List of Publications by Year in descending order

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#	Article	IF	CITATIONS
1	Noninvasive MR Imaging–guided Focal Opening of the Blood-Brain Barrier in Rabbits. Radiology, 2001, 220, 640-646.	7.3	1,264
2	A Randomized Trial of Focused Ultrasound Thalamotomy for Essential Tremor. New England Journal of Medicine, 2016, 375, 730-739.	27.0	770
3	Blood–brain barrier opening in Alzheimer's disease using MR-guided focused ultrasound. Nature Communications, 2018, 9, 2336.	12.8	618
4	MR Imaging-guided Focused Ultrasound Surgery of Fibroadenomas in the Breast: A Feasibility Study. Radiology, 2001, 219, 176-185.	7.3	602
5	Local and reversible blood–brain barrier disruption by noninvasive focused ultrasound at frequencies suitable for trans-skull sonications. NeuroImage, 2005, 24, 12-20.	4.2	596
6	Noninvasive localized delivery of Herceptin to the mouse brain by MRI-guided focused ultrasound-induced blood–brain barrier disruption. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 11719-11723.	7.1	589
7	MR Imaging–guided Focused Ultrasound Surgery of Uterine Leiomyomas: A Feasibility Study. Radiology, 2003, 226, 897-905.	7.3	547
8	Cellular mechanisms of the blood-brain barrier opening induced by ultrasound in presence of microbubbles. Ultrasound in Medicine and Biology, 2004, 30, 979-989.	1.5	514
9	Transcranial Magnetic Resonance Imaging– Guided Focused Ultrasound Surgery of Brain Tumors. Neurosurgery, 2010, 66, 323-332.	1.1	504
10	Targeted delivery of doxorubicin to the rat brain at therapeutic levels using MRI-guided focused ultrasound. International Journal of Cancer, 2007, 121, 901-907.	5.1	492
11	MR-guided focused ultrasound thalamotomy for essential tremor: a proof-of-concept study. Lancet Neurology, The, 2013, 12, 462-468.	10.2	475
12	Demonstration of Potential Noninvasive Ultrasound Brain Therapy Through an Intact Skull. Ultrasound in Medicine and Biology, 1998, 24, 275-283.	1.5	418
13	Effect of Focused Ultrasound Applied With an Ultrasound Contrast Agent on the Tight Junctional Integrity of the Brain Microvascular Endothelium. Ultrasound in Medicine and Biology, 2008, 34, 1093-1104.	1.5	409
14	Blood-Brain Barrier Opening in Primary Brain Tumors with Non-invasive MR-Guided Focused Ultrasound: A Clinical Safety and Feasibility Study. Scientific Reports, 2019, 9, 321.	3.3	400
15	500-element ultrasound phased array system for noninvasive focal surgery of the brain: A preliminary rabbit study with ex vivo human skulls. Magnetic Resonance in Medicine, 2004, 52, 100-107.	3.0	320
16	Antibodies Targeted to the Brain with Image-Guided Focused Ultrasound Reduces Amyloid-β Plaque Load in the TgCRND8 Mouse Model of Alzheimer's Disease. PLoS ONE, 2010, 5, e10549.	2.5	319
17	First-in-human trial of blood–brain barrier opening in amyotrophic lateral sclerosis using MR-guided focused ultrasound. Nature Communications, 2019, 10, 4373.	12.8	312
18	Blood-Brain Barrier: Real-time Feedback-controlled Focused Ultrasound Disruption by Using an Acoustic Emissions–based Controller. Radiology, 2012, 263, 96-106.	7.3	308

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19	Targeted delivery of antibodies through the blood–brain barrier by MRI-guided focused ultrasound. Biochemical and Biophysical Research Communications, 2006, 340, 1085-1090.	2.1	305
20	MRI-guided targeted blood-brain barrier disruption with focused ultrasound: Histological findings in rabbits. Ultrasound in Medicine and Biology, 2005, 31, 1527-1537.	1.5	292
21	Focal disruption of the blood–brain barrier due to 260-kHz ultrasound bursts: a method for molecular imaging and targeted drug delivery. Journal of Neurosurgery, 2006, 105, 445-454.	1.6	277
22	Amyloid-β plaque reduction, endogenous antibody delivery and glial activation by brain-targeted, transcranial focused ultrasound. Experimental Neurology, 2013, 248, 16-29.	4.1	265
23	MR-Guided Focused Ultrasound Surgery. Journal of Computer Assisted Tomography, 1992, 16, 956-965.	0.9	259
24	Super-resolution Ultrasound Imaging. Ultrasound in Medicine and Biology, 2020, 46, 865-891.	1.5	253
25	Blood-Brain Barrier Disruption Induced by Focused Ultrasound and Circulating Preformed Microbubbles Appears to Be Characterized by the Mechanical Index. Ultrasound in Medicine and Biology, 2008, 34, 834-840.	1.5	248
26	MR temperature mapping of focused ultrasound surgery. Magnetic Resonance in Medicine, 1994, 31, 628-636.	3.0	246
27	Improved Anti-Tumor Effect of Liposomal Doxorubicin After Targeted Blood-Brain Barrier Disruption by MRI-Guided Focused Ultrasound in Rat Glioma. Ultrasound in Medicine and Biology, 2012, 38, 1716-1725.	1.5	246
28	Uterine Leiomyomas: MR Imaging–guided Focused Ultrasound Surgery—Results of Different Treatment Protocols1. Radiology, 2007, 243, 885-893.	7.3	237
29	Targeted Delivery of Neural Stem Cells to the Brain Using MRI-Guided Focused Ultrasound to Disrupt the Blood-Brain Barrier. PLoS ONE, 2011, 6, e27877.	2.5	234
30	Ultrasound for drug and gene delivery to the brain. Advanced Drug Delivery Reviews, 2008, 60, 1209-1217.	13.7	232
31	Effects of Acoustic Parameters and Ultrasound Contrast Agent Dose on Focused-Ultrasound Induced Blood-Brain Barrier Disruption. Ultrasound in Medicine and Biology, 2008, 34, 930-937.	1.5	228
32	Alzheimer Disease in a Mouse Model: MR Imaging–guided Focused Ultrasound Targeted to the Hippocampus Opens the Blood-Brain Barrier and Improves Pathologic Abnormalities and Behavior. Radiology, 2014, 273, 736-745.	7.3	226
33	Multi-frequency characterization of the speed of sound and attenuation coefficient for longitudinal transmission of freshly excised human skulls. Physics in Medicine and Biology, 2011, 56, 219-250.	3.0	223
34	Progress and problems in the application of focused ultrasound for blood–brain barrier disruption. Ultrasonics, 2008, 48, 279-296.	3.9	219
35	Focused Ultrasound Surgery in Oncology: Overview and Principles. Radiology, 2011, 259, 39-56.	7.3	217
36	Pre-clinical testing of a phased array ultrasound system for MRI-guided noninvasive surgery of the brain—A primate study. European Journal of Radiology, 2006, 59, 149-156.	2.6	211

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37	Applications of focused ultrasound in the brain: from thermoablation to drug delivery. Nature Reviews Neurology, 2021, 17, 7-22.	10.1	211
38	Uterine Leiomyomas: MR Imaging–based Thermometry and Thermal Dosimetry during Focused Ultrasound Thermal Ablation. Radiology, 2006, 240, 263-272.	7.3	207
39	Ultrasound technology for hyperthermia. Ultrasound in Medicine and Biology, 1999, 25, 871-887.	1.5	198
40	MRI-guided focused ultrasound treatments. Ultrasonics, 2010, 50, 221-229.	3.9	193
41	Ultrasound-Responsive Cavitation Nuclei for Therapy and Drug Delivery. Ultrasound in Medicine and Biology, 2020, 46, 1296-1325.	1.5	193
42	Optimization of spoiled gradient-echo phase imaging forin vivo localization of a focused ultrasound beam. Magnetic Resonance in Medicine, 1996, 36, 745-752.	3.0	188
43	Ultrasound Enhanced Delivery of Molecular Imaging and Therapeutic Agents in Alzheimer's Disease Mouse Models. PLoS ONE, 2008, 3, e2175.	2.5	188
44	Focusing of therapeutic ultrasound through a human skull: A numerical study. Journal of the Acoustical Society of America, 1998, 104, 1705-1715.	1.1	185
45	Localized harmonic motion imaging: theory, simulations and experiments. Ultrasound in Medicine and Biology, 2003, 29, 1405-1413.	1.5	181
46	Focused ultrasound-mediated drug delivery through the blood–brain barrier. Expert Review of Neurotherapeutics, 2015, 15, 477-491.	2.8	181
47	A hemisphere array for non-invasive ultrasound brain therapy and surgery. Physics in Medicine and Biology, 2000, 45, 3707-3719.	3.0	174
48	Noninvasive arterial occlusion using MRI-guided focused ultrasound. Ultrasound in Medicine and Biology, 1996, 22, 1071-1077.	1.5	169
49	MRI evaluation of thermal ablation of tumors with focused ultrasound. Journal of Magnetic Resonance Imaging, 1998, 8, 91-100.	3.4	169
50	Acute Inflammatory Response Following Increased Blood-Brain Barrier Permeability Induced by Focused Ultrasound is Dependent on Microbubble Dose. Theranostics, 2017, 7, 3989-4000.	10.0	169
51	Targeted Delivery of Self-Complementary Adeno-Associated Virus Serotype 9 to the Brain, Using Magnetic Resonance Imaging-Guided Focused Ultrasound. Human Gene Therapy, 2012, 23, 1144-1155.	2.7	164
52	Thermal dosimetry of a focused ultrasound beamin vivoby magnetic resonance imaging. Medical Physics, 1999, 26, 2017-2026.	3.0	163
53	Multiphoton Imaging of Ultrasound/Optison Mediated Cerebrovascular Effects in vivo. Journal of Cerebral Blood Flow and Metabolism, 2007, 27, 393-403.	4.3	160
54	Focused Ultrasound Delivers Targeted Immune Cells to Metastatic Brain Tumors. Cancer Research, 2013, 73, 1892-1899.	0.9	160

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55	MRI investigation of the threshold for thermally induced blood-brain barrier disruption and brain tissue damage in the rabbit brain. Magnetic Resonance in Medicine, 2004, 51, 913-923.	3.0	155
56	Microbubble Contrast Agent with Focused Ultrasound to Create Brain Lesions at Low Power Levels: MR Imaging and Histologic Study in Rabbits. Radiology, 2006, 241, 95-106.	7.3	154
57	Uterine Leiomyomas: MR Imaging–guided Focused Ultrasound Surgery—Imaging Predictors of Success. Radiology, 2008, 249, 187-194.	7.3	152
58	Brain arterioles show more active vesicular transport of blood-borne tracer molecules than capillaries and venules after focused ultrasound-evoked opening of the blood-brain barrier. Ultrasound in Medicine and Biology, 2006, 32, 1399-1409.	1.5	149
59	To heat or not to heat: Challenges with clinical translation of thermosensitive liposomes. Journal of Controlled Release, 2017, 249, 63-73.	9.9	143
60	Potential adverse effects of high-intensity focused ultrasound exposure on blood vessels in vivo. Ultrasound in Medicine and Biology, 1996, 22, 193-201.	1.5	136
61	Use of Ultrasound Pulses Combined with Definity for Targeted Blood-Brain Barrier Disruption: A Feasibility Study. Ultrasound in Medicine and Biology, 2007, 33, 584-590.	1.5	136
62	The threshold for brain damage in rabbits induced by bursts of ultrasound in the presence of an ultrasound contrast agent (Optison®). Ultrasound in Medicine and Biology, 2003, 29, 473-481.	1.5	133
63	Focused ultrasound thalamotomy location determines clinical benefits in patients with essential tremor. Brain, 2018, 141, 3405-3414.	7.6	129
64	Temperature Mapping using the water proton chemical shift: A chemical shift selective phase mapping method. Magnetic Resonance in Medicine, 1997, 38, 845-851.	3.0	125
65	The potential of transskull ultrasound therapy and surgery using the maximum available skull surface area. Journal of the Acoustical Society of America, 1999, 105, 2519-2527.	1.1	124
66	Stimulation of Hippocampal Neurogenesis by Transcranial Focused Ultrasound and Microbubbles in Adult Mice. Brain Stimulation, 2014, 7, 304-307.	1.6	122
67	MRI detection of the thermal effects of focused ultrasound on the brain. Ultrasound in Medicine and Biology, 2000, 26, 871-880.	1.5	121
68	Focused ultrasound disruption of the blood-brain barrier: a new frontier for therapeutic delivery in molecular neurooncology. Neurosurgical Focus, 2012, 32, E3.	2.3	118
69	Two-Photon Fluorescence Microscopy Study of Cerebrovascular Dynamics in Ultrasound-Induced Blood—Brain Barrier Opening. Journal of Cerebral Blood Flow and Metabolism, 2011, 31, 1852-1862.	4.3	116
70	Correlation of ultrasound phase with physical skull properties. Ultrasound in Medicine and Biology, 2002, 28, 617-624.	1.5	109
71	The impact of standing wave effects on transcranial focused ultrasound disruption of the blood–brain barrier in a rat model. Physics in Medicine and Biology, 2010, 55, 5251-5267.	3.0	108
72	Three-Dimensional Transcranial Ultrasound Imaging of Microbubble Clouds Using a Sparse Hemispherical Array. IEEE Transactions on Biomedical Engineering, 2014, 61, 1285-1294.	4.2	108

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73	Noninvasive and targeted delivery of therapeutics to the brain using focused ultrasound. Neuropharmacology, 2017, 120, 20-37.	4.1	107
74	Enhanced delivery of gold nanoparticles with therapeutic potential into the brain using MRI-guided focused ultrasound. Nanomedicine: Nanotechnology, Biology, and Medicine, 2012, 8, 1133-1142.	3.3	106
75	Noninvasive and Targeted Drug Delivery to the Brain Using Focused Ultrasound. ACS Chemical Neuroscience, 2013, 4, 519-526.	3.5	106
76	Focused-Ultrasound Disruption of the Blood-Brain Barrier Using Closely-Timed Short Pulses: Influence of Sonication Parameters and Injection Rate. Ultrasound in Medicine and Biology, 2011, 37, 587-594.	1.5	101
77	Drug delivery to the brain by focused ultrasound induced blood–brain barrier disruption: Quantitative evaluation of enhanced permeability of cerebral vasculature using two-photon microscopy. Journal of Controlled Release, 2013, 172, 274-280.	9.9	100
78	Early treatment of HER2-amplified brain tumors with targeted NK-92 cells and focused ultrasound improves survival. Neuro-Oncology, 2016, 18, 974-981.	1.2	100
79	Three-dimensional transcranial microbubble imaging for guiding volumetric ultrasound-mediated blood-brain barrier opening. Theranostics, 2018, 8, 2909-2926.	10.0	100
80	A numerical study of transcranial focused ultrasound beam propagation at low frequency. Physics in Medicine and Biology, 2005, 50, 1821-1836.	3.0	99
81	Brainstem blood brain barrier disruption using focused ultrasound: A demonstration of feasibility and enhanced doxorubicin delivery. Journal of Controlled Release, 2018, 281, 29-41.	9.9	99
82	Key factors that affect sonoporation efficiency in in vitro settings: The importance of standing wave in sonoporation. Biochemical and Biophysical Research Communications, 2007, 359, 860-865.	2.1	98
83	In Vitro and In Vivo High-Intensity Focused Ultrasound Thrombolysis. Investigative Radiology, 2012, 47, 217-225.	6.2	98
84	Image-guided ultrasound phased arrays are a disruptive technology for non-invasive therapy. Physics in Medicine and Biology, 2016, 61, R206-R248.	3.0	98
85	Focused ultrasound for targeted delivery of siRNA and efficient knockdown of Htt expression. Journal of Controlled Release, 2012, 163, 125-129.	9.9	96
86	Acute effects of focused ultrasound-induced increases in blood-brain barrier permeability on rat microvascular transcriptome. Scientific Reports, 2017, 7, 45657.	3.3	96
87	Simultaneous magnetic resonance phase and magnitude temperature maps in muscle. Magnetic Resonance in Medicine, 1996, 35, 309-315.	3.0	95
88	Patterns of Thermal Deposition in the Skull During Transcranial Focused Ultrasound Surgery. IEEE Transactions on Biomedical Engineering, 2004, 51, 1693-1706.	4.2	94
89	Ultrasound Insertion Loss of Rat Parietal Bone Appears to Be Proportional to Animal Mass at Submegahertz Frequencies. Ultrasound in Medicine and Biology, 2011, 37, 1930-1937.	1.5	93
90	Opening the Blood-Brain Barrier with MR Imaging–guided Focused Ultrasound: Preclinical Testing on a Trans–Human Skull Porcine Model. Radiology, 2017, 282, 123-130.	7.3	91

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91	An MRI ompatible system for focused ultrasound experiments in small animal models. Medical Physics, 2009, 36, 1867-1874.	3.0	85
92	Safety and efficacy of focused ultrasound induced blood-brain barrier opening, an integrative review of animal and human studies. Journal of Controlled Release, 2019, 309, 25-36.	9.9	85
93	Temperature monitoring in fat with MRI. Magnetic Resonance in Medicine, 2000, 43, 901-904.	3.0	83
94	Invited. Calibration of water proton chemical shift with temperature for noninvasive temperature imaging during focused ultrasound surgery. Journal of Magnetic Resonance Imaging, 1998, 8, 175-181.	3.4	82
95	MR-guided focused ultrasound enhances delivery of trastuzumab to Her2-positive brain metastases. Science Translational Medicine, 2021, 13, eabj4011.	12.4	82
96	Glymphatics Visualization after Focused Ultrasoundâ€Induced Blood–Brain Barrier Opening in Humans. Annals of Neurology, 2019, 86, 975-980.	5.3	80
97	A Magnetic Resonance Imaging-Compatible, Large-Scale Array for Trans-Skull Ultrasound Surgery and Therapy. Journal of Ultrasound in Medicine, 2005, 24, 1117-1125.	1.7	79
98	Influence of Exposure Time and Pressure Amplitude on Bloodâ^'Brain-Barrier Opening Using Transcranial Ultrasound Exposures. ACS Chemical Neuroscience, 2010, 1, 391-398.	3.5	79
99	Transcranial passive acoustic mapping with hemispherical sparse arrays using CT-based skull-specific aberration corrections: a simulation study. Physics in Medicine and Biology, 2013, 58, 4981-5005.	3.0	79
100	Drug delivery across the blood–brain barrier using focused ultrasound. Expert Opinion on Drug Delivery, 2014, 11, 711-721.	5.0	79
101	High-Intensity Focused Ultrasound (HIFU) for Dissolution of Clots in a Rabbit Model of Embolic Stroke. PLoS ONE, 2012, 7, e42311.	2.5	77
102	Focused ultrasound delivery of Raman nanoparticles across the blood-brain barrier: Potential for targeting experimental brain tumors. Nanomedicine: Nanotechnology, Biology, and Medicine, 2014, 10, e1075-e1087.	3.3	77
103	Simulations of the thermo-acoustic lens effect during focused ultrasound surgery. Journal of the Acoustical Society of America, 2001, 109, 2245-2253.	1.1	75
104	Apoptosis in ultrasound-produced threshold lesions in the rabbit brain. Ultrasound in Medicine and Biology, 2001, 27, 111-117.	1.5	72
105	Focused ultrasound-mediated bbb disruption is associated with an increase in activation of AKT: experimental study in rats. BMC Neurology, 2010, 10, 114.	1.8	72
106	MRI monitoring of the thermal ablation of tissue: Effects of long exposure times. Journal of Magnetic Resonance Imaging, 2001, 13, 421-427.	3.4	70
107	Hyperthermia-mediated doxorubicin release from thermosensitive liposomes using MR-HIFU: Therapeutic effect in rabbit Vx2 tumours. International Journal of Hyperthermia, 2015, 31, 118-133.	2.5	70
108	Ultrasound enhanced drug delivery to the brain and central nervous system. International Journal of Hyperthermia, 2012, 28, 386-396.	2.5	69

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109	Field characterization of therapeutic ultrasound phased arrays through forward and backward planar projection. Journal of the Acoustical Society of America, 2000, 108, 441-446.	1.1	67
110	MR monitoring of focused ultrasonic surgery of renal cortex: Experimental and simulation studies. Journal of Magnetic Resonance Imaging, 1995, 5, 259-266.	3.4	65
111	Thermal effects of focused ultrasound energy on bone tissue. Ultrasound in Medicine and Biology, 2001, 27, 1427-1433.	1.5	65
112	Analysis of focused ultrasound-induced blood–brain barrier permeability in a mouse model of Alzheimer's disease using two-photon microscopy. Journal of Controlled Release, 2014, 192, 243-248.	9.9	65
113	Bloodâ€Brain Barrier Closure Time After Controlled Ultrasoundâ€Induced Opening Is Independent of Opening Volume. Journal of Ultrasound in Medicine, 2017, 36, 475-483.	1.7	65
114	The Usefulness of a Contrast Agent and Gradient-Recalled Acquisition in a Steady-State Imaging Sequence for Magnetic Resonance Imaging-Guided Noninvasive Ultrasound Surgery. Investigative Radiology, 1994, 29, 897-903.	6.2	64
115	Transcranial ultrasound focus reconstruction with phase and amplitude correction. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2005, 52, 1518-1522.	3.0	64
116	Focused ultrasound for blood–brain disruption and delivery of therapeutic molecules into the brain. Expert Opinion on Drug Delivery, 2007, 4, 27-35.	5.0	64
117	Simulations and measurements of transcranial low-frequency ultrasound therapy: skull-base heating and effective area of treatment. Physics in Medicine and Biology, 2011, 56, 4661-4683.	3.0	63
118	MRIgHIFU: A tool for imageâ€guided therapeutics. Journal of Magnetic Resonance Imaging, 2011, 34, 482-493.	3.4	63
119	Mechanism of Porphyrin-Induced Sonodynamic Effect: Possible Role of Hyperthermia. Radiation Research, 2006, 165, 299-306.	1.5	62
120	Focused Ultrasound Hyperthermia Mediated Drug Delivery Using Thermosensitive Liposomes and Visualized With <i>in vivo</i> Two-Photon Microscopy. Theranostics, 2017, 7, 2718-2731.	10.0	62
121	The relevance of skull density ratio in selecting candidates for transcranial MR-guided focused ultrasound. Journal of Neurosurgery, 2020, 132, 1785-1791.	1.6	62
122	Enhanced drug delivery in rabbit VX2 tumours using thermosensitive liposomes and MRI-controlled focused ultrasound hyperthermia. International Journal of Hyperthermia, 2012, 28, 776-787.	2.5	61
123	Focal beam distortion and treatment planning in abdominal focused ultrasound surgery. Medical Physics, 2005, 32, 1270-1280.	3.0	59
124	High-Intensity Focused Ultrasound Sonothrombolysis: The Use of Perfluorocarbon Droplets to Achieve Clot Lysis at Reduced Acoustic Power. Ultrasound in Medicine and Biology, 2014, 40, 2151-2161.	1.5	58
125	Experimental demonstration of passive acoustic imaging in the human skull cavity using CTâ€based aberration corrections. Medical Physics, 2015, 42, 4385-4400.	3.0	58
126	Time course of focused ultrasound effects on β-amyloid plaque pathology in the TgCRND8 mouse model of Alzheimer's disease. Scientific Reports, 2018, 8, 14061.	3.3	58

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127	Focused Ultrasound-Induced Neurogenesis Requires an Increase in Blood-Brain Barrier Permeability. PLoS ONE, 2016, 11, e0159892.	2.5	58
128	A multi-frequency sparse hemispherical ultrasound phased array for microbubble-mediated transcranial therapy and simultaneous cavitation mapping. Physics in Medicine and Biology, 2016, 61, 8476-8501.	3.0	57
129	Investigation of the Safety of Focused Ultrasound-Induced Blood-Brain Barrier Opening in a Natural Canine Model of Aging. Theranostics, 2017, 7, 3573-3584.	10.0	57
130	A PVDF Receiver for Ultrasound Monitoring of Transcranial Focused Ultrasound Therapy. IEEE Transactions on Biomedical Engineering, 2010, 57, 2286-2294.	4.2	56
131	Investigation of Standing-Wave Formation in a Human Skull for a Clinical Prototype of a Large-Aperture, Transcranial MR-Guided Focused Ultrasound (MRgFUS) Phased Array: An Experimental and Simulation Study. IEEE Transactions on Biomedical Engineering, 2012, 59, 435-444.	4.2	56
132	Intracranial Applications of Magnetic Resonance-guided Focused Ultrasound. Neurotherapeutics, 2014, 11, 593-605.	4.4	55
133	Evaluating the safety profile of focused ultrasound and microbubble-mediated treatments to increase blood-brain barrier permeability. Expert Opinion on Drug Delivery, 2019, 16, 129-142.	5.0	54
134	Invited. Brain edema development after MRI-guided focused ultrasound treatment. Journal of Magnetic Resonance Imaging, 1998, 8, 136-142.	3.4	51
135	In Vivo Monitoring of Focused Ultrasound Surgery Using Local Harmonic Motion. Ultrasound in Medicine and Biology, 2009, 35, 65-78.	1.5	50
136	Noninvasive delivery of an αâ€synuclein gene silencing vector with magnetic resonance–guided focused ultrasound. Movement Disorders, 2018, 33, 1567-1579.	3.9	49
137	Focused Ultrasound and Microbubbles-Mediated Drug Delivery to Brain Tumor. Pharmaceutics, 2021, 13, 15.	4.5	49
138	A parametric study of the concentricâ€ring transducer design for MRI guided ultrasound surgery. Journal of the Acoustical Society of America, 1996, 100, 1220-1230.	1.1	48
139	MR-guided Focused Ultrasound Facilitates Sonodynamic Therapy with 5-Aminolevulinic Acid in a Rat Glioma Model. Scientific Reports, 2019, 9, 10465.	3.3	48
140	Clinically approved IVIg delivered to the hippocampus with focused ultrasound promotes neurogenesis in a model of Alzheimer's disease. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 32691-32700.	7.1	48
141	Resting state functional connectivity changes after MR-guided focused ultrasound mediated blood-brain barrier opening in patients with Alzheimer's disease. NeuroImage, 2019, 200, 275-280.	4.2	46
142	Feasibility of Using Lateral Mode Coupling Method for a Large Scale Ultrasound Phased Array for Noninvasive Transcranial Therapy. IEEE Transactions on Biomedical Engineering, 2010, 57, 124-133.	4.2	45
143	Microbubbles and Blood–Brain Barrier Opening: A Numerical Study on Acoustic Emissions and Wall Stress Predictions. IEEE Transactions on Biomedical Engineering, 2015, 62, 1293-1304.	4.2	44
144	Contrast Agent Kinetics in the Rabbit Brain During Exposure to Therapeutic Ultrasound. Ultrasound in Medicine and Biology, 2010, 36, 916-924.	1.5	43

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145	Enhancing Checkpoint Inhibitor Therapy with Ultrasound Stimulated Microbubbles. Ultrasound in Medicine and Biology, 2019, 45, 500-512.	1.5	42
146	Microbubble-Assisted Ultrasound for Drug Delivery in the Brain and Central Nervous System. Advances in Experimental Medicine and Biology, 2016, 880, 293-308.	1.6	41
147	Investigating the effects of dexamethasone on blood-brain barrier permeability and inflammatory response following focused ultrasound and microbubble exposure. Theranostics, 2020, 10, 1604-1618.	10.0	41
148	MRI-guided focused ultrasound enhances drug delivery in experimental diffuse intrinsic pontine glioma. Journal of Controlled Release, 2021, 330, 1034-1045.	9.9	38
149	Design and experimental verification of thin acoustic lenses for the coagulation of large tissue volumes. Physics in Medicine and Biology, 1997, 42, 2341-2354.	3.0	36
150	MRI-Guided Focused Ultrasound for Targeted Delivery of rAAV to the Brain. Methods in Molecular Biology, 2019, 1950, 177-197.	0.9	36
151	Ultrafast three-dimensional microbubble imaging <i>in vivo</i> predicts tissue damage volume distributions during nonthermal brain ablation. Theranostics, 2020, 10, 7211-7230.	10.0	36
152	Simultaneous Intravital Optical and Acoustic Monitoring of Ultrasound-Triggered Nanobubble Generation and Extravasation. Nano Letters, 2020, 20, 4512-4519.	9.1	36
153	MRI-guided ultrasonic heating allows spatial control of exogenous luciferase in canine prostate. Ultrasound in Medicine and Biology, 2005, 31, 965-970.	1.5	34
154	Neutrophil recruitment and leukocyte response following focused ultrasound and microbubble mediated blood-brain barrier treatments. Theranostics, 2021, 11, 1655-1671.	10.0	34
155	Therapeutic Agent Delivery Across the Blood–Brain Barrier Using Focused Ultrasound. Annual Review of Biomedical Engineering, 2021, 23, 89-113.	12.3	34
156	Temperature monitoring with line scan echo planar spectroscopic imaging. Medical Physics, 2001, 28, 346-355.	3.0	33
157	Focused ultrasound as a novel strategy for Alzheimer disease therapeutics. Annals of Neurology, 2017, 81, 611-617.	5.3	33
158	Localized anesthesia of a specific brain region using ultrasound-responsive barbiturate nanodroplets. Theranostics, 2020, 10, 2849-2858.	10.0	33
159	The role of internal reflection in transskull phase distortion. Ultrasonics, 2001, 39, 109-113.	3.9	31
160	Interactions between ultrasound stimulated microbubbles and fibrin clots. Applied Physics Letters, 2013, 103, 053701.	3.3	31
161	The reduction in treatment efficiency at high acoustic powers during <scp>MR</scp> â€guided transcranial focused ultrasound thalamotomy for Essential Tremor. Medical Physics, 2018, 45, 2925-2936.	3.0	31
162	Role of perivascular and meningeal macrophages in outcome following experimental subarachnoid hemorrhage. Journal of Cerebral Blood Flow and Metabolism, 2021, 41, 0271678X2098029.	4.3	29

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163	Ultrasound-sensitive nanodroplets achieve targeted neuromodulation. Journal of Controlled Release, 2021, 332, 30-39.	9.9	29
164	Investigating the efficacy of a combination Aβ-targeted treatment in a mouse model of Alzheimer's disease. Brain Research, 2018, 1678, 138-145.	2.2	28
165	Preliminary Investigation of Focused Ultrasound-Facilitated Drug Delivery for the Treatment of Leptomeningeal Metastases. Scientific Reports, 2018, 8, 9013.	3.3	27
166	Simulation study of the effects of near- and far-field heating during focused ultrasound uterine fibroid ablation using an electronically focused phased array: A theoretical analysis of patient safety. Medical Physics, 2014, 41, 072902.	3.0	26
167	Sub-millimetre precision of drug delivery in the brain from ultrasound-triggered nanodroplets. Journal of Controlled Release, 2021, 338, 731-741.	9.9	26
168	Noninvasive transesophageal cardiac thermal ablation using a 2-D focused, ultrasound phased array: a simulation study. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2006, 53, 1138-1149.	3.0	25
169	Angiogenic response of rat hippocampal vasculature to focused ultrasound-mediated increases in blood-brain barrier permeability. Scientific Reports, 2018, 8, 12178.	3.3	25
170	Advances in acoustic monitoring and control of focused ultrasound-mediated increases in blood-brain barrier permeability. British Journal of Radiology, 2019, 92, 20180601.	2.2	25
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