KAZUKI TAJIMA

List of Publications by Year
in descending order

113 papers	1,779 citations	279798 23 h-index	377865 34 g-index
113 all docs	113 docs citations	113 times ranked	1212 citing authors

#	Article	IF	Citations
1	An rRNA-based analysis for evaluating the effect of heat stress on the rumen microbial composition of Holstein heifers. Anaerobe, 2010, 16, 27-33.	2.1	85
2	Planar catalytic combustor film for thermoelectric hydrogen sensor. Sensors and Actuators B: Chemical, 2005, 108, 455-460.	7.8	75
3	Color-neutral switchable mirrors based on magnesium-titanium thin films. Applied Physics A: Materials Science and Processing, 2007, 87, 621-624.	2.3	56
4	Toward Solid-State Switchable Mirror Devices Using Magnesium-Rich Magnesiumâ€“Nickel Alloy Thin Films. Japanese Journal of Applied Physics, 2007, 46, 5168-5171.	1.5	47
5	Flexible all-solid-state switchable mirror on plastic sheet. Applied Physics Letters, 2008, 92, 041912.	3.3	44
6	Aluminum buffer layer for high durability of all-solid-state switchable mirror based on magnesium-nickel thin film. Applied Physics Letters, 2007, 91, .	3.3	43
7	Thermoelectric Properties of RF-Sputtered SiGe Thin Film for Hydrogen Gas Sensor. Japanese Journal of Applied Physics, 2004, 43, 5978-5983.	1.5	42
8	Magnesiumâ€“titanium alloy thin-film switchable mirrors. Solar Energy Materials and Solar Cells, 2008, 92, 224-227.	6.2	40
9	Preparation and characterization of gasochromic switchable-mirror window with practical size. Solar Energy Materials and Solar Cells, 2009, 93, 2138-2142.	6.2	40
10	New Structural Design of Micro-Thermoelectric Sensor for Wide Range Hydrogen Detection. Journal of the Ceramic Society of Japan, 2006, 114, 853-856.	1.3	39
11	Combustor of ceramic Pt/alumina catalyst and its application for micro-thermoelectric hydrogen sensor. Applied Catalysis A: General, 2005, 287, 19-24.	4.3	33
12	Electrochemical evaluation of Ta2O5 thin film for all-solid-state switchable mirror glass. Solid State Ionics, 2009, 180, 654-658.	2.7	33
13	Degradation of Switchable Mirror Based on Mgâ€“Ni Alloy Thin Film. Japanese Journal of Applied Physics, 2007, 46, 4260-4264.	1.5	32
14	Near colorless all-solid-state switchable mirror based on magnesium-titanium thin film. Journal of Applied Physics, 2008, 103, .	2.5	32
15	Optical properties of switchable mirrors based on magnesium-calcium alloy thin films. Applied Physics Letters, 2009, 94, .	3.3	32
16	Solid electrolyte of tantalum oxide thin film deposited by reactive DC and RF magnetron sputtering for all-solid-state switchable mirror glass. Solar Energy Materials and Solar Cells, 2008, 92, 120-125.	6.2	31
17	Durability of All-Solid-State Switchable Mirror Based on Magnesiumâ€“Nickel Thin Film. Electrochemical and Solid-State Letters, 2007, 10, J52.	2.2	30
18	Optical switching durability of switchable mirrors based on magnesiumâ€“yttrium alloy thin films. Solar Energy Materials and Solar Cells, 2013, 117, 396-399.	6.2	29

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19	Solid/electrolyte interface phenomena during anodic polarization of Pd0.2M0.8 (M=Fe, Co, Ni) alloys in H2SO4. Journal of Alloys and Compounds, 2010, 494, 309-314.	5.5	28
20	Micromechanical fabrication of low-power thermoelectric hydrogen sensor. Sensors and Actuators B: Chemical, 2005, 108, 973-978.	7.8	27
21	Long-term stability of Pt/alumina catalyst combustors for micro-gas sensor application. Journal of the European Ceramic Society, 2008, 28, 2183-2190.	5.7	25
22	Accelerated degradation studies on electrochromic switchable mirror glass based on magnesiumâ€“nickel thin film in simulated environment. Solar Energy Materials and Solar Cells, 2010, 94, 1716-1722.	6.2	25
23	Electrochemical stability of self-assembled monolayers on nanoporous Au. Physical Chemistry Chemical Physics, 2011, 13, 12277.	2.8	24
24	Anatase formation on titanium by two-step thermal oxidation. Journal of Materials Science, 2011, 46, 2998-3005.	3.7	24
25	Thermopile sensor-devices for the catalytic detection of hydrogen gas. Sensors and Actuators B: Chemical, 2008, 130, 200-206.	7.8	23
26	Integration of ceramic catalyst on micro-thermoelectric gas sensor. Sensors and Actuators B: Chemical, 2006, 118, 283-291.	7.8	22
27	Effect of Pt/alumina catalyst preparation method on sensing performance of thermoelectric hydrogen sensor. Journal of Materials Science, 2006, 41, 2333-2338.	3.7	21
28	Micro-thermoelectric devices with ceramic combustors. Sensors and Actuators A: Physical, 2006, 130-131, 411-418.	4.1	20
29	Metal buffer layer inserted switchable mirrors. Solar Energy Materials and Solar Cells, 2008, 92, 216-223.	6.2	20
30	Cobalt hexacyanoferrate nanoparticles for wet-processed brownâ€“bleached electrochromic devices with hybridization of high-spin/low-spin phases. Journal of Materials Chemistry C, 2017, 5, 8921-8926.	5.5	20
31	Green fabrication of a complementary electrochromic device using water-based ink containing nanoparticles of WO₃ and Prussian blue. RSC Advances, 2020, 10, 2562-2565.	3.6	20
32	Effective Density of Tantalum Oxide Thin Film by Reactive DC Magnetron Sputtering for All-Solid-State Switchable Mirror. Journal of the Electrochemical Society, 2007, 154, J267.	2.9	19
33	Optical property and cycling durability of polytetrafluoroethylene top-covered and metal buffer layer inserted Mgâ€“Ni switchable mirror. Solar Energy Materials and Solar Cells, 2009, 93, 1642-1646.	6.2	19
34	Optical switching properties of switchable mirrors based on Mg alloyed with alkaline-earth metals. Solar Energy Materials and Solar Cells, 2012, 99, 73-75.	6.2	19
35	Flexible electrochromic devices based on tungsten oxide and Prussian blue nanoparticles for automobile applications. RSC Advances, 2021, 11, 28614-28620.	3.6	18
36	Surface Coating of Electrochromic Switchable Mirror Glass Based on Mgâ€“Ni Thin Film for High Durability in the Environment. Applied Physics Express, 2010, 3, 042201.	2.4	17

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37	Influence on optical properties and switching durability by introducing Ta intermediate layer in Mgâ€“Y switchable mirrors. Solar Energy Materials and Solar Cells, 2014, 125, 133-137.	6.2	17
38	New Switchable Mirror Based on Magnesiumâ€“Niobium Thin Film. Japanese Journal of Applied Physics, 2007, 46, L13-L15.	1.5	16
39	FeNi-Layered Double-Hydroxide Nanoflakes with Potential for Intrinsically High Water-Oxidation Catalytic Activity. ACS Applied Energy Materials, 2020, 3, 9040-9050.	5.1	16
40	Mass-producible slit coating for large-area electrochromic devices. Solar Energy Materials and Solar Cells, 2021, 232, 111361.	6.2	16
41	Complementary electrochromic devices based on acrylic substrates for smart window applications in aircrafts. Materials Chemistry and Physics, 2022, 277, 125460.	4.0	16
42	Real time characterization of hydrogenation mechanism of palladium thin films by <i>in situ</i> spectroscopic ellipsometry. Journal of Applied Physics, 2009, 106, .	2.5	15
43	Optical switching properties of all-solid-state switchable mirror glass based on magnesiumâ€“nickel thin film for environmental temperature. Solar Energy Materials and Solar Cells, 2010, 94, 227-231.	6.2	15
44	Effects of the variation of metal substitution and electrolyte on the electrochemical reaction of metal hexacyanoferrates. RSC Advances, 2018, 8, 37356-37364.	3.6	15
45	Thermoelectric Gas Sensor using Au Loaded Titania CO Oxidation Catalyst. Journal of the Ceramic Society of Japan, 2007, 115, 37-41.	1.3	14
46	Switchable mirror based on Mgâ€“Zrâ€“H thin films. Journal of Alloys and Compounds, 2012, 513, 495-498.	5.5	14
47	Formation of Anatase on Commercially Pure Ti by Two-Step Thermal Oxidation Using N₂–CO Gas. Materials Transactions, 2013, 54, 1302-1307.	1.2	14
48	Film thickness change of switchable mirrors using Mg3Y alloy thin films due to hydrogenation and dehydrogenation. Solar Energy Materials and Solar Cells, 2014, 126, 237-240.	6.2	14
49	Adhesive electrochromic WO3 thin films fabricated using a WO3 nanoparticle-based ink. Electrochimica Acta, 2021, 389, 138764.	5.2	14
50	All-solid-state switchable mirror on flexible sheet. Surface and Coatings Technology, 2008, 202, 5633-5636.	4.8	13
51	Polytetrafluoroethylene (PTFE) Top-Covered Mg-Ni Switchable Mirror Thin Films. Materials Transactions, 2008, 49, 1919-1921.	1.2	13
52	Micromachined Thermoelectric Hydrogen Sensor of Double-Membrane Structure. Japanese Journal of Applied Physics, 2005, 44, L367-L370.	1.5	12
53	Hydrogenation and dehydrogenation processes of palladium thin films measured in situ by spectroscopic ellipsometry. Solar Energy Materials and Solar Cells, 2009, 93, 2143-2147.	6.2	12
54	Clear transparency all-solid-state switchable mirror with Mgâ€“Ti thin film on polymer sheet. Solar Energy Materials and Solar Cells, 2009, 93, 2083-2087.	6.2	12

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55	In situ spectroscopic ellipsometry study of the hydrogenation process of switchable mirrors based on magnesium-nickel alloy thin films. Journal of Applied Physics, 2010, 107, 043517.	2.5	12
56	Switchable mirror glass with a Mgâ€“Zrâ€“Ni ternary alloy thin film. Solar Energy Materials and Solar Cells, 2014, 126, 227-236.	6.2	12
57	Fabrication study of proton injection layer suitable for electrochromic switchable mirror glass. Thin Solid Films, 2010, 519, 934-937.	1.8	11
58	Tantalum Oxide Thin Film Prepared by Reactive Sputtering Using Hydrogen-Containing Gas for Electrochromic Switchable Mirror. Journal of the Electrochemical Society, 2010, 157, J92.	2.9	11
59	Pd distribution of switchable mirrors based on Mgâ€“Y alloy thin films. Solar Energy Materials and Solar Cells, 2014, 120, 631-634.	6.2	11
60	Catalyst Combustors with B-Doped SiGe/Au Thermopile for Micro-Power-Generation. Japanese Journal of Applied Physics, 2006, 45, L1130-L1132.	1.5	10
61	Analysis of Degradation of Flexible All-Solid-State Switchable Mirror Based on Mgâ€“Ni Thin Film. Japanese Journal of Applied Physics, 2009, 48, 102402.	1.5	10
62	Characterization of flexible switchable mirror film prepared by DC magnetron sputtering. Vacuum, 2010, 84, 1460-1465.	3.5	10
63	Mgâ€“Ni thin-film composition dependence of durability of electrochromic switchable mirror glass in simulated environment. Solar Energy Materials and Solar Cells, 2011, 95, 3370-3376.	6.2	10
64	Electrochromic switchable mirror glass with controllable reflectance. Applied Physics Letters, 2012, 100, .	3.3	10
65	Electrochromic switchable mirror glass fabricated using adhesive electrolyte layer. Applied Physics Letters, 2012, 101, .	3.3	10
66	Environmental durability of electrochromic switchable mirror glass at sub-zero temperature. Solar Energy Materials and Solar Cells, 2012, 104, 146-151.	6.2	10
67	Photocatalytic performance of very thin TiO2/SnO2 stacked-film prepared by magnetron sputtering. Vacuum, 2008, 83, 688-690.	3.5	9
68	Optical properties of tungsten oxide thin films with protons intercalated during sputtering. Journal of Applied Physics, 2008, 103, 063508.	2.5	9
69	Proton conductive tantalum oxide thin film deposited by reactive DC magnetron sputtering for all-solid-state switchable mirror. Journal of Physics: Conference Series, 2008, 100, 082017.	0.4	9
70	Optical properties and degradation mechanism of magnesium-niobium thin film switchable mirrors. Journal of the Ceramic Society of Japan, 2008, 116, 771-775.	1.1	9
71	Fabrication of solid electrolyte Ta2O5 thin film by reactive dc magnetron sputtering suitable for electrochromic all-solid-state switchable mirror glass. Journal of the Ceramic Society of Japan, 2011, 119, 76-80.	1.1	9
72	Solution-Based Electrolyte Layer Suitable for Electrochromic Switchable Mirror. Applied Physics Express, 2012, 5, 084101.	2.4	9

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73	High contrast gasochromism of wet processable thin film with chromic and catalytic nanoparticles. Journal of Materials Chemistry C, 2018, 6, 4760-4764.	5.5	9
74	Electrochromic properties of sputter-deposited rhodium oxide thin films of varying thickness. Thin Solid Films, 2020, 709, 138226.	1.8	9
75	Practical Test Methods for Hydrogen Gas Sensor Response Characterization. Electrochemistry, 2006, 74, 315-320.	1.4	8
76	Degradation studies of electrochromic all-solid-state switchable mirror glass under various constant temperature and relative humidity conditions. Solar Energy Materials and Solar Cells, 2010, 94, 2411-2415.	6.2	8
77	Stress in Switchable Mirror Thin Film Resulting from Gasochromic Switching. Japanese Journal of Applied Physics, 2010, 49, 075701.	1.5	8
78	Preparation of Phosphorus-Doped Si0.8Ge0.2 Thermoelectric Thin Film Using RF Sputtering with Induction Coil. Journal of the Ceramic Society of Japan, 2005, 113, 558-561.	1.3	7
79	Micro-Thermoelectric Hydrogen Sensors with Pt Thin Film and Ptâˆ•Alumina Thick Film Catalysts. Journal of the Electrochemical Society, 2006, 153, H58.	2.9	7
80	Boron-Doped Si[sub 0.8]Ge[sub 0.2] Thin Film Deposited by Helicon Sputtering for Microthermoelectric Hydrogen Sensor. Journal of the Electrochemical Society, 2007, 154, J53.	2.9	7
81	Control of the concentration of protons intercalated into tungsten oxide thin films during deposition. Physica Status Solidi C: Current Topics in Solid State Physics, 2008, 5, 1105-1108.	0.8	7
82	Antidazzle effect of switchable mirrors prepared on substrates with rough surface. Solar Energy Materials and Solar Cells, 2008, 92, 1617-1620.	6.2	7
83	Optical charge transfer absorption in proton injected tungsten oxide thin films analyzed with spectroscopic ellipsometry. Solid State Ionics, 2009, 180, 659-661.	2.7	7
84	Electrochromic switchable mirror foil with tantalum oxide thin film prepared by reactive DC magnetron sputtering in hydrogen-containing gas. Surface and Coatings Technology, 2011, 205, 3956-3960.	4.8	7
85	Improved durability of electrochromic switchable mirror with surface coating in environment. Vacuum, 2013, 87, 155-159.	3.5	7
86	B- and P-Doped Si_{0.8}Ge_{0.2} Thin Film Deposited by Helicon Sputtering for the Micro-Thermoelectric Gas Sensor. Key Engineering Materials, 2006, 320, 99-102.	0.4	6
87	Effect of deposition conditions on the response and durability of an Mg4Ni film switchable mirror. Vacuum, 2008, 83, 486-489.	3.5	6
88	High Durability of Clear Transparency All-Solid-State Switchable Mirror Based on Magnesiumâ€–Titanium Thin Film. Applied Physics Express, 2008, 1, 067007.	2.4	6
89	Polyvinyl chloride seal layer for improving the durability of electrochromic switchable mirrors based on Mgâ€–Ni thin film. Thin Solid Films, 2011, 519, 8114-8118.	1.8	6
90	Ellipsometric study of optical switching processes of Mgâ€–Ni based switchable mirrors. Thin Solid Films, 2011, 519, 2941-2945.	1.8	6

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91	Accelerated test on electrochromic switchable mirror based on magnesium alloy thin film in simulated environment of various relative humidities. Solar Energy Materials and Solar Cells, 2012, 99, 76-83.	6.2	6
92	Activity of Ga₂O₃ in B₂O₃ Flux and Standard Free Energies of Formation of GaBO₃ and InBO₃. Materials Transactions, JIM, 2000, 41, 714-718.	0.9	5
93	Thermoelectric Hydrogen Sensor Based on SiGe Thin Film. Key Engineering Materials, 2004, 269, 117-120.	0.4	5
94	Preparation of Micro-Thermoelectric Hydrogen Sensor Loading Two Kinds of Catalysts to Enhance Gas Selectivity. Journal of the Ceramic Society of Japan, 2007, 115, 748-750.	1.1	5
95	Self-Organized Formation of Short TiO2 Nanotube Arrays By Complete Anodization of Ti Thin Films. Physics Procedia, 2012, 32, 714-718.	1.2	5
96	Surface Analysis of Electrochromic Switchable Mirror Glass Based on Magnesium-Nickel Thin Film in Accelerated Degradation Test. Materials Transactions, 2011, 52, 464-468.	1.2	4
97	Optical indices of switchable mirrors based on Mgâ€"Y alloy thin films in the transparent state. Thin Solid Films, 2014, 571, 712-714.	1.8	4
98	Microfabrication of Thermoelectric Hydrogen Sensor Using KOH Solution Etching. Key Engineering Materials, 2006, 301, 273-276.	0.4	3
99	Reactive DC sputter-deposited tantalum oxide thin film for all-solid-state switchable mirror. Vacuum, 2008, 83, 602-605.	3.5	3
100	Improved Durability of All-Solid-State Switchable Mirror Based on Magnesiumâ€"Nickel Thin Film Using Aluminum Buffer Layer. Journal of the Electrochemical Society, 2008, 155, J278.	2.9	3
101	Dehydrogenation process of Mgâ€"Ni based switchable mirrors analyzed by in situ spectroscopic ellipsometry. Solar Energy Materials and Solar Cells, 2012, 99, 84-87.	6.2	3
102	Si incorporated diamond-like carbon film-coated electrochromic switchable mirror glass for high environmental durability. Ceramics International, 2013, 39, 8273-8278.	4.8	3
103	Boron and Nitrogen in GaAs and InP Melts Equilibrated with B₂O₃ Flux. Materials Transactions, 2004, 45, 1306-1310.	1.2	2
104	Behavior of Oxygen in Ga-As Melts with the Range of As Content up to 5 mass% Equilibrated with B₂O₃ Flux. Materials Transactions, 2001, 42, 2434-2439.	1.2	1
105	Pt Loaded Alumina Ceramic Catalysts for Micro Thermoelectric Hydrogen Sensors. Journal of the Ceramic Society of Japan, 2006, 114, 686-691.	1.3	1
106	Gasochromic Properties of Mgâ€"Ni Switchable Mirror Thin Films on Flexible Sheets. Japanese Journal of Applied Physics, 2008, 47, 7993.	1.5	1
107	Ellipsometric study of dielectric functions of Mg_1â^'yCa_yH_x thin films (003â‰yâ‰017). Applied Optics, 2011, 50, 3879.	2.1	1
108	Structural control of polyvinyl chloride sealant layer for electrochromic switchable mirror glass based on Mg-Ni thin film. Journal of the Ceramic Society of Japan, 2011, 119, 295-302.	1.1	1

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109	Degradation Analysis of Electrochromic Switchable Mirror Glass Based on Mgâ€“Ni Thin Film at Constant Temperature and Relative Humidity. Japanese Journal of Applied Physics, 2011, 50, 105801.	1.5	1
110	Controllable light filters using an all-solid-state switchable mirror with a Mg-Ir thin film for preterm infant incubators. Applied Physics Letters, 2013, 102, 161913.	3.3	1
111	Micro-Thermoelectric Hydrogen Sensor of Three Different Membrane Structures. Japanese Journal of Applied Physics, 2006, 45, 6186-6191.	1.5	0
112	Integration of Ceramic Catalyst on Micro-Hotplate of Thermoelectric Hydrogen Sensor. Key Engineering Materials, 2006, 301, 277-280.	0.4	0
113	Composition Dependence of Pd–Ag Alloy Proton Injection Layer on Optical Switching Properties of Electrochromic Switchable Mirror. Materials Transactions, 2012, 53, 676-680.	1.2	0