

PUBLICATIONS AND SCIENTIFIC REFERENCES

- PSYCHIATRY Dell'Osso B, Dobrea C, Arici C, Benatti B, Ferrucci R, Vergari M, Priori A, Altamura AC. Augmentative transcranial direct current stimulation (tDCS) in poor responder depressed patients: a follow-up study. *CNS Spectr.* 2014 Aug;19(4):347-54. doi: 10.1017/S1092852913000497. Epub 2013 Aug 20. PubMed PMID: 23962405.
- Ferrucci R, Bortolomasi M, Vergari M, Tadini L, Salvoro B, Giacomuzzi M, Barbieri S, Priori A. Transcranial direct current stimulation in severe, drug-resistant major depression. *J Affect Disord.* 2009 Nov;118(1-3):215-9. doi: 10.1016/j.jad.2009.02.015. Epub 2009 Mar 16. PubMed PMID: 19286265.
- Brunoni AR, Ferrucci R, Bortolomasi M, Scelzo E, Boggio PS, Fregni F, Dell'Osso B, Giacomuzzi M, Altamura AC, Priori A. Interactions between transcranial direct current stimulation (tDCS) and pharmacological interventions in the Major Depressive Episode: findings from a naturalistic study. *Eur Psychiatry.* 2013 Aug;28(6):356-61. doi: 10.1016/j.eurpsy.2012.09.001. Epub 2012 Nov 23. PubMed PMID: 23182847.
- Dell'Osso B, Zanoni S, Ferrucci R, Vergari M, Castellano F, D'Urso N, Dobrea C, Benatti B, Arici C, Priori A, Altamura AC. Transcranial direct current stimulation for the outpatient treatment of poor-responder depressed patients. *Eur Psychiatry.* 2012 Oct;27(7):513-7. doi: 10.1016/j.eurpsy.2011.02.008. Epub 2011 May 31. PMID: 21621982
- Ferrucci, R., Bortolomasi, M., Brunoni, A., Vergari, M., Tadini, L., Giacomuzzi, M., Priori, A. Comparative benefits of transcranial direct current stimulation (TDCS) treatment in patients with mild/moderate vs. severe depression (2009) *Clinical Neuropsychiatry*, 6 (6), pp. 246-251.

Newronika s.r.l.

newronika.com
info@newronika.com

OPERATIVE LABS

via Milano, 150
20093 - Cologno Monzese (MI) - I
T. +39 - 02 84 10 93 81
F. +39 - 02 92 87 84 62

PUBLICATIONS AND SCIENTIFIC REFERENCES

- NEUROLOGY Ferrucci R, Mameli F, Ruggiero F, Priori A. Transcranial direct current stimulation as treatment for Parkinson's disease and other movement disorders Basal Ganglia, Volume 6, Issue 1, March 2016, Pages 53-61
- Marceglia S, Mrakic-Sposta S, Rosa M, Ferrucci R, Mameli F, Vergari M, Arlotti M, Ruggiero F, Scarpini E, Galimberti D, Barbieri S, Priori A. Transcranial Direct Current Stimulation Modulates Cortical Neuronal Activity in Alzheimer's Disease. *Front Neurosci*. 2016 Mar 31;10:134. doi: 10.3389/fnins.2016.00134. eCollection 2016. PubMed PMID: 27065792; PubMed Central PMCID: PMC4814712.
- Ferrucci R, Cortese F, Bianchi M, Pittera D, Turrone R, Bocci T, Borroni B, Vergari M, Cogiamanian F, Ardolino G, Di Fonzo A, Padovani A, Priori A. Cerebellar and Motor Cortical Transcranial Stimulation Decrease Levodopa-Induced Dyskinesias in Parkinson's Disease. *Cerebellum*. 2016 Feb;15(1):43-7. doi: 10.1007/s12311-015-0737-x. PubMed PMID: 26542731.
- Ferrucci R, Vergari M, Cogiamanian F, Bocci T, Ciocca M, Tomasini E, De Riz M, Scarpini E, Priori A. Transcranial direct current stimulation (tDCS) for fatigue in multiple sclerosis. *NeuroRehabilitation*. 2014;34(1):121-7. doi: 10.3233/NRE-131019. PubMed PMID: 24284464.
- Monti A, Cogiamanian F, Marceglia S, Ferrucci R, Mameli F, Mrakic-Sposta S, Vergari M, Zago S, Priori A. Improved naming after transcranial direct current stimulation in aphasia. *J Neurol Neurosurg Psychiatry*. 2008 Apr;79(4):451-3. Epub 2007 Dec 20. PubMed PMID: 18096677.
- Ferrucci R, Mameli F, Guidi I, Mrakic-Sposta S, Vergari M, Marceglia S, Cogiamanian F, Barbieri S, Scarpini E, Priori A. Transcranial direct current stimulation improves recognition memory in Alzheimer disease. *Neurology*. 2008 Aug 12;71(7):493-8. doi: 10.1212/01.wnl.0000317060.43722.a3. Epub 2008 Jun 4. PubMed PMID: 18525028.
- Mrakic-Sposta S, Marceglia S, Mameli F, Dilena R, Tadini L, Priori A. Transcranial direct current stimulation in two patients with Tourette syndrome. *Mov Disord*. 2008 Nov 15;23(15):2259-61. doi: 10.1002/mds.22292. PubMed PMID: 18785641.
- Boggio PS, Ferrucci R, Mameli F, Martins D, Martins O, Vergari M, Tadini L, Scarpini E, Fregni F, Priori A. Prolonged visual memory enhancement after direct current stimulation in Alzheimer's disease. *Brain Stimul*. 2012 Jul;5(3):223-30. doi: 10.1016/j.brs.2011.06.006. Epub 2011 Jul 27. PubMed PMID: 21840288.
- Monti A, Ferrucci R, Fumagalli M, Mameli F, Cogiamanian F, Ardolino G, Priori A, Transcranial direct current stimulation (tDCS) and language. *J Neurol Neurosurg Psychiatry*. 2013 Aug;84(8):832-42. doi: 10.1136/jnnp-2012-302825. Epub 2012 Nov 8. Review. PubMed PMID: 23138766; PubMed Central PMCID: PMC3717599.

Newronika s.r.l.
newronika.com
info@newronika.com

OPERATIVE LABS

via Milano, 150
20093 - Cologno Monzese (MI) - I
T. +39 - 02 84 10 93 81
F. +39 - 02 92 87 84 62

PUBLICATIONS AND SCIENTIFIC REFERENCES

MODELLING
with Politecnico of Milano

Parazzini M, Fiocchi S, Liorni I, Priori A, Ravazzani P. Computational modeling of transcranial direct current stimulation in the child brain: implications for the treatment of refractory childhood focal epilepsy. *Int J Neural Syst.* 2014 Mar;24(2):1430006. doi: 10.1142/S012906571430006X. Epub 2014 Jan 13. PubMed PMID: 24475898.

Parazzini M, Rossi E, Ferrucci R, Liorni I, Priori A, Ravazzani P. Modelling the electric field and the current density generated by cerebellar transcranial DC stimulation in humans. *Clin Neurophysiol.* 2014 Mar;125(3):577-84. doi: 10.1016/j.clinph.2013.09.039. Epub 2013 Oct 28. PubMed PMID: 24176297.

Parazzini M, Rossi E, Ferrucci R, Fiocchi S, Liorni I, Priori A, Ravazzani P. Computational model of cerebellar transcranial direct current stimulation. *Conf Proc IEEE Eng Med Biol Soc.* 2013;2013:237-40. doi: 10.1109/EMBC.2013.6609481. PubMed PMID: 24109668.

Parazzini M, Rossi E, Rossi L, Priori A, Ravazzani P. Numerical estimation of the current density in the heart during transcranial direct current stimulation. *Brain Stimul.* 2013 May;6(3):457-9. doi: 10.1016/j.brs.2012.05.007. Epub 2012 Jun 7. PubMed PMID: 22704793.

Parazzini M, Rossi E, Rossi L, Priori A, Ravazzani P. Evaluation of the current density in the brainstem during transcranial direct current stimulation with extra-cephalic reference electrode. *Clin Neurophysiol.* 2013 May;124(5):103940. doi: 10.1016/j.clinph.2012.09.021. Epub 2012 Oct 18. PubMed PMID: 23084663.

Newronika s.r.l.

newronika.com
info@newronika.com

OPERATIVE LABS

via Milano, 150
20093 - Cologno Monzese (MI) - I
T. +39 - 02 84 10 93 81
F. +39 - 02 92 87 84 62

PUBLICATIONS AND SCIENTIFIC REFERENCES

tDCS CEREBELLAR AND SPINAL
new stimulation sites

Bocci T, Marceglia S, Vergari M, Cognetto V, Cogliamanian F, Sartucci F, Priori A. Transcutaneous spinal direct current stimulation modulates human corticospinal system excitability. *J Neurophysiol.* 2015 Jul;114(1):440-6. doi: 10.1152/jn.00490.2014. Epub 2015 Apr 29. PubMed PMID: 25925328; PubMed Central PMCID: PMC4509392.

Ferrucci R, Cortese F, Priori A. Cerebellar tDCS: how to do it. *Cerebellum.* 2015 Feb;14(1):27-30. doi: 10.1007/s12311-014-0599-7. Review. PubMed PMID: 25231432; PubMed Central PMCID: PMC4318979.

Priori A, Ciocca M, Parazzini M, Vergari M, Ferrucci R. Transcranial cerebellar direct current stimulation and transcutaneous spinal cord direct current stimulation as innovative tools for neuroscientists. *J Physiol.* 2014 Aug 15;592(16):3345-69. doi: 10.1113/jphysiol.2013.270280. Epub 2014 Jun 6. Review. PubMed PMID: 24907311; PubMed Central PMCID: PMC4229333.

Ferrucci R, Priori A. Transcranial cerebellar direct current stimulation (tcDCS): motor control, cognition, learning and emotions. *Neuroimage.* 2014 Jan 15;85 Pt 3:918-23. doi: 10.1016/j.neuroimage.2013.04.122. Epub 2013 May 9. Review. PubMed PMID: 23664951.

Cogliamanian F, Ardolino G, Vergari M, Ferrucci R, Ciocca M, Scelzo E, Barbieri S, Priori A. Transcutaneous spinal direct current stimulation. *Front Psychiatry.* 2012 Jul 4;3:63. doi: 10.3389/fpsyt.2012.00063. eCollection 2012. PubMed PMID: 22783208; PubMed Central PMCID: PMC3389353.

Bocci T, Marceglia S, Vergari M, Cognetto V, Cogliamanian F, Sartucci F, Priori A. Transcutaneous spinal direct current stimulation modulates human corticospinal system excitability. *J Neurophysiol.* 2015 Jul;114(1):440-6. doi: 10.1152/jn.00490.2014. Epub 2015 Apr 29. PMID: 25925328

Cogliamanian F, Vergari M, Schiaffi E, Marceglia S, Ardolino G, Barbieri S, Priori A. Transcutaneous spinal cord direct current stimulation inhibits the lower limb nociceptive flexion reflex in human beings. *Pain.* 2011 Feb;152(2):370-5. doi: 10.1016/j.pain.2010.10.041. Epub 2010 Dec 14. PMID: 21159430

Cogliamanian F, Vergari M, Pulecchi F, Marceglia S, Priori A. Effect of spinal transcutaneous direct current stimulation on somatosensory evoked potentials in humans. *Clin Neurophysiol.* 2008 Nov;119(11):2636-40. doi: 10.1016/j.clinph.2008.07.249. Epub 2008 Sep 10. PMID: 18786856

Newronika s.r.l.
newronika.com
info@newronika.com

OPERATIVE LABS

via Milano, 150
20093 - Cologno Monzese (MI) - I
T. +39 - 02 84 10 93 81
F. +39 - 02 92 87 84 62

PUBLICATIONS AND SCIENTIFIC REFERENCES

COGNITION Priori A, Mameli F, Cogiamanian F, Marceglia S, Tiriticco M, Mrakic-Spota S, Ferrucci R, Zago S, Poleszki D, Sartori G. Lie-specific involvement of dorsolateral prefrontal cortex in deception. *Cereb Cortex*. 2008 Feb;18(2):451-5. Epub 2007 Jun 21. PubMed PMID: 17584853.

Ferrucci R, Brunoni AR, Parazzini M, Vergari M, Rossi E, Fumagalli M, Mameli F, Rosa M, Giannicola G, Zago S, Priori A. Modulating human procedural learning by cerebellar transcranial direct current stimulation. *Cerebellum*. 2013 Aug;12(4):485-92. doi: 10.1007/s12311-012-0436-9. PubMed PMID: 23328908.

Ferrucci R, Marceglia S, Vergari M, Cogiamanian F, Mrakic-Spota S, Mameli F, Zago S, Barbieri S, Priori A. Cerebellar transcranial direct current stimulation impairs the practice-dependent proficiency increase in working memory. *J Cogn Neurosci*. 2008 Sep;20(9):1687-97. doi: 10.1162/jocn.2008.20112. PubMed PMID: 18345990.

Mameli F, Mrakic-Spota S, Vergari M, Fumagalli M, Macis M, Ferrucci R, Nordio F, Consonni D, Sartori G, Priori A. Dorsolateral prefrontal cortex specifically processes general - but not personal - knowledge deception: Multiple brain networks for lying. *Behav Brain Res*. 2010 Aug 25;211(2):164-8. doi: 10.1016/j.bbr.2010.03.024. Epub 2010 Mar 20. PubMed PMID: 20307584.

Fumagalli M, Vergari M, Pasqualetti P, Marceglia S, Mameli F, Ferrucci R, Mrakic-Spota S, Zago S, Sartori G, Pravettoni G, Barbieri S, Cappa S, Priori A. Brain switches utilitarian behavior: does gender make the difference? *PLoS One*. 2010 Jan 25;5(1):e8865. doi: 10.1371/journal.pone.0008865. PubMed PMID: 20111608; PubMed Central PMCID: PMC2810338.

Ferrucci R, Giannicola G, Rosa M, Fumagalli M, Boggio PS, Hallett M, Zago S, Priori A. Cerebellum and processing of negative facial emotions: cerebellar transcranial DC stimulation specifically enhances the emotional recognition of facial anger and sadness. *Cogn Emot*. 2012;26(5):786-99. doi: 10.1080/02699931.2011.619520. Epub 2011 Nov 14. PubMed PMID: 22077643; PubMed Central PMCID: PMC4234053.

Newronika s.r.l.

newronika.com
info@newronika.com

OPERATIVE LABS

via Milano, 150
20093 - Cologno Monzese (MI) - I
T. +39 - 02 84 10 93 81
F. +39 - 02 92 87 84 62

PUBLICATIONS AND SCIENTIFIC REFERENCES

OTHER TOPICS Ardolino G, Scelzo E, Cogiமானian F, Bonara P, Nozza A, Rosa M, Garlaschi S, Barbieri S, Priori A. Transcranial direct current stimulation (tDCS) and lymphocytes. *Brain Stimul.* 2014 Mar-Apr;7(2):332-4. doi: 10.1016/j.brs.2013.11.007. Epub 2013 Nov 28. PubMed PMID: 24368098.

Scelzo E, Giannicola G, Rosa M, Ciocca M, Ardolino G, Cogiமானian F, Ferrucci R, Fumagalli M, Mameli F, Barbieri S, Priori A. Increased short latency afferent inhibition after anodal transcranial direct current stimulation. *Neurosci Lett.* 2011 Jul 8;498(2):167-70. doi: 10.1016/j.neulet.2011.05.007. Epub 2011 May 11. PubMed PMID: 21600266.

Tadini L, El-Nazer R, Brunoni AR, Williams J, Carvas M, Boggio P, Priori A, Pascual-Leone A, Fregni F. Cognitive, mood, and electroencephalographic effects of noninvasive cortical stimulation with weak electrical currents. *J ECT.* 2011 Jun;27(2):134-40. doi: 10.1097/YCT.0b013e3181e631a8. PubMed PMID: 20938352.

Priori A, Hallett M, Rothwell JC. Repetitive transcranial magnetic stimulation or transcranial direct current stimulation? *Brain Stimul.* 2009 Oct;2(4):241-5. doi: 10.1016/j.brs.2009.02.004. Epub 2009 Apr 3. PubMed PMID: 20633424.

Rango M, Cogiமானian F, Marceglia S, Barberis B, Arighi A, Biondetti P, Priori A. Myoinositol content in the human brain is modified by transcranial direct current stimulation in a matter of minutes: a 1H-MRS study. *Magn Reson Med.* 2008 Oct;60(4):782-9. doi: 10.1002/mrm.21709. PubMed PMID: 18816828.

Cogiமானian F, Marceglia S, Ardolino G, Barbieri S, Priori A. Improved isometric force endurance after transcranial direct current stimulation over the human motor cortical areas. *Eur J Neurosci.* 2007 Jul;26(1):242-9. PubMed PMID: 17614951.

Ardolino G, Bossi B, Barbieri S, Priori A. Non-synaptic mechanisms underlie the after-effects of cathodal transcutaneous direct current stimulation of the human brain. *J Physiol.* 2005 Oct 15;568(Pt 2):653-63. Epub 2005 Jul 21. PubMed PMID: 16037080; PubMed Central PMCID: PMC1474743.

Priori A. Brain polarization in humans: a reappraisal of an old tool for prolonged non-invasive modulation of brain excitability. *Clin Neurophysiol.* 2003 Apr;114(4):589-95. PubMed PMID: 12686266.

Newronika s.r.l.

newronika.com
info@newronika.com

OPERATIVE LABS

via Milano, 150
20093 - Cologno Monzese (MI) - I
T. +39 - 02 84 10 93 81
F. +39 - 02 92 87 84 62