Shunichi Hishita

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3002505/publications.pdf

Version: 2024-02-01

102	4,176	172457	110387
papers	citations	29 h-index	64 g-index

104	104	104	4992
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Visible-light-driven photocatalysis on fluorine-doped TiO2 powders by the creation of surface oxygen vacancies. Chemical Physics Letters, 2005, 401, 579-584.	2.6	482
2	Visible-Light-Driven Nâ^'Fâ^'Codoped TiO2Photocatalysts. 2. Optical Characterization, Photocatalysis, and Potential Application to Air Purification. Chemistry of Materials, 2005, 17, 2596-2602.	6.7	469
3	Origin of visible-light-driven photocatalysis: A comparative study on N/F-doped and Nâ€"F-codoped TiO2 powders by means of experimental characterizations and theoretical calculations. Journal of Solid State Chemistry, 2005, 178, 3293-3302.	2.9	327
4	Visible-Light-Driven Nâ^'Fâ^'Codoped TiO2Photocatalysts. 1. Synthesis by Spray Pyrolysis and Surface Characterization. Chemistry of Materials, 2005, 17, 2588-2595.	6.7	327
5	Fluorine-doped TiO2 powders prepared by spray pyrolysis and their improved photocatalytic activity for decomposition of gas-phase acetaldehyde. Journal of Fluorine Chemistry, 2005, 126, 69-77.	1.7	312
6	Effect of hydrogen doping on ultraviolet emission spectra of various types of ZnO. Applied Physics Letters, 2002, 80, 2869-2871.	3.3	176
7	Visible-light-driven nitrogen-doped TiO2 photocatalysts: effect of nitrogen precursors on their photocatalysis for decomposition of gas-phase organic pollutants. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2005, 117, 67-75.	3.5	171
8	Synthesis of Mesoporous BN and BCN Exhibiting Large Surface Areas via Templating Methods. Chemistry of Materials, 2005, 17, 5887-5890.	6.7	164
9	Passivation of active recombination centers in ZnO by hydrogen doping. Journal of Applied Physics, 2003, 93, 6386-6392.	2.5	107
10	Suspended Singleâ€Crystal Diamond Nanowires for Highâ€Performance Nanoelectromechanical Switches. Advanced Materials, 2010, 22, 5393-5397.	21.0	101
11	Synthesis of nanosized nitrogen-containing MOxâ€"ZnO (M = W, V, Fe) composite powders by spray pyrolysis and their visible-light-driven photocatalysis in gas-phase acetaldehyde decomposition. Catalysis Today, 2004, 93-95, 895-901.	4.4	79
12	Lowâ€Temperature Remediation of NO Catalyzed by Interleaved CuO Nanoplates. Advanced Materials, 2014, 26, 4481-4485.	21.0	79
13	Nanoporous Carbon Sensor with Cage-in-Fiber Structure: Highly Selective Aniline Adsorbent toward Cancer Risk Management. ACS Applied Materials & Interfaces, 2013, 5, 2930-2934.	8.0	62
14	Indiumâ€Based Perovskites: A New Class of Nearâ€Roomâ€Temperature Multiferroics. Angewandte Chemie - International Edition, 2009, 48, 6117-6120.	13.8	57
15	Surface core-level shift and electronic structure on transition-metal diboride (0001) surfaces. Physical Review B, 2005, 71, .	3.2	56
16	Structural characterization of epitaxial BaTiO3thin films grown by sputter deposition on MgO(100). Journal of Applied Physics, 1995, 78, 5604-5608.	2.5	54
17	Structures and properties of (Zn,Mg)O films studied from the aspect of phase equilibria. Journal of Crystal Growth, 2006, 287, 134-138.	1.5	49
18	Doping of As, P and N in laser deposited ZnO films. Journal of Crystal Growth, 2006, 287, 85-88.	1.5	44

#	Article	IF	Citations
19	Fabrication of ZnO Microstructures by Anisotropic Wet-Chemical Etching. Journal of the Electrochemical Society, 2007, 154, D82.	2.9	43
20	Preparation and characterization of novel microporous carbon nitride with very high surface area via nanocasting technique. Microporous and Mesoporous Materials, 2008, 108, 340-344.	4.4	43
21	Non-equilibrium defects in aluminum-doped zinc oxide thin films grown with a pulsed laser deposition method. Journal of Materials Research, 2005, 20, 2866-2872.	2.6	42
22	Synthesizing SnO2 thin films and characterizing sensing performances. Sensors and Actuators B: Chemical, 2010, 150, 99-104.	7.8	39
23	Ultrafast Dynamics of Surface-Enhanced Raman Scattering Due to Au Nanostructures. Nano Letters, 2011, 11, 2648-2654.	9.1	39
24	Batch production of single-crystal diamond bridges and cantilevers for microelectromechanical systems. Journal of Micromechanics and Microengineering, 2010, 20, 085002.	2.6	36
25	Ga, N solubility limit in co-implanted ZnO measured by secondary ion mass spectrometry. Applied Surface Science, 2002, 189, 349-352.	6.1	34
26	Crystallinity of In2O3(ZnO)5 films by epitaxial growth with a self-buffer-layer. Journal of Applied Physics, 2002, 92, 2378-2384.	2.5	30
27	Electrical properties of scandium nitride epitaxial films grown on (100) magnesium oxide substrates by molecular beam epitaxy. Journal of Applied Physics, 2013, 114, .	2.5	30
28	Growing BaTiO3 thin films on Si(100) with MgO-buffer layers by sputtering. Thin Solid Films, 1996, 281-282, 449-452.	1.8	29
29	Acceptor-Compensated Charge Transport and Surface Chemical Reactions in Au-Implanted SnO2 Nanowires. Scientific Reports, 2014, 4, 4622.	3.3	29
30	Indium-implantation-induced enhancement of gas sensing behaviors of SnO2 nanowires by the formation of homo-coreâ€“shell structure. Sensors and Actuators B: Chemical, 2020, 321, 128475.	7.8	29
31	Morphological reform of ZnO particles induced by coupling with MOx (M=V,W,Ce) and the effects on photocatalytic activity. Thin Solid Films, 2005, 486, 20-23.	1.8	28
32	Novel Hexagonally Ordered Nitrogen-doped Mesoporous Carbon from SBA-15/Polyaniline Nanocomposite. Chemistry Letters, 2007, 36, 770-771.	1.3	26
33	Energy dissipation in micron- and submicron-thick single crystal diamond mechanical resonators. Applied Physics Letters, 2014, 105, .	3.3	26
34	SIMS depth profiling of N and In in a ZnO single crystal. Applied Surface Science, 2003, 203-204, 359-362.	6.1	22
35	Hydrogen-terminated defects in ion-implanted silicon probed by monoenergetic positron beams. Journal of Applied Physics, 2003, 93, 3228-3233.	2.5	22
36	Characterization of luminous-cubic boron-nitride single-crystals doped with Eu3+ and Tb3+ ions. Applied Physics Letters, 2005, 87, 211913.	3.3	22

#	Article	IF	Citations
37	Recrystallization and Reactivation of Dopant Atoms in Ion-Implanted Silicon Nanowires. ACS Nano, 2012, 6, 3278-3283.	14.6	22
38	Study of Optical Property in ZnO Thin Film Implanted with Eu by Combinatorial Ion Implantation Techniques. Japanese Journal of Applied Physics, 2005, 44, L1289-L1292.	1.5	21
39	Diffusion and solubility of holmium ions in barium titanate ceramics. Journal of Materials Research, 2004, 19, 3512-3520.	2.6	20
40	Photoluminescence in phosphorous-implanted ZnO films. Journal of Applied Physics, 2007, 102, 086107.	2.5	20
41	Structure and Electric Properties in Tin-Doped Zinc Oxide Films Synthesized by Pulsed Laser Deposition. Journal of the Electrochemical Society, 2009, 156, H424.	2.9	20
42	Development of ZnO-based surface plasmon resonance gas sensor and analysis of UV irradiation effect on NO2 desorption from ZnO thin films. Journal of the Ceramic Society of Japan, 2010, 118, 193-196.	1.1	18
43	Preparation and Characterization of BaTiO₃ Thin Films on MgO-buffered Si(100) Substrates by RF Sputtering. Journal of Materials Research, 1997, 12, 1152-1159.	2.6	17
44	Effect of crystalline polarity on microstructure and optoelectronic properties of gallium-doped zinc oxide films deposited onto glass substrates. Thin Solid Films, 2014, 552, 56-61.	1.8	17
45	Epitaxial growth of tin oxide film on TiO2(110) using molecular beam epitaxy. Journal of Crystal Growth, 2010, 312, 3046-3049.	1.5	15
46	Visualization of Grain Boundary as Blocking Layer for Oxygen Tracer Diffusion and a Proposed Defect Model in Non Doped BaTiO₃Ceramics. Applied Physics Express, 2011, 4, 055801.	2.4	15
47	Epitaxial growth of Ag2S films on MgO(001). Journal of Solid State Chemistry, 2004, 177, 1165-1172.	2.9	14
48	Visible-light-active nitrogen-containing TiO2 photocatalysts prepared by spray pyrolysis. Research on Chemical Intermediates, 2005, 31, 331-341.	2.7	14
49	Graphitization of ultrathin amorphous carbon films on Si(001) by Ar+ ion irradiation at ambient temperature. Journal of Applied Physics, 2000, 88, 55-58.	2.5	13
50	Fabrication of epitaxial In2O3(ZnO)5 thin films by RF sputtering and their characterization by X-ray and electron diffraction techniques. Journal of Crystal Growth, 2002, 237-239, 558-563.	1.5	13
51	Dependence of photoluminescence and electrical properties with rapid thermal annealing in nitrogen-implanted ZnO films. Thin Solid Films, 2007, 515, 6927-6930.	1.8	13
52	Nanoelectromechanical switch fabricated from single crystal diamond: Experiments and modeling. Diamond and Related Materials, 2012, 24, 69-73.	3.9	13
53	Ion implantation and diffusion behavior of silver in zinc oxide. Journal of the Ceramic Society of Japan, 2010, 118, 217-219.	1.1	12
54	Characterization of ZnO thin film deposited by electron cyclotron resonance plasma-assisted chemical vapor deposition. Thin Solid Films, 2006, 506-507, 184-187.	1.8	10

#	Article	IF	Citations
55	Formation of compensated defects in zinc magnesium oxides assignable from diffusion coefficients and hard x-ray photoemission. Applied Physics Letters, 2009, 94, .	3.3	10
56	Local environment of silicon in cubic boron nitride. Journal of Applied Physics, 2013, 114, 233502.	2.5	10
57	Sn film deposition on silica glass substrates. Thin Solid Films, 2004, 464-465, 146-149.	1.8	9
58	Self-assembly prismatic aggregates formed during the calcination of ZnO powders: In situ monitoring by ETA technique and their photocatalytic properties. Journal of Colloid and Interface Science, 2005, 289, 472-478.	9.4	9
59	Surface reconstruction of W₂C(0001). Journal of Physics Condensed Matter, 2011, 23, 305007.	1.8	9
60	Electrical and optical properties of W-doped ZnO films grownon (11ar{2}0) sapphire substrates using pulsed laser deposition. Journal of the Ceramic Society of Japan, 2014, 122, 908-913.	1.1	9
61	Optimization of Annealing Time and Cu Concentration for Study of Luminescence Properties of Cu-Implanted ZnO Thin Films. Japanese Journal of Applied Physics, 2005, 44, L770-L773.	1.5	8
62	Defect Structure in (Zn,Mg)O Films Prepared on YSZ Substrate. Key Engineering Materials, 2006, 320, 103-106.	0.4	8
63	The oxidized layer on ZrB2(0001). Applied Surface Science, 2009, 256, 1120-1123.	6.1	8
64	Surface segregation of W doped in ZnO thin films. Surface Science, 2014, 625, 1-6.	1.9	8
65	Au-Decorated 1D SnO2 Nanowire/2D WS2 Nanosheet Composite for CO Gas Sensing at Room Temperature in Self-Heating Mode. Chemosensors, 2022, 10, 132.	3.6	8
66	Epitaxial growth of SnO2 film on Sn-doped TiO2(110). Vacuum, 2009, 84, 597-601.	3.5	6
67	Characterization of oxygen defect and zinc segregation in the dense tin dioxide ceramics added with zinc oxide. Journal of the Ceramic Society of Japan, 2013, 121, 956-959.	1.1	6
68	High nitrogen solubility in stishovite (SiO2) under lower mantle conditions. Scientific Reports, 2020, 10, 10897.	3.3	6
69	Effects of ion beam irradiation on the crystallization of Siâ€“C films. Nuclear Instruments & Methods in Physics Research B, 1999, 148, 594-598.	1.4	5
70	Diffusion and aggregation of Si implant in (100) single-crystal SrTiO3. Nuclear Instruments & Methods in Physics Research B, 2001, 173, 436-440.	1.4	5
71	Oxygen Diffusion in Rare-Earth Doped BaTiO₃ Ceramics. Key Engineering Materials, 0, 582, 189-193.	0.4	5
72	Ion implantation and diffusion of zinc in dense SnO₂ ceramics. Journal of the Ceramic Society of Japan, 2013, 121, 1004-1007.	1.1	5

#	Article	IF	Citations
73	Simultaneous Diffusion of Oxygen Tracer and Lithium Impurity in Aluminum Doped Zinc Oxide. Japanese Journal of Applied Physics, 2011, 50, 125501.	1.5	5
74	Electrical Properties and Characterization of In₂O₃(ZnO)_m Thin Films. Key Engineering Materials, 2002, 214-215, 199-202.	0.4	4
75	Interface stabilization by Al in GaN and AlN epitaxies on NbB2(0001). Applied Physics Letters, 2006, 89, 181913.	3.3	4
76	Plasma-assisted molecular-beam epitaxy of GaN on transition-metal carbide (111) surfaces. Journal of Crystal Growth, 2008, 310, 22-25.	1.5	4
77	Impurity Contamination and Diffusion during Annealing in Implanted ZnO. Key Engineering Materials, 2008, 388, 23-26.	0.4	4
78	Oxygen Diffusion Phenomena and Hydrogen Incorporation in Reducing BaTiO₃ Ceramics Doped with Ho below Solubility Limit. Japanese Journal of Applied Physics, 2012, 51, 101801.	1.5	4
79	Zn and Sb interaction and oxygen defect chemistry in dense SnO₂ ceramics co-doped with ZnO and Sb₂O₅. Journal of the Ceramic Society of Japan, 2014, 122, 421-425.	1.1	4
80	Oxygen Diffusion in Zinc Oxide Single Crystals. Key Engineering Materials, 1998, 157-158, 221-226.	0.4	3
81	Ion beam induced reaction of carbon films on Si(1 0 0). Applied Surface Science, 2001, 169-170, 296-299.	6.1	3
82	Recrystallization of ion-beam amorphized Bi2Sr2Ca1Cu2Ox thin films on SrTiO3(001). Thin Solid Films, 2002, 415, 224-227.	1.8	3
83	Zinc oxide film growth on zirconium boride. Superlattices and Microstructures, 2006, 39, 179-184.	3.1	3
84	Effect of post-annealing on structural and optical properties, and elemental distribution in heavy Eu-implanted ZnO thin films. Journal of the Ceramic Society of Japan, 2010, 118, 1087-1089.	1.1	3
85	Simultaneous Diffusion of Oxygen Tracer and Lithium Impurity in Aluminum Doped Zinc Oxide. Japanese Journal of Applied Physics, 2011, 50, 125501.	1.5	3
86	Oxygen Tracer Diffusion in BaTiO₃ Ceramics - Effect of Zr Impurity from Planetary Ball Milling. Key Engineering Materials, 0, 566, 262-265.	0.4	3
87	Global snapshot of the effects of the COVID-19 pandemic on the research activities of materials scientists between Spring and Autumn 2020. Science and Technology of Advanced Materials, 2021, 22, 173-184.	6.1	3
88	Impact of Two-Step Growth upon In₂O₃(ZnO)₅ Film Quality. Key Engineering Materials, 2002, 228-229, 167-172.	0.4	2
89	Effect of ion irradiation on the evolution of Pt film morphology. Nuclear Instruments & Methods in Physics Research B, 2005, 232, 348-352.	1.4	2
90	Relationship between Aluminum and Lithium and Annealing for Reducing Lithium Contamination in Aluminum-Implanted Zinc Oxide. Key Engineering Materials, 2010, 445, 205-208.	0.4	2

#	Article	IF	Citations
91	Electronâ€“phonon coupling and defect scatterings in Ar⁺-ion implanted graphite. Journal of the Ceramic Society of Japan, 2013, 121, 291-294.	1.1	2
92	Oxygen Diffusion Phenomena and Hydrogen Incorporation in Reducing BaTiO₃Ceramics Doped with Ho below Solubility Limit. Japanese Journal of Applied Physics, 2012, 51, 101801.	1.5	2
93	Formation of SiC Thin Films by Ion Beam Irradiation. Key Engineering Materials, 1999, 169-170, 179-182.	0.4	1
94	The Effect of Pt-Electrode Structures on the Ferroelectric Properties of Bismuth Titanate Thin Films. Ferroelectrics, 2007, 347, 150-156.	0.6	1
95	Growth of KNbO₃Films by Solid-State Diffusion Technique. Ferroelectrics, 2007, 357, 185-190.	0.6	1
96	Low-Loss Transmission Characteristics of Transparent Conductive Thin Films in GHz Range. Key Engineering Materials, 0, 485, 207-210.	0.4	1
97	Dynamics of coherent phonons in disordered graphite. , 2010, , .		1
98	Nitrogen and Fluorine Roles in Visible-Light-Driven Anion-Doped TiO2 Photocatalysis. Materials Research Society Symposia Proceedings, 2005, 900, 1.	0.1	0
99	Ion beam synthesis of SiC thin films. Journal of Electroceramics, 2010, 24, 97-103.	2.0	0
100	Focus on innovation in ceramics research in East Asia. Science and Technology of Advanced Materials, 2010, 11, 040301.	6.1	0
101	Fabricating transparent waveguide for wireless communication. Thin Solid Films, 2012, 520, 3835-3838.	1.8	0
102	Oxygen Tracer Diffusion in A-Axis Oriented ZnO Thin Films Grown on (01-12) Sapphire by Pulsed Laser Deposition. Key Engineering Materials, 0, 566, 266-270.	0.4	0