Hiroshi Yamada

List of Publications by Year
in descending order

99	3,611	136885	143943
papers	citations	32 h-index	57 g-index

101	101	101	2514
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Enhancement in piezoelectric responses of AlN thin films by co-addition of Mg and Ta. Materials Chemistry and Physics, 2022, 276, 125394.	2.0	3
2	Lower ferroelectric coercive field of ScGaN with equivalent remanent polarization as ScAlN. Applied Physics Express, 2022, 15, 081003.	1.1	5
3	Enhancement of crystal anisotropy and ferroelectricity by decreasing thickness in (Al,Sc)N films. Journal of the Ceramic Society of Japan, 2022, 130, 436-441.	0.5	11
4	Preparation of YbAlN piezoelectric thin film by sputtering and influence of Yb concentration on properties and crystal structure. Ceramics International, 2021, 47, 16029-16036.	2.3	13
5	Impact of Deposition Temperature on Crystal Structure and Ferroelectric Properties of (Al_{1â^'x}Sc_x)N Films Prepared by Sputtering Method. Physica Status Solidi (A) Applications and Materials Science, 2021, 218, 2100302.	0.8	6
6	First-principles calculations of spontaneous polarization in ScAlN. Journal of Applied Physics, 2021, 130, .	1.1	32
7	Thickness scaling of (Al_{0.8}Sc_{0.2})N films with remanent polarization beyond 100ÂĨ¼CÂcm^{â^'2} around 10Ânm in thickness. Applied Physics Express, 2021, 14, 105501.	1.1	30
8	Demonstration of ferroelectricity in ScGaN thin film using sputtering method. Applied Physics Letters, 2021, 119, .	1.5	15
9	Effects of different divalent cations in mTi-based codopants (m = Mg or Zn) on the piezoelectric properties of AlN thin films. Ceramics International, 2020, 46, 4015-4019.	2.3	12
10	Effects of deposition conditions on the ferroelectric properties of (Al1â^'xScx)N thin films. Journal of Applied Physics, 2020, 128, .	1.1	127
11	Polarity Inversion of Aluminum Nitride Thin Films by using Si and MgSi Dopants. Scientific Reports, 2020, 10, 4369.	1.6	21
12	First-Principles Study of Piezoelectric Properties and Bonding Analysis in (Mg, X, Al)N Solid Solutions (X = Nb, Ti, Zr, Hf). ACS Omega, 2019, 4, 15081-15086.	1.6	31
13	Mg and Ti codoping effect on the piezoelectric response of aluminum nitride thin films. Scripta Materialia, 2019, 159, 9-12.	2.6	17
14	Increase in the piezoelectric response of scandium-doped gallium nitride thin films sputtered using a metal interlayer for piezo MEMS. Applied Physics Letters, 2019, 114, .	1.5	17
15	Effect of Mg addition on the physical properties of aluminum nitride. Materials Letters, 2018, 219, 247-250.	1.3	10
16	Near-infrared luminescence from double-perovskite Sr₃Sn₂O₇:Nd³⁺: A new class of probe for in vivo imaging in the second optical window of biological tissue. Journal of the Ceramic Society of Japan, 2017, 125, 591-595.	0.5	28
17	Molecular orbital calculations of Eu-doped SrAl2O4 clusters. Solid State Communications, 2015, 206, 42-45.	0.9	5
18	Electronic structure of Eu2+-doped SrAl2O4 using modified Beckeâ€“Johnson exchange potential. Solid State Communications, 2014, 186, 46-49.	0.9	11

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19	Long-persistent luminescence in the near-infrared from Nd³⁺-doped Sr₂SnO₄for in vivo optical imaging. Japanese Journal of Applied Physics, 2014, 53, 092403.	0.8	47
20	Purple photochromism in Sr2SnO4:Eu3+ with layered perovskite-related structure. Applied Physics Letters, 2013, 102, .	1.5	43
21	Ultrasonic wave induced mechanoluminescence and its application for photocatalysis as ubiquitous light source. Catalysis Today, 2013, 201, 203-208.	2.2	102
22	Phase transformation behavior and pseudoelastic deformation in SrAl2O4. Journal of Alloys and Compounds, 2013, 577, S507-S516.	2.8	22
23	An intense elastico-mechanoluminescence material CaZnOS:Mn^2+ for sensing and imaging multiple mechanical stresses. Optics Express, 2013, 21, 12976.	1.7	134
24	Photochromic properties in Eu3+ doped Sr2SnO4. Materials Research Society Symposia Proceedings, 2013, 1492, 111-115.	0.1	0
25	Strong light emission from stress-activated perovskite-related oxides. Materials Research Society Symposia Proceedings, 2013, 1492, 117-122.	0.1	1
26	Enhancement of impact-induced mechanoluminescence for structure health monitoring using swift heavy ion irradiation. , 2012, , .		1
27	Evaluation of Thermal Stress Distribution With Elasticoluminescent Materials. , 2012, , .		0
28	Enhancement of afterglow in SrAl₂O₄:Eu²⁺long-lasting phosphor with swift heavy ion irradiation. RSC Advances, 2012, 2, 328-332.	1.7	31
29	Enhancement of impact-induced mechanoluminescence by swift heavy ion irradiation. Applied Physics Letters, 2012, 100, .	1.5	20
30	Strong reddish-orange light emission from stress-activated Sr_{n+1}Sn_nO_{3n+1}:Sm³⁺ (nâ€‰=â€‰1, 2, âˆž) with perovskite-related structures. Applied Physics Letters, 2012, 101, 091113.	1.5	102
31	Beam profile indicator for swift heavy ions using phosphor afterglow. AIP Advances, 2012, 2, .	0.6	7
32	Development of new elasticoluminescent material SrMg2(PO4)2:Eu. Journal of Luminescence, 2012, 132, 526-530.	1.5	51
33	Electro-Mechano-Optical Luminescence from CaYAl3O7:Ce. Electrochemical and Solid-State Letters, 2011, 14, J76.	2.2	30
34	Mechanoluminescent light source for a fluorescent probe molecule. Chemical Communications, 2011, 47, 8034.	2.2	75
35	Direct visualization of ultrasonic power distribution using mechanoluminescent film. Ultrasonics Sonochemistry, 2011, 18, 436-439.	3.8	33
36	Photochromism enhancement in reduced tridymite BaMgSiO4 by Fe-doping. Journal of the Ceramic Society of Japan, 2011, 119, 338-341.	0.5	17

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37	Multi color density photochromism in reduced tridymite BaMgSiO4 by wavelength of irradiation light. Journal of the Ceramic Society of Japan, 2011, 119, 105-109.	0.5	19
38	Strong Mechanoluminescence from Oxynitridosilicate Phosphors. IOP Conference Series: Materials Science and Engineering, 2011, 18, 212001.	0.3	13
39	Luminescence induced by elastic deformation of ZnS:Mn nanoparticles. Journal of Luminescence, 2010, 130, 442-450.	1.5	111
40	Detection of stress distribution using Ca2MgSi2O7:Eu,Dy microparticles. Physica E: Low-Dimensional Systems and Nanostructures, 2010, 42, 2872-2875.	1.3	41
41	Enhancement of Mechanoluminescence in CaAl[sub 2]Si[sub 2]O[sub 8]:Eu[sup 2+] by Partial Sr[sup 2+] Substitution for Ca[sup 2+]. Journal of the Electrochemical Society, 2010, 157, J50.	1.3	39
42	Studies on AC Electroluminescence Device Made of BaTiO₃â€“CaTiO₃:Pr³⁺Diphase Ceramics. Applied Physics Express, 2010, 3, 022601.	1.1	17
43	Strong Elastico-Mechanoluminescence in Diphase (Ba,Ca)TiO[sub 3]:Pr[sup 3+] with Self-Assembled Sandwich Architectures. Journal of the Electrochemical Society, 2010, 157, G269.	1.3	46
44	BLUE LIGHT EMISSION FROM STRESS-ACTIVATED SR₂MGSI₂O₇:EU. International Journal of Modern Physics B, 2009, 23, 1028-1033.	1.0	42
45	Mechanoluminescence of Europium-Doped SrAMgSi₂O₇ (A=Ca, Sr, Ba). Japanese Journal of Applied Physics, 2009, 48, 04C109.	0.8	35
46	Upgrade Mechanoluminescence by Sr²⁺ Substitution in CaAl₂Si₂O₈: Eu²⁺. Key Engineering Materials, 2009, 421-422, 315-318.	0.4	0
47	Hybrid material consisting of mechanoluminescent material and TiO2 photocatalyst. Thin Solid Films, 2009, 518, 473-476.	0.8	19
48	Development of mechanoluminescent micro-particles Ca2MgSi2O7:Eu,Dy and their application in sensors. Thin Solid Films, 2009, 518, 610-613.	0.8	53
49	Property of Highly Oriented SrAl[sub 2]O[sub 4]:Eu Film on Quartz Glass Substrates and Its Potential Application in Stress Sensor. Journal of the Electrochemical Society, 2009, 156, J249.	1.3	35
50	Dynamic visualization of stress distribution on metal by mechanoluminescence images. Journal of Visualization, 2008, 11, 329-335.	1.1	68
51	Preparation and characterization of fiber-textured SrAl2O4:Eu films grown using a homo-buffer layer. Journal of Crystal Growth, 2008, 310, 2885-2889.	0.7	7
52	Giant negative thermal expansion in magnetic nanocrystals. Nature Nanotechnology, 2008, 3, 724-726.	15.6	140
53	Determination of Eu Sites in Highly Europium-Doped Strontium Aluminate Phosphor Using Synchrotron X-Ray Powder Diffraction Analysis. Journal of the Electrochemical Society, 2008, 155, F139.	1.3	8
54	Observation of Elasticoluminescence from CaAl[sub 2]Si[sub 2]O[sub 8]:Eu[sup 2+] and Its Water Resistance Behavior. Journal of the Electrochemical Society, 2008, 155, J63.	1.3	47

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55	Fabrication of Triboluminescent Film on Inconel 600 Substrate by RF Magnetron Sputtering Method. Key Engineering Materials, 2008, 388, 153-156.	0.4	2
56	Triboluminescence of SrAl₂O₄:Eu Film with Strong Adhesion Fabricated by a Combination of RF Magnetron Sputtering and Post-Annealing Treatment. Key Engineering Materials, 2008, 368-372, 1362-1365.	0.4	10
57	Triboluminescence Properties of Highly Oriented SrAl[sub 2]O[sub 4]:Eu Films on Inconel 600 Substrate. Electrochemical and Solid-State Letters, 2008, 11, J27.	2.2	13
58	Blue Light Emission from Stress-Activated CaYAl[sub 3]O[sub 7]:Eu. Journal of the Electrochemical Society, 2008, 155, J128.	1.3	68
59	Blue-Greenish Light Emission from Stress-Activated SrCaMgSi₂O₇:Eu. Key Engineering Materials, 2008, 368-372, 359-362.	0.4	4
60	Green Mechanoluminescence of Ca[sub 2]MgSi[sub 2]O[sub 7]:Eu and Ca[sub 2]MgSi[sub 2]O[sub 7]:Eu,Dy. Journal of the Electrochemical Society, 2008, 155, J55.	1.3	41
61	Anisotropic lattice behavior in elasticoluminescent material SrAl2O4:Eu2+. Applied Physics Letters, 2008, 92, .	1.5	21
62	Ab initiocalculations of the mechanical properties of SrAl2O4 stuffed tridymite. Journal of Applied Physics, 2007, 102, .	1.1	14
63	Stress-Induced Mechanoluminescence in SrCaMgSi[sub 2]O[sub 7]:Eu. Electrochemical and Solid-State Letters, 2007, 10, J129.	2.2	49
64	Photocell System Driven by Mechanoluminescence. Japanese Journal of Applied Physics, 2007, 46, 2385-2388.	0.8	29
65	Quality Improvement of SrAl[sub 2]O[sub 4]:Eu[sup 2+] Film on Quartz Glass Through a Two-Step Sputtering Process. Journal of the Electrochemical Society, 2007, 154, J341.	1.3	5
66	Ultraviolet mechanoluminescence from SrAl2O4:Ce and SrAl2O4:Ce,Ho. Applied Physics Letters, 2007, 91, .	1.5	79
67	Enhancement of Adhesion and Triboluminescent Properties of SrAl[sub 2]O[sub 4]:Eu[sup 2+] Films Fabricated by RF Magnetron Sputtering and Postannealing Techniques. Journal of the Electrochemical Society, 2007, 154, J348.	1.3	36
68	Water-Resistant Surface-Coating on Europium-Doped Strontium Aluminate Nanoparticles. Journal of the Electrochemical Society, 2007, 154, J77.	1.3	23
69	One-Step Synthesis of Luminescent Nanoparticles of Complex Oxide, Strontium Aluminate. Journal of the American Ceramic Society, 2007, 90, 2273-2275.	1.9	36
70	Electrostrictive Properties of Pr-Doped BaTiO3â€“CaTiO3Ceramics. Japanese Journal of Applied Physics, 2006, 45, 813-816.	0.8	17
71	Electrostrictive and photoluminescent properties in Pr-doped (Ba,Sr)(Ti,Al)O/sub 3/ ceramics. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 1969-1973.	1.7	4
72	Electro-Mechano-Optical Conversions in Pr3+-Doped BaTiO3-CaTiO3 Ceramics. Advanced Materials, 2005, 17, 1254-1258.	11.1	343

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73	Enhancement of Photoluminescence in CaTiO3:Pr3+by Ba and Sr Substitution for Ca. Japanese Journal of Applied Physics, 2005, 44, L912-L914.	0.8	27
74	Unconventional magnetic transitions in the mineral clinoatacamiteCu2Cl(OH)3. Physical Review B, 2005, 71, .	1.1	97
75	Large electrostriction near the solubility limit in BaTiO3â€“CaTiO3 ceramics. Applied Physics Letters, 2005, 86, 022905.	1.5	138
76	Synthesis and Electric Property of CeAlO3Ceramics. Japanese Journal of Applied Physics, 2005, 44, 961-963.	0.8	13
77	Antiferromagnetic transitions in polymorphous minerals of the natural cuprates atacamite and botallackiteCu2Cl(OH)3. Physical Review B, 2005, 71, .	1.1	70
78	Lattice Deformation in Thermally Degraded Barium Magnesium Aluminate Phosphor. Journal of the Electrochemical Society, 2004, 151, E349.	1.3	15
79	Observation of orientational disorder in the hexagonal stuffed tridymite Sr0.864Eu0.136Al2O4by the maximum-entropy method. Journal of Applied Crystallography, 2004, 37, 698-702.	1.9	14
80	Fast suppression of antiferromagnetism inCu1â^'xLixO. Physical Review B, 2004, 69, .	1.1	17
81	Strong elasticoluminescence from monoclinic-structure SrAl2O4. Applied Physics Letters, 2004, 84, 3040-3042.	1.5	174
82	Novel Structural Behavior of Strontium Aluminate Doped with Europium. Journal of the Electrochemical Society, 2004, 151, H97.	1.3	26
83	Lattice distortion and magnetolattice coupling in CuO. Physical Review B, 2004, 69, .	1.1	41
84	Determination of the Crystal Structure of Spherical Particles of SrAl[sub 2]O[sub 4]:Eu Prepared by the Spray Method. Journal of the Electrochemical Society, 2003, 150, E251.	1.3	12
85	Effect of hole doping inLixCu1â^'xO. Physical Review B, 2003, 67, .	1.1	20
86	Evidence of Charge Stripes, Charge-Spin-Orbital Coupling and Phase Transition in a Simple Copper Oxide CuO. Journal of the Physical Society of Japan, 2001, 70, 1054-1063.	0.7	31
87	Observation of Charge Stripes in Cupric Oxide. Physical Review Letters, 2000, 85, 5170-5173.	2.9	210
88	The structural phase transition in BaTiO₃ in a static electric field. Phase Transitions, 1995, 54, 123-129.	0.6	2
89	Effect of Extinction on Neutron Diffraction Intensity of Silicon Single Crystals. Japanese Journal of Applied Physics, 1994, 33, 5107-5108.	0.8	4
90	Characterization of Single Crystals of High-TcSuperconductor La2-xSrxCuO4. Japanese Journal of Applied Physics, 1993, 32, 4959-4965.	0.8	3

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91	A Novel Technique for Viewing Stress Distribution with Mechanoluminescence Materials. Key Engineering Materials, 0, 368-372, 1401-1404.	0.4	19
92	Development of A Novel Elasticoluminescent Material with Calcium Aluminosilicate. Key Engineering Materials, 0, 368-372, 352-354.	0.4	1
93	New Mechanoluminescent Materials with Various Colors. Key Engineering Materials, 0, 388, 305-308.	0.4	6
94	Enhancement of Mechanoluminescence from ZnS:Mn,Te by Wet Process. Key Engineering Materials, 0, 388, 301-304.	0.4	6
95	Multifunctional Performance of Europium-Doped Feldspar Ceramics. Advanced Materials Research, 0, 47-50, 209-211.	0.3	5
96	Effects of SrAl₂O₄ Homo-Buffer Layer on SrAl₂O₄:Eu Phosphors Film Grown on Glass by RF Sputtering. Key Engineering Materials, 0, 368-372, 1358-1361.	0.4	1
97	A Novel Blue-Violet Emitting Mechanoluminescent Material with Calcium Aluminosilicate. Key Engineering Materials, 0, 388, 277-280.	0.4	3
98	Dynamic Visualization of Stress Distribution by Mechanoluminescence Image. Key Engineering Materials, 0, 388, 265-268.	0.4	11
99	Triboluminescence of Highly Oriented SrAl₂O₄:Eu Film and its Potential Role as a Stress Indicator. Key Engineering Materials, 0, 421-422, 319-322.	0.4	1