## Timothy L Hall

List of Publications by Year in descending order

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ΤΙΜΟΤΗΥ Ι ΗΛΙΙ

#	Article	IF	CITATIONS
1	Elastic Moduli of Breast and Prostate Tissues under Compression. Ultrasonic Imaging, 1998, 20, 260-274.	1.4	1,513
2	Pulsed Cavitational Ultrasound: A Noninvasive Technology for Controlled Tissue Ablation (Histotripsy) in the Rabbit Kidney. Journal of Urology, 2006, 175, 734-738.	0.2	301
3	Controlled Ultrasound Tissue Erosion. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2004, 51, 726-736.	1.7	269
4	Probability of Cavitation for Single Ultrasound Pulses Applied to Tissues and Tissue-Mimicking Materials. Ultrasound in Medicine and Biology, 2013, 39, 449-465.	0.7	240
5	Histotripsy methods in mechanical disintegration of tissue: Towards clinical applications. International Journal of Hyperthermia, 2015, 31, 145-162.	1.1	216
6	Microbubble-enhanced cavitation for noninvasive ultrasound surgery. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2003, 50, 1296-1304.	1.7	163
7	Histotripsy: the first noninvasive, non-ionizing, non-thermal ablation technique based on ultrasound. International Journal of Hyperthermia, 2021, 38, 561-575.	1.1	122
8	Histotripsy beyond the intrinsic cavitation threshold using very short ultrasound pulses: microtripsy. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 251-265.	1.7	120
9	Effects of acoustic parameters on bubble cloud dynamics in ultrasound tissue erosion (histotripsy). Journal of the Acoustical Society of America, 2007, 122, 229-236.	0.5	109
10	Caliceal Fluid Temperature During High-Power Holmium Laser Lithotripsy in an <i>In Vivo</i> Porcine Model. Journal of Endourology, 2018, 32, 724-729.	1.1	104
11	An Efficient Treatment Strategy for Histotripsy by Removing Cavitation Memory. Ultrasound in Medicine and Biology, 2012, 38, 753-766.	0.7	100
12	High Speed Imaging of Bubble Clouds Generated in Pulsed Ultrasound Cavitational Therapy - Histotripsy. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2007, 54, 2091-2101.	1.7	99
13	Thermal Response to High-Power Holmium Laser Lithotripsy. Journal of Endourology, 2017, 31, 1308-1312.	1.1	97
14	Refining Histotripsy: Defining the Parameter Space for the Creation of Nonthermal Lesions With High Intensity, Pulsed Focused Ultrasound of the In Vitro Kidney. Journal of Urology, 2007, 178, 672-676.	0.2	86
15	Histotripsy: Minimally Invasive Technology for Prostatic Tissue Ablation in an In Vivo Canine Model. Urology, 2008, 72, 682-686.	0.5	85
16	Holmium Laser Lithotripsy in the New Stone Age: Dust or Bust?. Frontiers in Surgery, 2017, 4, 57.	0.6	83
17	Histotripsy of Rabbit Renal Tissue <i>in Vivo</i> : Temporal Histologic Trends. Journal of Endourology, 2007, 21, 1159-1166.	1.1	79
18	Histotripsy of the Prostate: Dose Effects in a Chronic Canine Model. Urology, 2009, 74, 932-937.	0.5	75

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19	Quantitative ultrasound backscatter for pulsed cavitational ultrasound therapy-histotripsy. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2009, 56, 995-1005.	1.7	71
20	Optical and acoustic monitoring of bubble cloud dynamics at a tissue-fluid interface in ultrasound tissue erosion. Journal of the Acoustical Society of America, 2007, 121, 2421-2430.	0.5	70
21	A real-time measure of cavitation induced tissue disruption by ultrasound imaging backscatter reduction. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2007, 54, 569-575.	1.7	66
22	Histotripsy Fractionation of Prostate Tissue: Local Effects and Systemic Response in a Canine Model. Journal of Urology, 2011, 185, 1484-1489.	0.2	63
23	Size Measurement of Tissue Debris Particles Generated from Pulsed Ultrasound Cavitational Therapy – Histotripsy. Ultrasound in Medicine and Biology, 2009, 35, 245-255.	0.7	62
24	Watch Your Distance: The Role of Laser Fiber Working Distance on Fragmentation When Altering Pulse Width or Modulation. Journal of Endourology, 2019, 33, 120-126.	1.1	56
25	A Prototype Therapy System for Transcutaneous Application of Boiling Histotripsy. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 1542-1557.	1.7	55
26	Simulation of Laser Lithotripsy-Induced Heating in the Urinary Tract. Journal of Endourology, 2019, 33, 113-119.	1.1	49
27	Histotripsy of VX-2 Tumor Implanted in a Renal Rabbit Model. Journal of Endourology, 2010, 24, 1145-1150.	1.1	46
28	Rapid prototyping fabrication of focused ultrasound transducers. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1559-1574.	1.7	45
29	Targeted Lesion Generation Through the Skull Without Aberration Correction Using Histotripsy. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 671-682.	1.7	44
30	In vivo histotripsy brain treatment. Journal of Neurosurgery, 2019, 131, 1331-1338.	0.9	43
31	Histotripsy Erosion of Model Urinary Calculi. Journal of Endourology, 2011, 25, 341-344.	1.1	42
32	Arterial Vulnerable Plaque Characterization Using Ultrasound-Induced Thermal Strain Imaging (TSI). IEEE Transactions on Biomedical Engineering, 2008, 55, 171-180.	2.5	40
33	Understanding the Popcorn Effect During Holmium Laser Lithotripsy for Dusting. Urology, 2018, 122, 52-57.	0.5	40
34	Imaging feedback of histotripsy treatments using ultrasound shear wave elastography. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2012, 59, 1167-1181.	1.7	39
35	Effects of Temperature on the Histotripsy Intrinsic Threshold for Cavitation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2016, 63, 1064-1077.	1.7	39
36	Transcranial histotripsy therapy: a feasibility study. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 582-593.	1.7	37

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37	Defining Thermally Safe Laser Lithotripsy Power and Irrigation Parameters: <i>In Vitro</i> Model. Journal of Endourology, 2020, 34, 76-81.	1.1	37
38	Non-invasive, Rapid Ablation of Tissue Volume Using Histotripsy. Ultrasound in Medicine and Biology, 2017, 43, 2834-2847.	0.7	32
39	Prostate Histotripsy in an Anticoagulated Model. Urology, 2010, 75, 207-211.	0.5	30
40	Dual-beam histotripsy: a low-frequency pump enabling a high-frequency probe for precise lesion formation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 325-340.	1.7	29
41	Comparative study of the dynamics of laser and acoustically generated bubbles in viscoelastic media. Physical Review E, 2019, 99, 043103.	0.8	29
42	In vitro comminution of model renal calculi using histotripsy. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 971-980.	1.7	28
43	Effects of Histotripsy on Local Tumor Progression in an <i>in vivo</i> Orthotopic Rodent Liver Tumor Model. BME Frontiers, 2020, 2020, .	2.2	28
44	Histotripsy of Renal Implanted VX-2 Tumor in a Rabbit Model: Investigation of Metastases. Urology, 2012, 80, 724-729.	0.5	27
45	Effect of Frequency and Focal Spacing on Transcranial Histotripsy Clot Liquefaction, Using Electronic Focal Steering. Ultrasound in Medicine and Biology, 2017, 43, 2302-2317.	0.7	27
46	Frequency Threshold for Ablation During Holmium Laser Lithotripsy: How High Can You Go?. Journal of Endourology, 2020, 34, 1075-1081.	1.1	27
47	Acoustic Bubble Removal to Enhance SWL Efficacy at High Shock Rate: An <i>In Vitro</i> Study. Journal of Endourology, 2014, 28, 90-95.	1.1	26
48	Synthesis of monopolar ultrasound pulses for therapy: The frequency-compounding transducer. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1123-1136.	1.7	25
49	Real-Time Transcranial Histotripsy Treatment Localization and Mapping Using Acoustic Cavitation Emission Feedback. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 1178-1191.	1.7	25
50	Histotripsy Homogenization of the Prostate: Thresholds for Cavitation Damage of Periprostatic Structures. Journal of Endourology, 2011, 25, 1531-1535.	1.1	24
51	Removal of residual cavitation nuclei to enhance histotripsy fractionation of soft tissue. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 2068-2078.	1.7	24
52	Histotripsy Clot Liquefaction in a Porcine Intracerebral Hemorrhage Model. Neurosurgery, 2020, 86, 429-436.	0.6	24
53	Active focal zone sharpening for high-precision treatment using histotripsy. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2011, 58, 305-315.	1.7	23
54	Controlling cavitationâ€based image contrast in focused ultrasound histotripsy surgery. Magnetic Resonance in Medicine, 2015, 73, 204-213.	1.9	23

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55	Histotripsy for Non-Invasive Ablation of Hepatocellular Carcinoma (HCC) Tumor in a Subcutaneous Xenograft Murine Model. , 2018, 2018, 6064-6067.		23
56	Removal of residual nuclei following a cavitation event using low-amplitude ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1619-1626.	1.7	22
57	Controlled cavitation to augment SWL stone comminution: mechanistic insights in vitro. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2013, 60, 301-309.	1.7	21
58	Urethral-sparing Histotripsy of the Prostate in a Canine Model. Urology, 2012, 80, 730-735.	0.5	20
59	Patterns of Laser Activation During Ureteroscopic Lithotripsy: Effects on Caliceal Fluid Temperature and Thermal Dose. Journal of Endourology, 2021, 35, 1217-1222.	1.1	20
60	Soft-Tissue Aberration Correction for Histotripsy. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 2073-2085.	1.7	19
61	Pulse modulation with Moses technology improves popcorn laser lithotripsy. World Journal of Urology, 2021, 39, 1699-1705.	1.2	19
62	Transcranial MR-Guided Histotripsy System. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 2917-2929.	1.7	19
63	Impact of Histotripsy on Development of Intrahepatic Metastases in a Rodent Liver Tumor Model. Cancers, 2022, 14, 1612.	1.7	19
64	Removal of residual cavitation nuclei to enhance histotripsy erosion of model urinary stones. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 896-904.	1.7	18
65	Histotripsy of the Prostate in a Canine Model: Characterization of Post-Therapy Inflammation and Fibrosis. Journal of Endourology, 2015, 29, 810-815.	1.1	16
66	Integrated Histotripsy and Bubble Coalescence Transducer for Thrombolysis. Ultrasound in Medicine and Biology, 2018, 44, 2697-2709.	0.7	16
67	Effects of contrast agent infusion rates on thresholds for tissue damage produced by single exposures of high-intensity ultrasound. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 1121-1130.	1.7	15
68	A numerically optimized active shield for improved transcranial magnetic stimulation targeting. Brain Stimulation, 2010, 3, 218-225.	0.7	15
69	Acoustic Access to the Prostate for Extracorporeal Ultrasound Ablation. Journal of Endourology, 2010, 24, 1875-1881.	1.1	15
70	Imaging feedback for histotripsy by characterizing dynamics of acoustic radiation force impulse (ARFI)-induced shear waves excited in a treated volume. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2014, 61, 1137-1151.	1.7	15
71	Effect of Chilled Irrigation on Caliceal Fluid Temperature and Time to Thermal Injury Threshold During Laser Lithotripsy: <i>In Vitro</i> Model. Journal of Endourology, 2021, 35, 700-705.	1.1	15
72	Catheter Hydrophone Aberration Correction for Transcranial Histotripsy Treatment of Intracerebral Hemorrhage: Proof-of-Concept. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2017, 64, 1684-1697.	1.7	15

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73	Effects of frequency on bubble-cloud behavior and ablation efficiency in intrinsic threshold histotripsy. Physics in Medicine and Biology, 2021, 66, 225009.	1.6	15
74	Dual-frequency focused ultrasound using optoacoustic and piezoelectric transmitters for single-pulsed free-field cavitation in water. Applied Physics Letters, 2013, 103, .	1.5	14
75	The response of MRI contrast parameters in <i>in vitro</i> tissues and tissue mimicking phantoms to fractionation by histotripsy. Physics in Medicine and Biology, 2017, 62, 7167-7180.	1.6	14
76	Strike Rate: Analysis of Laser Fiber to Stone Distance During Different Modes of Laser Lithotripsy. Journal of Endourology, 2021, 35, 355-359.	1.1	14
77	Pelvicaliceal Volume and Fluid Temperature Elevation During Laser Lithotripsy. Journal of Endourology, 2022, 36, 22-28.	1.1	14
78	Endoscopic Assessment and Prediction of Prostate Urethral Disintegration After Histotripsy Treatment in a Canine Model. Journal of Endourology, 2012, 26, 183-189.	1.1	13
79	Removal of residual nuclei following a cavitation event: a parametric study. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 1605-1614.	1.7	13
80	MRâ€based detection of individual histotripsy bubble clouds formed in tissues and phantoms. Magnetic Resonance in Medicine, 2016, 76, 1486-1493.	1.9	13
81	A PZT–PVDF Stacked Transducer for Short-Pulse Ultrasound Therapy and Monitoring. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 2164-2171.	1.7	13
82	Transcranial Magnetic Resonance-Guided Histotripsy for Brain Surgery: Pre-clinical Investigation. Ultrasound in Medicine and Biology, 2022, 48, 98-110.	0.7	13
83	Removal of residual cavitation nuclei to enhance histotripsy fractionation of soft tissue. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2015, 62, 2068-78.	1.7	13
84	Bubble-Induced Color Doppler Feedback Correlates with Histotripsy-Induced Destruction of Structural Components in Liver Tissue. Ultrasound in Medicine and Biology, 2018, 44, 602-612.	0.7	12
85	Integrated Histotripsy and Bubble Coalescence Transducer for Rapid Tissue Ablation. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 1822-1831.	1.7	12
86	Evaluation of ultrasound tissue damage based on changes in image echogenicity in canine kidney. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 1111-1120.	1.7	11
87	Prostate histotripsy: evaluation of prostatic urethral treatment parameters in a canine model. BJU International, 2014, 113, 498-503.	1.3	11
88	Laser operator duty cycle effect on temperature and thermal dose: in-vitro study. World Journal of Urology, 2022, 40, 1575-1580.	1.2	10
89	Histotripsy Effects on the Bladder Trigone: Functional and Histologic Consequences in the Canine Model. Journal of Endourology, 2013, 27, 1267-1271.	1.1	9
90	Two-step aberration correction: application to transcranial histotripsy. Physics in Medicine and Biology, 2022, 67, 125009.	1.6	9

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91	Effects of phase aberration on transabdominal focusing for a large aperture, low f-number histotripsy transducer. Physics in Medicine and Biology, 2022, 67, 155004.	1.6	9
92	Burnback: the role of pulse duration and energy on fiber-tip degradation during high-power laser lithotripsy. Lasers in Medical Science, 2021, 36, 1817-1822.	1.0	8
93	Histotripsy Lesion Formation Using an Ultrasound Imaging Probe Enabled by a Low-Frequency Pump Transducer. Ultrasound in Medicine and Biology, 2015, 41, 2148-2160.	0.7	7
94	Enhanced High-Rate Shockwave Lithotripsy Stone Comminution in an <i>In Vivo</i> Porcine Model Using Acoustic Bubble Coalescence. Journal of Endourology, 2016, 30, 1321-1325.	1.1	7
95	Transcostal Histotripsy Ablation in an In Vivo Acute Hepatic Porcine Model. CardioVascular and Interventional Radiology, 2021, 44, 1643-1650.	0.9	7
96	Histotripsy for the treatment of BPH: evaluation in a chronic canine model. , 2008, , .		6
97	Enhanced Shock Scattering Histotripsy With Pseudomonopolar Ultrasound Pulses. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2019, 66, 1185-1197.	1.7	6
98	Are We Cutting Ourselves Short? Laser Lithotripsy Performance Based on Differences in Fiber-tip Preparation. Urology, 2019, 134, 79-83.	0.5	6
99	Focused ultrasound extraction (FUSE) for the rapid extraction of DNA from tissue matrices. Methods in Ecology and Evolution, 2020, 11, 1599-1608.	2.2	6
100	Stereotactic Transcranial Focused Ultrasound Targeting System for Murine Brain Models. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 154-163.	1.7	6
101	Chilled Irrigation for Control of Temperature Elevation During Ureteroscopic Laser Lithotripsy: <i>In Vivo</i> Porcine Model. Journal of Endourology, 2022, 36, 403-409.	1.1	6
102	Exploring the Acoustic Parameter Space in Ultrasound Therapy: Defining the Threshold for Cavitational Effects. AIP Conference Proceedings, 2007, , .	0.3	5
103	Acoustic Methods for Increasing the Cavitation Initiation Pressure Threshold. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 2012-2019.	1.7	5
104	A simulated model for fluid and tissue heating during pediatric laser lithotripsy. Journal of Pediatric Urology, 2020, 16, 626.e1-626.e8.	0.6	5
105	A cost-effective, multi-flash, "ghost―imaging technique for high temporal and spatial resolution imaging of cavitation using "still-frame―cameras. Journal of the Acoustical Society of America, 2020, 147, 1339-1343.	0.5	5
106	Endocavity Histotripsy for Efficient Tissue Ablation–Transducer Design and Characterization. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 2896-2905.	1.7	5
107	Optical and Acoustic Monitoring of Bubble Dynamics at a Tissue-fluid Interface in Ultrasound Tissue Erosion. AIP Conference Proceedings, 2006, , .	0.3	4
108	Coalescence of residual histotripsy cavitation nuclei using low-gain regions of the therapy beam during electronic focal steering. Physics in Medicine and Biology, 2018, 63, 225010.	1.6	4

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109	Temporal Trends in the Histology of the Rabbit Kidney after Cavitational Tissue Ablation. AIP Conference Proceedings, 2007, , .	0.3	3
110	Optimization of histotripsy for kidney stone erosion. , 2010, , .		2
111	Optically triggered solid state driver for shock wave therapy. , 2012, , .		2
112	Active removal of residual bubble nuclei following a cavitation event. , 2013, , .		2
113	Enhanced shockwave lithotripsy with active cavitation mitigation. Journal of the Acoustical Society of America, 2019, 146, 3275-3282.	0.5	2
114	The Characterization and Assembly of an Efficient, Cost Effective Focused Ultrasound Transducer. , 2020, , .		2
115	Size Measurement of Tissue Debris Generated from Mechanical Tissue Fractionation by Cavitational Pulsed Ultrasound Therapy — Histotripsy. AIP Conference Proceedings, 2007, , .	0.3	1
116	Non-invasive comminution of renal calculi using pulsed cavitational ultrasound therapy - histotripsy. , 2009, , .		1
117	Active protection in pulse cavitational ultrasound therapy (histotripsy). , 2009, , .		1
118	HISTOTRIPSY ABLATION OF THE PROSTATE: EVALUATION OF HISTOPATHOLOGY, SAFETY, AND TOLERABILITY IN A CHRONIC CANINE MODEL. Journal of Urology, 2009, 181, 704.	0.2	1
119	Controlled cavitation to augment SWL stone subdivision: Mechanistic insights in-vitro. , 2012, , .		1
120	Response to Wollin re: "Strike Rate: Analysis of Laser Fiber to Stone Distance During Different Modes of Laser Lithotripsy― Journal of Endourology, 2021, 35, 361-361.	1.1	1
121	Quantitative image feedback for pulsed cavitational ultrasound therapy- histotripsy. , 2008, , .		0
122	Histotripsy of the Prostate for the Treatment of BPH: Chronic Results From a Canine Model. , 2009, , .		0
123	Prostate histotripsy for BPH: initial canine results. Proceedings of SPIE, 2009, , .	0.8	0
124	Analysis of Acoustic Access to the Prostate Through the Abdomen and Perineum for Extracorporeal Ablation. , 2010, , .		0
125	V324 HISTOTRIPSY ABLATION OF THE PROSTATE IN A CANINE MODEL. Journal of Urology, 2010, 183, .	0.2	0
126	85 LOCAL EFFECTS OF HISTOTRIPSY ON RABBIT VX2 RENAL TUMOR MODEL. Journal of Urology, 2010, 183, .	0.2	0

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127	Local cavitation suppression using cavitation nuclei preconditioning for precise treatment in histotripsy. , 2010, , .		0
128	Imaging feedback of histotripsy treatments using ultrasound transient elastography. , 2011, , .		0
129	Ultrasound backscatter spectral analysis provides image feedback for histotripsy tissue fractionation. , 2011, , .		0
130	A dose-efficient treatment strategy for histotripsy by removing cavitation memory. , 2011, , .		0
131	Histotripsy and metastasis: Assessment in a renal VX-2 rabbit tumor model. , 2012, , .		0
132	1983 URETHRAL SPARING HISTOTRIPSY OF THE PROSTATE IN A CANINE MODEL. Journal of Urology, 2012, 187, .	0.2	0
133	A noninvasive approach for metastatic lymph node ablation using histotripsy tissue fractionation. , 2012, , .		0
134	Feasibility of MRI monitoring of histotripsy therapy. AIP Conference Proceedings, 2017, , .	0.3	0
135	Notice of Removal: Integrated histotripsy and bubble coalescence transducer for rapid tissue ablation. , 2017, , .		0
136	1850: Cavitational Ultrasound: A Potential Minimally Invasive Therapy for BPH. Journal of Urology, 2007, 177, 614-614.	0.2	0
137	10.1063/1.4836315.1., 2013, , .		0