Koji Sumitomo

List of Publications by Year
in descending order

99 papers	1,429 citations	361413 20 h-index	361022 35 g-index
101 all docs	101 docs citations	101 times ranked	1393 citing authors

#	Article	IF	Citations
1	Effects of Ge and Ni catalytic underlayers to nanographene synthesis from pentacene-based film via soft X-ray irradiation. Japanese Journal of Applied Physics, 2022, 61, SC1057.	1.5	0
2	Selective arrangement of vesicles on artificial lipid membrane by biotin-avidin interaction. Japanese Journal of Applied Physics, 2022, 61, 037002.	1.5	0
3	Mechanism of Budded Virus Envelope Fusion into a Planar Bilayer Lipid Membrane on a SiO₂ Substrate. Langmuir, 2022, , .	3.5	3
4	Nanographene synthesis on metal film using pentacene, H₂ gas and heated W mesh at low temperature. Japanese Journal of Applied Physics, 2021, 60, SBBK09.	1.5	1
5	Soft X-ray absorption and emission spectra of nanographene prepared from pentacene with hot mesh deposition and soft X-ray irradiation. Japanese Journal of Applied Physics, 2021, 60, 045506.	1.5	3
6	Structural and Electrical Properties of Nanographene Prepared from Pentacene by Hot Mesh Deposition and Soft X-ray Irradiation. , 2021, , .		0
7	Factors Facilitating Fusion between Dye-encapsulating Vesicles and Giant Unilamellar Vesicles. Sensors and Materials, 2021, 33, 4361.	0.5	0
8	Phase separation in freestanding bilayer lipid membrane induced by osmotic pressure difference. Japanese Journal of Applied Physics, 2020, 59, 027001.	1.5	1
9	Graphene synthesis from pentacene by soft X-ray irradiation. Thin Solid Films, 2020, 713, 138365.	1.8	9
10	Biodevices using microwells sealed with artificial lipid bilayers: Improvement of sealing performance by protein coating. Electronics and Communications in Japan, 2020, 103, 15-22.	0.5	0
11	Water Permeability through the Lipid Bilayers Suspended over Microwells on Si Substrates. IEEJ Transactions on Electronics, Information and Systems, 2020, 140, 421-425.	0.2	0
12	Biodevices Using Microwells Sealed with Artificial Lipid Bilayers: Improvement of Sealing Performance by Protein Coating. IEEJ Transactions on Electronics, Information and Systems, 2020, 140, 426-431.	0.2	0
13	Removal of Surface Contamination by Atomic Hydrogen Annealing. Journal of Photopolymer Science and Technology = [Fotoporima Konwakai Shi], 2020, 33, 419-426.	0.3	6
14	Deuteration of Pentacene Using Deuterium Gas and Heated Catalyst. , 2020, , .		0
15	Evaluation of Lateral Diffusion of Lipids in Continuous Membranes between Freestanding and Supported Areas by Fluorescence Recovery after Photobleaching. Langmuir, 2019, 35, 11725-11734.	3.5	9
16	Control of phase separation in freestanding lipid bilayer over microwells. Japanese Journal of Applied Physics, 2019, 58, SIID06.	1.5	4
17	Observation of intracellular protein localization area in a single neuron using gold nanoparticles with a scanning electron microscope. Micron, 2019, 126, 102740.	2.2	1
18	Vesicle Fusion with Artificial Bilayer Lipid Membrane Induced by Electrostatic Interaction. Bunseki Kagaku, 2019, 68, 23-32.	0.2	0

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19	Vesicle fusion with bilayer lipid membrane controlled by electrostatic interaction. Biochemistry and Biophysics Reports, 2017, 11, 58-63.	1.3	16
20	Liquid-Ordered/Liquid-Crystalline Phase Separation at a Lipid Bilayer Suspended over Microwells. Langmuir, 2017, 33, 13277-13283.	3.5	18
21	Neuronal Growth on a-Si and Au Nanopillars. Electrochemistry, 2016, 84, 296-298.	1.4	2
22	Mobile Silk Fibroin Electrode for Manipulation and Electrical Stimulation of Adherent Cells. Advanced Functional Materials, 2016, 26, 8185-8193.	14.9	28
23	A DNA aptamer recognising a malaria protein biomarker can function as part of a DNA origami assembly. Scientific Reports, 2016, 6, 21266.	3.3	82
24	Scanning Electron Microscopy Observation of Interface Between Single Neurons and Conductive Surfaces. Journal of Nanoscience and Nanotechnology, 2016, 16, 3383-3387.	0.9	3
25	Hermetically sealed microwell with a lipid bilayer created using a self-assembled monolayer. Applied Physics Express, 2015, 8, 117201.	2.4	3
26	Time-lapse imaging of morphological changes in a single neuron during the early stages of apoptosis using scanning ion conductance microscopy. Journal of Structural Biology, 2015, 191, 32-38.	2.8	11
27	Electrostatically induced planar lipid membrane formation on a cationic hydrogel array by the fusion of small negatively charged unilamellar vesicles. Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 477, 63-69.	4.7	2
28	Ligand-induced structural changes in a membrane-reconstituted ion channel observed with atomic force microscopy. Applied Physics Express, 2014, 7, 027001.	2.4	7
29	Fabrication of a gel-supported lipid membrane array on a silicon substrate. Japanese Journal of Applied Physics, 2014, 53, 01AF02.	1.5	2
30	Formation of a suspended lipid membrane on a microcavity covered by a thin SiO2layer with a nanohole array. Applied Physics Express, 2014, 7, 017001.	2.4	1
31	Fabrication of a ring structure at the aperture of a hole for the efficient suspension of a lipid bilayer. Japanese Journal of Applied Physics, 2014, 53, 096503.	1.5	1
32	Observation of Neuronal Death <i>In Vitro </i>by SEM and Optical Microscopy. E-Journal of Surface Science and Nanotechnology, 2014, 12, 179-184.	0.4	3
33	Gold Nanoparticle-Induced Formation of Artificial Protein Capsids. Nano Letters, 2012, 12, 2056-2059.	9.1	42
34	Ca2+ ion transport through channels formed by Î±-hemolysin analyzed using a microwell array on a Si substrate. Biosensors and Bioelectronics, 2012, 31, 445-450.	10.1	37
35	Examination of Ion Channel Protein Orientation in Supported Lipid Bilayers. Applied Physics Express, 2011, 4, 107001.	2.4	7
36	Confinement of Fluorescent Probes in Microwells on Si Substrates by Sealing with Lipid Bilayers. Applied Physics Express, 2010, 3, 107001.	2.4	23

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37	Pattern Formation and Molecular Transport of Histidine-Tagged GFPs Using Supported Lipid Bilayers. Langmuir, 2010, 26, 12716-12721.	3.5	10
38	Visualization of Single Membrane Protein Structure in Stretched Lipid Bilayer Suspended over Nanowells. Applied Physics Express, 2010, 3, 027002.	2.4	14
39	Atomic Force Microscopy Observation of Membrane Proteins Suspended over Carbon Nanotube Network. Japanese Journal of Applied Physics, 2009, 48, 08JB18.	1.5	7
40	Direct Observation of ATP-Induced Conformational Changes in Single P2X4 Receptors. PLoS Biology, 2009, 7, e1000103.	5.6	98
41	A Selfâ€Assembled Protein Nanotube with High Aspect Ratio. Small, 2009, 5, 2077-2084.	10.0	73
42	Elastic modulus of suspended purple membrane measured by atomic force microscopy. Applied Surface Science, 2008, 254, 7877-7880.	6.1	9
43	Effect of Ca²⁺ on Vesicle Fusion on Solid Surface: An In vitro Model of Protein-Accelerated Vesicle Fusion. Japanese Journal of Applied Physics, 2008, 47, 6164.	1.5	9
44	Effect of UV/Ozone Treatment on Nanogap Electrodes for Molecular Devices. Japanese Journal of Applied Physics, 2007, 46, 1731-1733.	1.5	3
45	Supported Lipid Bilayer Self-Spreading on a Nanostructured Silicon Surface. Langmuir, 2007, 23, 367-371.	3.5	51
46	Reversible Defect Engineering of Single-Walled Carbon Nanotubes Using Scanning Tunneling Microscopy. Nano Letters, 2007, 7, 3623-3627.	9.1	46
47	Real-time imaging of DNAâ€“streptavidin complex formation in solution using a high-speed atomic force microscope. Ultramicroscopy, 2007, 107, 184-190.	1.9	51
48	Multistable features of boronized interstitial-pentamers on Si(113) surfaces. Surface and Interface Analysis, 2006, 38, 1078-1082.	1.8	0
49	Molecular-Mediated Single-Electron Devices Operating at Room Temperature. Japanese Journal of Applied Physics, 2006, 45, 4285-4289.	1.5	6
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51	Electrode performance of layered LiNi0.5Ti0.5O2 prepared by ion exchange. Journal of Power Sources, 2005, 144, 183-190.	7.8	21
52	Observation of B segregation on Si(113) by scanning tunneling microscopy. Ultramicroscopy, 2005, 105, 16-21.	1.9	2
53	Boronizing structures of Si(113) surfaces. Surface Science, 2005, 576, 83-88.	1.9	4
54	Structure transition of Ge/Si(113) surfaces during Ge epitaxial growth. Physica E: Low-Dimensional Systems and Nanostructures, 2004, 24, 157-160.	2.7	3

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55	Ge molecular beam epitaxy on Si(113): surface structures, nanowires and nanodots. Surface and Interface Analysis, 2004, 36, 114-118.	1.8	6
56	STM observations of three-dimensional Ge islands on Si(111) surfaces with different step orientations and step-bunching conditions. Surface Science, 2004, 562, 15-21.	1.9	7
57	Selective formation of Ge nanostructures on Si(1â€‰1â€‰1) surface with patterned steps. Applied Surface Science, 2004, 237, 68-74.	6.1	5
58	Luminescent Nanoring Structures on Silicon. Advanced Materials, 2003, 15, 1522-1526.	21.0	19
59	Structural stability of the Ge/Si(1 1 3)-2Ã—2 surface. Applied Surface Science, 2003, 212-213, 724-729.	6.1	1
60	Anisotropic strain relaxation of Ge nanowires on Si(113) studied by medium-energy ion scattering. Physical Review B, 2003, 67, .	3.2	14
61	Structural Stability and Anisotropic Stress of Ge/Si(113)-2*2 Surface. Hyomen Kagaku, 2003, 24, 526-530.	0.0	3
62	Atomic Structures of theGe/Si(113)â˜(2Ã—2)Surface. Physical Review Letters, 2002, 88, 256101.	7.8	22
63	Influences of the Si anisotropy on Ge nanowire formation and related island shape transition. Surface Science, 2002, 497, 93-99.	1.9	22
64	Structure change of Ni(1 ML)/Si(111) by post-annealing observed by atomic force microscopy, ion scattering and photoelectron spectroscopy. Surface Science, 2002, 511, 112-120.	1.9	9
65	Design of Si surfaces for self-assembled nanoarchitecture. Surface Science, 2002, 514, 1-9.	1.9	21
66	Surface Segregation in Ge/Si System Studied by Medium Energy Ion Scattering.. Hyomen Kagaku, 2001, 22, 197-202.	0.0	0
67	Surface segregation and interdiffusion of Ge on Si(001) studied by medium-energy ion scattering. Thin Solid Films, 2000, 369, 112-115.	1.8	7
68	Ion-induced electron emission from Si crystal targets covered with noncrystalline Si layers. Nuclear Instruments & Methods in Physics Research B, 2000, 168, 181-191.	1.4	1
69	Ion-induced electron measurements using crystal targets overlaid with noncrystalline layers. Nuclear Instruments & Methods in Physics Research B, 2000, 164-165, 897-902.	1.4	1
70	Ge segregation mechanism during Si/Ge multilayer growth. Thin Solid Films, 1999, 357, 76-80.	1.8	10
71	Interaction of Co with SiGe epilayer grown on Si(100). Surface Science, 1999, 421, 100-105.	1.9	11
72	Oxidation of cobalt pre-reacted SiGe epilayer grown on Si(100). Surface Science, 1999, 429, 274-278.	1.9	1

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73	Control of surface composition on Ge/Si(001) by atomic hydrogen irradiation. Surface Science, 1999, 436, 9-14.	1.9	16
74	Fabrication and Integration of Nanostructures on Si Surfaces. Accounts of Chemical Research, 1999, 32, 447-454.	15.6	46
75	Ion-induced electron emission from crystal targets with noncrystalline overlayers. Nuclear Instruments & Methods in Physics Research B, 1998, 140, 47-54.	1.4	1
76	Dimer structures of Ge/Si(001) and Sb/Si(001) studied by medium-energy ion scattering. Applied Surface Science, 1998, 130-132, 133-138.	6.1	7
77	Disordering of Si(111) at high temperatures. Physical Review B, 1998, 58, 12587-12589.	3.2	17
78	Energy loss and straggling for 50- and 100-keVH+ions passing through the Si(001)2Ã—1-Sb surface. Physical Review B, 1997, 56, 7011-7017.	3.2	9
79	Structure analysis of Ge dimer on Si (001) by medium-energy ion scattering blocking profiles from embedded Ge layers. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1997, 15, 1537-1541.	2.1	7
80	Fabrication of buried epitaxial CoSi2 layer through selective diffusion. Applied Physics Letters, 1997, 70, 607-609.	3.3	15
81	Intermixing at Ge/Si(001) interfaces studied by surface energy loss of medium energy ion scattering. Surface Science, 1997, 385, 200-206.	1.9	32
82	Structure analysis of the GaAs(001)-2 Ã— 4 surface using medium energy ion scattering. Surface Science, 1996, 355, L361-L365.	1.9	5
83	Stopping powers and energy staggling for 50â€“300 keV H+ in amorphous Si and Ge films. Nuclear Instruments & Methods in Physics Research B, 1996, 115, 34-38.	1.4	14
84	Atomic structure analysis of the interfaces inSi/Ge superlattices. Applied Surface Science, 1996, 100-101, 503-507.	6.1	3
85	Preparation and characterization of a wellâ€ordered surface on a Si(001) substrate with a buried metal layer for application of infrared reflection spectroscopy. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1996, 14, 2263-2268.	2.1	12
86	Diffusion mediated chemical reaction in Co/Ge/Si(100) forming Ge/CoSi2/Si(100). Applied Physics Letters, 1996, 68, 1241-1243.	3.3	19
87	Thermal effects on surface Fermi level for GaAs(001). Journal of Applied Physics, 1996, 79, 7785-7789.	2.5	6
88	Oxidation of Ultrathin SiGe Layer on Si(001): Evidence for Inward Movement of Ge. Japanese Journal of Applied Physics, 1994, 33, 1837-1838.	1.5	6
89	In situoxidation of a thin layer of Ge on Si(001): Observation of GeO to SiO2transition. Applied Physics Letters, 1993, 62, 864-866.	3.3	36
90	Hydrogen-induced reconstruction of Si(111)-â^š3-Ag surface studied by TOF-ICISS. Applied Surface Science, 1992, 60-61, 183-189.	6.1	7

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91	Ag thin film growth on hydrogen-terminated Si(100) surface studied by TOF-ICISS. Applied Surface Science, 1992, 60-61, 195-199.	6.1	14
92	TOF-ICISS study of surface damage formed by Ar ion bombardment on Si(100). Surface Science, 1991, 242, 90-94.	1.9	10
93	Low-energy recoil-ion spectroscopy studies of hydrogen adsorption on Si(100)-2 Ã— 1 surfaces. Surface Science, 1991, 242, 422-427.	1.9	14
94	Adsorption of H on : evidence for Ag(111) agglomerates formation. Surface Science, 1991, 254, L460-L464.	1.9	47
95	Adsorption of H on Si(111)-â^š3 Ã— â^š3-Ag: evidence for Ag(111) agglomerates formation. Surface Science Letters, 1991, 254, L460-L464.	0.1	1
96	Hydrogen-mediated epitaxy of Ag on Si(111) as studied by low-energy ion scattering. Physical Review Letters, 1991, 66, 1193-1196.	7.8	161
97	Surface analysis by a TOF-ICISS/ERDA method.. Shinku/Journal of the Vacuum Society of Japan, 1991, 34, 136-139.	0.2	1
98	Structural study of Ag overlayers deposited on a Si(111) substrate by impact-collision ion-scattering-spectroscopy with time-of-flight detection. Applied Surface Science, 1990, 41-42, 112-117.	6.1	30
99	Effect of atomic hydrogen exposure on hydrogenated amorphous carbon thin films. Japanese Journal of Applied Physics, 0, , .	1.5	0