Shihe Yi

List of Publications by Year
in descending order

62 papers	1,139 citations	361413 20 h-index	434195 31 g-index
62 all docs	62 docs citations	62 times ranked	322 citing authors

#	Article	IF	Citations
1	Supersonic flow imaging via nanoparticles. Science in China Series D: Earth Sciences, 2009, 52, 3640-3648.	0.9	185
2	Study of density field measurement based on NPLS technique in supersonic flow. Science in China Series G: Physics, Mechanics and Astronomy, 2009, 52, 1357-1363.	0.2	57
3	Visualization of coherent structures in a supersonic flat-plate boundary layer. Science Bulletin, 2011, 56, 489-494.	1.7	54
4	The fractal measurement of experimental images of supersonic turbulent mixing layer. Science in China Series G: Physics, Mechanics and Astronomy, 2008, 51, 1134-1143.	0.2	43
5	A flow control study of a supersonic mixing layer via NPLS. Science in China Series G: Physics, Mechanics and Astronomy, 2009, 52, 2001-2006.	0.2	41
6	Experimental investigation on aero-optics of supersonic turbulent boundary layers. Applied Optics, 2017, 56, 7604.	1.8	38
7	The experimental study of interaction between shock wave and turbulence. Science Bulletin, 2007, 52, 1297-1301.	1.7	33
8	Aero-optical aberration measuring method based on NPLS and its application. Science Bulletin, 2010, 55, 3545-3549.	1.7	32
9	Experimental study of a supersonic turbulent boundary layer using PIV. Science China: Physics, Mechanics and Astronomy, 2011, 54, 1702-1709.	5.1	32
10	An experimental study on fine structures of supersonic laminar/turbulent flow over a backward-facing step based on NPLS. Science Bulletin, 2012, 57, 584-590.	1.7	30
11	Flow visualization of supersonic laminar flow over a backward-facing step via NPLS. Shock Waves, 2013, 23, 299-306.	1.9	29
12	Research on aero-optical prediction of supersonic turbulent boundary layer based on aero-optical linking equation. Optics Express, 2018, 26, 31317.	3.4	29
13	Hierarchical structure of the optical path length of the supersonic turbulent boundary layer. Optics Express, 2012, 20, 16494.	3.4	27
14	Structure of the refractive index distribution of the supersonic turbulent boundary layer. Optics and Lasers in Engineering, 2013, 51, 1113-1119.	3.8	26
15	Experimental study of second-mode wave on a flared cone at Mach 6. Physics of Fluids, 2019, 31, .	4.0	26
16	Density field measurement and approximate reconstruction of supersonic mixing layer. Science Bulletin, 2010, 55, 2004-2009.	1.7	24
17	Solvent-assisted thermal reduction of microcrystalline graphene oxide with excellent microwave absorption performance. RSC Advances, 2018, 8, 15315-15325.	3.6	23
18	Experimental investigation of boundary layer transition over a delta wing at Mach number 6. Chinese Journal of Aeronautics, 2020, 33, 1889-1902.	5.3	21

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19	Multiresolution analysis of density fluctuation in supersonic mixing layer. Science China Technological Sciences, 2010, 53, 584-591.	4.0	20
20	Optical path difference of the supersonic mixing layer. Applied Optics, 2010, 49, 3786.	2.1	20
21	Flow visualization of Mach 3 compression ramp with different upstream boundary layers. Journal of Visualization, 2015, 18, 631-644.	1.8	20
22	Experimental investigation of aero-optics induced by supersonic film based on near-field background-oriented schlieren. Applied Optics, 2019, 58, 2948.	1.8	20
23	Experimental Investigation on Aero-Optical Mitigation of Hypersonic Optical Dome Using Microvortex Generators. AIAA Journal, 2019, 57, 2653-2658.	2.6	19
24	Experimental Study of Crossflow Instability over a Delta Flat Plate at Mach 6. AIAA Journal, 2019, 57, 5566-5574.	2.6	18
25	Correcting the aero-optical aberration of the supersonic mixing layer with adaptive optics: concept validation. Applied Optics, 2012, 51, 3922.	1.8	17
26	Experimental investigation on aero-optical effects of a hypersonic optical dome under different exposure times. Applied Optics, 2020, 59, 3842.	1.8	17
27	Aero-optical wavefront measurement technique based on BOS and its applications. Science Bulletin, 2011, 56, 2320-2326.	1.7	16
28	An experimental study of aero-optical aberration and dithering of supersonic mixing layer via BOS. Science China: Physics, Mechanics and Astronomy, 2010, 53, 81-94.	5.1	14
29	Statistical characteristics of the tilts of the aero-optical aberration caused by the supersonic turbulent boundary layer. Optics Letters, 2013, 38, 751.	3.3	14
30	Cost-effective fabrication of graphene-like nanosheets from natural microcrystalline graphite minerals by liquid oxidationâ€“reduction method. RSC Advances, 2017, 7, 32008-32019.	3.6	13
31	Experimental and numerical study on instability structure of the supersonic mixing layer (M c = 0.5). Science in China Series G: Physics, Mechanics and Astronomy, 2009, 52, 1624-1631.	0.2	12
32	Investigation on flows in a supersonic isolator with an adjustable cowl convergence angle. Experimental Thermal and Fluid Science, 2014, 52, 182-190.	2.7	12
33	Visualisation on supersonic flow over backward-facing step with or without roughness. Journal of Turbulence, 2015, 16, 633-649.	1.4	11
34	Influence of turbulence structure with different scale on aero-optics induced by supersonic turbulent boundary layer. Optik, 2020, 202, 163565.	2.9	11
35	Experimental investigation about the second-mode waves in hypersonic boundary layer over a cone at small angle of attack. Experimental Thermal and Fluid Science, 2020, 118, 110143.	2.7	10
36	A swept fin-induced flow field with different height mounting gaps. Chinese Journal of Aeronautics, 2021, 34, 148-162.	5.3	10

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37	Preparation of Disperse Silver Particles by Chemical Reduction. Russian Journal of Physical Chemistry A, 2016, 90, 848-855.	0.6	9
38	Experimental investigation of nose-tip bluntness effects on the hypersonic crossflow instability over a cone. International Journal of Heat and Fluid Flow, 2020, 86, 108746.	2.4	9
39	Influences of Steps on the Hypersonic Boundary-Layer Transition on a Cone. AIAA Journal, 2021, 59, 439-446.	2.6	9
40	Experimental Investigation on the Effects of Swept Angles on Blunt Fin-Induced Flow. AIAA Journal, 2015, 53, 2805-2810.	2.6	8
41	Multi-resolution analysis of aero-optical effects in a supersonic turbulent boundary layer. Applied Optics, 2021, 60, 2242.	1.8	8
42	Design and performance of a hypersonic quiet wind tunnel at NUDT. , 2017, , .		7
43	Experimental Investigation of the Hypersonic Boundary Layer Transition on a 45Â° Swept Flat Plate. Fluid Dynamics, 2020, 55, 111-120.	0.9	7
44	Experimental investigation of supersonic turbulent flow over cylinders with various heights. Journal of Visualization, 2021, 24, 461-470.	1.8	7
45	Optical transfer function of the supersonic mixing layer. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2012, 29, 2628.	1.5	6
46	Structures and aero-optical effects of supersonic flow over a backward facing step with vortex generators. European Journal of Mechanics, B/Fluids, 2019, 74, 302-311.	2.5	6
47	Experimental study on the influence of attitude angle on the aero-optical effects of a hypersonic optical dome. Optik, 2020, 201, 163448.	2.9	6
48	Influence of cooling film pressure on the imaging quality of a hypersonic optical dome. Optical Engineering, 2020, 59, 1.	1.0	5
49	Effects of steps on the hypersonic boundary layer transition over a cone at 10Â° angle-of-attack. Physics of Fluids, 2022, 34, .	4.0	5
50	Modeling the temporal evolution of an aero-optical aberration with the minimum description length principle. Optics Letters, 2014, 39, 3126.	3.3	4
51	Experimental investigation on aero-optical aberration of shock wave/boundary layer interactions. , 2016, , .		3
52	Research on velocity measurements of the hypersonic turbulent boundary layer based on the nano-tracer-based planar laser scattering technique. Measurement Science and Technology, 2020, 31, 085302.	2.6	3
53	Aero-optical testing of a Mach 3 cooling film. Optik, 2021, 225, 165721.	2.9	3
54	Analyzing the structure of the optical path difference of the supersonic film cooling. , 2016, , .		3

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55	Delaying hypersonic boundary layer transition using forward-facing step arrays: An experimental work. Physics of Fluids, 2022, 34, .	4.0	3
56	Effects of Backward-Facing Step Shape on Hypersonic Flow Characteristics. Journal of Thermophysics and Heat Transfer, 2022, 36, 296-302.	1.6	2
57	Complex Interaction Between a Fin and a Transverse Jet at Mach 5. AIAA Journal, 2020, 58, 802-813.	2.6	1
58	Research on head cooling of high-speed aircraft by liquid nitrogen. Aeronautical Journal, 2021, 125, 389-409.	1.6	1
59	Study on the temporal and spatial characteristics of high-speed turbulent flow field and its optical transmission effects. Proceedings of SPIE, 2011, , .	0.8	0
60	Experimental investigation of supersonic flow over elliptic surface. Open Physics, 2013, 11, .	1.7	0
61	Research on correction of imaging deviation based on background-oriented schlieren technique. Optik, 2020, 224, 165692.	2.9	0
62	Numerical simulation of film cooling effect and aero-optical effect of optical window. , 2019, , .		0