Thomas C Corke

List of Publications by Year
in descending order

50 papers	6,069 citations	172457 29 h-index	214800 47 g-index
51 all docs	51 docs citations	51 times ranked	1557 citing authors

#	Article	IF	Citations
1	Controlled Cross-Flow Mode Interaction in Mach 6 Boundary Layer. IUTAM Symposium on Cellular, Molecular and Tissue Mechanics, 2022, , 661-670.	0.2	0
2	Design of a Hypersonic Boundary Layer Transition Control Experiment Utilizing a Swept Fin Cone Geometry in Mach 6 Flow. , 2021, , .		3
3	Characteristics of drag-reduced turbulent boundary layers with pulsed-direct-current plasma actuation. Journal of Fluid Mechanics, 2021, 915, .	3.4	24
4	Controlled Stationary/Traveling Cross-flow Mode Interaction in Mach 6 Boundary Layer. , 2020, , .		0
5	Rotating Stall Control in an Axial Fan with Pulsed-Direct-Current Plasma Actuation. Journal of Propulsion and Power, 2020, 36, 177-190.	2.2	3
6	Mechanism for Increased Viscous Drag over Porous Sheet Acoustic Liners. AIAA Journal, 2020, 58, 3393-3404.	2.6	13
7	Controlled stationary/travelling cross-flow mode interaction in a MachÂ6.0 boundary layer. Journal of Fluid Mechanics, 2020, 887, .	3.4	11
8	Parametric Modal Decomposition of Dynamic Stall. AIAA Journal, 2019, 57, 176-190.	2.6	8
9	Control of stationary cross-flow modes in a Mach 6 boundary layer using patterned roughness. Journal of Fluid Mechanics, 2018, 856, 822-849.	3.4	28
10	Electromagnetic wave transmittance control using self-organized plasma lattice metamaterial. Journal of Applied Physics, 2018, 124, .	2.5	17
11	Active and Passive Turbulent Boundary-Layer Drag Reduction. AIAA Journal, 2018, 56, 3835-3847.	2.6	108
12	Plasma Adaptive Optics Evaluation Using Two-Wavelength Heterodyne Interferometry. AIAA Journal, 2017, 55, 1633-1643.	2.6	3
13	Effect of wall suction on rotating disk absoluteÂinstability. Journal of Fluid Mechanics, 2016, 791, 704-737.	3.4	2
14	Design and Scaling of Plasma Streamwise Vortex Generators for Flow Separation Control. AIAA Journal, 2016, 54, 3397-3408.	2.6	15
15	Experiments and Modeling of Micro Flapping Wings of Different Designs in Hover. AIAA Journal, 2015, 53, 542-553.	2.6	2
16	Airfoil Shape Optimization for Dielectric Barrier Discharge Plasma Compliant Flows. AIAA Journal, 2015, 53, 3125-3129.	2.6	1
17	Mechanism of Vorticity Generation in Plasma Streamwise Vortex Generators. AIAA Journal, 2015, 53, 3404-3413.	2.6	29
18	Dynamic Stall in Pitching Airfoils: Aerodynamic Damping and Compressibility Effects. Annual Review of Fluid Mechanics, 2015, 47, 479-505.	25.0	154

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19	Leading-Edge Separation Control Using Alternating-Current and Nanosecond-Pulse Plasma Actuators. AIAA Journal, 2014, 52, 1871-1884.	2.6	94
20	Improved Understanding of Aerodynamic Damping Through the Hilbert Transform. AIAA Journal, 2014, 52, 2384-2394.	2.6	17
21	Control of stationary cross-flow modes in a Mach 3.5 boundary layer using patterned passive and active roughness. Journal of Fluid Mechanics, 2013, 718, 5-38.	3.4	79
22	Geometric Optimization of a Cylindrical Plasma Adaptive Optics Lens. AIAA Journal, 2013, 51, 657-664.	2.6	7
23	Closed-Loop Dynamic Stall Control Using a Plasma Actuator. AIAA Journal, 2013, 51, 1130-1141.	2.6	57
24	Plasma Actuator Blade Tip Clearance Flow Control in a Linear Turbine Cascade. Journal of Propulsion and Power, 2012, 28, 504-516.	2.2	16
25	Pressure Dependence of Dielectric Barrier Discharge Plasma Flow Actuators. AIAA Journal, 2012, 50, 1490-1502.	2.6	33
26	Plasma Lens for Optical Path Difference Control. AIAA Journal, 2012, 50, 123-130.	2.6	8
27	Sensing and control of flow separation using plasma actuators. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 1459-1475.	3.4	43
28	Single-dielectric barrier discharge plasma actuator modelling and validation. Journal of Fluid Mechanics, 2011, 669, 557-583.	3.4	67
29	Blade-Mounted Single Dielectric Barrier Discharge Plasma Actuators in a Turbine Cascade. Journal of Propulsion and Power, 2011, 27, 692-699.	2.2	7
30	Dielectric Barrier Discharge Plasma Actuators for Flow Control. Annual Review of Fluid Mechanics, 2010, 42, 505-529.	25.0	1,075
31	Single dielectric barrier discharge plasma enhanced aerodynamics: physics, modeling and applications. Experiments in Fluids, 2009, 46, 1-26.	2.4	303
32	Plasma Flaps and Slats: An Application of Weakly Ionized Plasma Actuators. Journal of Aircraft, 2009, 46, 864-873.	2.4	132
33	Optimization of Dielectric Barrier Discharge Plasma Actuators for Active Aerodynamic Flow Control. AIAA Journal, 2009, 47, 2169-2178.	2.6	427
34	Plasma Actuators for Cylinder Flow Control and Noise Reduction. AIAA Journal, 2008, 46, 1921-1931.	2.6	261
35	Single-Dielectric Barrier Discharge Plasma Enhanced Aerodynamics: Concepts, Optimization, and Applications. Journal of Propulsion and Power, 2008, 24, 935-945.	2.2	58
36	Scaling Effects of an Aerodynamic Plasma Actuator. Journal of Aircraft, 2008, 45, 223-236.	2.4	88

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37	Plasma Actuators for Hingeless Aerodynamic Control of an Unmanned Air Vehicle. Journal of Aircraft, 2007, 44, 1264-1274.	2.4	84
38	Autonomous Sensing and Control of Wing Stall Using a Smart Plasma Slat. Journal of Aircraft, 2007, 44, 516-527.	2.4	57
39	Aerodynamic Control of Using Windward-Surface Plasma Actuators on a Separation Ramp. Journal of Aircraft, 2007, 44, 1889-1895.	2.4	9
40	SDBD plasma enhanced aerodynamics: concepts, optimization and applications. Progress in Aerospace Sciences, 2007, 43, 193-217.	12.1	330
41	Transition to turbulence in rotating-disk boundary layersâ€"convective and absolute instabilities. Journal of Engineering Mathematics, 2007, 57, 253-272.	1.2	31
42	Separation Control Using Plasma Actuators: Dynamic Stall Vortex Control on Oscillating Airfoil. AIAA Journal, 2006, 44, 3125-3135.	2.6	301
43	Plasma Actuators for Separation Control of Low-Pressure Turbine Blades. AIAA Journal, 2006, 44, 51-57.	2.6	257
44	Unsteady Plasma Actuators for Separation Control of Low-Pressure Turbine Blades. AIAA Journal, 2006, 44, 1477-1487.	2.6	151
45	Mechanisms and Responses of a Dielectric Barrier Plasma Actuator: Geometric Effects. AIAA Journal, 2004, 42, 595-604.	2.6	526
46	Mechanisms and Responses of a Single Dielectric Barrier Plasma Actuator: Plasma Morphology. AIAA Journal, 2004, 42, 589-594.	2.6	521
47	Separation Control on HIgh Angle of Attack Airfoil Using Plasma Actuators. AIAA Journal, 2004, 42, 2177-2184.	2.6	503
48	Boundary layer leading-edge receptivity to sound at incidence angles. Journal of Fluid Mechanics, 2001, 444, 383-407.	3.4	29
49	Boundary layer receptivity to free-stream sound on elliptic leading edges of flat plates. Journal of Fluid Mechanics, 2001, 429, 1-21.	3.4	36
50	Boundary layer receptivity to free-stream sound on parabolic bodies. Journal of Fluid Mechanics, 1998, 368, 1-26.	3.4	41