Toshihiro Nakamura

List of Publications by Citations

71 papers	1,016 citations	19 h-index	26 g-index
76 ext. papers	1,106 ext. citations	3.3 avg, IF	4.66 L-index

#	Paper	IF	Citations
71	Enhancement of Dye Fluorescence by Gold Nanoparticles: Analysis of Particle Size Dependence. *Japanese Journal of Applied Physics*, **2005**, 44, 6833-6837	1.4	71
70	Size dependence of photoluminescence quantum efficiency of Si nanocrystals. *Physical Review B*, **2006**, 73,	3.3	64
69	EditorsTChoiceRb2SiF6:Mn4+and Rb2TiF6:Mn4+Red-Emitting Phosphors. *ECS Journal of Solid State Science and Technology*, **2016**, 5, R206-R210	2	41
68	Synthesis and Photoluminescence Properties of BaSnF6:Mn4+Red Phosphor. *ECS Journal of Solid State Science and Technology*, **2016**, 5, R37-R43	2	36
67	Synthesis and properties of Rb2GeF6:Mn4+ red-emitting phosphors. *Japanese Journal of Applied Physics*, **2018**, 57, 022601	1.4	31
66	Blue-light-emitting ZnSe random laser. *Optics Letters*, **2009**, 34, 3923-5	3	31
65	Electron-hole plasma lasing in a ZnO random laser. *Physical Review B*, **2012**, 86,	3.3	28
64	Phosphorus and boron codoping of silicon nanocrystals by ion implantation: Photoluminescence properties. *Physical Review B*, **2012**, 85,	3.3	28
63	Modification of energy transfer from Si nanocrystals to Er3+ near a Au thin film. *Physical Review B*, **2005**, 72,	3.3	27
62	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,	3.3	25
61	Surface plasmon polariton mediated photoluminescence from excitons in silicon nanocrystals. *Applied Physics Letters*, **2006**, 89, 101907	3.4	25
60	High-yield preparation of blue-emitting colloidal Si nanocrystals by selective laser ablation of porous silicon in liquid. *Nanotechnology*, **2014**, 25, 275602	3.4	24
59	Effects of thermal oxidation on the photoluminescence properties of porous silicon. *Journal of Luminescence*, **2010**, 130, 682-687	3.8	24
58	Micronization of red-emitting K 2 SiF 6 :Mn 4+ phosphor by pulsed laser irradiation in liquid. *Applied Surface Science*, **2014**, 320, 514-518	6.7	22
57	Enhancement of photoluminescence from excitons in silicon nanocrystals via coupling to surface plasmon polaritons. *Journal of Applied Physics*, **2007**, 102, 023506	2.5	22
56	Resonant energy transfer in (Eu3+, Bi3+)-codoped CaZrO3 red-emitting phosphor. *RSC Advances*, **2016**, 6, 66130-66139	3.7	22
55	Solubility limit and luminescence properties of Eu3+ ions in Al2O3 powder. *Journal of Luminescence* , **2016**, 176, 266-271	3.8	22

54	Electron-hole plasma induced band gap renormalization in ZnO microlaser cavities. *Optics Express*, **2014**, 22, 28831-7	3.3	21
53	Gold-nanoparticle-assisted random lasing from powdered GaN. *Optics Express*, **2011**, 19, 467-75	3.3	20
52	Temperature dependence of GaAs random laser characteristics. *Physical Review B*, **2010**, 81,	3.3	19
51	Properties of silver/porous-silicon nanocomposite powders prepared by metal assisted electroless chemical etching. *Journal of Applied Physics*, **2010**, 108, 104315	2.5	19
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	1.4	19
49	Bright and multicolor luminescent colloidal Si nanocrystals prepared by pulsed laser irradiation in liquid. *Applied Physics Letters*, **2016**, 108, 023105	3.4	18
48	Improvement of Laser Processing for Colloidal Silicon Nanocrystal Formation in a Reactive Solvent. *Journal of Physical Chemistry C*, **2017**, 121, 8623-8629	3.8	16
47	Size and dopant-concentration dependence of photoluminescence properties of ion-implanted phosphorus- and boron-codoped Si nanocrystals. *Physical Review B*, **2015**, 91,	3.3	16
46	Improved lasing characteristics of ZnO/organic-dye random laser. *Applied Physics Letters*, **2012**, 100, 171101	3.4	16
45	Control of random lasing in ZnO/Al2O3 nanopowders. *Applied Physics Letters*, **2011**, 99, 231105	3.4	16
44	Luminescence color control and quantum-efficiency enhancement of colloidal Si nanocrystals by pulsed laser irradiation in liquid. *Nanoscale*, **2017**, 9, 1193-1200	7.7	15
43	Discrete-mode ZnO microparticle random laser. *Optics Letters*, **2015**, 40, 2661-4	3	15
42	Origins of lasing emission in a resonance-controlled ZnO random laser. *New Journal of Physics*, **2014** , 16, 093054	2.9	15
41	Properties of magnetic nickel/porous-silicon composite powders. *AIP Advances*, **2012**, 2, 032167	1.5	15
40	Double threshold behavior in a resonance-controlled ZnO random laser. *APL Photonics*, **2017**, 2, 036101	5.2	14
39	Unique properties of ZnTiF 6 □6H 2 O:Mn 4+ red-emitting hexahydrate phosphor. *Journal of Luminescence*, **2017**, 184, 160-168	3.8	13
38	Synthesis and properties of Tb3Al5O12:Eu3+ garnet phosphor. *Journal of Luminescence*, **2018**, 197, 242-247	3.8	11
37	Abnormal photoluminescence phenomena in (Tb3+, Eu3+) codoped Ga2O3 phosphor. *Journal of Alloys and Compounds*, **2016**, 678, 448-455	5.7	11

36	Yellow-light emitting Tb3Al5O12:Ce3+ phosphor properties sensitized by Bi3+ ions. *Journal of Luminescence*, **2017**, 192, 720-727	3.8	11
35	Enhancement of photoluminescence from Yb and Er co-doped Al2O3 films by an asymmetric metal cavity. *Applied Physics Letters*, **2006**, 88, 042101	3.4	11
34	Tb3+ion doping into Al2O3: Solubility limit and luminescence properties. *Japanese Journal of Applied Physics*, **2016**, 55, 112401	1.4	11
33	Luminescence properties of Tb3Al5O12 garnet and related compounds synthesized by the metal organic decomposition method. *Journal of Luminescence*, **2017**, 183, 193-200	3.8	10
32	Highly luminescent mono- and multilayers of immobilized CdTe nanocrystals: controlling optical properties through post chemical surface modification. *Chemical Communications*, **2008**, 1641-3	5.8	10
31	Synthesis and properties of Ca3Ga2Ge3O12:Tb3+ garnet phosphor. *Ceramics International*, **2017**, 43, 14225-14232	5.1	10
30	Europium gallium garnet (Eu3Ga5O12) and Eu3GaO6: Synthesis and material properties. *Journal of Applied Physics*, **2016**, 120, 143102	2.5	10
29	Quantum-assisted photoelectric gain effects in perovskite solar cells. *NPG Asia Materials*, **2020**, 12,	10.3	9
28	Synthesis and Unique Photoluminescence Properties of Eu2Ti2O7 and Eu2TiO5. *Journal of the American Ceramic Society*, **2016**, 99, 3039-3046	3.8	9
27	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	3.3	8
26	Plasmonic control of ZnO random lasing characteristics. *Laser Physics Letters*, **2014**, 11, 016004	1.5	8
25	An Orange-Light Emitting Garnet Phosphor: Tb3Ga5O12:Eu3+. *ECS Journal of Solid State Science and Technology*, **2017**, 6, R97-R104	2	8
24	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	1.4	8
23	Strongly modified spontaneous emission decay rate of silicon nanocrystals near semicontinuous gold films. *Optics Express*, **2012**, 20, 26548-58	3.3	8
22	Enhancement of Visible-Luminescence Saturation Intensity by Surface Plasmons in Ag/ZnO Films. *Physical Review Applied*, **2016**, 6,	4.3	7
21	Enhancement of Radiative Recombination Rate of Excitons in Si Nanocrystals on Au Film. *Japanese Journal of Applied Physics*, **2006**, 45, 6132-6136	1.4	7
20	Emerging Functions of Nanostructured Porous Silicon-With a Focus on the Emissive Properties of Photons, Electrons, and Ultrasound. *Frontiers in Chemistry*, **2019**, 7, 273	5	6
19	Dynamics of resonance energy transfer process from Tb3+ to Eu3+ in Ga2O3 phosphor. *Journal of Luminescence*, **2019**, 215, 116616	3.8	6

18	Photoluminescence decay dynamics of silver/porous-silicon nanocomposites formed by metal-assisted etching. *Journal of Luminescence*, **2012**, 132, 3019-3026	3.8	6
17	(Tb3+, Eu3+)-Codoped Ga2O3Phosphors: Synthesis and Photoluminescence Properties. *ECS Journal of Solid State Science and Technology*, **2016**, 5, R67-R73	2	4
16	Structural change induced by thermal annealing of red-light-emitting ZnSnF6 6H2O:Mn4+hexahydrate phosphor. *Japanese Journal of Applied Physics*, **2016**, 55, 052601	1.4	4
15	Unusual near-infrared luminescence from Ti-doped MgSiF6 6H2O powder. *Journal of Luminescence*, **2019**, 211, 157-161	3.8	2
14	Temperature dependence of lasing characteristics of irregular-shaped-microparticle ZnO laser. *Optics Express*, **2015**, 23, 28905-13	3.3	2
13	Resonant energy transfer from silicon nanocrystals to iodine molecules. *Physical Review B*, **2009**, 79,	3.3	2
12	High-yield green fabrication of colloidal silicon quantum dots by low-temperature thermal cracking of porous silicon. *APL Materials*, **2020**, 8, 081105	5.7	2
11	Luminescence properties of Eu3+-activated TbAlO3 perovskite compound synthesized by metal organic decomposition. *Japanese Journal of Applied Physics*, **2018**, 57, 082601	1.4	1
10	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	3.5	1
9	Energy transfer from Si nanocrystals to Er ions near a metal layer. *Physica Status Solidi (A) Applications and Materials Science*, **2008**, 205, 47-51	1.6	1
8	Spontaneous Emission Rate of Si Nanocrystals on Thin Au Film. *Japanese Journal of Applied Physics*, **2007**, 46, 6498-6502	1.4	1
7	Gamma-ray induced photo emission from GaN single crystal wafer. *Applied Physics Letters*, **2021**, 118, 032106	3.4	1
6	Spectral tuning of colloidal Si nanocrystal luminescence by post-laser irradiation in liquid.. *RSC Advances*, **2020**, 10, 32992-32998	3.7	0
5	Emission decay rate of a light emitter on thin metal films. *Japanese Journal of Applied Physics*, **2014**, 53, 045201	1.4	
4	Surface-plasmon-enhanced band-edge emission from Au/GaN powders. *Applied Physics Letters*, **2011**, 98, 161906	3.4	
3	Material Processing for Colloidal Silicon Quantum Dot Formation **2022**, 161-185		
2	Preparation of powdered porous silicon by stain etching method. *Hosokawa Powder Technology Foundation ANNUAL REPORT*, **2009**, 17, 103-109	0	
1	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	