Zhi-De Deng

List of Publications by Year
in descending order

75 papers	3,403 citations	279798 23 h-index	168389 53 g-index
93 all docs	93 docs citations	93 times ranked	3319 citing authors

#	Article	IF	Citations
1	Continuous Theta-Burst Stimulation to the Right Dorsolateral Prefrontal Cortex May Increase Potentiated Startle in Healthy Individuals. Biological Psychiatry Global Open Science, 2023, 3, 470-479.	2.2	5
2	Longitudinal Neurocognitive Effects of Combined Electroconvulsive Therapy (ECT) and Pharmacotherapy in Major Depressive Disorder in Older Adults: Phase 2 of the PRIDE Study. American Journal of Geriatric Psychiatry, 2022, 30, 15-28.	1.2	18
3	Proof of concept study to develop a novel connectivity-based electric-field modelling approach for individualized targeting of transcranial magnetic stimulation treatment. Neuropsychopharmacology, 2022, 47, 588-598.	5.4	13
4	Noninvasive neuromodulation of the prefrontal cortex in mental health disorders. Neuropsychopharmacology, 2022, 47, 361-372.	5.4	11
5	Electroconvulsive therapy, electric field, neuroplasticity, and clinical outcomes. Molecular Psychiatry, 2022, 27, 1676-1682.	7.9	28
6	Using diffusion tensor imaging to effectively target TMS to deep brain structures. NeuroImage, 2022, 249, 118863.	4.2	19
7	Ictal Theta Power as an Electroconvulsive Therapy Safety Biomarker. Journal of ECT, 2022, 38, 88-94.	0.6	7
8	Angle-tuned coils: attractive building blocks for TMS with improved depth-spread performance. Journal of Neural Engineering, 2022, 19, 026059.	3.5	8
9	A study protocol for an ongoing multi-arm, randomized, double-blind, sham-controlled clinical trial with digital features, using portable transcranial electrical stimulation and internet-based behavioral therapy for major depression disorders: The PSYLECT study. Expert Review of Neurotherapeutics, 2022, 22, 513-523.	2.8	5
10	The kynurenine pathway and bipolar disorder: intersection of the monoaminergic and glutamatergic systems and immune response. Molecular Psychiatry, 2021, 26, 4085-4095.	7.9	48
11	Association between tDCS computational modeling and clinical outcomes in depression: data from the ELECT-TDCS trial. European Archives of Psychiatry and Clinical Neuroscience, 2021, 271, 101-110.	3.2	35
12	Electric field strength induced by electroconvulsive therapy is associated with clinical outcome. NeuroImage: Clinical, 2021, 30, 102581.	2.7	21
13	Biophysical mechanisms of electroconvulsive therapy-induced volume expansion in the medial temporal lobe: A longitudinal inÂvivo human imaging study. Brain Stimulation, 2021, 14, 1038-1047.	1.6	14
14	Neurocognitive Effects of Combined Electroconvulsive Therapy (ECT) and Venlafaxine in Geriatric Depression: Phase 1 of the PRIDE Study. American Journal of Geriatric Psychiatry, 2020, 28, 304-316.	1.2	28
15	Device-Based Modulation of Neurocircuits as a Therapeutic for Psychiatric Disorders. Annual Review of Pharmacology and Toxicology, 2020, 60, 591-614.	9.4	29
16	Mechanistic link between right prefrontal cortical activity and anxious arousal revealed using transcranial magnetic stimulation in healthy subjects. Neuropsychopharmacology, 2020, 45, 694-702.	5.4	28
17	A generalized workflow for conducting electric fieldâ€“optimized, fMRI-guided, transcranial magnetic stimulation. Nature Protocols, 2020, 15, 3595-3614.	12.0	36
18	Using Mnemonic Similarity Task to Assess Medial Temporal Lobe Function: A Magnetoencephalography Study. Biological Psychiatry, 2020, 87, S237-S238.	1.3	0

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19	The Effect of Electric Field on the Human Brain. Biological Psychiatry, 2020, 87, S231.	1.3	0
20	Factor Structure of the Hamilton Depression Rating Scale During Electroconvulsive Therapy and Magnetic Seizure Therapy in the Treatment of Major Depression. Biological Psychiatry, 2020, 87, S288.	1.3	0
21	Measuring the Effect of Transcranial Direct Current Stimulation (tDCS) on Large-Scale Brain Networks With Simultaneous Functional Magnetic Resonance Imaging (fMRI). Biological Psychiatry, 2020, 87, S412.	1.3	2
22	Neural and Psychological Predictors of Cognitive Enhancement and Impairment from Neurostimulation. Advanced Science, 2020, 7, 1902863.	11.2	12
23	Low-frequency parietal repetitive transcranial magnetic stimulation reduces fear and anxiety. Translational Psychiatry, 2020, 10, 68.	4.8	26
24	Transcranial Direct Current Stimulation Applied to the Dorsolateral and Ventromedial Prefrontal Cortices in Smokers Modifies Cognitive Circuits Implicated in the Nicotine Withdrawal Syndrome. Biological Psychiatry: Cognitive Neuroscience and Neuroimaging, 2020, 5, 448-460.	1.5	8
25	Utilizing transcranial direct current stimulation to enhance laparoscopic technical skills training: A randomized controlled trial. Brain Stimulation, 2020, 13, 863-872.	1.6	21
26	Precision non-implantable neuromodulation therapies: a perspective for the depressed brain. Revista Brasileira De Psiquiatria, 2020, 42, 403-419.	1.7	19
27	Not So Fast. Journal of Clinical Psychiatry, 2020, 81, .	2.2	6
28	Statistical Model of Motor-Evoked Potentials. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1539-1545.	4.9	26
29	S112. A Spectral Method for Determining Cortical Silent Period Induced by Transcranial Magnetic Stimulation. Biological Psychiatry, 2019, 85, S340-S341.	1.3	0
30	Neural circuit repair by low-intensity magnetic stimulation requires cellular magnetoreceptors and specific stimulation patterns. Science Advances, 2019, 5, eaav9847.	10.3	47
31	Effects of online repetitive transcranial magnetic stimulation (rTMS) on cognitive processing: A meta-analysis and recommendations for future studies. Neuroscience and Biobehavioral Reviews, 2019, 107, 47-58.	6.1	83
32	Modulation of Resting Connectivity Between the Mesial Frontal Cortex and Basal Ganglia. Frontiers in Neurology, 2019, 10, 587.	2.4	11
33	Magnetic seizure therapy: Towards personalized seizure therapy for major depression. Personalized Medicine in Psychiatry, 2019, 17-18, 37-42.	0.1	13
34	A double-blind pilot dosing study of low field magnetic stimulation (LFMS) for treatment-resistant depression (TRD). Journal of Affective Disorders, 2019, 249, 286-293.	4.1	12
35	161. The Relationship Among Electric-Field Distributions, Neuroimaging Findings and Clinical Outcomes in ECT. Biological Psychiatry, 2019, 85, S67.	1.3	0
36	T15. Repetitive Transcranial Magnetic Stimulation Reveals a Causal Link Between Right dlPFC Activity and Anxiety Expression. Biological Psychiatry, 2019, 85, S135.	1.3	0

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37	Electric Field Modeling for Transcranial Magnetic Stimulation and Electroconvulsive Therapy. , 2019, , 75-84.		9
38	Electric field causes volumetric changes in the human brain. ELife, 2019, 8, .	6.0	57
39	T176. Controllability of Structural Brain Networks in Depressed Patients Receiving Repetitive Transcranial Magnetic Stimulation. Biological Psychiatry, 2018, 83, S196.	1.3	1
40	Rigor and reproducibility in research with transcranial electrical stimulation: An NIMH-sponsored workshop. Brain Stimulation, 2018, 11, 465-480.	1.6	144
41	Redesigning existing transcranial magnetic stimulation coils to reduce energy: application to low field magnetic stimulation. Journal of Neural Engineering, 2018, 15, 036022.	3.5	33
42	F171. Ketamine Modulates Kynurenine Pathway in Mood Disorders: A Longitudinal Structural Equation Model. Biological Psychiatry, 2018, 83, S304-S305.	1.3	0
43	High-frequency repetitive TMS for suicidal ideation in adolescents with depression. Journal of Affective Disorders, 2018, 239, 282-290.	4.1	58
44	599. Cortical Excitability in Patients with Treatment Resistant Depression. Biological Psychiatry, 2017, 81, S242-S243.	1.3	0
45	The development and modelling of devices and paradigms for transcranial magnetic stimulation. International Review of Psychiatry, 2017, 29, 115-145.	2.8	71
46	Electric field characteristics of low-field synchronized transcranial magnetic stimulation (sTMS). , 2017, 2017, 1445-1448.		3
47	In vitro Magnetic Stimulation: A Simple Stimulation Device to Deliver Defined Low Intensity Electromagnetic Fields. Frontiers in Neural Circuits, 2016, 10, 85.	2.8	25
48	Brain network properties in depressed patients receiving seizure therapy: A graph theoretical analysis of peri-treatment resting EEG. , 2015, 2015, 2203-6.		12
49	On the characterization of coils for deep transcranial magnetic stimulation. Clinical Neurophysiology, 2015, 126, 1456-1457.	1.5	5
50	On the stimulation depth of transcranial magnetic stimulation coils. Clinical Neurophysiology, 2015, 126, 843-844.	1.5	4
51	Effect of Anatomical Variability on Electric Field Characteristics of Electroconvulsive Therapy and Magnetic Seizure Therapy: A Parametric Modeling Study. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2015, 23, 22-31.	4.9	44
52	Neuromodulation for mood and memory: from the engineering bench to the patient bedside. Current Opinion in Neurobiology, 2015, 30, 38-43.	4.2	18
53	Multifactorial Determinants of the Neurocognitive Effects of Electroconvulsive Therapy. Journal of ECT, 2014, 30, 165-176.	0.6	98
54	Simultaneous transcranial magnetic stimulation and single-neuron recording in alert non-human primates. Nature Neuroscience, 2014, 17, 1130-1136.	14.8	123

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55	Coil design considerations for deep transcranial magnetic stimulation. Clinical Neurophysiology, 2014, 125, 1202-1212.	1.5	222
56	Electric field depthâ€“focality tradeoff in transcranial magnetic stimulation: Simulation comparison of 50 coil designs. Brain Stimulation, 2013, 6, 1-13.	1.6	771
57	Controlling Stimulation Strength and Focality in Electroconvulsive Therapy via Current Amplitude and Electrode Size and Spacing. Journal of ECT, 2013, 29, 325-335.	0.6	14
58	Topography of seizures induced by electroconvulsive therapy and magnetic seizure therapy. , 2013, , .		2
59	Extended Remediation of Sleep Deprived-Induced Working Memory Deficits Using fMRI-guided Transcranial Magnetic Stimulation. Sleep, 2013, 36, 857-871.	1.1	57
60	Controlling Stimulation Strength and Focality in Electroconvulsive Therapy via Current Amplitude and Electrode Size and Spacing. Journal of ECT, 2013, 29, 321-331.	0.6	31
61	Regional electric field induced by electroconvulsive therapy in a realistic finite element head model: Influence of white matter anisotropic conductivity. NeuroImage, 2012, 59, 2110-2123.	4.2	98
62	Transcranial magnetic stimulation coil with electronically switchable active and sham modes. , 2011, 2011, 1993-6.		8
63	Influence of white matter conductivity anisotropy on electric field strength induced by electroconvulsive therapy. , 2011, 2011, 5473-6.		7
64	Electric field strength and focality in electroconvulsive therapy and magnetic seizure therapy: a finite element simulation study. Journal of Neural Engineering, 2011, 8, 016007.	3.5	152
65	Electroconvulsive Therapy Stimulus Parameters. Journal of ECT, 2010, 26, 159-174.	0.6	163
66	Regional electric field induced by electroconvulsive therapy: A finite element simulation study. , 2010, 2010, 2045-8.		14
67	Electroconvulsive therapy in the presence of deep brain stimulation implants: Electric field effects. , 2010, 2010, 2049-52.		5
68	Transcranial magnetic stimulation in the presence of deep brain stimulation implants: Induced electrode currents. , 2010, 2010, 6821-4.		13
69	Effect of anatomical variability on neural stimulation strength and focality in electroconvulsive therapy (ECT) and magnetic seizure therapy (MST). , 2009, 2009, 682-8.		27
70	Coil design considerations for deep-brain transcranial magnetic stimulation (dTMS). , 2008, 2008, 5675-9.		41
71	Analysis of First-Derivative Based QRS Detection Algorithms. IEEE Transactions on Biomedical Engineering, 2008, 55, 478-484.	4.2	345
72	Heart Rate Variability in Pediatric Obstructive Sleep Apnea. , 2006, 2006, 3565-8.		27

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73	Quantitative Analysis of QRS Detection Algorithms Based on the First Derivative of the ECG. , 2006, 2006, 1788-91.		26
74	Heart Rate Variability in Pediatric Obstructive Sleep Apnea. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
75	Application of Non-Invasive Brain Stimulation in Psychophysiology. , 0, , 116-150.		5