

Select Recent Publications of Brainmodulation for Neurorehabilitation

ID	TYPE*	TOOL	DISEASE	CITATION
1	2	rTMS	SCI	Brihmat, N., Allexandre, D., Saleh, S. et al. Stimulation Parameters Used During Repetitive Transcranial Magnetic Stimulation for Motor Recovery and Corticospinal Excitability Modulation in SCI: A Scoping Review. <i>Front Hum Neurosci</i> 16, 800349, doi:10.3389/fnhum.2022.800349 (2022).
2	1	LIFU	Disorder of Consciousness	Cain, J. A., Spivak, N. M., Coetzee, J. P. et al. Ultrasonic Deep Brain Neuromodulation in Acute Disorders of Consciousness: A Proof-of-Concept. <i>Brain Sci</i> 12, doi:10.3390/brainsci12040428 (2022).
3	1	XNKQ acupuncture	Stroke	Guo, X., Zhang, X., Sun, M. et al. Modulation of Brain Rhythm Oscillations by Xingnao Kaiqiao Acupuncture Correlates with Stroke Recovery: A Randomized Control Trial. <i>J Integr Complement Med</i> 28, 436-444, doi:10.1089/jicm.2021.0264 (2022).
4	1	Closed-loop FES	Gait rehab	Hayami, N., Williams, H. E., Shibagaki, K. et al. Development and Validation of a Closed-Loop Functional Electrical Stimulation-Based Controller for Gait Rehabilitation Using a Finite State Machine Model. <i>IEEE Trans Neural Syst Rehabil Eng</i> 30, 1642-1651, doi:10.1109/TNSRE.2022.3183571 (2022).
5	2	tDCS, rTMS	Substance use disorders	Johnstone, S., Sorkhou, M., Al-Saghir, N. et al. Neuromodulation to Treat Substance Use Disorders in People With Schizophrenia and Other Psychoses: A Systematic Review. <i>Front Psychiatry</i> 13, 793938, doi:10.3389/fpsy.2022.793938 (2022).
6	2	VNS	Stroke	Keser, Z. & Feng, W. Vagus Nerve Stimulation for Stroke Motor Recovery-What Is Next? <i>Transl Stroke Res</i> , doi:10.1007/s12975-022-01041-4 (2022).
7	1	tDCS	Stroke	Muffel, T., Shih, P. C., Kalloch, B. et al. Differential effects of anodal and dual tDCS on sensorimotor functions in chronic hemiparetic stroke patients. <i>Brain Stimul</i> 15, 509-522, doi:10.1016/j.brs.2022.02.013 (2022).
8	1	tvDCS	SCI	Naro, A., Billeri, L., Balletta, T. et al. Finding the Way to Improve Motor Recovery of Patients with Spinal Cord Lesions: A Case-Control Pilot Study on a Novel Neuromodulation Approach. <i>Brain Sci</i> 12, doi:10.3390/brainsci12010119 (2022).
9	2	rs-tDCS	various diseases	Pilloni, G., Vogel-Eyny, A., Lustberg, M. et al. Tolerability and feasibility of at-home remotely supervised transcranial direct current stimulation (RS-tDCS): Single-center evidence from 6,779 sessions. <i>Brain Stimul</i> 15, 707-716, doi:10.1016/j.brs.2022.04.014 (2022).
10	2	tsDCS	SCI	Rahman, M. A., Tharu, N. S., Gustin, S. M. et al. Trans-Spinal Electrical Stimulation Therapy for Functional Rehabilitation after Spinal Cord Injury: Review. <i>J Clin Med</i> 11, doi:10.3390/jcm11061550 (2022).
11	2	TUS	various diseases	Sarica, C., Nankoo, J. F., Fomenko, A. et al. Human Studies of Transcranial Ultrasound neuromodulation: A systematic review of effectiveness and safety. <i>Brain Stimul</i> 15, 737-746, doi:10.1016/j.brs.2022.05.002 (2022).
12	1	rTMS	Stroke	Starosta, M., Cichon, N., Saluk-Bijak, J. & Miller, E. Benefits from Repetitive Transcranial Magnetic Stimulation in Post-Stroke Rehabilitation. <i>J Clin Med</i> 11, doi:10.3390/jcm11082149 (2022).
13	1	TUS.	Stroke	Wang, Y., Li, F., He, M. J. & Chen, S. J. The effects and mechanisms of transcranial ultrasound stimulation combined with cognitive rehabilitation on post-stroke cognitive impairment. <i>Neurol Sci</i> 43, 4315-4321, doi:10.1007/s10072-022-05906-2 (2022).
14	1	Cogn. Rehab. + tDCS	PSNP	Wysokinski, A., Magierska, J. & Magierski, R. No Cognitive Effects of Computer-Assisted Cognitive Rehabilitation Augmented With Transcranial Direct Current Stimulation in a Patient With Progressive Supranuclear Palsy. <i>J ECT</i> , doi:10.1097/YCT.0000000000000845 (2022).
15	1	Cerebellar TBS	Aphasia	Zheng, K., Chen, M., Shen, Y. et al. Cerebellar Continuous Theta Burst Stimulation for Aphasia Rehabilitation: Study Protocol for a Randomized Controlled Trial. <i>Front Aging Neurosci</i> 14, 909733, doi:10.3389/fnagi.2022.909733 (2022).
16	1	TUS	Stroke	Zhu, S., Meng, B., Jiang, J. et al. The Updated Role of Transcranial Ultrasound Neuromodulation in Ischemic Stroke: From Clinical and Basic Research. <i>Front Cell Neurosci</i> 16, 839023, doi:10.3389/fncel.2022.839023 (2022).
17	1	rTMS	Aphasia	Zumbansen, A., Kneifel, H., Lazzouni, L. et al. Differential Effects of Speech and Language Therapy and rTMS in Chronic Versus Subacute Post-stroke Aphasia: Results of the NORTHSTAR-CA Trial. <i>Neurorehabil Neural Repair</i> 36, 306-316, doi:10.1177/15459683211065448 (2022).

* 1 = Experimental, 2 = Review