

Timothy L Hall

List of Publications by Citations

Source: <https://exaly.com/author-pdf/4725820/timothy-l-hall-publications-by-citations.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

112
papers

4,267
citations

29
h-index

63
g-index

159
ext. papers

5,092
ext. citations

2.8
avg, IF

5.39
L-index

#	Paper	IF	Citations
112	Elastic moduli of breast and prostate tissues under compression. <i>Ultrasonic Imaging</i> , 1998 , 20, 260-74	1.9	1253
111	Pulsed cavitation ultrasound: a noninvasive technology for controlled tissue ablation (histotripsy) in the rabbit kidney. <i>Journal of Urology</i> , 2006 , 175, 734-8	2.5	240
110	Controlled ultrasound tissue erosion. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2004 , 51, 726-36	3.2	197
109	Probability of cavitation for single ultrasound pulses applied to tissues and tissue-mimicking materials. <i>Ultrasound in Medicine and Biology</i> , 2013 , 39, 449-65	3.5	172
108	Histotripsy methods in mechanical disintegration of tissue: towards clinical applications. <i>International Journal of Hyperthermia</i> , 2015 , 31, 145-62	3.7	140
107	Microbubble-enhanced cavitation for noninvasive ultrasound surgery. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2003 , 50, 1296-304	3.2	130
106	Effects of acoustic parameters on bubble cloud dynamics in ultrasound tissue erosion (histotripsy). <i>Journal of the Acoustical Society of America</i> , 2007 , 122, 229-36	2.2	90
105	Histotripsy beyond the intrinsic cavitation threshold using very short ultrasound pulses: microtripsy. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014 , 61, 251-65	3.2	85
104	High speed imaging of bubble clouds generated in pulsed ultrasound cavitation therapy--histotripsy. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2007 , 54, 2091-101	3.2	84
103	Refining histotripsy: defining the parameter space for the creation of nonthermal lesions with high intensity, pulsed focused ultrasound of the in vitro kidney. <i>Journal of Urology</i> , 2007 , 178, 672-6	2.5	75
102	An efficient treatment strategy for histotripsy by removing cavitation memory. <i>Ultrasound in Medicine and Biology</i> , 2012 , 38, 753-66	3.5	72
101	Histotripsy: minimally invasive technology for prostatic tissue ablation in an in vivo canine model. <i>Urology</i> , 2008 , 72, 682-6	1.6	71
100	Histotripsy of rabbit renal tissue in vivo: temporal histologic trends. <i>Journal of Endourology</i> , 2007 , 21, 1159-66	2.7	63
99	Caliceal Fluid Temperature During High-Power Holmium Laser Lithotripsy in an In Vivo Porcine Model. <i>Journal of Endourology</i> , 2018 , 32, 724-729	2.7	62
98	Histotripsy of the prostate: dose effects in a chronic canine model. <i>Urology</i> , 2009 , 74, 932-7	1.6	58
97	Thermal Response to High-Power Holmium Laser Lithotripsy. <i>Journal of Endourology</i> , 2017 , 31, 1308-1312	2.7	57
96	Quantitative ultrasound backscatter for pulsed cavitation ultrasound therapy- histotripsy. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2009 , 56, 995-1005	3.2	57

95	Holmium Laser Lithotripsy in the New Stone Age: Dust or Bust?. <i>Frontiers in Surgery</i> , 2017 , 4, 57	2.3	56
94	A real-time measure of cavitation induced tissue disruption by ultrasound imaging backscatter reduction. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2007 , 54, 569-75	3.2	54
93	Size measurement of tissue debris particles generated from pulsed ultrasound cavitation therapy-histotripsy. <i>Ultrasound in Medicine and Biology</i> , 2009 , 35, 245-55	3.5	52
92	Histotripsy fractionation of prostate tissue: local effects and systemic response in a canine model. <i>Journal of Urology</i> , 2011 , 185, 1484-9	2.5	50
91	Optical and acoustic monitoring of bubble cloud dynamics at a tissue-fluid interface in ultrasound tissue erosion. <i>Journal of the Acoustical Society of America</i> , 2007 , 121, 2421-30	2.2	50
90	Histotripsy erosion of model urinary calculi. <i>Journal of Endourology</i> , 2011 , 25, 341-4	2.7	36
89	Histotripsy of VX-2 tumor implanted in a renal rabbit model. <i>Journal of Endourology</i> , 2010 , 24, 1145-50	2.7	36
88	Watch Your Distance: The Role of Laser Fiber Working Distance on Fragmentation When Altering Pulse Width or Modulation. <i>Journal of Endourology</i> , 2019 , 33, 120-126	2.7	35
87	Arterial vulnerable plaque characterization using ultrasound-induced thermal strain imaging (TSI). <i>IEEE Transactions on Biomedical Engineering</i> , 2008 , 55, 171-80	5	33
86	Rapid prototyping fabrication of focused ultrasound transducers. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014 , 61, 1559-74	3.2	31
85	A Prototype Therapy System for Transcutaneous Application of Boiling Histotripsy. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2017 , 64, 1542-1557	3.2	29
84	. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014 , 61, 582-593	3.2	29
83	Imaging feedback of histotripsy treatments using ultrasound shear wave elastography. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2012 , 59, 1167-81	3.2	29
82	Targeted Lesion Generation Through the Skull Without Aberration Correction Using Histotripsy. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2016 , 63, 671-682	3.2	28
81	Understanding the Popcorn Effect During Holmium Laser Lithotripsy for Dusting. <i>Urology</i> , 2018 , 122, 52-57	1.6	27
80	Prostate histotripsy in an anticoagulated model. <i>Urology</i> , 2010 , 75, 207-11	1.6	26
79	Effects of Temperature on the Histotripsy Intrinsic Threshold for Cavitation. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2016 , 63, 1064-1077	3.2	25
78	Simulation of Laser Lithotripsy-Induced Heating in the Urinary Tract. <i>Journal of Endourology</i> , 2019 , 33, 113-119	2.7	25

77	Acoustic bubble removal to enhance SWL efficacy at high shock rate: an in vitro study. <i>Journal of Endourology</i> , 2014 , 28, 90-5	2.7	24
76	Active focal zone sharpening for high-precision treatment using histotripsy. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2011 , 58, 305-15	3.2	22
75	In vitro comminution of model renal calculi using histotripsy. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2011 , 58, 971-80	3.2	22
74	Histotripsy homogenization of the prostate: thresholds for cavitation damage of periprostatic structures. <i>Journal of Endourology</i> , 2011 , 25, 1531-5	2.7	22
73	In vivo histotripsy brain treatment. <i>Journal of Neurosurgery</i> , 2018 , 1-8	3.2	21
72	Non-invasive, Rapid Ablation of Tissue Volume Using Histotripsy. <i>Ultrasound in Medicine and Biology</i> , 2017 , 43, 2834-2847	3.5	20
71	Dual-beam histotripsy: a low-frequency pump enabling a high-frequency probe for precise lesion formation. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014 , 61, 325-40	3.2	20
70	. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2015 , 62, 2068-2078	3.2	18
69	Comparative study of the dynamics of laser and acoustically generated bubbles in viscoelastic media. <i>Physical Review E</i> , 2019 , 99, 043103	2.4	17
68	Controlled cavitation to augment SWL stone comminution: mechanistic insights in vitro. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2013 , 60, 301-9	3.2	17
67	Controlling cavitation-based image contrast in focused ultrasound histotripsy surgery. <i>Magnetic Resonance in Medicine</i> , 2015 , 73, 204-13	4.4	17
66	Removal of residual nuclei following a cavitation event using low-amplitude ultrasound. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014 , 61, 1619-26	3.2	17
65	Histotripsy of renal implanted VX-2 tumor in a rabbit model: investigation of metastases. <i>Urology</i> , 2012 , 80, 724-9	1.6	16
64	Histotripsy: the first noninvasive, non-ionizing, non-thermal ablation technique based on ultrasound. <i>International Journal of Hyperthermia</i> , 2021 , 38, 561-575	3.7	16
63	Synthesis of monopolar ultrasound pulses for therapy: the frequency-compounding transducer. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014 , 61, 1123-36	3.2	15
62	Imaging feedback for histotripsy by characterizing dynamics of acoustic radiation force impulse (ARFI)-induced shear waves excited in a treated volume. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2014 , 61, 1137-51	3.2	15
61	Effect of Frequency and Focal Spacing on Transcranial Histotripsy Clot Liquefaction, Using Electronic Focal Steering. <i>Ultrasound in Medicine and Biology</i> , 2017 , 43, 2302-2317	3.5	15
60	Removal of residual cavitation nuclei to enhance histotripsy erosion of model urinary stones. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2015 , 62, 896-904	3.2	15

59	Histotripsy of the Prostate in a Canine Model: Characterization of Post-Therapy Inflammation and Fibrosis. <i>Journal of Endourology</i> , 2015 , 29, 810-5	2.7	14
58	Effects of contrast agent infusion rates on thresholds for tissue damage produced by single exposures of high-intensity ultrasound. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2005 , 52, 1121-30	3.2	13
57	Removal of residual cavitation nuclei to enhance histotripsy fractionation of soft tissue. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2015 , 62, 2068-78	3.2	13
56	Defining Thermally Safe Laser Lithotripsy Power and Irrigation Parameters: Model. <i>Journal of Endourology</i> , 2020 , 34, 76-81	2.7	13
55	Histotripsy Clot Liquefaction in a Porcine Intracerebral Hemorrhage Model. <i>Neurosurgery</i> , 2020 , 86, 429-436	3.2	13
54	Histotripsy for Non-Invasive Ablation of Hepatocellular Carcinoma (HCC) Tumor in a Subcutaneous Xenograft Murine Model. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2018 , 2018, 4064-4067	0.9	13
53	Urethral-sparing histotripsy of the prostate in a canine model. <i>Urology</i> , 2012 , 80, 730-5	1.6	12
52	Endoscopic assessment and prediction of prostate urethral disintegration after histotripsy treatment in a canine model. <i>Journal of Endourology</i> , 2012 , 26, 183-9	2.7	12
51	Acoustic access to the prostate for extracorporeal ultrasound ablation. <i>Journal of Endourology</i> , 2010 , 24, 1875-81	2.7	12
50	A numerically optimized active shield for improved transcranial magnetic stimulation targeting. <i>Brain Stimulation</i> , 2010 , 3, 218-25	5.1	12
49	Removal of residual nuclei following a cavitation event: a parametric study. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2015 , 62, 1605-14	3.2	11
48	Dual-frequency focused ultrasound using optoacoustic and piezoelectric transmitters for single-pulsed free-field cavitation in water. <i>Applied Physics Letters</i> , 2013 , 103, 234103	3.4	11
47	Catheter Hydrophone Aberration Correction for Transcranial Histotripsy Treatment of Intracerebral Hemorrhage: Proof-of-Concept. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2017 , 64, 1684-1697	3.2	11
46	Soft-Tissue Aberration Correction for Histotripsy. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2018 , 65, 2073-2085	3.2	11
45	Integrated Histotripsy and Bubble Coalescence Transducer for Thrombolysis. <i>Ultrasound in Medicine and Biology</i> , 2018 , 44, 2697-2709	3.5	11
44	Frequency Threshold for Ablation During Holmium Laser Lithotripsy: How High Can You Go?. <i>Journal of Endourology</i> , 2020 , 34, 1075-1081	2.7	10
43	Evaluation of ultrasound tissue damage based on changes in image echogenicity in canine kidney. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2005 , 52, 1111-20	3.2	10
42	Bubble-Induced Color Doppler Feedback Correlates with Histotripsy-Induced Destruction of Structural Components in Liver Tissue. <i>Ultrasound in Medicine and Biology</i> , 2018 , 44, 602-612	3.5	9

41	MR-based detection of individual histotripsy bubble clouds formed in tissues and phantoms. <i>Magnetic Resonance in Medicine</i> , 2016 , 76, 1486-1493	4.4	9
40	Pulse modulation with Moses technology improves popcorn laser lithotripsy. <i>World Journal of Urology</i> , 2021 , 39, 1699-1705	4	8
39	Histotripsy effects on the bladder trigone: functional and histologic consequences in the canine model. <i>Journal of Endourology</i> , 2013 , 27, 1267-71	2.7	8
38	Prostate histotripsy: evaluation of prostatic urethral treatment parameters in a canine model. <i>BJU International</i> , 2014 , 113, 498-503	5.6	8
37	Effects of Histotripsy on Local Tumor Progression in an Orthotopic Rodent Liver Tumor Model. <i>BME Frontiers</i> , 2020 , 2020,	4.4	8
36	Integrated Histotripsy and Bubble Coalescence Transducer for Rapid Tissue Ablation. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2018 , 65, 1822-1831	3.2	7
35	The response of MRI contrast parameters in in vitro tissues and tissue mimicking phantoms to fractionation by histotripsy. <i>Physics in Medicine and Biology</i> , 2017 , 62, 7167-7180	3.8	7
34	Patterns of Laser Activation During Ureteroscopic Lithotripsy: Effects on Caliceal Fluid Temperature and Thermal Dose. <i>Journal of Endourology</i> , 2021 , 35, 1217-1222	2.7	7
33	Real-Time Transcranial Histotripsy Treatment Localization and Mapping Using Acoustic Cavitation Emission Feedback. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2020 , 67, 1178-1191	3.2	6
32	A PZT-PVDF Stacked Transducer for Short-Pulse Ultrasound Therapy and Monitoring. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2021 , 68, 2164-2171	3.2	6
31	Enhanced High-Rate Shockwave Lithotripsy Stone Comminution in an In Vivo Porcine Model Using Acoustic Bubble Coalescence. <i>Journal of Endourology</i> , 2016 , 30, 1321-1325	2.7	6
30	Effect of Chilled Irrigation on Caliceal Fluid Temperature and Time to Thermal Injury Threshold During Laser Lithotripsy: Model. <i>Journal of Endourology</i> , 2021 , 35, 700-705	2.7	6
29	Histotripsy Lesion Formation Using an Ultrasound Imaging Probe Enabled by a Low-Frequency Pump Transducer. <i>Ultrasound in Medicine and Biology</i> , 2015 , 41, 2148-60	3.5	5
28	Transcranial MR-Guided Histotripsy System. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2021 , 68, 2917-2929	3.2	5
27	Are We Cutting Ourselves Short? Laser Lithotripsy Performance Based on Differences in Fiber-tip Preparation. <i>Urology</i> , 2019 , 134, 79-83	1.6	4
26	A cost-effective, multi-flash, "ghost" imaging technique for high temporal and spatial resolution imaging of cavitation using "still-frame" cameras. <i>Journal of the Acoustical Society of America</i> , 2020 , 147, 1339	2.2	4
25	Histotripsy for the treatment of BPH: evaluation in a chronic canine model 2008 ,		4
24	Exploring the Acoustic Parameter Space in Ultrasound Therapy: Defining the Threshold for Cavitational Effects. <i>AIP Conference Proceedings</i> , 2007 ,	0	4

23	Pelvicicalceal Volume and Fluid Temperature Elevation During Laser Lithotripsy. <i>Journal of Endourology</i> , 2021 ,	2.7	4
22	Enhanced Shock Scattering Histotripsy With Pseudomonopolar Ultrasound Pulses. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2019 , 66, 1185-1197	3.2	3
21	Temporal Trends in the Histology of the Rabbit Kidney after Cavitational Tissue Ablation. <i>AIP Conference Proceedings</i> , 2007 ,	0	3
20	A simulated model for fluid and tissue heating during pediatric laser lithotripsy. <i>Journal of Pediatric Urology</i> , 2020 , 16, 626.e1-626.e8	1.5	3
19	Strike Rate: Analysis of Laser Fiber to Stone Distance During Different Modes of Laser Lithotripsy. <i>Journal of Endourology</i> , 2021 , 35, 355-359	2.7	3
18	Burnback: the role of pulse duration and energy on fiber-tip degradation during high-power laser lithotripsy. <i>Lasers in Medical Science</i> , 2021 , 36, 1817-1822	3.1	3
17	Impact of Histotripsy on Development of Intrahepatic Metastases in a Rodent Liver Tumor Model.. <i>Cancers</i> , 2022 , 14,	6.6	3
16	2013 ,		2
15	Optical and Acoustic Monitoring of Bubble Dynamics at a Tissue-fluid Interface in Ultrasound Tissue Erosion. <i>AIP Conference Proceedings</i> , 2006 ,	0	2
14	Coalescence of residual histotripsy cavitation nuclei using low-gain regions of the therapy beam during electronic focal steering. <i>Physics in Medicine and Biology</i> , 2018 , 63, 225010	3.8	2
13	Acoustic Methods for Increasing the Cavitation Initiation Pressure Threshold. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2018 , 65, 2012-2019	3.2	2
12	Focused ultrasound extraction (FUSE) for the rapid extraction of DNA from tissue matrices. <i>Methods in Ecology and Evolution</i> , 2020 , 11, 1599-1608	7.7	1
11	2010 ,		1
10	Optically triggered solid state driver for shock wave therapy 2012 ,		1
9	Transcranial Magnetic Resonance-Guided Histotripsy for Brain Surgery: Pre-clinical Investigation. <i>Ultrasound in Medicine and Biology</i> , 2022 , 48, 98-110	3.5	1
8	Effects of frequency on bubble-cloud behavior and ablation efficiency in intrinsic threshold histotripsy. <i>Physics in Medicine and Biology</i> , 2021 , 66,	3.8	1
7	Response to Wollin re: "Strike Rate: Analysis of Laser Fiber to Stone Distance During Different Modes of Laser Lithotripsy". <i>Journal of Endourology</i> , 2021 , 35, 361	2.7	1
6	Enhanced shockwave lithotripsy with active cavitation mitigation. <i>Journal of the Acoustical Society of America</i> , 2019 , 146, 3275	2.2	1

5	Endocavity Histotripsy for Efficient Tissue Ablation-Transducer Design and Characterization. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2021 , 68, 2896-2905	3.2	1
4	Chilled irrigation for control of temperature elevation during ureteroscopic laser lithotripsy: in vivo porcine model. <i>Journal of Endourology</i> , 2021 ,	2.7	1
3	Transcostal Histotripsy Ablation in an In Vivo Acute Hepatic Porcine Model. <i>CardioVascular and Interventional Radiology</i> , 2021 , 44, 1643-1650	2.7	0
2	Laser operator duty cycle effect on temperature and thermal dose: in-vitro study.. <i>World Journal of Urology</i> , 2022 , 1	4	0
1	Stereotactic Transcranial Focused Ultrasound Targeting System for Murine Brain Models. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2021 , 68, 154-163	3.2	