

Tomohiko Nakajima

List of Publications by Year in descending order

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citations

201385

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3035
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#	ARTICLE	IF	CITATIONS
1	Black-TiO ₂ Nanotubes Formed by High-Energy Proton Implantation Show Noble-Metal-Catalyst Free Photocatalytic H ₂ -Evolution. Nano Letters, 2015, 15, 6815-6820.	4.5	174
2	Correlation between Luminescence Quantum Efficiency and Structural Properties of Vanadate Phosphors with Chained, Dimerized, and Isolated VO ₄ Tetrahedra. Journal of Physical Chemistry C, 2010, 114, 5160-5167.	1.5	162
3	Promoting the hydrogen evolution reaction through oxygen vacancies and phase transformation engineering on layered double hydroxide nanosheets. Journal of Materials Chemistry A, 2020, 8, 2490-2497.	5.2	159
4	A revisit of photoluminescence property for vanadate oxides AVO ₃ (A:K, Rb and Cs) and M ₃ V ₂ O ₈ (M:Mg) Tj ETQq0,0,0 rgBT /Overlock 138	1.5	138
5	Direct fabrication of metavanadate phosphor films on organic substrates for white-light-emitting devices. Nature Materials, 2008, 7, 735-740.	13.3	123
6	Structures and Electromagnetic Properties of New Metal-Ordered Manganites:RBaMn ₂ O ₆ (R=Y and) Tj ETQq0,0,0 rgBT /Overlock 10 Tf 5 100	0.7	100
7	Photoluminescence property of vanadates M ₂ V ₂ O ₇ (M: Ba, Sr and Ca). Optical Materials, 2010, 32, 1618-1621.	1.7	99
8	A-site Randomness Effect on Structural and Physical Properties of Ba-based Perovskite Manganites. Journal of the Physical Society of Japan, 2004, 73, 2283-2291.	0.7	93
9	Ground State Properties of theA-site Ordered Manganites, RBaMn ₂ O ₆ (R= La, Pr and Nd). Journal of the Physical Society of Japan, 2003, 72, 3237-3242.	0.7	91
10	Hydrogenated Anatase: Strong Photocatalytic Dihydrogen Evolution without the Use of a Co-Catalyst. Angewandte Chemie - International Edition, 2014, 53, 14201-14205.	7.2	87
11	New A-site Ordered Perovskite Cobaltite LaBaCo ₂ O ₆ : Synthesis, Structure, Physical Property and Cation Order-Disorder Effect. Journal of the Physical Society of Japan, 2005, 74, 1572-1577.	0.7	78
12	Successive phase transitions in a metal-ordered manganite perovskite YBaMn ₂ O ₆ . Journal of Physics and Chemistry of Solids, 2002, 63, 913-916.	1.9	71
13	Plant Habitat-Conscious White Light Emission of Dy ³⁺ in Whitlockite-like Phosphates: Reduced Photosynthesis and Inhibition of Bloom Impediment. ACS Applied Materials & Interfaces, 2015, 7, 21398-21407.	4.0	71
14	UV-assisted nucleation and growth of oxide films from chemical solutions. Chemical Society Reviews, 2014, 43, 2027-2041.	18.7	68
15	Photo-driven Oxygen Vacancies Extends Charge Carrier Lifetime for Efficient Solar Water Splitting. Angewandte Chemie - International Edition, 2021, 60, 17601-17607.	7.2	67
16	Singlet Ground State and Magnetic Interactions in New Spin Dimer System Ba ₃ Cr ₂ O ₈ . Journal of the Physical Society of Japan, 2006, 75, 054706.	0.7	56
17	Rapid formation of black titania photoanodes: pulsed laser-induced oxygen release and enhanced solar water splitting efficiency. Journal of Materials Chemistry A, 2014, 2, 6762-6771.	5.2	52
18	Rare earth-free high color rendering white light-emitting diodes using CsVO ₃ with highest quantum efficiency for vanadate phosphors. Journal of Materials Chemistry C, 2015, 3, 10748-10754.	2.7	49

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19	WO ₃ nanosponge photoanodes with high applied bias photon-to-current efficiency for solar hydrogen and peroxydisulfate production. <i>Journal of Materials Chemistry A</i> , 2016, 4, 17809-17818.	5.2	49
20	Anomalous octahedral distortion and multiple phase transitions in the metal-ordered manganite YBaMn ₂ O ₆ . <i>Journal of Solid State Chemistry</i> , 2004, 177, 987-999.	1.4	47
21	New Stacking Variations of the Charge and Orbital Ordering in the Metal-Ordered Manganite YBaMn ₂ O ₆ . <i>Journal of the Physical Society of Japan</i> , 2003, 72, 241-244.	0.7	46
22	Novel structures and electromagnetic properties of the A-site-ordered/disordered manganites RBaMn ₂ O ₆ /R _{0.5} Ba _{0.5} MnO ₃ (R = Y and rare earth elements). <i>Journal of Physics Condensed Matter</i> , 2004, 16, S573-S583.	0.7	46
23	Preparation and Characterization of Epitaxial VO ₂ Films on Sapphire Using Postepitaxial Topotaxy Route via Epitaxial V ₂ O ₃ Films. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 1022-1027.	0.8	37
24	Pulsed laser-induced oxygen deficiency at TiO ₂ surface: Anomalous structure and electrical transport properties. <i>Journal of Solid State Chemistry</i> , 2009, 182, 2560-2565.	1.4	32
25	Plant habitat-conscious white light-emitting devices: Dy ³⁺ -emission considerably reduces involvement in photosynthesis. <i>Journal of Materials Chemistry C</i> , 2015, 3, 3371-3378.	2.7	32
26	Tungsten induced defects control on BiVO ₄ photoanodes for enhanced solar water splitting performance and photocorrosion resistance. <i>Applied Catalysis B: Environmental</i> , 2021, 298, 120610.	10.8	32
27	Effective-Time of Pulsed Photothermal Heating for Polycrystalline Nucleation of Perovskite Oxide Films from an Amorphous Matrix. <i>Applied Physics Express</i> , 0, 2, 023001.	1.1	31
28	A method to give chemical stabilities of photoelectrodes for water splitting: Compositing of a highly crystallized TiO ₂ layer on a chemically unstable Cu ₂ O photocathode using laser-induced crystallization process. <i>Applied Surface Science</i> , 2016, 363, 173-180.	3.1	31
29	Ti-Doped VO ₂ Films Grown on Glass Substrates by Excimer-Laser-Assisted Metal Organic Deposition Process. <i>Japanese Journal of Applied Physics</i> , 2011, 50, 01BE04.	0.8	28
30	A universal value of effective annealing time for rapid oxide nucleation and growth under pulsed ultraviolet laser irradiation. <i>Physical Chemistry Chemical Physics</i> , 2013, 15, 14384.	1.3	24
31	Photoelectrochemical Oxidation of Glycerol to Dihydroxyacetone Over an Acid-Resistant Ta:BiVO ₄ Photoanode. <i>ACS Sustainable Chemistry and Engineering</i> , 2022, 10, 7586-7594.	3.2	24
32	Low-Temperature Fabrication of Red Phosphor Ca _{0.997} Pr _{0.002} TiO ₃ Thin Film Using Excimer Laser Assisted Metal Organic Deposition. <i>Japanese Journal of Applied Physics</i> , 2007, 46, L365-L368.	0.8	23
33	Flexible thermistors: pulsed laser-induced liquid-phase sintering of spinel Mn ²⁺ -Co ²⁺ -Ni oxide films on polyethylene terephthalate sheets. <i>Journal of Materials Chemistry C</i> , 2015, 3, 3809-3816.	2.7	23
34	Flexible humidity sensors composed of graphite-like carbon micro-pinecone arrays. <i>RSC Advances</i> , 2016, 6, 95342-95348.	1.7	21
35	Single-LED solar simulator for amorphous Si and dye-sensitized solar cells. <i>RSC Advances</i> , 2014, 4, 19165-19171.	1.7	20
36	Simultaneous reduction of surface, bulk, and interface recombination for Au nanoparticle-embedded hematite nanorod photoanodes toward efficient water splitting. <i>Journal of Materials Chemistry A</i> , 2019, 7, 5258-5265.	5.2	17

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37	Korringa-like relaxation in the high-temperature phase of A-site ordered YBaMn ₂ O ₆ . Physical Review B, 2012, 85, .	1.1	16
38	Flexible Ceramic Film Sensors for Free-Form Devices. Sensors, 2022, 22, 1996.	2.1	15
39	In situ monitoring of excimer laser annealing of tin-doped indium oxide films for the development of a low-temperature fabrication process. Applied Surface Science, 2014, 292, 1052-1058.	3.1	14
40	Effect of Lattice Distortion on Photocatalytic Performance of TiO ₂ . Catalysis Letters, 2017, 147, 292-300.	1.4	14
41	Sustainable chromic acid oxidation: solar-driven recycling of hexavalent chromium ions for quinone production by WO ₃ nanosponge photoanodes. Journal of Materials Chemistry A, 2018, 6, 110-117.	5.2	14
42	Electron spin resonance across the charge-ordering transition in $YBaMn_2O_6$. Physical Review B, 2008, 78, .	1.1	13
43	N-Doped lepidocrocite nanotubular arrays: hydrothermal formation from anodic TiO ₂ nanotubes and enhanced visible light photoresponse. Journal of Materials Chemistry A, 2013, 1, 1860-1866.	5.2	13
44	Highly stable flexible thermistor properties of spinel Mn-Co-Ni oxide films on silver/carbon micro-pinecone array composite electrodes. Journal of Applied Physics, 2017, 122, .	1.1	13
45	Probing electronic-phase-separated insulating domains in the metallic phase of patterned perovskite manganite microwires. Physical Review B, 2009, 80, .	1.1	11
46	Facile on-demand oriented growth of perovskite oxide thin films: applications of Dionâ€“Jacobson phase as seed layer. CrystEngComm, 2011, 13, 158-166.	1.3	11
47	Uncooled infrared detector with 12 $\frac{1}{4}$ m pixel pitch video graphics array. Proceedings of SPIE, 2013, , .	0.8	11
48	Crystal growth of phosphor perovskite titanate thin films under excimer laser irradiation. Applied Physics A: Materials Science and Processing, 2008, 93, 51-55.	1.1	10
49	The significant effect of heterojunction quality on photoelectrochemical water splitting in bilayer photoelectrodes: Rb _x WO ₃ thin films on RbLaNb ₂ O ₇ layers. Physical Chemistry Chemical Physics, 2014, 16, 26901-26908.	1.3	10
50	Ultrathin Highly Flexible Featherweight Ceramic Temperature Sensor Arrays. ACS Applied Materials & Interfaces, 2020, 12, 36600-36608.	4.0	10
51	Acid-Resistant BiVO ₄ Photoanodes: Insolubility Control by Solvents and Weak W Diffusion in the Lattice. ACS Applied Materials & Interfaces, 2021, 13, 12079-12090.	4.0	10
52	Transparent and flexible field emission display device based on single-walled carbon nanotubes. Physica Status Solidi - Rapid Research Letters, 2012, 6, 303-305.	1.2	9
53	Electrical properties of Sb-doped epitaxial SnO ₂ thin films prepared using excimer-laser-assisted metal-organic deposition. Applied Physics B: Lasers and Optics, 2013, 113, 333-338.	1.1	9
54	Improvement of temperature coefficient of resistance of a VO ₂ film on an SiN/polyimide/Si substrate by excimer laser irradiation for IR sensors. Japanese Journal of Applied Physics, 2014, 53, 05FB15.	0.8	9

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55	Rubidium metavanadate formation at room temperature under vacuum ultraviolet irradiation from metal-organic compositions. <i>Applied Surface Science</i> , 2009, 255, 9787-9790.	3.1	8
56	New route for low-temperature fabrication of Sr $^{1-x}$ Pr $_x$ TiO $_3$:Al $_3$ polycrystalline thin film phosphors. <i>Current Applied Physics</i> , 2008, 8, 404-407.	1.1	7
57	Flexible and Epitaxial Metal Oxide Thin Film Growth by Photoreaction Processing for Electrical and Optical Applications. <i>Chemistry - A European Journal</i> , 2020, 26, 9261-9276.	1.7	7
58	Structures and physical properties of metal-ordered manganites R $_{1-x}$ Y $_x$ Mn $_2$ O $_6$ (R:Y and rare earth) Tj ETQq0 0 0 rgBT /Qverlock 10 Tf 50 6	1.3	6
59	Fabrication of La $_{1-x}$ Pr $_x$ MnO $_3$ thin films by chemical solution deposition for high-temperature resistive materials. <i>Journal of the Ceramic Society of Japan</i> , 2014, 122, 415-420.	0.5	6
60	Intermediate-temperature sensors based on La $_{0.5}$ Ba $_{0.5}$ MnO $_3$ /nanoporous anodic aluminum oxide multilayered film thermistors. <i>Journal of Materials Chemistry C</i> , 2019, 7, 5193-5200.	2.7	6
61	Photo-driven Oxygen Vacancies Extends Charge Carrier Lifetime for Efficient Solar Water Splitting. <i>Angewandte Chemie</i> , 2021, 133, 17742-17748.	1.6	6
62	Structural and physical property of A-site ordered perovskite manganite LaBaMn $_2$ O $_6$ thin film on SrTiO $_3$ (0 0 1). <i>Materials Science and Engineering B: Solid-State Materials for Advanced Technology</i> , 2007, 144, 104-108.	1.7	5
63	Amorphous film thickness dependence for epitaxy of perovskite oxide films under excimer laser irradiation. <i>Applied Surface Science</i> , 2009, 255, 9775-9778.	3.1	5
64	Tunable photoluminescent properties of Eu-doped \hat{I}^2 -Ga $_2$ O $_3$ phosphor thin films prepared via excimer laser-assisted metal organic decomposition. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 05FB14.	0.8	5
65	Diffusion controlled porous WO $_3$ thin film photoanodes for efficient solar-driven photoelectrochemical permanganic acid production. <i>Sustainable Energy and Fuels</i> , 2019, 3, 2380-2390.	2.5	5
66	Origin of simultaneous enhancement of work function and carrier concentration in In $_2$ O $_3$ films by excimer-laser irradiation. <i>Applied Physics Letters</i> , 2021, 118, .	1.5	5
67	Solar-to-Pharmaceutical Raw Material Production: Photoelectrochemical Naphthoquinone Formation Using Stabilized BiVO $_4$ Photoanodes in Acid Media. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 57132-57141.	4.0	5
68	Epitaxial Growth of La $_{0.7}$ Ba $_{0.3}$ MnO $_3$ Thin Films on SrTiO $_3$ and LaAlO $_3$ Substrates by Metal-Organic Deposition. <i>Japanese Journal of Applied Physics</i> , 2007, 46, 2530-2533.	0.8	4
69	New sign of vacuum ultraviolet driven crystal growth in ternary oxide Zn $_3$ V $_2$ O $_8$ films. <i>Applied Physics A: Materials Science and Processing</i> , 2010, 98, 885-888.	1.1	4
70	Strain Effect on the Electrical and Magnetic Properties of \hat{A} La $_{0.7}$ Ba $_{0.3}$ MnO $_3$ Thin Films Grown by Metal-Organic Deposition. <i>Journal of Superconductivity and Novel Magnetism</i> , 2010, 23, 1355-1358.	0.8	4
71	SR investigation of magnetically ordered states in the A-site ordered perovskite manganites $R_{1-x}Y_xMnO_3$ ($R = La, Pr$). http://www.w3.org/1998/Math/MathML	1.1	4
72	In situ measurement of crystallization of oxide thin films during irradiation with pulsed UV laser in chemical solution deposition process. <i>Applied Physics B: Lasers and Optics</i> , 2013, 113, 479-484.	1.1	4

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73	An optical method for evaluating the degradation mechanism of a developing RuO ₂ /thick film resistor element for power modules. Journal of the Ceramic Society of Japan, 2017, 125, 476-481.	0.5	4
74	Crystal-Plane Dependence of Nb-Doped Rutile TiO ₂ Single Crystals on Photoelectrochemical Water Splitting. Catalysts, 2019, 9, 725.	1.6	4
75	Structures and Electromagnetic Properties of the A-site Ordered Perovskite Manganite. , 2005, , 273-294.		3
76	Effective Connection of Phase-Separated Metallic Pathways under Low Magnetic Fields in Charge-Ordered Insulators of Micropatterned Perovskite Manganite Thin Films. Journal of the Physical Society of Japan, 2010, 79, 014712.	0.7	3
77	Ion-Exchange Protonation and Enhanced Seed Layer Property of Uniaxially Grown RbLaNb ₂ O ₇ Thin Films on Glass Substrates. Journal of the American Ceramic Society, 2012, 95, 573-578.	1.9	3
78	Design of process diagnostics for excimer laser irradiation of oxide thin films. Japanese Journal of Applied Physics, 2014, 53, 05FB08.	0.8	3
79	Low temperature uniaxial growth of conducting LaNiO ₃ thin films on glass substrates with RbLaNb ₂ O ₇ seed layer. Applied Physics A: Materials Science and Processing, 2011, 104, 981-985.	1.1	2
80	(001)-orientation of anatase TiO ₂ thin films on RbLaNb ₂ O ₇ seed layer prepared by ELAMOD. IOP Conference Series: Materials Science and Engineering, 2011, 18, 032009.	0.3	2
81	Unconventional upright layer orientation and considerable enhancement of proton-electron conductivity in Dion-Jacobson perovskite thin films. CrystEngComm, 2014, 16, 4113-4119.	1.3	2
82	SR study of A-site ordered perovskite manganite LaBaMn ₂ O ₆ . Journal of Physics: Conference Series, 2012, 391, 012096.	0.3	1
83	Passive Component Enhancements in High-Temperature Electronic Devices: A Deterioration Mechanism for Metal Electrodes in Ceramic Film Resistors. Industrial & Engineering Chemistry Research, 2020, 59, 10483-10492.	1.8	1
84	Structural and Physical Properties of A-site Ordered/Disordered Perovskite Manganites RBaMn ₂ O ₆ /R _{0.5} Ba _{0.5} MnO ₃ . Funtai Oyobi Fummtatsu Yakin/Journal of the Japan Society of Powder and Powder Metallurgy, 2004, 51, 869-874.	0.1	0
85	Variability of electrical resistivity in epitaxial grown La _{0.5} Ba _{0.5} MnO ₃ patterned micro-wires. Journal of Physics: Conference Series, 2010, 200, 012138.	0.3	0
86	Out-of-Plane and In-Plane Crystalline Orientations of Oxide Heterostructures of LSMO/ZnO. Materials Research Society Symposia Proceedings, 2012, 1454, 69-74.	0.1	0
87	Pulsed Laser Assisted Polycrystalline Growth of Oxide Thin Films for Efficient Processing. Materials Research Society Symposia Proceedings, 2012, 1449, 3.	0.1	0
88	Solution-processed perfect uniaxial orientation of perovskite titanate (Ca _{0.65} Sr _{0.35}) _{0.997} Pr _{0.002} TiO ₃ phosphor thin films. Japanese Journal of Applied Physics, 2014, 53, 05FB05.	0.8	0