

Applications of focused ultrasound in the brain: from th

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Citation Report

#	ARTICLE	IF	CITATIONS
1	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
2	Intravenous and Non-invasive Drug Delivery to the Mouse Basal Forebrain Using MRI-guided Focused Ultrasound. Bio-protocol, 2021, 11, e4056.	0.4	3
3	Closed-loop trans-skull ultrasound hyperthermia leads to improved drug delivery from thermosensitive drugs and promotes changes in vascular transport dynamics in brain tumors. Theranostics, 2021, 11, 7276-7293.	10.0	26
4	MR-guided focused ultrasound liquid biopsy enriches circulating biomarkers in patients with brain tumors. Neuro-Oncology, 2021, 23, 1789-1797.	1.2	59
5	Single-cell analysis reveals effective siRNA delivery in brain tumors with microbubble-enhanced ultrasound and cationic nanoparticles. Science Advances, 2021, 7, .	10.3	47
6	Subwavelength Acoustic Vortex Beams Using Self-Demodulation. Physical Review Applied, 2021, 15, .	3.8	8
7	Device profile of exAblate Neuro 4000, the leading system for brain magnetic resonance guided focused ultrasound technology: an overview of its safety and efficacy in the treatment of medically refractory essential tremor. Expert Review of Medical Devices, 2021, 18, 1-9.	2.8	19
8	Photoacoustic Impulse Response of Lipid-Coated Ultrasound Contrast Agents. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2021, 68, 2311-2314.	3.0	2
9	Ultrasound-Responsive Microfluidic Microbubbles for Combination Tumor Treatment. Advanced Therapeutics, 2021, 4, 2100050.	3.2	22
10	Ultrasonic technologies in imaging and drug delivery. Cellular and Molecular Life Sciences, 2021, 78, 6119-6141.	5.4	14
11	Acoustically Detonated Microbubbles Coupled with Low Frequency Insonation: Multiparameter Evaluation of Low Energy Mechanical Ablation. Bioconjugate Chemistry, 2022, 33, 1069-1079.	3.6	15
12	Therapeutic Ultrasound as a Treatment Modality for Physiological and Pathological Ageing Including Alzheimer's Disease. Pharmaceutics, 2021, 13, 1002.	4.5	4
13	Sonodynamic therapy for gliomas. Journal of Neuro-Oncology, 2022, 156, 1-10.	2.9	25
14	Emerging Nano-Carrier Strategies for Brain Tumor Drug Delivery and Considerations for Clinical Translation. Pharmaceutics, 2021, 13, 1193.	4.5	17
15	Combining Low-Dose Radiation Therapy and Magnetic Resonance Guided Focused Ultrasound to Reduce Amyloid- β^2 Deposition in Alzheimer's Disease. Journal of Alzheimer's Disease, 2021, 84, 1-4.	2.6	0
16	Efficient antiglioblastoma therapy in mice through doxorubicin-loaded nanomicelles modified using a novel brain-targeted RVG-15 peptide. Journal of Drug Targeting, 2021, 29, 1016-1028.	4.4	13
17	Focused ultrasound: growth potential and future directions in neurosurgery. Journal of Neuro-Oncology, 2022, 156, 23-32.	2.9	3
18	Localized blood-brain barrier opening in infiltrating gliomas with MRI-guided acoustic emissions-controlled focused ultrasound. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	53

#	ARTICLE	IF	CITATIONS
19	Functional intersections between extracellular vesicles and oncolytic therapies. Trends in Pharmacological Sciences, 2021, 42, 883-896.	8.7	6
20	A review of bioeffects induced by focused ultrasound combined with microbubbles on the neurovascular unit. Journal of Cerebral Blood Flow and Metabolism, 2022, 42, 3-26.	4.3	13
21	Acoustic properties across the human skull. Ultrasonics, 2022, 119, 106591.	3.9	30
22	Recent ultrasound advancements for the manipulation of nanobiomaterials and nanoformulations for drug delivery. Ultrasonics Sonochemistry, 2021, 80, 105805.	8.2	39
23	Towards controlled drug delivery in brain tumors with microbubble-enhanced focused ultrasound. Advanced Drug Delivery Reviews, 2022, 180, 114043.	13.7	41
24	Magnetic Nanoparticle-Mediated Heating for Biomedical Applications. Journal of Heat Transfer, 2022, 144, .	2.1	15
25	Gene Therapeutic Approaches for the Treatment of Mitochondrial Dysfunction in Parkinson's Disease. Genes, 2021, 12, 1840.	2.4	11
26	Finite-Element Modeling of Tissue Responses to Focused Ultrasound With Different Intensities. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-10.	4.7	0
27	Neural Processing Dysfunctions During Fear Learning but Not Reward-Related Processing Characterize Depressed Individuals with High Levels of Repetitive Negative Thinking. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 2022, , .	1.5	2
28	Looking beyond the opioid receptor: A desperate need for new treatments for opioid use disorder. Journal of the Neurological Sciences, 2022, 432, 120094.	0.6	6
30	Present and future of microglial pharmacology. Trends in Pharmacological Sciences, 2022, 43, 669-685.	8.7	35
31	Initial experience with magnetic resonance-guided focused ultrasound stereotactic surgery for central brain lesions in young adults. Journal of Neurosurgery, 2022, 137, 760-767.	1.6	7
32	Awake mouse brain photoacoustic and optical imaging through a transparent ultrasound cranial window. Optics Letters, 2022, 47, 1121.	3.3	12
33	Experimental Demonstration of Trans-Skull Volumetric Passive Acoustic Mapping With the Heterogeneous Angular Spectrum Approach. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2022, 69, 534-542.	3.0	8
34	Non-invasive transcranial ultrasound stimulation for neuromodulation. Clinical Neurophysiology, 2022, 135, 51-73.	1.5	87
35	Transcranial pulse stimulation (TPS) improves depression in AD patients on state-of-the-art treatment. Alzheimer's and Dementia: Translational Research and Clinical Interventions, 2022, 8, e12245.	3.7	19
36	Focused Ultrasound for Pediatric Diseases. Pediatrics, 2022, 149, .	2.1	4
37	Comparison of Transcranial Focused Ultrasound and Transcranial Pulse Stimulation for Neuromodulation: A Computational Study. Neuromodulation, 2022, 25, 606-613.	0.8	5

#	ARTICLE	IF	CITATIONS
38	CAR T Cell Therapy in Primary Brain Tumors: Current Investigations and the Future. <i>Frontiers in Immunology</i> , 2022, 13, 817296.	4.8	35
39	Recent Trend of Ultrasound-Mediated Nanoparticle Delivery for Brain Imaging and Treatment. <i>ACS Applied Materials & Interfaces</i> , 2023, 15, 120-137.	8.0	10
40	Focused ultrasound for the treatment of glioblastoma. <i>Journal of Neuro-Oncology</i> , 2022, 157, 237-247.	2.9	25
41	The roles of thermal and mechanical stress in focused ultrasound-mediated immunomodulation and immunotherapy for central nervous system tumors. <i>Journal of Neuro-Oncology</i> , 2022, 157, 221-236.	2.9	5
42	Effect of Public Interest in Magnetic Resonance Imagingâ€“Guided Focused Ultrasound on Enrolment for Deep Brain Stimulation. <i>Movement Disorders</i> , 2022, 37, 1103-1104.	3.9	1
43	Advances in local therapy for glioblastoma â€” taking the fight to the tumour. <i>Nature Reviews Neurology</i> , 2022, 18, 221-236.	10.1	106
44	Nanoparticle delivery systems for substance use disorder. <i>Neuropsychopharmacology</i> , 2022, , .	5.4	10
45	Synthetic CT skull generation for transcranial MR imagingâ€“guided focused ultrasound interventions with conditional adversarial networks. , 2022, , .		5
46	Effects of transcranial ultrasound stimulation pulsed at 40ÂˆHz on AÎ² plaques and brain rhythms in 5ÂˆFAD mice. <i>Translational Neurodegeneration</i> , 2021, 10, 48.	8.0	17
47	High-resolution fluorescence-guided transcranial ultrasound mapping in the live mouse brain. <i>Science Advances</i> , 2021, 7, eabi5464.	10.3	11
48	Clinical utility of targeted next-generation sequencing assay in IDH-wildtype glioblastoma for therapy decision-making. <i>Neuro-Oncology</i> , 2022, 24, 1140-1149.	1.2	13
49	Ultrasonic thalamic stimulation modulates neural activity of thalamus and motor cortex in the mouse. <i>Journal of Neural Engineering</i> , 2021, 18, 066037.	3.5	9
51	New trends in non-pharmacological approaches for cardiovascular disease: Therapeutic ultrasound. <i>Trends in Cardiovascular Medicine</i> , 2023, 33, 431-440.	4.9	4
52	A 3D printable perfused hydrogel vascular model to assay ultrasound-induced permeability. <i>Biomaterials Science</i> , 2022, 10, 3158-3173.	5.4	3
53	Brain metastases: A Society for Neuro-Oncology (SNO) consensus review on current management and future directions. <i>Neuro-Oncology</i> , 2022, 24, 1613-1646.	1.2	39
54	Alpha-Synuclein Targeting Therapeutics for Parkinson's Disease and Related Synucleinopathies. <i>Frontiers in Neurology</i> , 2022, 13, .	2.4	16
55	Activatable Cancer Sonoâ€“immunotherapy using Semiconducting Polymer Nanobodies. <i>Advanced Materials</i> , 2022, 34, e2203246.	21.0	75
56	Neuropathology of Parkinsonâ€™s disease after focused ultrasound thalamotomy. <i>Npj Parkinson's Disease</i> , 2022, 8, 59.	5.3	5

#	ARTICLE	IF	CITATIONS
57	Human Studies of Transcranial Ultrasound neuromodulation: A systematic review of effectiveness and safety. <i>Brain Stimulation</i> , 2022, 15, 737-746.	1.6	36
58	Ultrasound triggered organic mechanoluminescence materials. <i>Advanced Drug Delivery Reviews</i> , 2022, 186, 114343.	13.7	14
59	Functional Specificity of TPS Brain Stimulation Effects in Patients with Alzheimer's Disease: A Follow-up fMRI Analysis. <i>Neurology and Therapy</i> , 2022, 11, 1391-1398.	3.2	8
60	Low-Intensity Focused Ultrasound Technique in Glioblastoma Multiforme Treatment. <i>Frontiers in Oncology</i> , 0, 12, .	2.8	16
61	Bringing Human Brain Connectomics to Clinical Practice in Psychiatry. <i>Biological Psychiatry</i> , 2023, 93, 386-387.	1.3	10
62	Catalytical nano-immunocomplexes for remote-controlled sono-metabolic checkpoint trimodal cancer therapy. <i>Nature Communications</i> , 2022, 13, .	12.8	76
63	Ultrasound-Mediated Bioeffects in Senescent Mice and Alzheimer's Mouse Models. <i>Brain Sciences</i> , 2022, 12, 775.	2.3	3
64	Enhanced Sonothrombolysis Induced by High-Intensity Focused Acoustic Vortex. <i>Ultrasound in Medicine and Biology</i> , 2022, . .	1.5	6
65	Update in the clinical application of focused ultrasound. <i>Current Opinion in Neurology</i> , 0, Publish Ahead of Print, .	3.6	4
66	European Academy of Neurology/Movement Disorder Society's European Section Guideline on the Treatment of Parkinson's Disease: I. Invasive Therapies. <i>Movement Disorders</i> , 2022, 37, 1360-1374.	3.9	49
67	Therapeutic ultrasound: The future of epilepsy surgery?. <i>Revue Neurologique</i> , 2022, 178, 1055-1065.	1.5	7
68	European Academy of Neurology/Movement Disorder Society's European Section guideline on the treatment of Parkinson's disease: I. Invasive therapies. <i>European Journal of Neurology</i> , 2022, 29, 2580-2595.	3.3	22
69	Specific Tuning Band Structure in Hetero-Semiconductor Nanorods to Match with Reduction of Oxygen Molecules for Low-Intensity Yet Highly Effective Sonodynamic/Hole Therapy of Tumors. <i>Small</i> , 2022, 18, .	10.0	19
70	Site-Specific Considerations on Engineered T Cells for Malignant Gliomas. <i>Biomedicines</i> , 2022, 10, 1738.	3.2	7
71	Perfluorocarbon Nanodroplets as Potential Nanocarriers for Brain Delivery Assisted by Focused Ultrasound-Mediated Blood-Brain Barrier Disruption. <i>Pharmaceutics</i> , 2022, 14, 1498.	4.5	6
72	Editorial: Innovation and resilience in movement disorders: abundance of creative science despite the covid-19 period. <i>Current Opinion in Neurology</i> , 2022, 35, 482-484.	3.6	0
73	Ultrasound-mediated delivery of novel tau-specific monoclonal antibody enhances brain uptake but not therapeutic efficacy. <i>Journal of Controlled Release</i> , 2022, 349, 634-648.	9.9	13
74	Delivery of DNA octahedra enhanced by focused ultrasound with microbubbles for glioma therapy. <i>Journal of Controlled Release</i> , 2022, 350, 158-174.	9.9	5

#	ARTICLE	IF	CITATIONS
75	Surgery procedures in temporal lobe epilepsies. Handbook of Clinical Neurology / Edited By P J Vinken and G W Bruyn, 2022, , 531-556.	1.8	5
76	Preventive and Therapeutic Effects of Low-Intensity Ultrasound Stimulation on Migraine in Rats. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2022, 30, 2332-2340.	4.9	3
77	Sonochemistry-assisted photocontrolled atom transfer radical polymerization enabled by manganese carbonyl. Polymer Chemistry, 2022, 13, 4908-4914.	3.9	10
78	Timeâ€“frequency cross-coupling between cortical low-frequency neuronal calcium oscillations and blood oxygen metabolism evoked by ultrasound stimulation. Cerebral Cortex, 2023, 33, 4665-4676.	2.9	4
79	Safety of Clinical Ultrasound Neuromodulation. Brain Sciences, 2022, 12, 1277.	2.3	6
80	Iron based coupling media (IBCM) for MRIâ€“guided ultrasound surgery. Medical Physics, 0, , .	3.0	2
81	Development of a wireless ultrasonic brain stimulation system for concurrent bilateral neuromodulation in freely moving rodents. Frontiers in Neuroscience, 0, 16, .	2.8	0
83	The cost-effectiveness of unilateral magnetic resonance-guided focused ultrasound in comparison with unilateral deep brain stimulation for the treatment of medically refractory essential tremor in England. British Journal of Radiology, 2022, 95, .	2.2	4
84	Surgical Management of Synucleinopathies. Biomedicines, 2022, 10, 2657.	3.2	2
85	Advancements in drug delivery methods for the treatment of brain disease. Frontiers in Veterinary Science, 0, 9, .	2.2	5
87	Harnessing Ultrasound for Targeting Drug Delivery to the Brain and Breaching the Bloodâ€“Brain Tumour Barrier. Pharmaceutics, 2022, 14, 2231.	4.5	8
88	Numerical and experimental evaluation of lowâ€“intensity transcranial focused ultrasound wave propagation using human skulls for brain neuromodulation. Medical Physics, 2023, 50, 38-49.	3.0	9
90	CNS Delivery of Nucleic Acid Therapeutics: Beyond the Bloodâ€“Brain Barrier and Towards Specific Cellular Targeting. Pharmaceutical Research, 2023, 40, 77-105.	3.5	9
91	Microbubbleâ€“Nanoparticle Complexes for Ultrasound-Enhanced Cargo Delivery. Pharmaceutics, 2022, 14, 2396.	4.5	8
92	Combined use of microbubbles of various sizes and singleâ€“transducer dualâ€“frequency ultrasound for safe and efficient inner ear drug delivery. Bioengineering and Translational Medicine, 2023, 8, .	7.1	2
93	Modulation effect of low-intensity transcranial ultrasound stimulation on REM and NREM sleep. Cerebral Cortex, 2023, 33, 5238-5250.	2.9	1
94	Ultrasoundâ€“mediated delivery of flexibilityâ€“tunable polymer drug conjugates for treating glioblastoma. Bioengineering and Translational Medicine, 2023, 8, .	7.1	3
95	Ultrasonic-induced reversible bloodâ€“brain barrier opening: Safety evaluation into the cellular level. Open Chemistry, 2022, 20, 1327-1336.	1.9	1

#	ARTICLE	IF	CITATIONS
96	PTN-PTPRZ1 signaling axis blocking mediates tumor microenvironment remodeling for enhanced glioblastoma treatment. <i>Journal of Controlled Release</i> , 2023, 353, 63-76.	9.9	8
98	Novel Nano-Drug Delivery System for Brain Tumor Treatment. <i>Cells</i> , 2022, 11, 3761.	4.1	12
100	Modulation effect of mouse hippocampal neural oscillations by closed-loop transcranial ultrasound stimulation. <i>Journal of Neural Engineering</i> , 2022, 19, 066038.	3.5	4
101	Influence of Plastination on Ultrasound Transmission Through the Human Skull. <i>Ultrasound in Medicine and Biology</i> , 2022, , .	1.5	0
102	Realizing Highly Efficient Sonodynamic Bactericidal Capability through the Phononâ€“Electron Coupling Effect Using Twoâ€“Dimensional Catalytic Planar Defects. <i>Advanced Materials</i> , 2023, 35, .	21.0	25
103	Modulation effect of non-invasive transcranial ultrasound stimulation in an ADHD rat model. <i>Journal of Neural Engineering</i> , 2023, 20, 016003.	3.5	2
104	Ultrasound technology and biomaterials for precise drug therapy. <i>Materials Today</i> , 2023, 63, 210-238.	14.2	24
105	Prospective Long-term Follow-up of Focused Ultrasound Unilateral Subthalamotomy for Parkinson Disease. <i>Neurology</i> , 2023, 100, .	1.1	16
106	Unilateral Focused Ultrasound Subthalamotomy for Parkinson Disease. <i>Neurology</i> , 2023, 100, 601-602.	1.1	0
107	Using of MRI-guided focused ultrasound treatment for Parkinsonâ€™s disease tremor. Clinical case and literature review. <i>Russian Neurological Journal</i> , 2023, 27, 56-62.	0.3	0
108	Thermal immuno-nanomedicine in cancer. <i>Nature Reviews Clinical Oncology</i> , 2023, 20, 116-134.	27.6	60
109	Ultrasound-Triggered In Situ Photon Emission for Noninvasive Optogenetics. <i>Journal of the American Chemical Society</i> , 2023, 145, 1097-1107.	13.7	16
110	Bloodâ€“brain barrier opening of the default mode network in Alzheimerâ€™s disease with magnetic resonance-guided focused ultrasound. <i>Brain</i> , 2023, 146, 865-872.	7.6	11
111	Intravascular Sono-Ablation for In-Stent Restenosis Relief: Transducer Development and the In-Vitro Demonstration. <i>IEEE Transactions on Biomedical Engineering</i> , 2023, 70, 2172-2180.	4.2	3
113	Real-Time Intravital Imaging of Acoustic Cluster Therapyâ€“Induced Vascular Effects in the Murine Brain. <i>Ultrasound in Medicine and Biology</i> , 2023, 49, 1212-1226.	1.5	1
114	Safety Profile of Low-Intensity Pulsed Ultrasoundâ€“Induced Bloodâ€“Brain Barrier Opening in Non-epileptic Mice and in a Mouse Model of Mesial Temporal Lobe Epilepsy. <i>Ultrasound in Medicine and Biology</i> , 2023, 49, 1327-1336.	1.5	3
115	Ultrasound-mediated nano drug delivery for treating cancer: Fundamental physics to future directions. <i>Journal of Controlled Release</i> , 2023, 355, 552-578.	9.9	27
116	Low-intensity ultrasound stimulation modulates time-frequency patterns of cerebral blood oxygenation and neurovascular coupling of mouse under peripheral sensory stimulation state. <i>NeuroImage</i> , 2023, 270, 119979.	4.2	2

#	ARTICLE	IF	CITATIONS
117	Ultrasound as a versatile tool for short- and long-term improvement and monitoring of brain function. <i>Neuron</i> , 2023, 111, 1174-1190.	8.1	18
118	Ultrasound-enhanced brain delivery of edaravone provides additive amelioration on disease progression in an ALS mouse model. <i>Brain Stimulation</i> , 2023, 16, 628-641.	1.6	6
119	Ultrasound Neuromodulation as a New Brain Therapy. <i>Advanced Science</i> , 2023, 10, .	11.2	6
120	The role of acoustofluidics and microbubble dynamics for therapeutic applications and drug delivery. <i>Biomicrofluidics</i> , 2023, 17, .	2.4	3
121	The return of the lesion for localization and therapy. <i>Brain</i> , 2023, 146, 3146-3155.	7.6	3
122	High-intensity focused ultrasound for medical therapy. , 2023, , 577-598.		0
123	Cell-based relay delivery strategy in biomedical applications. <i>Advanced Drug Delivery Reviews</i> , 2023, 198, 114871.	13.7	4
124	Roles of non-coding RNAs in the metabolism and pathogenesis of bladder cancer. <i>Human Cell</i> , 2023, 36, 1343-1372.	2.7	2
125	Current and Emerging Systems for Focused Ultrasound-Mediated Blood-Brain Barrier Opening. <i>Ultrasound in Medicine and Biology</i> , 2023, 49, 1479-1490.	1.5	1
126	Evaluating drug delivery enhancement following ultrasound treatment. <i>Lancet Oncology</i> , The, 2023, 24, 420-422.	10.7	0
127	BabelBrain: An Open-Source Application for Prospective Modeling of Transcranial Focused Ultrasound for Neuromodulation Applications. <i>IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2023, 70, 587-599.	3.0	1
128	Acoustic field techniques for cell characterization in health monitoring. , 2023, , 329-353.		1
129	Radioenhancement with the Combination of Docetaxel and Ultrasound Microbubbles: In Vivo Prostate Cancer. <i>Pharmaceutics</i> , 2023, 15, 1468.	4.5	0
130	Diameter-dependent assessment of microvascular leakage following ultrasound-mediated blood-brain barrier opening. <i>IScience</i> , 2023, 26, 106965.	4.1	4
131	Advances in Focused Ultrasound for the Treatment of Brain Tumors. <i>Tomography</i> , 2023, 9, 1094-1109.	1.8	1
132	Highly piezoelectric, biodegradable, and flexible amino acid nanofibers for medical applications. <i>Science Advances</i> , 2023, 9, .	10.3	13
133	Focused ultrasound thalamotomy for tremor treatment impacts the cerebello-thalamo-cortical network. <i>Npj Parkinson's Disease</i> , 2023, 9, .	5.3	3
134	Global sonication of the human intracranial space via a jumbo planar transducer. <i>Ultrasonics</i> , 2023, 134, 107062.	3.9	0

#	ARTICLE	IF	CITATIONS
136	An integrated measure of GABA to characterize post-stroke plasticity. <i>NeuroImage: Clinical</i> , 2023, 39, 103463.	2.7	1
137	Image-guided focused ultrasound-mediated molecular delivery to breast cancer in an animal model. <i>Physics in Medicine and Biology</i> , 0, , .	3.0	0
138	Focused ultrasound for treatment of peripheral brain tumors. , 0, , 107-125.		3
139	Perspective: Focused-Ultrasound Guided Neuropeptide Delivery as a Novel Therapeutic Approach in Psychiatry. <i>Seeds of Science</i> , 0, , .	0.0	0
140	Neuroethical implications of focused ultrasound for neuropsychiatric illness. <i>Brain Stimulation</i> , 2023, 16, 806-814.	1.6	2
141	Selective Activation of Cells by Piezoelectric Molybdenum Disulfide Nanosheets with Focused Ultrasound. <i>ACS Nano</i> , 2023, 17, 9140-9154.	14.6	7
142	Mechanically manipulating glymphatic transport by ultrasound combined with microbubbles. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2023, 120, .	7.1	10
143	Therapeutic applications and technical developments of focused ultrasound for movement disorders. <i>International Review of Movement Disorders</i> , 2023, , 245-296.	0.1	0
145	Applications of Ultrasonic Brain Imaging and Transcranial Ultrasound Therapy in Brain Injury Rehabilitation. <i>Rehabilitation Medicine</i> , 2023, 33, 97-102.	0.1	0
146	Drug delivery breakthrough technologies â€“ A perspective on clinical and societal impact. <i>Journal of Controlled Release</i> , 2023, 360, 335-343.	9.9	0
147	Nanoparticles Mediated the Diagnosis and Therapy of Glioblastoma: Bypass or Cross the Bloodâ€“Brain Barrier. <i>Small</i> , 2023, 19, .	10.0	3
148	Transcranial focused ultrasound in neurosurgery: therapeutic possibilities and experimental studies. <i>Russian Journal of Neurosurgery</i> , 2023, 25, 140-147.	0.2	0
149	Ultrasoundâ€“mediated nanoâ€“sized drug delivery systems for cancer treatment: Multiâ€“scale and multiâ€“physics computational modeling. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2024, 16, .	6.1	6
150	Enhanced thermal ablation via an acoustic vortex with a large focal region. <i>Journal of Applied Physics</i> , 2023, 134, .	2.5	0
151	A Review of Ultrasound Neuromodulation Technologies. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2023, 17, 1084-1096.	4.0	0
153	Anticancer drug delivery by focused ultrasound-mediated blood-brain/tumor barrier disruption for glioma therapy: From benchside to bedside. , 2023, 250, 108518.		2
154	An Overview of Nanotherapeutic Drug Delivery Options for the Management of Glioblastoma. <i>Journal of Nanotheranostics</i> , 2023, 4, 323-345.	3.1	1
155	The future of brain circuit-targeted therapeutics. <i>Neuropsychopharmacology</i> , 2024, 49, 179-188.	5.4	4

#	ARTICLE	IF	CITATIONS
156	Unilateral focused ultrasound subthalamotomy in early Parkinson's disease: a pilot study. <i>Journal of Neurology, Neurosurgery and Psychiatry</i> , 2024, 95, 206-213.	1.9	1
157	Noninvasive disruption of the blood-brain barrier in the marmoset monkey. <i>Communications Biology</i> , 2023, 6, .	4.4	3
158	Comparing Transcranial Direct Current Stimulation (tDCS) with Other Non-Invasive Brain Stimulation (NIBS) in the Treatment of Alzheimer's Disease: A Literature Review. <i>Journal of Medical and Biological Engineering</i> , 2023, 43, 362-375.	1.8	2
159	Protein corona on brain targeted nanocarriers: Challenges and prospects. <i>Advanced Drug Delivery Reviews</i> , 2023, 202, 115114.	13.7	2
160	Inhibition of midfrontal theta with transcranial ultrasound explains greater approach versus withdrawal behavior in humans. <i>Brain Stimulation</i> , 2023, 16, 1278-1288.	1.6	1
161	Influence of focused ultrasound on locoregional drug delivery to the brain: Potential implications for brain tumor therapy. <i>Journal of Controlled Release</i> , 2023, 362, 755-763.	9.9	1
162	Influence of the skull bone and brain tissue on the sound field in transcranial extracorporeal shock wave therapy: an <i>in vivo</i> study. <i>Biomedizinische Technik</i> , 2024, 69, 27-37.	0.8	0
163	Evaluation of synthetically generated computed tomography for use in transcranial focused ultrasound procedures. <i>Journal of Medical Imaging</i> , 2023, 10, .	1.5	2
164	Generating Patient-Specific Acoustic Simulations for Transcranial Focused Ultrasound Procedures Based on Optical Tracking Information. <i>IEEE Open Journal of Ultrasonics, Ferroelectrics, and Frequency Control</i> , 2023, 3, 146-156.	1.4	0
166	Ultrasound-Sensitive Intelligent Nanosystems: A Promising Strategy for the Treatment of Neurological Diseases. <i>Advanced Materials</i> , 0, , .	21.0	1
167	Correction of transcranial acoustic field using transient ultrasound field visualization technique. <i>Optics Letters</i> , 0, , .	3.3	0
168	A simple quantitative model of neuromodulation, Part I: Ion flow through neural ion channels. <i>Journal of the Mechanics and Physics of Solids</i> , 2024, 182, 105457.	4.8	1
169	Transcranial Ultrasonic Neurostimulation. , 2023, , 177-185.		0
170	Using focused ultrasound to modulate microglial structure and function. <i>Frontiers in Cellular Neuroscience</i> , 0, 17, .	3.7	1
171	Blood-brain barrier transporters: An overview of function, dysfunction in Alzheimer's disease and strategies for treatment. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2024, 1870, 166967.	3.8	0
172	Drug Delivery to the Brain: Recent Advances and Unmet Challenges. <i>Pharmaceutics</i> , 2023, 15, 2658.	4.5	1
173	Effects of focused ultrasound in a "clean" mouse model of ultrasonic neuromodulation. <i>IScience</i> , 2023, 26, 108372.	4.1	3
174	Performance of learned pseudo-CT in transcranial ultrasound simulations using fluid and solid skulls. , 2023, , .		0

#	ARTICLE	IF	CITATIONS
175	MR-Guided Focused Ultrasound for Refractory Epilepsy: Where Are We Now?. <i>Journal of Clinical Medicine</i> , 2023, 12, 7070.	2.4	0
177	Guidelines for immunological analyses following focused ultrasound treatment. , 2023, 11, e007455.		0
178	Learning-based Efficient Phase-Amplitude Modulation and Hybrid Control for MRI-guided Focused Ultrasound Treatment. <i>IEEE Robotics and Automation Letters</i> , 2023, , 1-8.	5.1	0
179	Transcranial ultrasound stimulation selectively affects cortical neurovascular coupling across neuronal types and LFP frequency bands. <i>Cerebral Cortex</i> , 0, , .	2.9	0
180	Focused ultrasound combined with radiotherapy for malignant brain tumor: a preclinical and clinical study. <i>Journal of Neuro-Oncology</i> , 2023, 165, 535-545.	2.9	4
182	Advances in Brain Tumor Therapy Based on the Magnetic Nanoparticles. <i>International Journal of Nanomedicine</i> , 0, Volume 18, 7803-7823.	6.7	0
183	Pre-clinical indications of brain stimulation treatments for non-affective psychiatric disorders, a status update. <i>Translational Psychiatry</i> , 2023, 13, .	4.8	0
184	Harnessing immunotherapy for brain metastases: insights into tumorâ€“brain microenvironment interactions and emerging treatment modalities. <i>Journal of Hematology and Oncology</i> , 2023, 16, .	17.0	2
186	MR Thermometry during Transcranial MR Imagingâ€“Guided Focused Ultrasound Procedures: A Review. <i>American Journal of Neuroradiology</i> , 2024, 45, 1-8.	2.4	1
187	Ultrasound robotics for precision therapy. <i>Advanced Drug Delivery Reviews</i> , 2024, 205, 115164.	13.7	0
188	Protocol to assess extravasation of fluorescent molecules in mice after ultrasound-mediated blood-brain barrier opening. <i>STAR Protocols</i> , 2024, 5, 102770.	1.2	0
189	Shedding light on ultrasound in action: Optical and optoacoustic monitoring of ultrasound brain interventions. <i>Advanced Drug Delivery Reviews</i> , 2024, 205, 115177.	13.7	0
190	Stimuliâ€“Responsive Nanocarriers for Transcytosisâ€“Based Cancer Drug Delivery. <i>Advanced NanoBiomed Research</i> , 2024, 4, .	3.6	0
191	Sonogenetics for Monitoring and Modulating Biomolecular Function by Ultrasound. <i>Angewandte Chemie - International Edition</i> , 2024, 63, .	13.8	0
192	Sonogenetics for Monitoring and Modulating Biomolecular Function by Ultrasound. <i>Angewandte Chemie</i> , 2024, 136, .	2.0	0
193	Controlled noninvasive modulation of deep brain regions in humans. , 2024, 3, .		1
194	Focused ultrasound therapy: Back to the future. <i>Parkinsonism and Related Disorders</i> , 2024, 121, 106023.	2.2	0
195	Focused ultrasound-assisted delivery of immunomodulating agents in brain cancer. <i>Journal of Controlled Release</i> , 2024, 367, 283-299.	9.9	0

#	ARTICLE	IF	CITATIONS
196	Evaluation the Effect of Sonodynamic Therapy with 5-Aminolevulinic Acid and Sodium Fluorescein by Preclinical Animal Study. <i>Cancers</i> , 2024, 16, 253.	3.7	0
197	Treating the Brain With Focused Ultrasound. <i>IEEE Pulse</i> , 2023, 14, 18-22.	0.3	0
198	Antitumor effects of natural molecules in the brain: a nanotechnology-based approach. , 2024, , 1989-2013.		0
199	Recent Advances in Metal-Hydrate-Based Disease Treatment. <i>ACS Applied Materials & Interfaces</i> , 2024, 16, 5355-5367.	8.0	0
200	FPGA-Controlled High-Power Driving Design for High Intensity Focused Ultrasound Application. , 2023, , ,		0
201	From concept to early clinical trials: 30 years of microbubble-based ultrasound-mediated drug delivery research. <i>Advanced Drug Delivery Reviews</i> , 2024, 206, 115199.	13.7	1
202	Boosting Sono-immunotherapy of Prostate Carcinoma through Amplifying Domino-Effect of Mitochondrial Oxidative Stress Using Biodegradable Cascade-Targeting Nanocomposites. <i>ACS Nano</i> , 0, , ,	14.6	0
203	Multimodal neuro-nanotechnology: Challenging the existing paradigm in glioblastoma therapy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2024, 121, .	7.1	0
204	MR-guided focused ultrasound in movement disorders and beyond: Lessons learned and new frontiers. <i>Parkinsonism and Related Disorders</i> , 2024, 122, 106040.	2.2	0
205	Ultrasound and antibodies “ a potentially powerful combination for Alzheimer disease therapy. <i>Nature Reviews Neurology</i> , 2024, 20, 257-258.	10.1	0
206	Exploring the dynamics of adult Axin2 cell lineage integration into dentate gyrus granule neurons. <i>Frontiers in Neuroscience</i> , 0, 18, .	2.8	0
207	Drug Delivery Strategies in Parkinson’s Disease. , 2023, , 305-324.		0
208	Miniaturized therapeutic systems for ultrasound-modulated drug delivery to the central and peripheral nervous system. <i>Advanced Drug Delivery Reviews</i> , 2024, 208, 115275.	13.7	0
209	Optimization of 3D Passive Acoustic Mapping Image Metrics: Impact of Sensor Geometry and Beamforming Approach. <i>Sensors</i> , 2024, 24, 1868.	3.8	0
210	Scanning ultrasound-mediated memory and functional improvements do not require amyloid- β^2 reduction. <i>Molecular Psychiatry</i> , 0, , .	7.9	0
211	Noninvasive intervention by transcranial ultrasound stimulation: Modulation of neural circuits and its clinical perspectives. <i>Psychiatry and Clinical Neurosciences</i> , 2024, 78, 273-281.	1.8	0