

Takayuki Suehiro

List of Publications by Year in descending order

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47
papers

3,915
citations

185998

28
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44
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52
all docs

52
docs citations

52
times ranked

2106
citing authors

#	ARTICLE	IF	CITATIONS
1	Characterization and properties of green-emitting $\hat{\Gamma}^2$ -SiAlON:Eu ²⁺ powder phosphors for white light-emitting diodes. Applied Physics Letters, 2005, 86, 211905.	1.5	656
2	Down-Conversion Nitride Materials for Solid State Lighting: Recent Advances and Perspectives. Chemical Reviews, 2018, 118, 1951-2009.	23.0	598
3	A Simple, Efficient Synthetic Route to Sr ₂ Si ₅ N ₈ :Eu ²⁺ -Based Red Phosphors for White Light-Emitting Diodes. Chemistry of Materials, 2006, 18, 5578-5583.	3.2	571
4	Optical Properties of Eu ²⁺ in $\hat{\Gamma}^2$ -SiAlON. Journal of Physical Chemistry B, 2004, 108, 12027-12031.	1.2	251
5	Warm-white light-emitting diode with yellowish orange SiAlON ceramic phosphor. Optics Letters, 2004, 29, 2001.	1.7	170
6	Strong Green Emission from $\hat{\Gamma}^2$ -SiAlON Activated by Divalent Ytterbium under Blue Light Irradiation. Journal of Physical Chemistry B, 2005, 109, 9490-9494.	1.2	138
7	Synthesis and Photoluminescent Properties of (La,Ca) ₃ Si ₆ N ₁₁ :Ce ³⁺ Fine Powder Phosphors for Solid-State Lighting. ACS Applied Materials & Interfaces, 2011, 3, 811-816.	4.0	127
8	Powder Synthesis of Ca- $\hat{\Gamma}^2$ -SiAlON as a Host Material for Phosphors. Chemistry of Materials, 2005, 17, 308-314.	3.2	124
9	Blue-emitting LaSi ₃ N ₅ :Ce ³⁺ fine powder phosphor for UV-converting white light-emitting diodes. Applied Physics Letters, 2009, 95, .	1.5	107
10	Photoluminescence of Cerium-Doped $\hat{\Gamma}^2$ -SiAlON Materials. Journal of the American Ceramic Society, 2004, 87, 1368-1370.	1.9	96
11	Nitride and oxynitride phosphors for white LEDs: Synthesis, new phosphor discovery, crystal structure. Progress in Solid State Chemistry, 2018, 51, 41-51.	3.9	95
12	Photoluminescence of Rare-Earth-Doped Ca- α -SiAlON Phosphors: Composition and Concentration Dependence. Journal of the American Ceramic Society, 2005, 88, 2883-2888.	1.9	77
13	Moisture-induced degradation and its mechanism of (Sr,Ca)AlSi ₃ :Eu ²⁺ , a red-color-converter for solid state lighting. Journal of Materials Chemistry C, 2015, 3, 3181-3188.	2.7	75
14	Blue-Emitting Sr ₃ Si ₈ Al ₇ O ₇ N ₈ :Eu ²⁺ Discovered by a Single-Particle-Diagnosis Approach: Crystal Structure, Luminescence, Scale-Up Synthesis, and Its Abnormal Thermal Quenching Behavior. Chemistry of Materials, 2015, 27, 7689-7697.	3.2	63
15	Gas-Reduction Nitridation Synthesis of CaAlSi ₃ :Eu ²⁺ Fine Powder Phosphors for Solid-State Lighting. Industrial & Engineering Chemistry Research, 2014, 53, 2713-2717.	1.8	56
16	A novel and high brightness AlN:Mn ²⁺ red phosphor for field emission displays. Dalton Transactions, 2014, 43, 6120.	1.6	55
17	Fine yellow $\hat{\Gamma}^2$ -SiAlON:Eu phosphors for white LEDs prepared by the gas-reduction nitridation method. Science and Technology of Advanced Materials, 2007, 8, 601-606.	2.8	52
18	Facile Synthesis of (Sr,Ca) ₂ Si ₅ N ₈ :Eu ²⁺ -Based Red-Emitting Phosphor for Solid-State Lighting. Industrial & Engineering Chemistry Research, 2013, 52, 7453-7456.	1.8	50

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19	Phase Purity and Luminescence Properties of Fine Ca- $\hat{\pm}$ -SiAlON:Eu Phosphors Synthesized by Gas Reduction Nitridation Method. Journal of the Electrochemical Society, 2008, 155, J175.	1.3	49
20	Luminescence properties of (Ca,Y)- $\hat{\pm}$ -SiAlON:Eu phosphors. Materials Letters, 2007, 61, 547-550.	1.3	46
21	Synthesis of Aluminum Nitride Nanopowder by Gas-Reduction-Nitridation Method. Journal of the American Ceramic Society, 2003, 86, 1046-1048.	1.9	44
22	Fluorescence of Eu ²⁺ in Strontium Oxonitridoaluminosilicates (SiAlONS). Journal of the Ceramic Society of Japan, 2005, 113, 462-465.	1.3	41
23	One-step preparation of Ca- $\hat{\pm}$ -SiAlON:Eu ²⁺ fine powder phosphors for white light-emitting diodes. Applied Physics Letters, 2008, 92, .	1.5	40
24	Structure and luminescence of a novel orange-yellow-emitting Ca _{1.62} Eu _{0.38} Si ₅ O ₃ N ₆ phosphor for warm white LEDs, discovered by a single-particle-diagnosis approach. Journal of Materials Chemistry C, 2016, 4, 9968-9975.	2.7	40
25	A novel yellow-emitting SrAlSi ₄ N ₇ :Ce ³⁺ phosphor for solid state lighting: Synthesis, electronic structure and photoluminescence properties. Journal of Solid State Chemistry, 2013, 208, 50-57.	1.4	37
26	Synthesis and sintering properties of aluminium nitride nanopowder prepared by the gas-reduction-nitridation method. Nanotechnology, 2003, 14, 487-491.	1.3	32
27	Powder Synthesis of Y- $\hat{\pm}$ -SiAlON and Its Potential as a Phosphor Host. Journal of Physical Chemistry C, 2010, 114, 1337-1342.	1.5	32
28	Aluminum Nitride Fibers Synthesized from Alumina Fibers Using Gas-Reduction-Nitridation Method. Journal of the American Ceramic Society, 2002, 85, 715-717.	1.9	30
29	Crystal Structure of La ₄ Si ₂ O ₇ N ₂ Analyzed by the Rietveld Method Using the Time-of-Flight Neutron Powder Diffraction Data. Chemistry of Materials, 2003, 15, 1099-1104.	3.2	22
30	Local analysis of Eu ²⁺ emission in CaAlSi ₃ . Science and Technology of Advanced Materials, 2013, 14, 064201.	2.8	18
31	Europium(II)-activated oxonitridosilicate yellow phosphor with excellent quantum efficiency and thermal stability – a robust spectral conversion material for highly efficient and reliable white LEDs. Physical Chemistry Chemical Physics, 2015, 17, 15797-15804.	1.3	17
32	Quaternary Wurtzitic Nitrides in the System ZnGeN ₂ – GaN: Powder Synthesis, Characterization, and Potentiality as a Photocatalyst. Journal of Physical Chemistry C, 2017, 121, 27590-27596.	1.5	17
33	Preparation, crystal structure and photoluminescence of Mn ²⁺ -doped magnesium pyroborates solid solutions, (Mg _{1-x} Mn _x) ₂ B ₂ O ₅ . Journal of Luminescence, 2010, 130, 2161-2165.	1.5	16
34	Preparation of Lutetium Nitride by Direct Nitridation. Journal of Materials Research, 2004, 19, 959-963.	1.2	15
35	Preparation, crystal structure and photoluminescence of lithium magnesium manganese borate solid solutions, LiMg _{1-x} Mn _x BO ₃ . Journal of Alloys and Compounds, 2012, 512, 223-229.	2.8	10
36	Optical properties of excitation spectra of (Ca,Y)- $\hat{\pm}$ -SiAlON:Eu yellow phosphors. Physica Status Solidi C: Current Topics in Solid State Physics, 2006, 3, 2701-2704.	0.8	9

#	ARTICLE	IF	CITATIONS
37	One-Step Preparation of Blue-Emitting (La,Ca)Si ₃ (O,N) ₅ :Ce ³⁺ Phosphors for High-Color Rendering White Light-Emitting Diodes. Applied Physics Express, 2011, 4, 022101.	1.1	8
38	Growth Temperature Influence on the Luminescence of Eu,Si-Codoped AlN Phosphors. ECS Journal of Solid State Science and Technology, 2013, 2, R126-R130.	0.9	8
39	Na ⁺ -GeGaON Solid Solution Analogous to ⁺ -SiAlON: Synthesis, Crystal Structure, and Potentiality as a Photocatalyst. Inorganic Chemistry, 2016, 55, 2355-2362.	1.9	6
40	Constancy of the quadrupolar interaction product in nanocrystalline gallium nitride revealed by ⁷¹ Ga MAS NMR shift distribution. Solid State Nuclear Magnetic Resonance, 2019, 97, 25-30.	1.5	5
41	Quaternary nitride system (1-x)ZnGeN ₂ ·2xGaN (x = 1/3): disordered wurtzite structure revealed by time-of-flight neutron powder diffraction. Applied Physics Express, 2020, 13, 115503.	1.1	4
42	Effect of CaCO ₃ -Y ₂ O ₃ Addition on Synthesis of AlN Powder by Carbothermal Reduction-Nitridation of Al ₂ O ₃ .. Journal of the Ceramic Society of Japan, 2001, 109, 1051-1054.	1.3	2
43	Effect of Characteristics of Raw Material on Synthesis of AlN Fibers by Gas-Reduction-Nitridation.. Journal of the Ceramic Society of Japan, 2002, 110, 67-69.	1.3	2
44	Low-energy Cathodoluminescence for (Oxy)Nitride Phosphors. Journal of Visualized Experiments, 2016, , .	0.2	2
45	Quaternary Wurtzitic Nitrides (1-x)ZnGeN ₂ ·2xGaN (x = 0.02, 0.05): Disorder-Induced Band-Gap Narrowing and Potentiality as a Solar-Active Photocatalyst. Inorganic Chemistry, 2021, 60, 1542-1549.	1.9	1
46	Crystal Structure of La ₄ Si ₂ O ₇ N ₂ Analyzed by the Rietveld Method Using the Time-of-Flight Neutron Powder Diffraction Data.. ChemInform, 2003, 34, no.	0.1	0
47	Oxidation of Rare Earth Silicon Oxynitride J-Phases. Key Engineering Materials, 0, 403, 57-59.	0.4	0