ , Bi ³⁺)-codoped CaZrO ₃ red-emitting phosphor. RSC Advances, 2016, 6, 66130-66139.	1.7	27
15	Effects of thermal oxidation on the photoluminescence properties of porous silicon. Journal of Luminescence, 2010, 130, 682-687.	1.5	25
16	Micronization of red-emitting K ₂ SiF ₆ :Mn ⁴⁺ phosphor by pulsed laser irradiation in liquid. Applied Surface Science, 2014, 320, 514-518.	3.1	25
17	Bright and multicolor luminescent colloidal Si nanocrystals prepared by pulsed laser irradiation in liquid. Applied Physics Letters, 2016, 108, .	1.5	25
18	Solubility limit and luminescence properties of Eu ³⁺ ions in Al ₂ O ₃ powder. Journal of Luminescence, 2016, 176, 266-271.	1.5	25

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19	Enhancement of photoluminescence from excitons in silicon nanocrystals via coupling to surface plasmon polaritons. <i>Journal of Applied Physics</i> , 2007, 102, 023506.	1.1	23
20	Gold-nanoparticle-assisted random lasing from powdered GaN. <i>Optics Express</i> , 2011, 19, 467.	1.7	22
21	Properties of silver/porous-silicon nanocomposite powders prepared by metal assisted electroless chemical etching. <i>Journal of Applied Physics</i> , 2010, 108, .	1.1	21
22	Improved lasing characteristics of ZnO/organic-dye random laser. <i>Applied Physics Letters</i> , 2012, 100, .	1.5	20
23	Double threshold behavior in a resonance-controlled ZnO random laser. <i>APL Photonics</i> , 2017, 2, .	3.0	20
24	Temperature dependence of GaAs random laser characteristics. <i>Physical Review B</i> , 2010, 81, .	1.1	19
25	Control of random lasing in ZnO/Al ₂ O ₃ nanopowders. <i>Applied Physics Letters</i> , 2011, 99, .	1.5	19
26	Direct Synthesis and Enhanced Catalytic Activities of Platinum and Porous-Silicon Composites by Metal-Assisted Chemical Etching. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 081301.	0.8	19
27	Origins of lasing emission in a resonance-controlled ZnO random laser. <i>New Journal of Physics</i> , 2014, 16, 093054.	1.2	18
28	Unique properties of ZnTiF ₆ ·6H ₂ O:Mn ⁴⁺ red-emitting hexahydrate phosphor. <i>Journal of Luminescence</i> , 2017, 184, 160-168.	1.5	18
29	Improvement of Laser Processing for Colloidal Silicon Nanocrystal Formation in a Reactive Solvent. <i>Journal of Physical Chemistry C</i> , 2017, 121, 8623-8629.	1.5	18
30	Size and dopant-concentration dependence of photoluminescence properties of ion-implanted phosphorus- and boron-codoped Si nanocrystals. <i>Physical Review B</i> , 2015, 91, .	1.1	17
31	Discrete-mode ZnO microparticle random laser. <i>Optics Letters</i> , 2015, 40, 2661.	1.7	16
32	Properties of magnetic nickel/porous-silicon composite powders. <i>AIP Advances</i> , 2012, 2, .	0.6	15
33	Luminescence color control and quantum-efficiency enhancement of colloidal Si nanocrystals by pulsed laser irradiation in liquid. <i>Nanoscale</i> , 2017, 9, 1193-1200.	2.8	15
34	Synthesis and properties of Ca ₃ Ga ₂ Ge ₃ O ₁₂ :Tb ³⁺ garnet phosphor. <i>Ceramics International</i> , 2017, 43, 14225-14232.	2.3	14
35	Enhancement of photoluminescence from Yb and Er co-doped Al ₂ O ₃ films by an asymmetric metal cavity. <i>Applied Physics Letters</i> , 2006, 88, 042101.	1.5	13
36	Synthesis and Unique Photoluminescence Properties of Eu ₂ Ti ₂ O ₇ and Eu ₂ Ti ₅ O ₁₅ . <i>Journal of the American Ceramic Society</i> , 2016, 99, 3039-3046.	1.9	13

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37	Europium gallium garnet (Eu ₃ Ga ₅ O ₁₂) and Eu ₃ GaO ₆ : Synthesis and material properties. Journal of Applied Physics, 2016, 120, .	1.1	13
38	Yellow-light emitting Tb ₃ Al ₅ O ₁₂ :Ce ³⁺ phosphor properties sensitized by Bi ³⁺ ions. Journal of Luminescence, 2017, 192, 720-727.	1.5	13
39	Synthesis and properties of Tb ₃ Al ₅ O ₁₂ :Eu ³⁺ garnet phosphor. Journal of Luminescence, 2018, 197, 242-247.	1.5	13
40	Abnormal photoluminescence phenomena in (Tb ³⁺ , Eu ³⁺) codoped Ga ₂ O ₃ phosphor. Journal of Alloys and Compounds, 2016, 678, 448-455.	2.8	12
41	Luminescence properties of Tb ₃ Al ₅ O ₁₂ garnet and related compounds synthesized by the metal organic decomposition method. Journal of Luminescence, 2017, 183, 193-200.	1.5	12
42	Quantum-assisted photoelectric gain effects in perovskite solar cells. NPC Asia Materials, 2020, 12, .	3.8	12
43	Tb ³⁺ ion doping into Al ₂ O ₃ : Solubility limit and luminescence properties. Japanese Journal of Applied Physics, 2016, 55, 112401.	0.8	11
44	An Orange-Light Emitting Garnet Phosphor: Tb ₃ Ga ₅ O ₁₂ :Eu ³⁺ . ECS Journal of Solid State Science and Technology, 2017, 6, R97-R104.	0.9	11
45	Highly luminescent mono- and multilayers of immobilized CdTe nanocrystals: controlling optical properties through post chemical surface modification. Chemical Communications, 2008, , 1641.	2.2	10
46	Plasmonic control of ZnO random lasing characteristics. Laser Physics Letters, 2014, 11, 016004.	0.6	10
47	Enhancement of Visible-Luminescence Saturation Intensity by Surface Plasmons in Ag/ZnO Film. Physical Review Applied, 2016, 6, .	1.5	10
48	Emerging Functions of Nanostructured Porous Silicon With a Focus on the Emissive Properties of Photons, Electrons, and Ultrasound. Frontiers in Chemistry, 2019, 7, 273.	1.8	10
49	Enhancement of Radiative Recombination Rate of Excitons in Si Nanocrystals on Au Film. Japanese Journal of Applied Physics, 2006, 45, 6132-6136.	0.8	8
50	Direct Synthesis and Enhanced Catalytic Activities of Platinum and Porous-Silicon Composites by Metal-Assisted Chemical Etching. Japanese Journal of Applied Physics, 2011, 50, 081301.	0.8	8
51	Strongly modified spontaneous emission decay rate of silicon nanocrystals near semicontinuous gold films. Optics Express, 2012, 20, 26548.	1.7	8
52	Photoluminescence properties of Tb ₃ Al ₅ O ₁₂ :Ce ³⁺ garnet synthesized by the metal organic decomposition method. Optical Materials, 2017, 64, 557-563.	1.7	8
53	Dynamics of resonance energy transfer process from Tb ³⁺ to Eu ³⁺ in Ga ₂ O ₃ phosphor. Journal of Luminescence, 2019, 215, 116616.	1.5	7
54	Photoluminescence decay dynamics of silver/porous-silicon nanocomposites formed by metal-assisted etching. Journal of Luminescence, 2012, 132, 3019-3026.	1.5	6

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55	Structural change induced by thermal annealing of red-light-emitting ZnSnF ₆ ™ 6H ₂ O:Mn ⁴⁺ hexahydrate phosphor. Japanese Journal of Applied Physics, 2016, 55, 052601.	0.8	6
56	(Tb ³⁺ , Eu ³⁺)-Codoped Ga ₂ O ₃ Phosphors: Synthesis and Photoluminescence Properties. ECS Journal of Solid State Science and Technology, 2016, 5, R67-R73.	0.9	5
57	High-yield green fabrication of colloidal silicon quantum dots by low-temperature thermal cracking of porous silicon. APL Materials, 2020, 8, 081105.	2.2	5
58	Unusual near-infrared luminescence from Ti-doped MgSiF ₆ ·6H ₂ O powder. Journal of Luminescence, 2019, 211, 157-161.	1.5	4
59	Facile Formation of Stable Water-Dispersed Luminescent Silicon Nanocrystals by Laser Processing in Liquid: Toward Fluorescent Labeling for Bio-imaging. ChemNanoMat, 2019, 5, 1137-1143.	1.5	3
60	Resonant energy transfer from silicon nanocrystals to iodine molecules. Physical Review B, 2009, 79, .	1.1	2
61	Temperature dependence of lasing characteristics of irregular-shaped-microparticle ZnO laser. Optics Express, 2015, 23, 28905.	1.7	2
62	Luminescence properties of Eu ³⁺ -activated TbAlO ₃ perovskite compound synthesized by metal organic decomposition. Japanese Journal of Applied Physics, 2018, 57, 082601.	0.8	2
63	Spectral tuning of colloidal Si nanocrystal luminescence by post-laser irradiation in liquid. RSC Advances, 2020, 10, 32992-32998.	1.7	2
64	Gamma-ray induced photo emission from GaN single crystal wafer. Applied Physics Letters, 2021, 118, .	1.5	2
65	Spontaneous Emission Rate of Si Nanocrystals on Thin Au Film. Japanese Journal of Applied Physics, 2007, 46, 6498-6502.	0.8	1
66	Energy transfer from Si nanocrystals to Er ions near a metal layer. Physica Status Solidi (A) Applications and Materials Science, 2008, 205, 47-51.	0.8	1
67	Emission decay rate of a light emitter on thin metal films. Japanese Journal of Applied Physics, 2014, 53, 045201.	0.8	1
68	Material Processing for Colloidal Silicon Quantum Dot Formation. , 2022, , 161-185.		1
69	Surface-plasmon-enhanced band-edge emission from Au/GaN powders. Applied Physics Letters, 2011, 98, 161906.	1.5	0
70	(Invited) Facile Formation of Luminescent Colloidal Silicon Quantum Dots from Porous Silicon. ECS Meeting Abstracts, 2021, MA2021-01, 906-906.	0.0	0
71	Preparation of powdered porous silicon by stain etching method. Hosokawa Powder Technology Foundation ANNUAL REPORT, 2009, 17, 103-109.	0.0	0
72	C211 Evaluation of Droplet Shape and Pressure Drop in the Gas Channel in a Polymer Electrolyte Fuel Cell. The Proceedings of the National Symposium on Power and Energy Systems, 2014, 2014.19, 277-278.	0.0	0

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73	Double threshold behavior in a resonance-controlled ZnO random laser. , 2015, , .		0
74	Recent Development of Fabrication Process for Luminescent Silicon Quantum Dot toward Applications in Lighting Devices. Journal of the Institute of Electrical Engineers of Japan, 2022, 142, 415-418.	0.0	0