

# Akira Iwakawa

## List of Publications by Year in descending order

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Version: 2024-02-01

45  
papers

289  
citations

840776

11  
h-index

940533

16  
g-index

49  
all docs

49  
docs citations

49  
times ranked

129  
citing authors

#	ARTICLE	IF	CITATIONS
1	Effects of Repetitive Laser Energy Deposition on Supersonic Duct Flows. <i>AIAA Journal</i> , 2018, 56, 542-553.	2.6	33
2	Frequency modulation in shock wave-boundary layer interaction by repetitive-pulse laser energy deposition. <i>Physics of Fluids</i> , 2015, 27, .	4.0	23
3	An interatomic potential model for molecular dynamics simulation of silicon etching by Br <sup>+</sup> -containing plasmas. <i>Journal of Applied Physics</i> , 2008, 104, .	2.5	22
4	Ten-Ampere-Level, Applied-Field-Dominant Operation in Magnetoplasmadynamic Thrusters. <i>Journal of Propulsion and Power</i> , 2017, 33, 360-369.	2.2	21
5	Electrostatic acceleration of helicon plasma using a cusped magnetic field. <i>Applied Physics Letters</i> , 2014, 105, 194101.	3.3	18
6	Molecular Dynamics Simulation of Si Etching by Off-Normal Cl <sup>+</sup> Bombardment at High Neutral-to-Ion Flux Ratios. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 8560-8564.	1.5	15
7	Impacts of Laser Energy Deposition on Flow Instability over Double-Cone Model. <i>AIAA Journal</i> , 2017, 55, 2992-3000.	2.6	15
8	Experimental investigation of the interaction of a weak planar shock with grid turbulence in a counter-driver shock tube. <i>Physical Review Fluids</i> , 2019, 4, .	2.5	15
9	Counter-driver shock tube. <i>Shock Waves</i> , 2015, 25, 667-674.	1.9	14
10	Numerical Investigation on Origin of Microscopic Surface Roughness during Si Etching by Chemically Reactive Plasmas. <i>Japanese Journal of Applied Physics</i> , 2008, 47, 6464-6466.	1.5	13
11	Mach Number Effect on Supersonic Drag Reduction using Repetitive Laser Energy Depositions over a Blunt Body. <i>Transactions of the Japan Society for Aeronautical and Space Sciences</i> , 2017, 60, 303-311.	0.7	13
12	Electrostatic/magnetic ion acceleration through a slowly diverging magnetic nozzle between a ring anode and an on-axis hollow cathode. <i>AIP Advances</i> , 2017, 7, .	1.3	9
13	Suppression of Low-Frequency Shock Oscillations over Boundary Layers by Repetitive Laser Pulse Energy Deposition. <i>Aerospace</i> , 2016, 3, 13.	2.2	8
14	Moderation of near-field pressure over a supersonic flight model using laser-pulse energy deposition. <i>Physics of Fluids</i> , 2016, 28, 051701.	4.0	8
15	Electrostatic ion acceleration across a diverging magnetic field. <i>Applied Physics Letters</i> , 2016, 109, .	3.3	7
16	Anode Geometry Effects on Ion Beam Energy Performance in Helicon Electrostatic Thruster. <i>IEEE Transactions on Plasma Science</i> , 2016, 44, 306-313.	1.3	7
17	Influence of cellophane diaphragm rupture processes on the shock wave formation in a shock tube. <i>Shock Waves</i> , 2020, 30, 545-557.	1.9	7
18	Effects of magnetic field profile near anode on ion acceleration characteristics of a diverging magnetic field electrostatic thruster. <i>Journal of Applied Physics</i> , 2017, 122, 043302.	2.5	6

#	ARTICLE	IF	CITATIONS
19	Electrostatic-magnetic-hybrid thrust generation in central cathode electrostatic thruster (CC-EST). Acta Astronautica, 2018, 152, 137-145.	3.2	6
20	Repetitive Energy Deposition at a Supersonic Intake in Subcritical and Buzz Modes. AIAA Journal, 2020, 58, 107-117.	2.6	6
21	Repetition Frequency Dependence of Wave Drag Reduction Induced by Laser-Pulse-Energy Depositions. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2013, 11, 53-60.	0.2	4
22	Operation Characteristics of Applied-Field Magnetoplasma Dynamics Thruster Using Hollow Cathode. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2018, 16, 69-74.	0.2	4
23	Pulse Energy Effect on Shock Wave Boundary Layer Interaction Control using Repetitive Energy Depositions. , 2016, , .		3
24	Central and External Cathode Operations in a Diverging-Magnetic-Field Electrostatic Thruster. Journal of Propulsion and Power, 2020, 36, 68-77.	2.2	2
25	High-Specific-Impulse Electrostatic Thruster with Argon Propellant. Journal of Propulsion and Power, 2020, 36, 256-263.	2.2	2
26	In-tube shock wave compression by piston effect of unsteady jet. Mechanical Engineering Journal, 2020, 7, 19-00534-19-00534.	0.4	2
27	Experimental Study of a Two-Dimensional Applied-Field Magnetoplasma Dynamic Thruster. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2010, 8, Pb_13-Pb_17.	0.2	1
28	Supersonic Drag Reduction Performance of Blunt-Body with Conical Spike using with Energy Depositions. , 2013, , .		1
29	Control of Shock Wave-Boundary Layer Interaction by Repetitive Laser Energy Depositions. , 2014, , .		1
30	Control of Shock Wave Boundary Layer Interaction using Laser Pulse Energy Depositions. , 2015, , .		1
31	Experimental Investigation of Interactions Between a Normal Shock Wave and Various Counter Flows Using Counter-Driver Shock Tube. , 2016, , .		1
32	Power matching between plasma generation and electrostatic acceleration in helicon electrostatic thruster. Acta Astronautica, 2017, 139, 157-164.	3.2	1
33	Aerodynamic Performance by Off-Axis Energy Deposition of a Body in a Supersonic Flow. , 2012, , .		0
34	Ring-Force Balance System for Small Wind Tunnels. Transactions of the Japan Society for Aeronautical and Space Sciences Aerospace Technology Japan, 2015, 13, 51-60.	0.2	0
35	Free Flight Measurement of Aircraft Model using Aero Ballistic Range. , 2015, , .		0
36	Shock Wave Boundary Layer Interaction Control using Repetitive-Pulse Laser Energy Depositions. , 2016, , .		0

#	ARTICLE	IF	CITATIONS
37	Impacts of Energy Deposition on Flow Characteristics over an Inlet. , 2017, , .		0
38	Behavior of Whole Near-Filed Flow over Mach 1.7 Free-Flight Bodies. , 2017, , .		0
39	Mechanisms of Pressure Loss Recovery by Repetitive Energy Deposition in Supersonic Intake Model. , 2018, , .		0
40	Experimental investigation of planar shock wave-grid turbulence interaction using counter driver shock tube. , 2019, , .		0
41	Supersonic Drag Reduction over a Blunt-Body by Combination of Conical Spike and Energy Deposition. Journal of the Japan Society for Aeronautical and Space Sciences, 2014, 62, 99-106.	0.1	0
42	10.1063/1.4950783.1. , 2016, , .		0
43	Effects of Negative Overpressure Phase of a Laser Breakdown-Induced Blast Wave on Impulse Characteristics. , 2017, , 1339-1343.		0
44	Experimental Study of Normal Shock Wave-Isotropic Turbulence Interaction Using Counter-Driver Shock Tube. , 2019, , 835-841.		0
45	Geometrical matching in remote in-tube shock compression by an unsteady jet. Shock Waves, 0, , 1.	1.9	0