

Shoichiro Nakao

List of Publications by Year in descending order

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430874

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48
times ranked

1481
citing authors

#	ARTICLE	IF	CITATIONS
1	Ligand Field-Induced Exotic Dopant for Infrared Transparent Electrode: W in Rutile SnO ₂ . Advanced Functional Materials, 2022, 32, .	14.9	8
2	Spectral Splitting Solar Cells Constructed with InGaP/GaAs Two-Junction Subcells and Infrared PbS Quantum Dot/ZnO Nanowire Subcells. ACS Energy Letters, 2022, 7, 2477-2485.	17.4	7
3	Electron localization induced by intrinsic anion disorder in a transition metal oxynitride. Communications Physics, 2021, 4, .	5.3	9
4	High-Mobility and Air-Stable Amorphous Semiconductor Composed of Earth-Abundant Elements: Amorphous Zinc Oxy sulfide. Advanced Electronic Materials, 2020, 6, 1900602.	5.1	5
5	High-Quality Heteroepitaxial Growth of Thin Films of the Perovskite Oxynitride CaTaO ₂ N: Importance of Interfacial Symmetry Matching between Films and Substrates. ACS Omega, 2020, 5, 13396-13402.	3.5	7
6	High mobility approaching the intrinsic limit in Ta-doped SnO ₂ films epitaxially grown on TiO ₂ (001) substrates. Scientific Reports, 2020, 10, 6844.	3.3	24
7	Epitaxial Growth of Baddeleyite NbON Thin Films on Ytria-stabilized Zirconia by Pulsed Laser Deposition. Chemistry Letters, 2018, 47, 65-67.	1.3	7
8	Strain-enhanced topotactic hydrogen substitution for oxygen in SrTiO ₃ epitaxial thin film. Applied Physics Letters, 2018, 113, .	3.3	6
9	(TiO ₂) _{1-x} (TaON) _x Solid Solution for Band Engineering of Anatase TiO ₂ . Chemistry of Materials, 2018, 30, 8789-8794.	6.7	8
10	Anion-Substitution-Induced Nonrigid Variation of Band Structure in SrNbO _{3-x} N _x (0 ≤ x ≤ 1) Epitaxial Thin Films. ACS Applied Materials & Interfaces, 2018, 10, 35008-35015.	8.0	19
11	Fabrication of textured SnO ₂ transparent conductive films using self-assembled Sn nanospheres. Japanese Journal of Applied Physics, 2018, 57, 060307.	1.5	0
12	Enhanced Electrical Conduction in Anatase TaON via Soft Chemical Lithium Insertion toward Electronics Application. ACS Applied Nano Materials, 2018, 1, 3981-3985.	5.0	3
13	TiO ₂ /TNO homojunction introduced in a dye-sensitized solar cell with a novel transparent conductive oxide film. Journal of the American Ceramic Society, 2018, 101, 5071-5079.	3.8	3
14	Effect of micromorphology on transport properties of Nb-doped anatase TiO ₂ films: A transmission electron microscopy study. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600606.	1.8	1
15	Structural, electrical, and optical properties of polycrystalline NbO ₂ thin films grown on glass substrates by solid phase crystallization. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600604.	1.8	4
16	Indium-Free Inverted Organic Solar Cells Using Niobium-Doped Titanium Oxide with Integrated Dual Function of Transparent Electrode and Electron Transport Layer. Advanced Electronic Materials, 2016, 2, 1500341.	5.1	8
17	Effects of reductive annealing on insulating polycrystalline thin films of Nb-doped anatase TiO ₂ : recovery of high conductivity. Journal of Semiconductors, 2016, 37, 022001.	3.7	4
18	Amorphous ZnO _x Ny thin films with high electron Hall mobility exceeding 200 cm ² V ⁻¹ s ⁻¹ . Applied Physics Letters, 2016, 109, .	3.3	19

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19	Intrinsic high electrical conductivity of stoichiometric SrNbO_3 epitaxial thin films. <i>Physical Review B</i> , 2015, 92, .	3.2	58
20	Composition-induced structural, electrical, and magnetic phase transitions in <i>AX</i> -type mixed-valence cobalt oxynitride epitaxial thin films. <i>Applied Physics Letters</i> , 2015, 107, .	3.3	12
21	Low temperature epitaxial growth of anatase TaON using anatase TiO_2 seed layer. <i>Japanese Journal of Applied Physics</i> , 2015, 54, 080303.	1.5	3
22	Electrical and Structural Properties of Ta-doped SnO_2 Transparent Conductive Thin Films by Pulsed Laser Deposition. <i>Materials Research Society Symposia Proceedings</i> , 2014, 1604, 1.	0.1	0
23	TiO_2 thin film crystallization temperature lowered by Cu-induced solid phase crystallization. <i>Thin Solid Films</i> , 2014, 553, 17-20.	1.8	5
24	Carrier generation mechanism and effect of tantalum-doping in transparent conductive amorphous SnO_2 thin films. <i>Japanese Journal of Applied Physics</i> , 2014, 53, 05FX04.	1.5	8
25	High-Mobility Electron Conduction in Oxynitride: Anatase TaON . <i>Chemistry of Materials</i> , 2014, 26, 976-981.	6.7	42
26	Lateral Solid-Phase Epitaxy of Oxide Thin Films on Glass Substrate Seeded with Oxide Nanosheets. <i>ACS Nano</i> , 2014, 8, 6145-6150.	14.6	24
27	Epitaxial growth of indium oxyfluoride thin films by reactive pulsed laser deposition: Structural change induced by fluorine insertion into vacancy sites in bixbyite structure. <i>Thin Solid Films</i> , 2014, 559, 96-99.	1.8	3
28	c-axis-oriented growth of anatase TiO_2 thin films on glass substrate with $\text{SrTiO}_3/\text{TiN}$ template. <i>Journal of Crystal Growth</i> , 2013, 376, 66-69.	1.5	5
29	Application of sputter-deposited amorphous and anatase TiO_2 as electron-collecting layers in inverted organic photovoltaics. <i>Organic Electronics</i> , 2013, 14, 1715-1719.	2.6	18
30	Wet Etching of Amorphous TiO_2 Thin Films Using H_3PO_4 "H ₂ O" Aqueous Solution. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 098002.	1.5	11
31	Metal-induced solid-phase crystallization of amorphous TiO_2 thin films. <i>Applied Physics Letters</i> , 2012, 101, 052101.	3.3	23
32	Transparent conductivity of fluorine-doped anatase TiO_2 epitaxial thin films. <i>Journal of Applied Physics</i> , 2012, 111, 093528.	2.5	25
33	Fabrication of Nb-Doped TiO_2 Transparent Conducting Films by Postdeposition Annealing under Nitrogen Atmosphere. <i>Japanese Journal of Applied Physics</i> , 2012, 51, 118003.	1.5	3
34	Crystallization Kinetics of Amorphous Sputtered Nb-Doped TiO_2 Thin Films. <i>Applied Physics Express</i> , 2011, 4, 105601.	2.4	8
35	Enhanced Carrier Transport in Uniaxially (001)-Oriented Anatase $\text{Ti}_{0.94}\text{Nb}_{0.06}\text{O}_2$ Films Grown on Nanosheet Seed Layers. <i>Applied Physics Express</i> , 2011, 4, 045801.	2.4	21
36	Fabrication of transparent conductive W-doped SnO_2 thin films on glass substrates using anatase TiO_2 seed layers. <i>Physica Status Solidi C: Current Topics in Solid State Physics</i> , 2011, 8, 543-545.	0.8	25

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37	Wet Etching of TiO ₂ -Based Precursor Amorphous Films for Transparent Electrodes. Japanese Journal of Applied Physics, 2011, 50, 018002.	1.5	5
38	Wet Etching of TiO ₂ -Based Precursor Amorphous Films for Transparent Electrodes. Japanese Journal of Applied Physics, 2011, 50, 018002.	1.5	6
39	Transparent conducting Nb-doped anatase TiO ₂ (TNO) thin films sputtered from various oxide targets. Thin Solid Films, 2010, 518, 3101-3104.	1.8	51
40	Fabrication of highly conductive Ta-doped SnO ₂ polycrystalline films on glass using seed-layer technique by pulse laser deposition. Thin Solid Films, 2010, 518, 3093-3096.	1.8	34
41	Properties of TiO ₂ -based transparent conducting oxides. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 1529-1537.	1.8	165
42	Sputter Deposition of High-Mobility Sn _{1-x} Ta _x O ₂ Films on Anatase-TiO ₂ -Coated Glass. Japanese Journal of Applied Physics, 2010, 49, 108002.	1.5	12
43	Carrier Compensation by Excess Oxygen Atoms in Anatase Ti _{0.94} Nb _{0.06} O _{2+δ} Epitaxial Thin Films. Japanese Journal of Applied Physics, 2010, 49, 041102.	1.5	18
44	High Mobility Exceeding 80 cm ² V ⁻¹ s ⁻¹ in Polycrystalline Ta-Doped SnO ₂ Thin Films on Glass Using Anatase TiO ₂ Seed Layers. Applied Physics Express, 2010, 3, 031102.	2.4	44
45	Large electron mass anisotropy in a d-electron-based transparent conducting oxide: Nb-doped anatase films. Physical Review B, 2009, 79, .	3.2	63
46	Direct growth of transparent conducting Nb-doped anatase TiO ₂ polycrystalline films on glass. Journal of Applied Physics, 2009, 105, .	2.5	70
47	Electronic Band Structure of Transparent Conductor: Nb-Doped Anatase TiO ₂ . Applied Physics Express, 2008, 1, 111203.	2.4	134
48	Low-temperature Fabrication of Transparent Conducting Anatase Nb-doped TiO ₂ Films by Sputtering. Applied Physics Express, 2008, 1, 115001.	2.4	69