Shoso Shingubara

List of Publications by Year
in descending order

92	1,873	279798 23	276875 41
papers	citations	h-index	g-index

93	93	93	1748
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Bactericidal effect of nanostructures via lytic transglycosylases of Escherichia coli. RSC Advances, 2022, 12, 1645-1652.	3.6	8
2	Detailed analysis of liposome adsorption and its rupture on the liquid-solid interface monitored by LSPR and QCM-D integrated sensor. Sensing and Bio-Sensing Research, 2021, 32, 100415.	4.2	11
3	Low cost TSV fabrication technologies using anisotropic Si wet etching and conformal electroless plating of barrier and seed metals. , 2021, , .		0
4	Formation of MoS2 nanostructure arrays using anodic aluminum oxide template. Micro and Nano Engineering, 2020, 9, 100071.	2.9	6
5	Adhesion and bactericidal properties of nanostructured surfaces dependent on bacterial motility. RSC Advances, 2020, 10, 5673-5680.	3.6	39
6	Effect of additives on preparation of vertical holes in Si substrate using metal-assisted chemical etching. Japanese Journal of Applied Physics, 2019, 58, SDDF06.	1.5	6
7	Nano-Honeycomb Electrode-Based QCM Sensor and Its Application for PPI Detection. IEEE Sensors Journal, 2019, 19, 4025-4030.	4.7	3
8	Effect of a metal interlayer under Au catalyst for the preparation of microscale holes in Si substrate by metal-assisted chemical etching. Japanese Journal of Applied Physics, 2019, 58, SAAE07.	1.5	3
9	Study of MacEtch using Additives for Preparation of TSV. , 2019, , .		0
10	Time-Lapse imaging of bactericidal effect on nanostructural surface. , 2019, , .		1
11	Highly sensitive quartz crystal microbalance based biosensor using Au dendrite structure. Japanese Journal of Applied Physics, 2018, 57, 02CD01.	1.5	6
12	Study on Effect of Hf Layer Thickness on Ti/Hf/HfO 2/Au ReRAM Device. , 2018, , .		0
13	Adhesion and Bactericidal Properties of a Wettability-Controlled Artificial Nanostructure. ACS Applied Nano Materials, 2018, 1, 5736-5741.	5.0	26
14	Evaluation of the interdiffusion properties of Cu and electroless-plated CoWB barrier films formed on silicon substrate. Japanese Journal of Applied Physics, 2018, 57, 07MB02.	1.5	3
15	Fabrication of highly sensitive QCM sensor using AAO nanoholes and its application in biosensing. Sensors and Actuators B: Chemical, 2018, 276, 534-539.	7.8	29
16	Magnetic Conductive Filament Formed in the ReRAM Device with Ferromagnetic Electrode. ECS Transactions, 2017, 75, 65-71.	0.5	0
17	Antibacterial Property of Si Nanopillar Array Fabricated Using Metal Assisted Etching; Mimic a Cicada Wing. ECS Transactions, 2017, 75, 1-5.	0.5	9
18	Multilevel resistance switching phenomena observed in the Cu (Ti)/HfO<inf>2</inf>/Au device. , 2017, , .		0

#	Article	IF	Citations
19	Fabricating a Highly Sensitive QCM Sensor Using AAO Nanoholes and Its Application for Biosensing. Proceedings (mdpi), 2017, 1, 495.	0.2	0
20	ZnO Nanostructure Based QCM Sensor to Detect Ethanol at Room Temperature Fabricated by All Wet Process. Proceedings (mdpi), 2017, 1, 397.	0.2	1
21	Formation of three-dimensional nano-trees with perpendicular branches by electrodeposition of CuSn alloy. Surface and Coatings Technology, 2016, 294, 83-89.	4.8	12
22	Oxidation of CuSn alloy nanotree and application for gas sensors. Japanese Journal of Applied Physics, 2016, 55, 06GH08.	1.5	0
23	Fabrication of nanocone arrays by two step metal assisted chemical etching method. Microelectronic Engineering, 2016, 153, 55-59.	2.4	24
24	Temperature dependence of magnetoresistance characteristics of the on-state of resistive random access memory with ferromagnetic electrode. , 2015, , .		0
25	Magnetoresistance of conductive filament in Ni/HfO₂/Pt resistive switching memory. Japanese Journal of Applied Physics, 2015, 54, 05ED02.	1.5	10
26	All-wet TSV filling with highly adhesive displacement plated Cu seed layer. , 2015, , .		4
27	Dynamic moderation of an electric field using a SiO₂ switching layer in TaO_x â€based ReRAM. Physica Status Solidi - Rapid Research Letters, 2015, 9, 166-170.	2.4	9
28	Ferromagnetic nano-conductive filament formed in Ni/TiO2/Pt resistive-switching memory. Applied Physics A: Materials Science and Processing, 2015, 118, 613-619.	2.3	21
29	Effect of electric field concentration using nanopeak structures on the currentâ€“voltage characteristics of resistive switching memory. AIP Advances, 2014, 4, .	1.3	12
30	Morphology dependence of optical reflectance properties for a high-density array of silicon nanowires. Japanese Journal of Applied Physics, 2014, 53, 06JF10.	1.5	10
31	Electroless Cu deposition on atomic layer deposited Ru as novel seed formation process in through-Si vias. Electrochimica Acta, 2013, 100, 203-211.	5.2	42
32	Highly adhesive electroless barrier/Cu-seed formation for high aspect ratio through-Si vias. Microelectronic Engineering, 2013, 106, 164-167.	2.4	25
33	Control of Crystal Orientation and Diameter of Silicon Nanowire Using Anodic Aluminum Oxide Template. Japanese Journal of Applied Physics, 2013, 52, 06GF06.	1.5	2
34	Temperature dependence of resistance of conductive filament formed in NiO layer in resistive switching memory. , 2013, , .		1
35	Low temperature through-Si via fabrication using electroless deposition. , 2012, , .		0
36	Evaluation of crystal structure of porous Si nanowires prepared by metal assisted etching. Materials Research Society Symposia Proceedings, 2012, 1439, 1-4.	0.1	2

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37	DNAâ€“Gold Conjugates: Formation of 1D and 2D Gold Nanoparticle Arrays by Divalent DNAâ€“Gold Nanoparticle Conjugates (Small 15/2012). Small, 2012, 8, 2445-2445.	10.0	0
38	Resistive switching characteristics of NiO/Ni nanostructure. Microelectronic Engineering, 2012, 98, 367-370.	2.4	5
39	Electroless Copper Bath Stability Monitoring with UV-VIS Spectroscopy, pH, and Mixed Potential Measurements. Journal of the Electrochemical Society, 2012, 159, D437-D441.	2.9	22
40	Evaluation of morphology and crystal structure of Si nanowires prepared by singlestep metal assisted etching. , 2012, , .		0
41	Hydrogen effect on characteristics of the resistive switching memory. , 2012, , .		0
42	Electroless deposition of barrier and seed layers for via last Cu-TSV metalization. , 2012, , .		4
43	Adsorption of Pd nanoparticles catalyst in high aspect ratio through-Si vias for electroless deposition. Electrochimica Acta, 2012, 82, 372-377.	5.2	14
44	OS7-1-3 Fabrication of vertically aligned Si nanowire arrays using metal catalyst and porous aluminum. The Proceedings of the Symposium on Micro-Nano Science and Technology, 2012, 2012.4, 7-8.	0.0	0
45	Preparation of Ultrahigh-Density Magnetic Nanowire Arrays beyond 1 Terabit/Inch² on Si Substrate Using Anodic Aluminum Oxide Template. Japanese Journal of Applied Physics, 2011, 50, 06GE01.	1.5	7
46	Formation of electroless barrier and seed layers in a high aspect ratio through-Si vias using Au nanoparticle catalyst for all-wet Cu filling technology. Electrochimica Acta, 2011, 56, 6245-6250.	5.2	49
47	Formation and Evaluation of Electroless-Plated Barrier Films for High-Aspect-Ratio Through-Si Vias. Japanese Journal of Applied Physics, 2011, 50, 05ED01.	1.5	3
48	Control of Crystal Orientation of Epitaxial Si nanowires on Si Substrate Using AAO template. Materials Research Society Symposia Proceedings, 2011, 1350, 1.	0.1	0
49	Formation and Evaluation of Electroless-Plated Barrier Films for High-Aspect-Ratio Through-Si Vias. Japanese Journal of Applied Physics, 2011, 50, 05ED01.	1.5	6
50	Preparation of Ultrahigh-Density Magnetic Nanowire Arrays beyond 1 Terabit/Inch²on Si Substrate Using Anodic Aluminum Oxide Template. Japanese Journal of Applied Physics, 2011, 50, 06GE01.	1.5	17
51	Vertical Epitaxial Wire-on-Wire Growth of Ge/Si on Si(100) Substrate. Nano Letters, 2009, 9, 1523-1526.	9.1	22
52	G1001-5-1 Measurements of Thermal Expansion Coefficient at Low Temperatures Using Electronic Speckle Pattern Interferometry. The Proceedings of the JSME Annual Meeting, 2009, 2009.5, 109-110.	0.0	0
53	Characterization of sputtered tungsten nitride film and its application to Cu electroless plating. Microelectronic Engineering, 2008, 85, 395-400.	2.4	25
54	Homoepitaxial Growth of Vertical Si Nanowires on Si(100) Substrate using Anodic Aluminum Oxide Template. Materials Research Society Symposia Proceedings, 2007, 1058, 1.	0.1	0

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55	Bottom-up copper fill with addition of mercapto alkyl carboxylic acid in electroless plating. Electrochimica Acta, 2006, 51, 2442-2446.	5.2	28
56	Epitaxial Growth of Cu Nanodot Arrays Using an AAO Template on a Si Substrate. Electrochemical and Solid-State Letters, 2006, 9, J13.	2.2	23
57	Electroplating of ZnO Nanowires Using Nanohole Arrays of Anodized Aluminum Oxide and Effects of Thermal Annealing. Materials Research Society Symposia Proceedings, 2006, 957, 1.	0.1	0
58	Characterization of Electroless-Plated Cu Film over Pd Catalytic Layer Formed by an Ionized Cluster Beam. Journal of the Electrochemical Society, 2005, 152, C684.	2.9	8
59	Effect of Additives on Hole Filling Characteristics of Electroless Copper Plating. Japanese Journal of Applied Physics, 2004, 43, 7000-7001.	1.5	15
60	Bottom-Up Fill for Submicrometer Copper Via Holes of ULSIs by Electroless Plating. Journal of the Electrochemical Society, 2004, 151, C781.	2.9	70
61	Wet treatment for preparing atomically smooth Si(100) wafer surface. Applied Surface Science, 2004, 234, 439-444.	6.1	15
62	Effects of the Surface Pressure on the Formation of Langmuirâ˜Blodgett Monolayer of Nanoparticles. Langmuir, 2004, 20, 2274-2276.	3.5	68
63	Bottom-Up Fill of Copper in Deep Submicrometer Holes by Electroless Plating. Electrochemical and Solid-State Letters, 2004, 7, C78.	2.2	82
64	Formation of Ultra-High-Density Ferromagnetic Column Arrays Beyond 1 Tera/inch2 Using Porous Alumina Template. Transactions of the Magnetics Society of Japan, 2004, 4, 231-234.	0.5	10
65	Fabrication of Nanomaterials Using Porous Alumina Templates. Journal of Nanoparticle Research, 2003, 5, 17-30.	1.9	310
66	Formation of aluminum nanodot array by combination of nanoindentation and anodic oxidation of aluminum. Surface Science, 2003, 532-535, 317-323.	1.9	54
67	Suppression of native oxide growth in sputtered TaN films and its application to Cu electroless plating. Journal of Applied Physics, 2003, 94, 4697-4701.	2.5	48
68	Influence of Surface Oxide of Sputtered TaN on Displacement Plating of Cu. Japanese Journal of Applied Physics, 2003, 42, 1843-1846.	1.5	15
69	Highly Adhesive Electroless Cu Layer Formation Using an Ultra Thin Ionized Cluster Beam (ICB)-Pd Catalytic Layer for Sub-100 nm Cu Interconnections. Japanese Journal of Applied Physics, 2003, 42, L1223-L1225.	1.5	13
70	Optical spectroscopic studies of the dispersibility of gold nanoparticle solutions. Journal of Applied Physics, 2002, 92, 7486-7490.	2.5	35
71	Formation of Al Dot Hexagonal Array on Si Using Anodic Oxidation and Selective Etching. Japanese Journal of Applied Physics, 2002, 41, L340-L343.	1.5	16
72	Adhesion improvement of electroless copper to a polyimide film substrate by combining surface microroughening and imide ring cleavage. Journal of Adhesion Science and Technology, 2002, 16, 1027-1040.	2.6	55

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73	Fabrication of Two- and Three-Dimensional Structures of Nanoparticles Using Lb Method and DNA Hybridization. Materials Research Society Symposia Proceedings, 2001, 704, 451.	0.1	1
74	Fabrication of Two- and Three-Dimensional Structures of Nanoparticles Using LB Method and DNA Hybridization. Materials Research Society Symposia Proceedings, 2001, 707, 451.	0.1	0
75	Well-size-controlled Colloidal Gold Nanoparticles Dispersed in Organic Solvents. Japanese Journal of Applied Physics, 2001, 40, 346-349.	1.5	61
76	Experimental conditions for a highly ordered monolayer of gold nanoparticles fabricated by the Langmuirâ€“Blodgett method. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 2045.	1.6	72
77	Scanning Electron Microscope Observation of Heterogeneous Three-Dimensional Nanoparticle Arrays Using DNA. Japanese Journal of Applied Physics, 2001, 40, L521-L523.	1.5	6
78	Formation of a large-scale Langmuirâ€“Blodgett monolayer of alkanethiol-encapsulated gold particles. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2001, 19, 115.	1.6	51
79	Atomic-scale defect control on hydrogen-terminated silicon surface at wafer scale. Applied Physics Letters, 2001, 78, 309-311.	3.3	42
80	Electrical properties of self-organized nanostructures of alkanethiol-encapsulated gold particles. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2000, 18, 2653.	1.6	19
81	Control of Interdot Space and Dot Size in a Two-Dimensional Gold Nanodot Array. Japanese Journal of Applied Physics, 1999, 38, L473-L476.	1.5	9
82	Multiprobe resistance monitoring of Blech pattern during electromigration testing. , 1999, , .		1
83	Self-Organization of a Two-Dimensional Array of Gold Nanodots Encapsulated by Alkanethiol. Japanese Journal of Applied Physics, 1998, 37, 7198-7201.	1.5	31
84	Scanning Tunneling Microscopy Observation on the Atomic Structures of Step Edges and Etch Pits on a NH4F-Treated Si(111) Surface. Japanese Journal of Applied Physics, 1997, 36, 1420-1423.	1.5	5
85	Ordered Two-Dimensional Nanowire Array Formation Using Self-Organized Nanoholes of Anodically Oxidized Aluminum. Japanese Journal of Applied Physics, 1997, 36, 7791-7795.	1.5	138
86	Resistance oscillations induced by DC electromigration. AIP Conference Proceedings, 1996, , .	0.4	2
87	Aluminum-Selective Chemical Vapor Deposition Induced by Hydrogen Desorption on Silicon. Japanese Journal of Applied Physics, 1996, 35, 1010-1013.	1.5	11
88	Interaction of a void and a grain boundary under a high electric current stress employing three-dimensional molecular dynamics simulation. Applied Surface Science, 1995, 91, 220-226.	6.1	3
89	Molecular dynamics simulation of void electromigration under a high-density electric current stress in an aluminum interconnection. Electronics and Communications in Japan, 1995, 78, 82-95.	0.2	2
90	Electromigrationâ€induced abrupt changes in electrical resistance associated with void dynamics in aluminum interconnections. Journal of Applied Physics, 1991, 69, 207-212.	2.5	53

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91	Effect of etching solution concentration on preparation of Si holes by metal-assisted chemical etching. Japanese Journal of Applied Physics, 0, , .	1.5	1
92	Effect of Au electrode on the resistance change response of HfOx-based ReRAM device under voltage pulse trains. Japanese Journal of Applied Physics, 0, , .	1.5	1