Brian S Thurow

List of Publications by Year
in descending order

121	1,660	331538	345118
papers	citations	21 h-index	36 g-index

123	123	123	638
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Tomographic background oriented schlieren using plenoptic cameras. Measurement Science and Technology, 2022, 33, 025203.	1.4	6
2	Design of a multispectral plenoptic camera and itsapplication for pyrometry. Applied Optics, 2022, 61, 2459-2472.	0.9	3
3	Three-Dimensional Measurement of the Crater Formation During Plumeâ€“Surface Interactions Using Stereo-Photogrammetry. AIAA Journal, 2022, 60, 1316-1331.	1.5	10
4	Rotating three-dimensional velocimetry. Experiments in Fluids, 2021, 62, 1.	1.1	2
5	Perspective on the development and application of light-field cameras in flow diagnostics. Measurement Science and Technology, 2021, 32, 101001.	1.4	10
6	Development of a high-speed plenoptic imaging system and its application to marine biology PIV. Measurement Science and Technology, 2020, 31, 054005.	1.4	13
7	Single-Camera Three-Dimensional Velocity Measurement of a Fin-Generated Shock-Wave/Boundary-Layer Interaction. AIAA Journal, 2020, 58, 4438-4450.	1.5	13
8	Vortex topology of a pitching and rolling wing in forward flight. Experiments in Fluids, 2020, 61, 1.	1.1	1
9	On the Impact of Subaperture Sampling for Multispectral Scalar Field Measurements. Optics, 2020, 1, 136-154.	0.6	1
10	A Novel Multi-band Plenoptic Pyrometer used for Temperature Measurements of Strand Burner Plumes. , 2020, , .		2
11	Preliminary Development of a Single Camera Rotating Volumetric Velocimetry Technique. , 2020, , .		0
12	Depth-of-field reduction due to blurring in a relayed plenoptic camera and mitigation via deconvolution. Measurement Science and Technology, 2020, 31, 055403.	1.4	3
13	Refinement and Application of 3D Particle Location from Perspective Shifted Plenoptic Images. , 2019, , .		0
14	Characterization and Manipulation of Vorticity Transport On a Rolling Wing. , 2019, , .		1
15	Three-dimensional extent of flow stagnation in transcatheter heart valves. Journal of the Royal Society Interface, 2019, 16, 20190063.	1.5	19
16	A direct comparison between conventional and plenoptic background oriented schlieren imaging. Measurement Science and Technology, 2019, 30, 064001.	1.4	10
17	Time-Resolved 3D Flow-Measurement with a Single Plenoptic-Camera. , 2019, , .		7
18	Volumetric spectral imaging and two-color pyrometry of flames using plenoptic cameras. , 2019, , .		4

#	Article	IF	Citations
19	Development and uncertainty characterization of 3D particle location from perspective shifted plenoptic images. Optics Express, 2019, 27, 7997.	1.7	11
20	Development of a modular, high-speed plenoptic-camera for 3D flow-measurement. Optics Express, 2019, 27, 13400.	1.7	23
21	Scalar-field reconstruction algorithms using plenoptic cameras. , 2019, , .		1
22	Editorial: Introduction to the 36th Annual Gallery of Fluid Motion and Summary of 19 Years of Winners (Atlanta, Georgia, USA 2018). Physical Review Fluids, 2019, 4, .	1.0	0
23	Plenoptic particle image velocimetry with multiple plenoptic cameras. Measurement Science and Technology, 2018, 29, 075202.	1.4	39
24	Comparison of 4-camera Tomographic PIV and Single-camera Plenoptic PIV. , 2018, , .		7
25	Characterization of Vorticity Transport in the Leading-Edge Vortex of a Rolling Wing using Plenoptic PIV. , 2018, , .		1
26	Recent Developments using Background Oriented Schlieren with a Plenoptic Camera. , 2018, , .		2
27	Volumetric calibration of a plenoptic camera. Applied Optics, 2018, 57, 914.	0.9	40
28	Two Camera Plenoptic PIV Applied to Shock Wave-Boundary Layer Interactions. , 2018, , .		2
29	Comparison of stereo-PIV and plenoptic-PIV measurements on the wake of a cylinder in NASA ground test facilities. , 2017, , .		3
30	Volumetric calibration of a plenoptic camera. , 2017, , .		6
31	Visualization of an SBLI using Plenoptic BOS. , 2017, , .		5
32	A Plenoptic Multi-Color Imaging Pyrometer. , 2017, , .		9
33	Single Camera 3D Measurement of a Shock Wave-Turbulent Boundary Layer Interaction. , 2017, , .		7
34	Correlation-Based Depth Estimation with a Plenoptic Camera. AIAA Journal, 2017, 55, 435-445.	1.5	6
35	Preliminary Plenoptic PIV Results for Volumetric Measurements of Shock Wave-Boundary Layer Interactions. , 2017, , .		2
36	Two camera plenoptic-PIV. , 2017, , .		0

#	Article	IF	Citations
37	Volumetric Velocity Measurements in the Wake of a Hemispherical Roughness Element. AIAA Journal, 2017, 55, 2158-2173.	1.5	20
38	Preliminary Comparison Between Conventional and Plenoptic Background Oriented Schlieren Imaging. , 2017, , .		1
39	Plenoptic background oriented schlieren imaging. Measurement Science and Technology, 2017, 28, 095404.	1.4	18
40	Characterization of Plenoptic Imaging Systems and Efficient Volumetric Estimation From Plenoptic Data. IEEE Journal on Selected Topics in Signal Processing, 2017, 11, 1020-1033.	7.3	6
41	Uncertainty characterization of particle location from refocused plenoptic images. Optics Express, 2017, 25, 21801.	1.7	21
42	Volumetric Measurement of a Shock Wave-Turbulent Boundary Layer Interaction Using Plenoptic Particle Image Velocimetry. , 2016, , .		11
43	Filtered refocusing: a volumetric reconstruction algorithm for plenoptic-PIV. Measurement Science and Technology, 2016, 27, 094005.	1.4	28
44	Light-Field Imaging Toolkit. SoftwareX, 2016, 5, 101-106.	1.2	17
45	Comparison of three-dimensional particle tracking and sizing using plenoptic imaging and digital in-line holography. Applied Optics, 2016, 55, 6410.	2.1	43
46	On the resolution of plenoptic PIV. Measurement Science and Technology, 2016, 27, 084003.	1.4	36
47	Correlation-based Depth Estimation with a Plenoptic Camera. , 2016, , .		1
48	3-D Visualization of Compressible Flow Using a Plenoptic Camera and Background Oriented Schlieren. , 2016, , .		6
49	A Preliminary Comparison of Three Dimensional Particle Tracking and Sizing using Plenoptic Imaging and Digital In-line Holography. , 2016, , .		2
50	Investigations of Transonic Flow over a Hemisphere using DES and hybrid RANS/LES Turbulence Models. , 2016, , .		10
51	Investigations of Flow over a Hemisphere using Numerical Simulations. , 2015, , .		9
52	Enhanced Imaging of Reacting Flows Using 3D Deconvolution and a Plenoptic Camera. , 2015, , .		2
53	Comparison of Large-Scale Three-Dimensional Features in Zero- and Adverse-Pressure-Gradient Turbulent Boundary Layers. AIAA Journal, 2015, 53, 3686-3699.	1.5	5
54	Volumetric particle image velocimetry with a single plenoptic camera. Measurement Science and Technology, 2015, 26, 115201.	1.4	136

#	Article	IF	Citations
55	Comparing Volumetric Reconstruction Algorithms for Plenoptic-PIV. , 2015, , .		6
56	Modeling the Effect of Refraction at a Flat Interface on Plenoptic Particle Reconstruction. , 2014, , .		0
57	Preliminary Investigation of Three-Dimensional Flame Measurements with a Plenoptic Camera. , 2014, , .		4
58	Comparison of Large Scale Features in Zero and Adverse Pressure Gradient Turbulent Boundary Layers. , 2014, , .		0
59	On the relationship between image intensity and velocity in a turbulent boundary layer seeded with smoke particles. Experiments in Fluids, 2014, 55, 1.	1.1	4
60	On the application of background oriented schlieren for wavefront sensing. Measurement Science and Technology, 2014, 25, 015001.	1.4	21
61	An examination of MHz rate PIV in a heated supersonic jet. , 2014, , .		18
62	3D Particle Position Reconstruction Accuracy in Plenoptic PIV. , 2014, , .		6
63	Calibration of a Microlens Array for a Plenoptic Camera. , 2014, , .		16
64	Density Measurements of a Turbulent Wake Using Acetone Planar Laser-Induced Fluorescence. AIAA Journal, 2013, 51, 829-839.	1.5	21
65	Efficient volumetric estimation from plenoptic data. , 2013, , .		1
66	Review of ultra-high repetition rate laser diagnostics for fluid dynamic measurements. Measurement Science and Technology, 2013, 24, 012002.	1.4	104
67	Flow Visualization of Three-Dimensional Large Scale Motions in ZPG and APG Turbulent Boundary Layers. , 2013, , .		1
68	Three-Dimensional Particle Image Velocimetry Using a Plenoptic Camera. , 2012, , .		28
69	Experimental Investigation of Three-Dimensional Structures in an Adverse Pressure Gradient Turbulent Boundary Layer. , 2012, , .		1
70	Tomographic Reconstruction of a 3-D Flow Field Using a Plenoptic Camera. , 2012, , .		32
71	Experimental Investigation of a Turbulent Boundary Layer Using Simultaneous 3-D Flow Visualization and 2-D PIV. , 2012, , .		0
72	3-D flow visualization of axisymmetric jets at Reynolds number 6,700 and 10,200. Journal of Visualization, 2012, 15, 309-319.	1.1	12

#	Article	IF	Citations
73	A Laboratory Framework for Synchronous Near/Far-Field Acoustics and MHz PIV in High-Temperature, Shock-Containing, Jets. , 2012, , .		9
74	Optical diagnostics investigation of wake flow fields behind geometrically modified turrets. , 2012, , .		2
75	Visualization of Hypersonic Turbulent Boundary Layers Negotiating Convex Curvature. , 2011, , .		5
76	Preliminary Development of a 3-D, 3-C PIV Technique using Light Field Imaging. , 2011, , .		16
77	Simultaneous 3-D Flow Visualization with 2-D PIV to Observe a Turbulent Boundary Layer. , 2011, , .		2
78	Density Measurements of a High-Speed, Compressible Flow Field Using Acetone Planar Laser Induced Fluorescence (PLIF). , 2011, , .		7
79	3-D Flow Visualization of a Turbulent Boundary Layer. , 2010, , .		0
80	Development of a Background Oriented Schlieren-Based Wavefront Sensor for Aero-Optics. , 2010, , .		10
81	Further Development of a High-Speed 3-D Density Measurement Technique for Aero-Optics. , 2010, , .		2
82	Development of a High-Speed Three-Dimensional Flow Visualization Technique. AIAA Journal, 2009, 47, 2857-2865.	1.5	29
83	Third-generation megahertz-rate pulse burst laser system. Applied Optics, 2009, 48, 2086.	2.1	46
84	Preliminary Development of a High-Speed 3-D Laser Induced Fluorescence Technique. , 2009, , .		0
85	Three-Dimensional Flow Visualization Using a Pulse Burst Laser System. , 2009, , .		1
86	Initial Development of Acetone Laser Induced Fluorescence (lLIF) for Aero-Optics. , 2009, , .		0
87	POD Analysis of 3-D Flow Visualization Images of a Circular Jet with Reynolds Number 9500. , 2009, , .		3
88	3-D POD Analysis of a Naturally Excited Jet. , 2008, , .		3
89	Investigation of Image Processing Steps for Reconstruction of Three-Dimensional Flow Visualization Images. , 2008, , .		3
90	Issues with measurements of the convective velocity of large-scale structures in the compressible shear layer of a free jet. Physics of Fluids, 2008, 20, .	1.6	45

#	Article	IF	Citations
91	Further Development of a High-Speed Three-Dimensional Flow Visualization System. , 2007, , .		6
92	Design of a MHz Repetition Rate Pulse Burst Laser System at Auburn University. , 2006, , .		11
93	Preliminary Development of a Nearly-Instantaneous Three-Dimensional Imaging Technique for High-Speed Flow Fields. , 2006, , .		3
94	Development of Megahertz-Rate Planar Doppler Velocimetry for High Speed Flows. AIAA Journal, 2005, 43, 500-511.	1.5	52
95	Large-scale structure evolution and sound emission in high-speed jets: real-time visualization with simultaneous acoustic measurements. Journal of Fluid Mechanics, 2005, 544, 277.	1.4	159
96	High Repetition Rate Planar Velocity Measurements in a Mach 2.0 Compressible Axisymmetric Jet. , 2005, , .		4
97	Development and evaluation of a 3-D microphone array to locate individual acoustic sources in a high-speed jet. Journal of Sound and Vibration, 2004, 276, 649-669.	2.1	31
98	Further Development of Temporally Resolved PDV and Its Application to Compressible Free Shear Layers. , 2004, , .		0
99	MHz Rate Planar Doppler Velocimetry in Supersonic Jets. , 2004, , .		12
100	Differences in Dynamics of an Idealy Expanded Mach 1.3 Jet During Noise Generation and Relative Quiet Periods. , 2004, , .		2
101	A Burst Mode OPO System for MHz Frame Rate PLIF Imaging Diagnostics. , 2004, , .		2
102	Narrow-linewidth megahertz-rate pulse-burst laser for high-speed flow diagnostics. Applied Optics, 2004, 43, 5064.	2.1	74
103	Temporally Resolved Flow Visualization with Simultaneous 3-D Noise Source Localization in High Speed Jets. , 2003, , .		0
104	Simultaneous High-resolution Optical Wavefront and Flow Diagnostics for High-speed Flows. , 2003, , .		1
105	Simultaneous MHz Rate Flow Visualization and Wavefront Sensing for Aero-Optics. , 2003, , .		11
106	Progress Towards Real-Time Planar Doppler Velocimetry. , 2003, , .		7
107	Compressibility effects on turbulence structures of axisymmetric mixing layers. Physics of Fluids, 2003, 15, 1755.	1.6	57
108	Acoustic source localization using a 3-D microphone array in a Mach 1.3 jet. , 2002, , .		9

#	Article	IF	Citations
109	A technique for real-time visualization of flow structure in high-speed flows. Physics of Fluids, 2002, 14, 3449-3452.	1.6	42
110	Exploring Noise Sources Using Simultaneous Acoustic Measurements and Real-Time Flow Visualizations in Jets. AIAA Journal, 2002, 40, 2382-2392.	1.5	29
111	Structure of a Supersonic Impinging Rectangular Jet via Real-Time Optical Diagnostics. , 2002, , .		7
112	Compressibility effects on the growth and development of large-scale structures in an axisymmetric jet. , 2002, , .		7
113	An experimental effort on the connection of turbulence structures to far-field acoustic radiation in a Mach 1.3 jet. , 2001, , .		4
114	Progress towards a real-time quantitative measurement technique for high-speed flows. , 2001, , .		4
115	An in-depth investigation of large scale structures in a Mach 1.3 axisymmetric jet. , 2001, , .		8
116	Determination of noise sources within a high-speed jet via simultaneous acoustic measurements and real-time flow. , 2001, , .		5
117	MHz rate imaging of large-scale structures within a high speed axisymmetric jet. , 2000, , .		3
118	A MHz rate imaging system for study of turbulent and time evolving high speed flows. , 0, , .		3
119	Recent enhancements to the OSU burst mode laser and MHz rate imaging systems. , 0, , .		0
120	A novel multi-band plenoptic pyrometer for high temperature applications. Measurement Science and Technology, 0, , .	1.4	7
121	Volumetric Velocity Measurements of a Three-Dimensional Shock-Wave/Boundary-Layer Interaction with Flow Actuation Using Two-Camera Plenoptic Particle Image Velocimetry. AIAA Journal, 0, , 1-16.	1.5	1