Naoki Shirai

List of Publications by Year
in descending order

36 papers	721 citations	687220 13 h-index	552653 26 g-index
37 all docs	37 docs citations	37 times ranked	481 citing authors

#	Article	IF	Citations
1	Synthesis of metal nanoparticles by dual plasma electrolysis using atmospheric dc glow discharge in contact with liquid. Japanese Journal of Applied Physics, 2014, 53, 046202.	0.8	98
2	Chemical reactions in liquid induced by atmospheric-pressure dc glow discharge in contact with liquid. Japanese Journal of Applied Physics, 2014, 53, 126201.	0.8	76
3	Influence of liquid temperature on the characteristics of an atmospheric dc glow discharge using a liquid electrode with a miniature helium flow. Plasma Sources Science and Technology, 2011, 20, 034013.	1.3	68
4	Influence of oxygen gas on characteristics of self-organized luminous pattern formation observed in an atmospheric dc glow discharge using a liquid electrode. Plasma Sources Science and Technology, 2014, 23, 054010.	1.3	56
5	Self-Organized Anode Pattern on Surface of Liquid or Metal Anode in Atmospheric DC Glow Discharges. IEEE Transactions on Plasma Science, 2011, 39, 2652-2653.	0.6	52
6	Atmospheric DC Glow Microplasmas Using Miniature Gas Flow and Electrolyte Cathode. Japanese Journal of Applied Physics, 2009, 48, 036002.	0.8	49
7	Self-Organization Pattern in the Anode Spot of an Atmospheric Glow Microdischarge using an Electrolyte Anode and Axial Miniature Helium Flow. Applied Physics Express, 0, 2, 036001.	1.1	25
8	Analysis of effect of ion irradiation to liquid surface on water molecule kinetics by classical molecular dynamics simulation. Japanese Journal of Applied Physics, 2014, 53, 010210.	0.8	24
9	Simulation of Atmospheric Pressure Direct Current Glow Discharge along a Miniature Helium Flow in Nitrogen. Applied Physics Express, 2011, 4, 056001.	1.1	23
10	Liquid-phase reactions induced by atmospheric pressure glow discharge with liquid electrode. Journal of Physics: Conference Series, 2014, 565, 012010.	0.3	22
11	Diagnostics of atmospheric-pressure pulsed-dc discharge with metal and liquid anodes by multiple laser-aided methods. Plasma Sources Science and Technology, 2016, 25, 045004.	1.3	21
12	Atmospheric DC Glow Discharge Observed in Intersecting Miniature Gas Flows. IEEE Transactions on Plasma Science, 2008, 36, 960-961.	0.6	20
13	Synthesis of magnetic nanoparticles by atmospheric-pressure glow discharge plasma-assisted electrolysis. Japanese Journal of Applied Physics, 2017, 56, 076201.	0.8	19
14	Atmospheric negative corona discharge using Taylor cone as a liquid cathode. Japanese Journal of Applied Physics, 2014, 53, 026001.	0.8	18
15	Development of dispersion interferometer for magnetic confinement plasmas and high-pressure plasmas. Journal of Instrumentation, 2015, 10, P09022-P09022.	0.5	13
16	Formation of Ethanol Filament and Its Pulsed Discharge for Microplasma Generation. Japanese Journal of Applied Physics, 2008, 47, 2244-2249.	0.8	12
17	Visualization of short-lived reactive species in liquid in contact with atmospheric-pressure plasma by chemiluminescence of luminol. Applied Physics Express, 2018, 11, 026201.	1.1	12
18	Correlation between gas-phase OH density and intensity of luminol chemiluminescence in liquid interacting with atmospheric-pressure plasma. Journal Physics D: Applied Physics, 2019, 52, 39LT02.	1.3	12

#	Article	IF	Citations
19	Electrolyte-Cathode Atmospheric Glow Discharge With Wide-Gap Operation Using Miniature Gas Flow. IEEE Transactions on Plasma Science, 2008, 36, 1160-1161.	0.6	11
20	Generation of Microplasma Using Pulsed Discharge of Ethanol Droplet in Air. Japanese Journal of Applied Physics, 2007, 46, 370-374.	0.8	10
21	Characteristics of liquid flow induced by atmospheric-pressure DC glow discharge in contact with liquid. Japanese Journal of Applied Physics, 2017, 56, 046201.	0.8	10
22	Mechanism of droplet generation and optical emission of metal atoms in atmospheric-pressure dc glow discharge employing liquid cathode. Plasma Sources Science and Technology, 2020, 29, 025007.	1.3	10
23	Electron density change of atmospheric-pressure plasmas in helium flow depending on the oxygen/nitrogen ratio of the surrounding atmosphere. Japanese Journal of Applied Physics, 2016, 55, 066101.	0.8	9
24	Chemical reaction process for magnetite nanoparticle synthesis by atmospheric-pressure DC glow-discharge electrolysis. Japanese Journal of Applied Physics, 2018, 57, 096203.	0.8	9
25	DC Corona and Glow Discharges Generated along the Intersecting Axial Miniature Gas Flows under Atmospheric Pressure Air. Applied Physics Express, 0, 2, 076001.	1.1	7
26	Atmospheric Negative Corona Discharge Observed at Tip of Taylor Cone Using PVA Solution. IEEE Transactions on Plasma Science, 2011, 39, 2210-2211.	0.6	7
27	Synthesis mechanism of cuprous oxide nanoparticles by atmospheric-pressure plasma electrolysis. Journal Physics D: Applied Physics, 2021, 54, 105201.	1.3	7
28	Generation and control of electrolyte cathode atmospheric glow discharge using miniature gas flow. Electrical Engineering in Japan (English Translation of Denki Gakkai Ronbunshi), 2012, 178, 8-15.	0.2	6
29	Negative ion species in atmospheric-pressure helium dc glow discharge produced in ambient air. Plasma Sources Science and Technology, 2020, 29, 085012.	1.3	5
30	Eï¬ƒcient production and transport of OH radicals in spatial afterglow of atmospheric-pressure DC glow discharge using intersecting helium ï¬‚ows. Plasma Sources Science and Technology, 0, , .	1.3	3
31	Observation of ¹Dâ€™¹S forbidden optical emission of atomic oxygen in atmosphericâ€pressure N₂/O₂ plasma jet. Contributions To Plasma Physics, 2020, 60, e202000061.	0.5	2
32	Generation and Control of Electrolyte Cathode Atmospheric Glow Discharges using Miniature Gas Flow. IEEJ Transactions on Fundamentals and Materials, 2009, 129, 269-274.	0.2	2
33	Effect of atmospheric-pressure plasma irradiation on the surface tension of water. Journal Physics D: Applied Physics, 0, , .	1.3	2
34	Atmospheric-pressure Non-equilibrium Microplasmas using Liquids and Miniature Gas Flows. IEEJ Transactions on Fundamentals and Materials, 2010, 130, 899-906.	0.2	1
35	Numerical Investigation of the Correlation between Electrode Structure and Number of Captured Particles in a Dielectrophoretic Device. IEEJ Transactions on Sensors and Micromachines, 2014, 134, 235-240.	0.0	0
36	Metabolic Evaluation of Heat-Treated Yeast by Dielectrophoretic Velocimetry. IEEJ Transactions on Sensors and Micromachines, 2016, 136, 505-510.	0.0	0