Taku T Suzuki

List of Publications by Year
in descending order

98 papers	1,073 citations	535685 17 h-index	563245 28 g-index
100 all docs	100 docs citations	100 times ranked	1085 citing authors

#	Article	IF	Citations
1	Polarity reversal of resistance response to trace H2 gas in the air between asymmetrically shaped electrodes on rutile-TiO2 single crystal. Journal of Applied Physics, 2022, 131, .	1.1	5
2	Au-Decorated 1D SnO2 Nanowire/2D WS2 Nanosheet Composite for CO Gas Sensing at Room Temperature in Self-Heating Mode. Chemosensors, 2022, 10, 132.	1.8	8
3	He+ LEIS analysis combined with pulsed jet technique of ethanol sensing by a ZnO surface. Applied Surface Science, 2021, 538, 148102.	3.1	4
4	Study of oxygen diffusion in dense lanthanum oxide ceramics. Journal of the Ceramic Society of Japan, 2021, 129, 79-82.	0.5	0
5	Crystal planeâ€dependent ethanol gas sensing of ZnO studied by lowâ€energy He + ion scattering combined with pulsed jet technique. Surface and Interface Analysis, 2021, 53, 747-753.	0.8	0
6	A Novel Alaska Pollock Gelatin Sealant Shows Higher Bonding Strength and Nerve Regeneration Comparable to That of Fibrin Sealant in a Cadaveric Model and a Rat Model. Plastic and Reconstructive Surgery, 2021, 148, 742e-752e.	0.7	1
7	Ethanol Gas Sensing by a Zn-Terminated ZnO(0001) Bulk Single-Crystalline Substrate. ACS Omega, 2020, 5, 21104-21112.	1.6	14
8	Electrical resistance response of a ZnO single-crystalline substrate to trace ethanol under pulsed air jet irradiation. Vacuum, 2020, 179, 109526.	1.6	5
9	Polarity dependent gas sensing properties of ZnO thin films. Thin Solid Films, 2019, 685, 238-244.	0.8	10
10	Atomic arrangement and spin polarization at a Ge/Fe(100) surface studied by spin-polarized ion scattering spectroscopy. Surface Science, 2019, 683, 1-6.	0.8	1
11	Effects of the Electronic Spinâ€“Orbit Interaction on the Anomalous Asymmetric Scattering of the Spin-Polarized He+ Beam with Paramagnetic Target Materials II. Partial Wave Representation. Journal of the Physical Society of Japan, 2018, 87, 054302.	0.7	0
12	Electron microscopy and ultraviolet photoemission spectroscopy studies of native oxides on GaN(0001). Japanese Journal of Applied Physics, 2018, 57, 098003.	0.8	8
13	Analysis of trace n-alkane in air by cryogenic-temperature programmed desorption. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, 041401.	0.9	0
14	Electron microscopy studies of the intermediate layers at the SiO₂/GaN interface. Japanese Journal of Applied Physics, 2017, 56, 110312.	0.8	28
15	Spin-orbit coupling and surface magnetism coexisting in spin-dependent low-energy <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:msup><mml:mrow><mml:mi mathvariant="bold">He</mml:mi></mml:mrow><mml:mo>+</mml:mo></mml:msup></mml:math> -ion surface scattering. Physical Review B, 2017, 95, .	1.1	2
16	Low-energy ion scattering spectroscopy and reflection high-energy electron diffraction of native oxides on GaN(0001). Japanese Journal of Applied Physics, 2017, 56, 128004.	0.8	16
17	Correlation Between High Gas Sensitivity and Dopant Structure in W-doped ZnO. Physical Review Applied, 2017, 7, .	1.5	15
18	Electron-Spin Dependent Surface Scattering of a Polarized ⁴He⁺ Ion Beam. Hyomen Kagaku, 2017, 38, 164-169.	0.0	2

#	Article	IF	Citations
19	Effects of the Electronic Spinâ€“Orbit Interaction on the Anomalous Asymmetric Scattering of the Spin-Polarized 4He+ Beam with Paramagnetic Target Materials. Journal of the Physical Society of Japan, 2017, 86, 064301.	0.7	2
20	Evaluation of sensor property for hydrogen and ethanol of zinc-doped tin-dioxide thin films fabricated by rf sputtering. Journal of the Ceramic Society of Japan, 2016, 124, 714-716.	0.5	5
21	Quantitative analysis of helium by postâ€ionization method using femtosecond laser technique. Surface and Interface Analysis, 2016, 48, 1181-1184.	0.8	7
22	Temperature Programmed Desorption of Quench-condensed Krypton and Acetone in Air; Selective Concentration of Ultra-trace Gas Components. Analytical Sciences, 2016, 32, 449-454.	0.8	2
23	Selective Concentration of Ultra-trace Acetone in the Air by Cryogenic Temperature Programmed Desorption (cryo-TPD). Analytical Sciences, 2016, 32, 937-941.	0.8	1
24	Gas sensing properties of <i>c</i>-axis-oriented Al-incorporated ZnO films epitaxially grown on (11-20) sapphire substrates using pulsed laser deposition. Journal of the Ceramic Society of Japan, 2016, 124, 668-672.	0.5	7
25	Oscillatory spin asymmetric scattering of low-energy He + ions on Sn surfaces. Nuclear Instruments & Methods in Physics Research B, 2016, 382, 2-6.	0.6	3
26	An ultrabright and monochromatic electron point source made of a LaB6 nanowire. Nature Nanotechnology, 2016, 11, 273-279.	15.6	118
27	Target element dependent spinâ€“orbit coupling in polarized 4He+ ion scattering. Nuclear Instruments & Methods in Physics Research B, 2015, 354, 163-166.	0.6	4
28	Depth profiling analysis of solar wind helium collected in diamond-like carbon film from <i>Genesis</i>. Geochemical Journal, 2015, 49, 559-566.	0.5	14
29	Electron-spin-dependent4He+ion scattering on Bi surfaces. Radiation Effects and Defects in Solids, 2014, 169, 1003-1009.	0.4	6
30	Development of microscopy for lithium analysis using medium-energy ion-stimulated desorption. Applied Physics Express, 2014, 7, 106601.	1.1	2
31	Surface segregation of W doped in ZnO thin films. Surface Science, 2014, 625, 1-6.	0.8	8
32	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.	0.5	9
33	The Improved Self-assembled Monolayer of Octadecyltrichlorosilane as Positive Resist for Patterning Silicon Surface by Metastable Helium Atom Beam Lithography. Physics Procedia, 2012, 32, 525-531.	1.2	0
34	Atomic arrangement and magnetism of iron silicide on Fe(100) surface. Applied Surface Science, 2012, 259, 166-171.	3.1	1
35	Effect of ion beam irradiation on magnetism of Fe(100) outermost surfaces studied by spin-polarized ion scattering spectroscopy. Surface Science, 2011, 605, 1197-1201.	0.8	4
36	Spin-Dependent Low-EnergyHe+4Ion Scattering from Nonmagnetic Surfaces. Physical Review Letters, 2011, 107, 176101.	2.9	11

#	Article	IF	Citations
37	Silicon Micro/Nanofabrication Using Metastable Helium Atom Beam Lithography. Journal of Nanoscience and Nanotechnology, 2010, 10, 7443-7446.	0.9	1
38	StÃ¼ckelberg oscillations in nonadiabatic spin transitions of an electron spin-polarized<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mmultiscripts><mml:mi mathvariant="normal">He</mml:mi><mml:mprescripts /><mml:none /><mml:mrow><mml:mn>4</mml:mn></mml:mrow></mml:mmultiscripts></mml:math><mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msup><mml:mrow /><mml:mrow><mml:mo>+</mml:mo></mml:mrc	1.0	3
39	Element-selective spin polarization analysis of surfaces by spin-polarized ion scattering spectroscopy. Surface Science, 2010, 604, 1767-1771.	0.8	8
40	Structure and spin polarization of outermost surface of the<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" display="inline"><mml:mrow><mml:msub><mml:mrow><mml:mtext>Co</mml:mtext></mml:mrow><mml:mn>2</mml:mn></mml:msu alloy studied by spin-polarized. Physical Review B, 2009, 79, .	1.1	7
41	Spin-polarized ion scattering spectroscopy of CCl4 adsorption on Fe(001) surfaces. Surface Science, 2008, 602, 1688-1692.	0.8	5
42	Spin polarization study of benzene on Fe(100) at the initial stages of multilayer growth. Chemical Physics Letters, 2008, 452, 156-161.	1.2	5
43	Spin-polarized ion scattering spectroscopy as a novel analytical method of magnetic structure at outermost surfaces. Surface Science, 2008, 602, 579-583.	0.8	17
44	Ab initio study of pentacene on the Fe(100) surface. Surface Science, 2008, 602, 1191-1198.	0.8	10
45	Determination of the spin polarization of aH4e+ion beam. Physical Review A, 2008, 77, .	1.0	10
46	Development of Spin-Polarized Ion Scattering Spectroscopy. Analytical Sciences, 2008, 24, 81-85.	0.8	6
47	Spin Polarization Measurement of Metastable He 23S1Atoms in He Discharge. Japanese Journal of Applied Physics, 2007, 46, 3673-3675.	0.8	2
48	Current enhancement of a He+ion beam by optical pumping. Journal of Physics B: Atomic, Molecular and Optical Physics, 2007, 40, 2817-2826.	0.6	1
49	Spin-polarization study ofCOmolecules adsorbed onFe(110)using metastable-atom deexcitation spectroscopy and first-principles calculations. Physical Review B, 2007, 75, .	1.1	15
50	Spin Polarization Study of Benzene Molecule Adsorbed on Fe(100) Surface with Metastable-Atom Deexcitation Spectroscopy and Density Functional Calculations. Journal of Physical Chemistry C, 2007, 111, 15289-15298.	1.5	20
51	Generation of polarized ion beam by optical pumping using circularly and linearly polarized radiation tuned to line (He metastables). Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2007, 575, 343-346.	0.7	17
52	Depolarization effects in electron spin polarization of 4He+ ion beam. Nuclear Instruments & Methods in Physics Research B, 2007, 256, 451-454.	0.6	7
53	Electrostatic linear ion trap for low-energy ion beam storage. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2006, 562, 53-56.	0.7	16
54	Microfabrication of Silicon Using Self-Assembled Monolayer Resist and Metastable Helium Beam. Japanese Journal of Applied Physics, 2006, 45, 8020-8023.	0.8	5

#	Article	IF	Citations
55	Electronic structure of the topmost tenfold surface of decagonal Al-Ni-Co quasicrystal. Physical Review B, 2005, 72, .	1.1	12
56	æº–å®‰å®šåŠ±èµ·åŽŸåæ¿€è„±é›¢ã®ç”©©¶. Shinku/Journal of the Vacuum Society of Japan, 2005, 48, 426-431.	0.2	0
57	Study on Magnetic Surface by Spin-Polarized Metastable-atom Deexcitation Spectroscopy. Hyomen Kagaku, 2005, 26, 151-157.	0.0	2
58	Extremely surface-sensitive hysteresis loop measurement with a spin-polarized metastable helium atom beam. Applied Physics Letters, 2004, 85, 2869-2871.	1.5	14
59	Spin polarization of Na atoms on Fe(001): comparison of the spin-polarized metastable-atom deexcitation spectroscopy (SPMDS) measurements and electronic structure calculation. Surface Science, 2004, 548, 269-275.	0.8	4
60	Temperature dependence of the magnetization of Fe films on Cu(100) studied by SPMDS and SMOKE: effects of relaxation. Surface Science, 2004, 552, 193-198.	0.8	6
61	Adsorption structure and spin polarization of pentacene on a magnetized Fe(100) substrate: SPMDS and ERDA study. Surface Science, 2004, 549, 97-102.	0.8	21
62	Characterization of nanoscale patterns prepared by metastable helium atom beam and butanethiol self-assembled monolayers. Thin Solid Films, 2003, 438-439, 128-131.	0.8	6
63	A metastable-atom deexcitation spectroscopy (MDS) study of water adsorption on Cu(100): a new feature at around the Fermi level. Chemical Physics Letters, 2003, 377, 519-522.	1.2	11
64	Metastable-atom-stimulated desorption from hydrogen-passivated silicon surfaces. Surface Science, 2003, 528, 91-96.	0.8	5
65	Metastable-Atom-Induced Dissociation of Dodecanethiolate Self-Assembled Monolayers on Gold Substrates. Journal of Physical Chemistry B, 2003, 107, 4107-4110.	1.2	9
66	Self-Assembled Monolayers Exposed by Metastable Helium for Nano-Patterning: Octanethiol and Dodecanethiol. Chinese Physics Letters, 2003, 20, 2064-2066.	1.3	3
67	Spin-polarized metastable-atom deexcitation spectroscopy of Fe/Cu(100) surfaces with perpendicular magnetization. Physical Review B, 2003, 67, .	1.1	31
68	Electronic structure of pentacene adsorbates on Au(111) surfaces. Applied Physics Letters, 2003, 83, 4342-4344.	1.5	19
69	Spin Dependence in the Survival Probability of Metastable He (2S3) Atoms during the Scattering from Ferromagnetic Surfaces. Physical Review Letters, 2003, 91, 267203.	2.9	17
70	A Spin-Polarized Metastable-Atom Deexcitation Spectroscopy (SPMDS) Study on Surface Curie Temperature of Fe Films on Cu(100). Japanese Journal of Applied Physics, 2003, 42, 4698-4700.	0.8	7
71	Microlithography Using Metastable Helium Atoms: Patterning of Gold Film Coated with Dodecanethiol Self-Assembled Monolayers on Mica. Japanese Journal of Applied Physics, 2003, 42, 4767-4769.	0.8	7
72	Patterning of gold film on muscovite mica by using a helium-metastable atom beam and an octanethiol self-assembled monolayer. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 2478.	1.6	1

#	Article	IF	Citations
73	Mask technologies for metastable atom lithography: photomask and physical mask. , 2003, 5130, 1055.		0
74	Influence of submonolayers of sodium on the spin polarization of iron outmost surfaces. Journal of Applied Physics, 2003, 93, 8734-8736.	1.1	4
75	The electronic structure and magnetism of NO adsorbed on Fe(100) surfaces. Surface Science, 2002, 507-510, 181-185.	0.8	3
76	Spin-Polarized Metastable Deexcitation Spectroscopy Study of Potassium and Oxygen Adsorbed Iron Surfaces. Japanese Journal of Applied Physics, 2002, 41, 4675-4678.	0.8	4
77	Spin Polarization in Molecular Orbitals of Copperâ^'Phthalocyanine Deposited on a Magnetized Fe(100) Substrate. Journal of Physical Chemistry B, 2002, 106, 7643-7646.	1.2	27
78	Spin Polarization of Metal (Mn, Fe, Cu, and Mg) and Metal-Free Phthalocyanines on an Fe(100) Substrate. Journal of Physical Chemistry B, 2002, 106, 11553-11556.	1.2	34
79	Spin-resolved electronic structure of the outermost surface in the H2O/Na/Fe(001) coadsorption system: spin-polarized metastable deexcitation spectroscopy study. Surface Science, 2001, 476, 63-70.	0.8	9
80	Spin Polarized MetastableHe*(23S,1s2s)Stimulated Desorption ofH+Ions. Physical Review Letters, 2001, 86, 3654-3657.	2.9	6
81	TiO(001) single-crystal film formation by the incorporation of oxygen from MgO into the deposited Ti film. Physical Review B, 2000, 62, 8306-8312.	1.1	9
82	TiO2(110)â^'p(1Ã—1)surface structure analyzed by impact-collision ion-scattering spectroscopy. Physical Review B, 2000, 61, 5679-5682.	1.1	30
83	TiO epitaxial film growth on MgO(001) and its surface structural analysis. Surface Science, 2000, 445, 506-511.	0.8	14
84	The encapsulation of Pd by the supporting TiO2(110) surface induced by strong metal-support interactions. Surface Science, 2000, 448, 33-39.	0.8	50
85	Low-energy reactive ion scattering as a probe of surface femtochemical reaction: H+ and Hâ^' formation on ionic compound surfaces. Journal of Chemical Physics, 1999, 110, 2226-2239.	1.2	24
86	Effects of potential energy on sputtering ofF+from theCaF2(111)surface by noble-gas ion bombardment. Physical Review B, 1999, 60, 13854-13859.	1.1	10
87	Capture and loss of valence electrons during low energy H+ and Hâ^' scattering from LaB6(100), Cs/Si(100), graphite and LiCl. Surface Science, 1999, 421, 89-99.	0.8	19
88	Positive ionization of hydrogen during scattering and sputtering from clean and passivated Si(111) surfaces. Surface Science, 1999, 431, 26-32.	0.8	4
89	Structure of Î±-Al 2 O 3 (0001) surface and Ti deposited on Î±-Al 2 O 3 (0001) substrate. Surface Science, 1999, 437, 289-298.	0.8	71
90	Structure analysis of CsCl deposited on the MgO(001) surface by coaxial impact collision atom scattering spectroscopy (CAICASS). Surface Science, 1999, 442, 283-290.	0.8	19

#	Article	IF	Citations
91	Initial stage growth mechanisms of metal adsorbates â€“ Ti, Zr, Fe, Ni, Ge, and Ag â€“ on MgO(001) surface. Surface Science, 1999, 442, 291-299.	0.8	23
92	Interfacial Reaction during Thin Film Growth of Ti on the MgO(001) Surface. Journal of Physical Chemistry B, 1999, 103, 5747-5749.	1.2	7
93	Surface segregation of implanted ions: Bi, Eu, and Ti at the MgO(100) surface. Applied Surface Science, 1998, 130-132, 534-538.	3.1	3
94	Neutralization and electronic excitation during low-energy H and He scattering from LiF. Surface Science, 1998, 397, 63-70.	0.8	31
95	Effect of surface defects on charge exchange of low-energy deuterium ions scattered fromSrCl2andBaF2. Physical Review B, 1998, 58, 4143-4148.	1.1	1
96	In SituObservation of Charge Exchange and Surface Segregation of Hydrogen during Low EnergyH+andH2+Scattering from Semiconductor Surfaces. Physical Review Letters, 1998, 81, 465-468.	2.9	8
97	Interactions ofSrF2andPrF3with TiC(111) and Si(111) surfaces studied by low-energyD+scattering spectroscopy. Physical Review B, 1998, 58, 10054-10059.	1.1	1
98	Segregation of Eu implanted at the MgO(100) surface. Surface Science, 1997, 391, L1243-L1248.	0.8	9