Masanaga Fukasawa

List of Publications by Year
in descending order

43 papers	997 citations	516710 16 h-index	454955 30 g-index
43 all docs	43 docs citations	43 times ranked	411 citing authors

#	Article	IF	Citations
1	Structural and electrical characteristics of ion-induced Si damage during atomic layer etching. Japanese Journal of Applied Physics, 2022, 61, SI1003.	1.5	2
2	Five-step plasma-enhanced atomic layer etching of silicon nitride with a stable etched amount per cycle. Japanese Journal of Applied Physics, 2022, 61, 066002.	1.5	5
3	Mechanism of SiN etching rate fluctuation in atomic layer etching. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2020, 38, .	2.1	15
4	Characterization of dynamic behaviors of defects in Si substrates created by H2 plasma using conductance method. Japanese Journal of Applied Physics, 2020, 59, SJJC02.	1.5	6
5	On-wafer monitoring and control of ion energy distribution for damage minimization in atomic layer etching processes. Japanese Journal of Applied Physics, 2020, 59, SJJC01.	1.5	12
6	Diffusion mechanism of fluorine in plasma processing of IIIâ€“V semiconductor compounds. Japanese Journal of Applied Physics, 2020, 59, SJJB01.	1.5	4
7	Damage recovery and lowâ€damage etching of ITO in H 2 /CO plasma: Effects of hydrogen or oxygen. Plasma Processes and Polymers, 2019, 16, 1900029.	3.0	6
8	Cyclic etching of tin-doped indium oxide using hydrogen-induced modified layer. Japanese Journal of Applied Physics, 2018, 57, 06JB02.	1.5	13
9	Enhanced etching of tin-doped indium oxide due to surface modification by hydrogen ion injection. Japanese Journal of Applied Physics, 2018, 57, 06JC05.	1.5	8
10	Effects of hydrogen ion irradiation on zinc oxide etching. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	2.1	13
11	Influence of hydrogen in silicon nitride films on the surface reactions during hydrofluorocarbon plasma etching. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2017, 35, .	2.1	26
12	Effects of hydrogen-damaged layer on tin-doped indium oxide etching by H₂/Ar plasma. Japanese Journal of Applied Physics, 2017, 56, 06HD02.	1.5	11
13	Advanced simulation technology for etching process design for CMOS device applications. Japanese Journal of Applied Physics, 2016, 55, 07LA02.	1.5	12
14	Mass-selected ion beam study on etching characteristics of ZnO by methane-based plasma. Japanese Journal of Applied Physics, 2016, 55, 021202.	1.5	9
15	Control of SiO₂/Si interface defects generation during thin dielectric film etching using CH<i>_x</i>F<i>_y</i>/Ar/O₂plasma. Japanese Journal of Applied Physics, 2015, 54, 06GB05.	1.5	19
16	Prediction of plasma-induced damage distribution during silicon nitride etching using advanced three-dimensional voxel model. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	2.1	18
17	Molecular dynamics simulation of silicon oxidation enhanced by energetic hydrogen ion irradiation. Journal Physics D: Applied Physics, 2015, 48, 152002.	2.8	17
18	Sputtering yields and surface chemical modification of tin-doped indium oxide in hydrocarbon-based plasma etching. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2015, 33, .	2.1	15

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19	Characterization of polymer layer formation during SiO₂/SiN etching by fluoro/hydrofluorocarbon plasmas. Japanese Journal of Applied Physics, 2014, 53, 03DD02.	1.5	33
20	Effect of open area ratio and pattern structure on fluctuations in critical dimension and Si recess. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2013, 31, 061304.	2.1	9
21	Wavelength Dependence of Photon-Induced Interface Defects in Hydrogenated Silicon Nitride/Si Structure during Plasma Etching Processes. Japanese Journal of Applied Physics, 2013, 52, 05ED01.	1.5	12
22	Modeling and Simulation of Plasma-Induced Damage Distribution during Hole Etching of SiO$_{2}$ over Si Substrate by Fluorocarbon Plasma. Applied Physics Express, 2012, 5, 126201.	2.4	13
23	Vacuum Ultraviolet and Ultraviolet Radiation-Induced Effect of Hydrogenated Silicon Nitride Etching: Surface Reaction Enhancement and Damage Generation. Japanese Journal of Applied Physics, 2012, 51, 026201.	1.5	5
24	Vacuum Ultraviolet and Ultraviolet Radiation-Induced Effect of Hydrogenated Silicon Nitride Etching: Surface Reaction Enhancement and Damage Generation. Japanese Journal of Applied Physics, 2012, 51, 026201.	1.5	5
25	Si Recess of Polycrystalline Silicon Gate Etching: Damage Enhanced by Ion Assisted Oxygen Diffusion. Japanese Journal of Applied Physics, 2011, 50, 08KD02.	1.5	9
26	Analysis of GaN Damage Induced by Cl₂/SiCl₄/Ar Plasma. Japanese Journal of Applied Physics, 2011, 50, 08JE03.	1.5	34
27	Mechanism of plasma-induced damage to low-k SiOCH films during plasma ashing of organic resists. Journal of Applied Physics, 2011, 109, .	2.5	36
28	Hydrogen effects in hydrofluorocarbon plasma etching of silicon nitride: Beam study with CF+, CF2+, CHF2+, and CH2F+ ions. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, .	2.1	52
29	Structural and electrical characterization of HBr/O2 plasma damage to Si substrate. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2011, 29, .	2.1	41
30	Numerical Simulation Method for Plasma-Induced Damage Profile in SiO$_{2}$ Etching. Japanese Journal of Applied Physics, 2011, 50, 116501.	1.5	14
31	Analysis of GaN Damage Induced by Cl₂/SiCl₄/Ar Plasma. Japanese Journal of Applied Physics, 2011, 50, 08JE03.	1.5	40
32	Si Recess of Polycrystalline Silicon Gate Etching: Damage Enhanced by Ion Assisted Oxygen Diffusion. Japanese Journal of Applied Physics, 2011, 50, 08KD02.	1.5	15
33	Numerical Simulation Method for Plasma-Induced Damage Profile in SiO₂Etching. Japanese Journal of Applied Physics, 2011, 50, 116501.	1.5	1
34	Optical and Electrical Characterization of Hydrogen-Plasma-Damaged Silicon Surface Structures and Its Impact on In-line Monitoring. Japanese Journal of Applied Physics, 2010, 49, 08JD02.	1.5	52
35	Analysis of Plasma Wall Reactions Using Virtual Optical Emission Spectrometry Signal during Dielectric Etching. Japanese Journal of Applied Physics, 2010, 49, 08JD01.	1.5	8
36	CoSix contact resistance after etching and ashing plasma exposure. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2009, 27, 844-848.	2.1	14

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37	Prediction of Fluctuations in Plasmaâ€“Wall Interactions Using an Equipment Engineering System. Japanese Journal of Applied Physics, 2009, 48, 08HC01.	1.5	32
38	Surface reactions during low-k etching using H2âˆ•N2 plasma. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2008, 26, 870-874.	2.1	16
39	Reducing Damage to Si Substrates during Gate Etching Processes. Japanese Journal of Applied Physics, 2008, 47, 5324.	1.5	111
40	Evaluation of Property Changes due to Radiation, Radicals, and Ions on Organic Low-k Films in H₂/N₂ Plasma Etching. Japanese Journal of Applied Physics, 2008, 47, 3621.	1.5	25
41	Plasma damage mechanisms for low-k porous SiOCH films due to radiation, radicals, and ions in the plasma etching process. Journal of Applied Physics, 2008, 103, .	2.5	128
42	Effects of Ar and O2 additives on SiO2 etching in C4F8-based plasmas. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 2003, 21, 284-293.	2.1	81
43	Tungsten via poisoning caused by water trapped in embedded organic low-K dielectrics. , 0, , .		0