Akira Saito

List of Publications by Year in descending order

85 papers	1,556 citations	331670 21 h-index	345221 36 g-index
86 all docs	86 docs citations	86 times ranked	1484 citing authors

#	Article	IF	Citations
1	Study of stereochemical crystallization of racemic mixtures of [5] and [7]thiaheterohelicene molecules on Ag(111) surface by scanning tunneling microscopy and Raman scattering spectroscopy. Applied Surface Science, 2022, 589, 152860.	6.1	5
2	Adsorption and Light Emission of a Racemic Mixture of [7]thiaheterohelicene-2,13-carboxaldehyde on Au(111), Cu(001), and NiAl(110) Surfaces Investigated Using a Scanning Tunneling Microscope. Journal of Physical Chemistry C, 2021, 125, 9419-9427.	3.1	8
3	Daylight window based on the nano-disorder inspired by Morpho butterfliesâ€™ coloration. Journal of the Optical Society of America B: Optical Physics, 2021, 38, 1532.	2.1	4
4	Demonstration of a diffraction-based optical diffuser inspired by the Morpho butterfly. Optics Express, 2021, 29, 30927.	3.4	10
5	Elucidating the mystery of Morpho-blue using in-plane randomness: toward simple nanofabrication. Japanese Journal of Applied Physics, 2020, 59, 052009.	1.5	8
6	Optical analysis on the Morpho butterflyâ€™s in-plane randomness using three-dimensional FDTD simulations. , 2020, , .		1
7	New Relationship between Structural Color Materials and Nanoimprint Lithography. Vacuum and Surface Science, 2020, 63, 580-585.	0.1	0
8	Fabrication Process of Large-area <i>Morpho</i>-color Flexible Film via Flexible Nano-imprint Mold. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2018, 31, 113-119.	0.3	8
9	Replication of large-area Morpho-color material using flexible mold. , 2018, , .		5
10	X-Ray Standing Wave Method. , 2018, , 849-853.		0
11	Morpho-colored flexible film fabricated by simple mass-production method. , 2017, , .		3
12	Nanoscale Dehydrogenation Observed by Tip-Enhanced Raman Spectroscopy. Journal of Physical Chemistry C, 2017, 121, 18162-18168.	3.1	22
13	Anomalous hexagonal superstructure of aluminum oxide layer grown on NiAl(110) surface. Nanotechnology, 2016, 27, 455708.	2.6	3
14	Detection of Light Emission from (S)-PTCDI Molecules Adsorbed on Au(111) and NiAl(110) Surfaces Induced by a Scanning Tunneling Microscope. Journal of Physical Chemistry C, 2016, 120, 3964-3977.	3.1	15
15	Nanoscale analysis of multiwalled carbon nanotube by tip-enhanced Raman spectroscopy. Carbon, 2016, 99, 642-648.	10.3	31
16	Layer matching epitaxy of NiO thin films on atomically stepped sapphire (0001) substrates. Scientific Reports, 2015, 5, 14385.	3.3	24
17	Principle, Control & Applications Learned from the Mystery of Morpho-butterfly's Structural Coloration. Journal of the Japan Society for Precision Engineering, 2015, 81, 410-414.	0.1	0
18	Ecological color devices by biomimetic nanostructures. , 2015, , .		0

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19	Simple mass-production method of substrate-free powders for applications of the Morpho-colored materials. , 2015, , .		4
20	Self-Assembly Formation of M-Type Enantiomer of 2,13-Bis(hydroxymethyl)[7]-thiaheterohelicene Molecules on Au(111) Surface Investigated by STM/CITS. Journal of Physical Chemistry C, 2015, 119, 21434-21442.	3.1	14
21	X-ray STM: Nanoscale elemental analysis & Observation of atomic track. Microscopy (Oxford, England), 2014, 63, i14.2-i15.	1.5	1
22	Advantages of flattened electrode in bottom contact single-walled carbon nanotube field-effect transistor. Applied Physics Letters, 2014, 105, .	3.3	7
23	Simulation analysis on the optical role of the number of randomly arranged nano-trees on theMorphobutterfly's scale. , 2013, , .		3
24	High-throughput reproduction of the Morpho butterfly's specific high contrast blue. , 2012, , .		7
25	Biomimetics of Optical Nanostructures. Series in Optics and Optoelectronics, 2012, , 55-116.	0.0	1
26	Modeling and Simulation of Structural Colors. Series in Optics and Optoelectronics, 2012, , 191-242.	0.0	1
27	Material design and structural color inspired by biomimetic approach. Science and Technology of Advanced Materials, 2011, 12, 064709.	6.1	85
28	Direct Observation of X-ray Induced Atomic Motion Using Scanning Tunneling Microscope Combined with Synchrotron Radiation. Journal of Nanoscience and Nanotechnology, 2011, 11, 2873-2881.	0.9	4
29	<I>A Special Section on</I> Atomically Controlled Fabrication Technology. Journal of Nanoscience and Nanotechnology, 2011, 11, 2761-2762.	0.9	0
30	Center of Excellence for Atomically Controlled Fabrication Technology. Journal of Nanoscience and Nanotechnology, 2011, 11, 2763-2776.	0.9	3
31	Structural Characterization of Femtosecond Laser Modified Regions Inside Sapphire. Journal of Nanoscience and Nanotechnology, 2011, 11, 2931-2936.	0.9	5
32	Charge-Carrier Injection into Pentacene Thin Film Formed on Si(111) Probed by STM Spectroscopy. Journal of Nanoscience and Nanotechnology, 2011, 11, 2867-2872.	0.9	0
33	STM-induced light emission from thin films of perylene derivatives on the HOPG and Au substrates. Nanoscale Research Letters, 2011, 6, 347.	5.7	19
34	Synthesis of high-pressure phases of silica by laser-induced optical breakdown. Applied Physics A: Materials Science and Processing, 2011, 104, 903-906.	2.3	6
35	Numerical Analysis on the Optical Role of Nano-Randomness on the <I>Morpho</I> Butterfly's Scale. Journal of Nanoscience and Nanotechnology, 2011, 11, 2785-2792.	0.9	52
36	Enhanced Red-Light Emission by Local Plasmon Coupling of Au Nanorods in an Organic Light-Emitting Diode. Applied Physics Express, 2011, 4, 032105.	2.4	28

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37	Structural changes in femtosecond laser modified regions inside fused silica. Journal of Optics (United Kingdom), 2010, 12, 124007.	2.2	21
38	Reproduction, mass production, and control of the Morpho butterfly's blue. , 2009, , .		32
39	Formation of amorphous sapphire by a femtosecond laser pulse induced micro-explosion. Applied Surface Science, 2009, 255, 9745-9749.	6.1	28
40	Nanoscale elemental identification by synchrotronâ€radiationâ€based scanning tunneling microscopy. Surface and Interface Analysis, 2008, 40, 1033-1036.	1.8	12
41	Polymerizationâ€directionâ€controlled growth of polydiacetylene on artificial silicon oxide templates. Surface and Interface Analysis, 2008, 40, 1037-1041.	1.8	2
42	High-mobility organic single crystal transistors with submicrometer channels. Applied Physics Letters, 2008, 93, 023303.	3.3	14
43	Roughening Surface of Layered Manganite La0.5Sr1.5MnO4by Scanning Tunneling Microscopy. Japanese Journal of Applied Physics, 2008, 47, 6456-6458.	1.5	1
44	Optimization of reproduced Morpho -blue coloration. Proceedings of SPIE, 2007, , .	0.8	17
45	Development of the Technology for Mass Production of Morpho-blue by Nanoimprint Lithography. Hyomen Kagaku, 2007, 28, 414-420.	0.0	1
46	Development of a scanning tunneling microscope forin situexperiments with a synchrotron radiation hard-X-ray microbeam. Journal of Synchrotron Radiation, 2006, 13, 216-220.	2.4	45
47	Control of conduction of iodine-doped poly(3-octylthiophene) thin films by double-tip scanning tunneling microscopy. Chemical Physics Letters, 2006, 419, 250-253.	2.6	2
48	Tunneling-current-induced light emission from individual carbon nanotubes. Surface Science, 2006, 600, L15-L19.	1.9	16
49	Scanning Tunneling Microscopy Combined with Hard X-ray Microbeam of High Brilliance from Synchrotron Radiation Source. Japanese Journal of Applied Physics, 2006, 45, 1913-1916.	1.5	8
50	Polaron Injection into One-Dimensional Polydiacetylene Nanowire. Japanese Journal of Applied Physics, 2006, 45, 2049-2052.	1.5	13
51	Application of Simple Mechanical Polishing to Fabrication of Nanogap Flat Electrodes. Japanese Journal of Applied Physics, 2006, 45, L145-L147.	1.5	18
52	Morpho -blue reproduced by nanocasting lithography. , 2006, , .		16
53	Reproduction of the Morpho blue by nanocasting lithography. Journal of Vacuum Science & Technology B, 2006, 24, 3248.	1.3	51
54	Tunneling-Current-Induced Light Emission from Copper Phthalocyanine Thin Films. E-Journal of Surface Science and Nanotechnology, 2006, 4, 559-562.	0.4	6

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55	Significant increase in conductivity of polydiacetylene thin film induced by iodine doping. Surface Science, 2005, 591, L273-L279.	1.9	35
56	Structural Study of Initial Growth of Nickel on Yttria-Stabilized Zirconia by Coaxial Impact-Collision Ion Scattering Spectroscopy. Japanese Journal of Applied Physics, 2005, 44, 2630-2633.	1.5	0
57	Construction of Independently Driven Double-Tip Scanning Tunneling Microscope. Japanese Journal of Applied Physics, 2005, 44, L120-L122.	1.5	40
58	Element Array by Scanning X-ray Fluorescence Microscopy after Cis-Diamminedichloro-Platinum(II) Treatment. Cancer Research, 2005, 65, 4998-5002.	0.9	64
59	Wave-optical evaluation of interference fringes and wavefront phase in a hard-x-ray beam totally reflected by mirror optics. Applied Optics, 2005, 44, 6927.	2.1	46
60	Structure of Atomically Smoothed LiNbO3(0001) Surface. Japanese Journal of Applied Physics, 2004, 43, 2057-2060.	1.5	18
61	Fabrication technology of hard x-ray aspherical mirror optics and application to nanospectroscopy. , 2004, , .		9
62	Conductivity Measurement of Polydiacetylene Thin Films by Double-Tip Scanning Tunneling Microscopy. Journal of Physical Chemistry B, 2004, 108, 16353-16356.	2.6	61
63	Reproduction of the Morpho butterfly's blue: arbitration of contradicting factors. , 2004, , .		32
64	Development of a figure correction method having spatial resolution close to 0.1 mm. , 2004, 5193, 105.		4
65	Fabrication of elliptical mirror at nanometer-level accuracy for hard x-ray focusing by numerically controlled plasma chemical vaporization machining. Review of Scientific Instruments, 2003, 74, 4549-4553.	1.3	99
66	Two-dimensional Submicron Focusing of Hard X-rays by Two Elliptical Mirrors Fabricated by Plasma Chemical Vaporization Machining and Elastic Emission Machining. Japanese Journal of Applied Physics, 2003, 42, 7129-7134.	1.5	57
67	Microstitching interferometry for x-ray reflective optics. Review of Scientific Instruments, 2003, 74, 2894-2898.	1.3	149
68	Structural Analysis of Bismuth Nanowire by X-Ray Standing Wave Method. Japanese Journal of Applied Physics, 2003, 42, 2408-2411.	1.5	13
69	Wave-optical evaluation of reflected X-ray intensity and wavefront distribution in total reflection hard X-ray by mirror optics.. Journal of the Japan Society for Precision Engineering, 2003, 69, 997-1001.	0.1	2
70	Scanning Tunneling Microscopy Observation of Langmuirâ€“Blodgett Diacetylene Compound Films Deposited by Schaefer's Method. Japanese Journal of Applied Physics, 2002, 41, 2187-2188.	1.5	3
71	Aspheric Surface Fabrication in nm-level Accuracy by Numerically Controlled Plasma Chemical Vaporization Machining (CVM) and Elastic Emission Machining (EEM). , 2002, 4782, 265.		9
72	Submicron focusing of hard x-ray beam by elliptically figured mirrors for scanning x-ray microscopy. , 2002, , .		10

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73	Wave-optical analysis of submicron focus of hard x-ray beams by reflective optics. , 2002, 4782, 271.		17
74	Nearly diffraction-limited line focusing of a hard-X-ray beam with an elliptically figured mirror. Journal of Synchrotron Radiation, 2002, 9, 313-316.	2.4	62
75	Fabrication of the Elliptical Mirror for Synchrotron hard X-ray by Plasma Chemical Vaporization Machining and Elastic Emission Machining and the Evaluation of the Focusing Performances.. Journal of the Japan Society for Precision Engineering, 2002, 68, 1347-1350.	0.1	3
76	Rapid and sensitive XAFS using a tunable X-ray undulator at BL10XU of SPring-8. Journal of Synchrotron Radiation, 2000, 7, 89-94.	2.4	10
77	Force Microscopy Study of SrTiO3(001) Surfaces with Single Atomic-Layer Steps. Japanese Journal of Applied Physics, 1999, 38, 3946-3948.	1.5	20
78	Normal-incidence x-ray standing-wave analysis ofSi(111)3Ã—3â˜’Austructure. Physical Review B, 1998, 58, 3541-3544.	3.2	7
79	Measurements of the Flow in Backshroud/Casing Clearance of Precessing Centrifugal Impeller. International Journal of Rotating Machinery, 1997, 3, 259-268.	0.8	5
80	Characterization of Sb Atomic-Layer-Doped Si(100) Crystal by X-Ray Standing Wave Method. Japanese Journal of Applied Physics, 1993, 32, 1772-1774.	1.5	1
81	XPS for in situ observation of an Ag electrode on a solid electrolyte used as oxygen sensor. Chemical Physics Letters, 1983, 94, 250-252.	2.6	24
82	Surface study of a Ag electrode on a solid electrolyte used as oxygen sensor. Applications of Surface Science, 1983, 16, 365-372.	1.0	33
83	Efficiency of Noble Metal Electrodes for Zirconia Oxygen Sensors in Detecting Oxygen at Lower Temperatures. Bulletin of the Chemical Society of Japan, 1982, 55, 2273-2274.	3.2	22
84	Stark Effect in CH3OH Submillimeter Lasers. Japanese Journal of Applied Physics, 1980, 19, 2527-2528.	1.5	5
85	Novel optical applications inspired by the Morpho butterflyâ€™s coloration: technology transfer from reflection to transmission. Japanese Journal of Applied Physics, 0, , .	1.5	2