Richard Manasseh

List of Publications by Year
in descending order

87 papers	2,512 citations	159585 30 h-index	206112 48 g-index
88 all docs	88 docs citations	88 times ranked	2473 citing authors

#	Article	IF	Citations
1	Cavitation microstreaming and stress fields created by microbubbles. Ultrasonics, 2010, 50, 273-279.	3.9	243
2	Cavitation microstreaming patterns in single and multiple bubble systems. Journal of Fluid Mechanics, 2007, 576, 191-233.	3.4	186
3	A Novel Mouse Model of Atherosclerotic Plaque Instability for Drug Testing and Mechanistic/Therapeutic Discoveries Using Gene and MicroRNA Expression Profiling. Circulation Research, 2013, 113, 252-265.	4.5	164
4	Ultrasonic Separation of Particulate Fluids in Small and Large Scale Systems: A Review. Industrial & Engineering Chemistry Research, 2013, 52, 16555-16576.	3.7	101
5	Breakdown regimes of inertia waves in a precessing cylinder. Journal of Fluid Mechanics, 1992, 243, 261.	3.4	93
6	Passive acoustic bubble sizing in sparged systems. Experiments in Fluids, 2001, 30, 672-682.	2.4	74
7	Design parameters for the separation of fat from natural whole milk in an ultrasonic litre-scale vessel. Ultrasonics Sonochemistry, 2014, 21, 1289-1298.	8.2	61
8	From mechanical stimulation to biological pathways in the regulation of stem cell fate. Cell Biochemistry and Function, 2014, 32, 309-325.	2.9	57
9	Passive Acoustic Determination of Wave-Breaking Events and Their Severity across the Spectrum. Journal of Atmospheric and Oceanic Technology, 2006, 23, 599-618.	1.3	56
10	Anisotropy in the sound field generated by a bubble chain. Journal of Sound and Vibration, 2004, 278, 807-823.	3.9	53
11	The Role of Surfactant Headgroup, Chain Length, and Cavitation Microstreaming on the Growth of Bubbles by Rectified Diffusion. Journal of Physical Chemistry C, 2011, 115, 24310-24316.	3.1	53
12	Air Entrainment Processes in a Circular Plunging Jet: Void-Fraction and Acoustic Measurements. Journal of Fluids Engineering, Transactions of the ASME, 2003, 125, 910-921.	1.5	52
13	Temperature effects on the ultrasonic separation of fat from natural whole milk. Ultrasonics Sonochemistry, 2014, 21, 2092-2098.	8.2	52
14	Symmetric mode resonance of bubbles attached to a rigid boundary. Journal of the Acoustical Society of America, 2005, 118, 2841-2849.	1.1	47
15	Sound generation on bubble coalescence following detachment. International Journal of Multiphase Flow, 2008, 34, 938-949.	3.4	47
16	A look at three measurement techniques for bubble size determination. Experimental Thermal and Fluid Science, 2005, 30, 49-57.	2.7	46
17	Distortions of inertia waves in a rotating fluid cylinder forced near its fundamental mode resonance. Journal of Fluid Mechanics, 1994, 265, 345-370.	3.4	45
18	Cavitation and non-cavitation regime for large-scale ultrasonic standing wave particle separation systems â€“ In situ gentle cavitation threshold determination and free radical related oxidation. Ultrasonics Sonochemistry, 2016, 28, 346-356.	8.2	45

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19	Ultrasonically enhanced fractionation of milk fat in a litre-scale prototype vessel. Ultrasonics Sonochemistry, 2016, 28, 118-129.	8.2	44
20	Time delays in coupled multibubble systems (L). Journal of the Acoustical Society of America, 2005, 117, 47-50.	1.1	43
21	Experimental and theoretical analysis of secondary Bjerknes forces between two bubbles in a standing wave. Ultrasonics, 2015, 58, 35-42.	3.9	41
22	Effects of coupling, bubble size, and spatial arrangement on chaotic dynamics of microbubble cluster in ultrasonic fields. Journal of the Acoustical Society of America, 2013, 134, 3425-3434.	1.1	38
23	Dynamics of dual-particles settling under gravity. International Journal of Multiphase Flow, 1998, 24, 1343-1358.	3.4	37
24	Production of monodispersed micron-sized bubbles at high rates in a microfluidic device. Applied Physics Letters, 2009, 95, .	3.3	36
25	Nonlinear behaviour of contained inertia waves. Journal of Fluid Mechanics, 1996, 315, 151-173.	3.4	35
26	Experimental comparison between acoustic and pressure signals from a bubbling flow. Chemical Engineering Science, 2008, 63, 5860-5869.	3.8	33
27	Frequencies of acoustically interacting bubbles. Bubble Science, Engineering & Technology, 2009, 1, 58-74.	0.2	33
28	Megasonic Separation of Food Droplets and Particles: Design Considerations. Food Engineering Reviews, 2015, 7, 298-320.	5.9	33
29	Integration of wave energy and other marine renewable energy sources with the needs of coastal societies. The International Journal of Ocean and Climate Systems, 2017, 8, 19-36.	0.8	33
30	Development of optimized vascular fractal tree models using level set distance function. Medical Engineering and Physics, 2010, 32, 790-794.	1.7	32
31	Influence of acoustic pressure and bubble sizes on the coalescence of two contacting bubbles in an acoustic field. Ultrasonics Sonochemistry, 2015, 22, 70-77.	8.2	30
32	Triadic resonances in precessing rapidly rotating cylinder flows. Journal of Fluid Mechanics, 2015, 778, .	3.4	29
33	Can acoustic emissions be used to size bubbles seeping from a sediment bed?. Chemical Engineering Science, 2015, 131, 187-196.	3.8	29
34	Efficient simulation of surface tension-dominated flows through enhanced interface geometry interrogation. Journal of Computational Physics, 2010, 229, 7520-7544.	3.8	28
35	Visualization of the flows in precessing tanks with internal baffles. AIAA Journal, 1993, 31, 312-318.	2.6	27
36	Dynamics of pulsatile flow in fractal models of vascular branching networks. Medical and Biological Engineering and Computing, 2009, 47, 763-772.	2.8	26

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37	Analysis of time delay effects on a linear bubble chain system. Journal of the Acoustical Society of America, 2008, 124, 815-826.	1.1	25
38	The effects of coupling and bubble size on the dynamical-systems behaviour of a small cluster of microbubbles. Journal of Sound and Vibration, 2010, 329, 687-699.	3.9	24
39	Recirculation in the lee of complicated headlands: A case study of Bass Point. Journal of Geophysical Research, 1995, 100, 16087.	3.3	23
40	Chaotic micromixing in open wells using audio-frequency acoustic microstreaming. BioTechniques, 2009, 47, 827-834.	1.8	23
41	Intraneural perineurioma. Journal of Clinical Neuroscience, 2009, 16, 1633-1636.	1.5	22
42	Nonlinear dynamic behavior of microscopic bubbles near a rigid wall. Physical Review E, 2012, 85, 066309.	2.1	21
43	On the propagation of acoustic energy in the vicinity of a bubble chain. Journal of Sound and Vibration, 2007, 306, 507-523.	3.9	20
44	The transition from density-driven to wave-dominated isolated flows. Journal of Fluid Mechanics, 1998, 361, 253-274.	3.4	18
45	Cavitation microstreaming and material transport around microbubbles. Physics Procedia, 2010, 3, 427-432.	1.2	17
46	Ultrasonic Recovery and Modification of Food Ingredients. Food Engineering Series, 2011, , 345-368.	0.7	17
47	On triadic resonance as an instability mechanism in precessing cylinder flow. Journal of Fluid Mechanics, 2018, 841, .	3.4	17
48	Acoustic Bubbles, Acoustic Streaming, and Cavitation Microstreaming. , 2016, , 33-68.		15
49	Characterization of patterns in rimming flow. Experimental Thermal and Fluid Science, 2011, 35, 1184-1192.	2.7	14
50	The surface wind gust regime and aircraft operations at Sydney Airport. Journal of Wind Engineering and Industrial Aerodynamics, 1999, 79, 269-288.	3.9	13
51	Eigenmodal resonances of polydisperse bubble systems on a rigid boundary. Journal of the Acoustical Society of America, 2009, 126, 2929-2938.	1.1	13
52	Modeling of Flow Through The Circle of Willis and Cerebral Vasculature to Assess The Effects of Changes In The Peripheral Small Cerebral Vasculature on The Inflows. Engineering Applications of Computational Fluid Mechanics, 2014, 8, 609-622.	3.1	13
53	Pioneering developments of marine renewable energy in Australia. The International Journal of Ocean and Climate Systems, 2017, 8, 50-67.	0.8	13
54	Acoustic microstreaming increases the efficiency of reverse transcription reactions comprising single-cell quantities of RNA. BioTechniques, 2011, 50, 116-119.	1.8	10

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55	Behaviour of eigenmodes of an array of oscillating water column devices. Wave Motion, 2017, 74, 56-72.	2.0	9
56	Boundary Layer Oscillations from Thunderstorms at Sydney Airport. Monthly Weather Review, 1995, 123, 1166-1177.	1.4	8
57	Effects of boundary proximity on monodispersed microbubbles in ultrasonic fields. Journal of Sound and Vibration, 2017, 410, 330-343.	3.9	8
58	Extraction of bubble size and number data from an acoustically-excited bubble chain. Journal of the Acoustical Society of America, 2020, 147, 921-940.	1.1	8
59	Increasing cDNA Yields from Single-cell Quantities of mRNA in Standard Laboratory Reverse Transcriptase Reactions using Acoustic Microstreaming. Journal of Visualized Experiments, 2011, , e3144.	0.3	7
60	Insonation frequency selection may assist detection and therapeutic delivery of targeted ultrasound contrast agents. Therapeutic Delivery, 2011, 2, 213-222.	2.2	6
61	Acoustic streaming and the induced forces between two spheres. Journal of Fluid Mechanics, 2017, 810, 378-391.	3.4	6
62	Energy loss and developing length during reciprocating flow in a pipe with a free-end. Physics of Fluids, 2020, 32, .	4.0	6
63	The heart signal: An acoustic signature observed during a second-bubble entrainment. Chemical Engineering Science, 2020, 219, 115597.	3.8	6
64	On the origins of steady streaming in precessing fluids. Journal of Fluid Mechanics, 2021, 910, .	3.4	6
65	Measurement of microbubble-induced acoustic microstreaming using microparticle image velocimetry. , 2005, 5651, 336.		5
66	Experimental and numerical investigation of a strongly-forced precessing cylinder flow. International Journal of Heat and Fluid Flow, 2016, 61, 68-74.	2.4	5
67	Modelling of flow through the circle of Willis and cerebral vasculature. WIT Transactions on Biomedicine and Health, 2009, , .	0.0	5
68	Three-dimensional direct numerical simulation of flow induced by an oscillating sphere close to a plane boundary. Physics of Fluids, 2021, 33, 097106.	4.0	4
69	Analysis of sound pressure levels generated by nozzle-emitted large bubbles. JASA Express Letters, 2022, 2, 054002.	1.1	4
70	Acoustic microstreaming applied to batch micromixing. , 2005, 6036, 485.		3
71	Computational aeroacoustics using the B-spline collocation method. Comptes Rendus - Mecanique, 2005, 333, 726-731.	2.1	3
72	Measurement of pressure on a surface using bubble acoustic resonances. Measurement Science and Technology, 2010, 21, 027002.	2.6	2

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73	Theoretical and experimental evaluation of microstreaming created by a single microbubble: Application to sonoporation. , 2011, , .		2
74	Ultrasound detection of the skull-brain interface: A phantom study. , 2012, , .		2
75	Quantitative Guidelines for the Prediction of Ultrasound Contrast Agent Destruction During Injection. Ultrasound in Medicine and Biology, 2013, 39, 1838-1847.	1.5	2
76	Modelling of embolus transport and embolic stroke. , 2011, , .		2
77	Transport by pulsatile flow in a branching network of cerebral vasculature. , 2013, , .		1
78	Acoustic Bubbles, Acoustic Streaming, and Cavitation Microstreaming. , 2015, , 1-36.		1
79	Identification of an initial non-linear transition in reciprocating finite-length pipe flow. Physics of Fluids, 2021, 33, .	4.0	1
80	Nonlinear oscillations of air bubbles near and on a rigid boundary with time delay effects. , 2008, , .		0
81	ICU 2009 Special Session 20: Microbubbles for therapy. Ultrasonics, 2010, 50, 258-259.	3.9	0
82	Resonant Collapse. , 1992, , 371-378.		0
83	Boundary Effect on Reflected Ultrasound Signals from Adherent Bubbles. Lecture Notes in Mechanical Engineering, 2016, , 125-129.	0.4	0
84	10.1063/5.0065775.1. , 2021, , .		0
85	10.1121/10.0010377.1. , 2022, , .		0
86	Numerical Investigation on the Mean Flow Fields Generated by an Oscillating Sphere. , 2022, , .		0
87	CONGREGATION OF PARTICLES ON A PLANE BOUNDARY DUE TO THE FLOW INDUCED BY AN OSCILLATING SPHERE. Physics of Fluids, 0, , .	4.0	0