Stephen T Mcclain

List of Publications by Year
in descending order

32	652	933447 10	888059 17
papers	citations	h-index	g-index

32	32	32	229
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	The Many Faces of Turbine Surface Roughness. Journal of Turbomachinery, 2001, 123, 739-748.	1.7	204
2	Effect of Density Ratio on Flat Plate Film Cooling With Shaped Holes Using PSP. Journal of Turbomachinery, 2011, 133, .	1.7	73
3	Effect of Freestream Turbulence Intensity on Film Cooling Jet Structure and Surface Effectiveness Using PIV and PSP. Journal of Turbomachinery, 2011, 133, .	1.7	49
4	Assessment of Ice Shape Roughness Using a Self-Organizing Map Approach. , 2013, , .		38
5	The Effect of Real Turbine Roughness With Pressure Gradient on Heat Transfer. Journal of Turbomachinery, 2004, 126, 385-394.	1.7	34
6	The Importance of the Mean Elevation in Predicting Skin Friction for Flow Over Closely Packed Surface Roughness. Journal of Fluids Engineering, Transactions of the ASME, 2006, 128, 579-586.	1.5	30
7	Ice Roughness in Short Duration SLD Icing Events. , 2014, , .		27
8	Predicting Skin Friction and Heat Transfer for Turbulent Flow Over Real Gas Turbine Surface Roughness Using the Discrete Element Method. Journal of Turbomachinery, 2004, 126, 259-267.	1.7	26
9	Validation of the discrete element roughness method for predicting heat transfer on rough surfaces. International Journal of Heat and Mass Transfer, 2019, 136, 1217-1232.	4.8	20
10	Three-Dimensional Ice-Accretion Measurement Methodology for Experimental Aerodynamic Simulation. Journal of Aircraft, 2018, 55, 817-828.	2.4	19
11	Analysis of frost thickness and roughness growth from the perspective of frost crystal structure. International Journal of Refrigeration, 2020, 112, 314-323.	3.4	17
12	Turbulent Convection From Deterministic Roughness Distributions With Varying Thermal Conductivities. Journal of Turbomachinery, 2012, 134, .	1.7	15
13	Manual Point Cloud Registration for Combined Ice Roughness and Ice Thickness Measurements. , 2016, , .		15
14	Ice Shape Characterization Using Self-Organizing Maps. Journal of Aircraft, 2011, 48, 724-730.	2.4	10
15	Convection from Ice Roughness with Varying Flux Boundary Conditions. , 2014, , .		9
16	A Reevaluation of Appendix C Ice Roughness Using Laser Scanning. , 0, , .		9
17	The Effect of Element Thermal Conductivity on Turbulent Convective Heat Transfer From Rough Surfaces. Journal of Turbomachinery, 2011, 133, .	1.7	8
18	Heat Transfer from Protuberances. Journal of Thermophysics and Heat Transfer, 2007, 21, 337-345.	1.6	7

#	Article	IF	Citations
19	Reduced Rough-Surface Parametrization for Use With the Discrete-Element Model. Journal of Turbomachinery, 2009, 131, .	1.7	7
20	Assessment of Uncertainty in Equivalent Sand-Grain Roughness Methods. , 2007, , .		5
21	Spanwise Form Extraction for Ice Roughness Measurements from Misaligned Airfoils or Tapered Wings. , 2017, , .		5
22	Predicting Skin Friction for Turbulent Flow Over Randomly-Rough Surfaces Using the Discrete-Element Method: Part II â€" Skin Friction Validation. , 2003, , 1283.		4
23	Convection from Surfaces with Real Laser-Scanned Ice Accretion Roughness and Different Thermal Conductivities. , 2017, , .		4
24	Photogrammetric Frost Roughness Measurements in Cold-Soaked Conditions. , 0, , .		4
25	Convection from Surfaces with Ice Roughness Characterized at Increasing Accumulation Times. , 2018, , .		3
26	Protuberances in a Turbulent Thermal Boundary Layer. Journal of Heat Transfer, 2012, 134, .	2.1	2
27	A Novel Method for Constructing Analog Roughness Patterns to Replicate Ice Accretion Characteristics. , 2018, , .		2
28	Convection in Scaled Turbine Internal Cooling Passages With Additive Manufacturing Roughness. Journal of Turbomachinery, 2022, 144, .	1.7	2
29	Variation of Frost Roughness on a Flat Plate Under Forced Convection. Journal of Thermal Science and Engineering Applications, 2021, 13, .	1.5	2
30	Reduced Rough-Surface Parameterization for Use With the Discrete-Element Model. , 2007, , .		1
31	Dimensionless Model of Frost Roughness on Cold Flat Plate Under Forced Convection. Journal of Aircraft, 2021, 58, 1375-1385.	2.4	1
32	Turbulent Convection From Deterministic Roughness Distributions With Varying Thermal Conductivities. , 2011, , .		0