

Lect. Zübeyir BAYRAKTAROĞLU

Personal Information

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Education Information

Post Doctorate, Charite Universitaetsmedizin Berlin, Nöroloji, Nörofizik, Germany 2010 - 2012

Doctorate, Istanbul University, Istanbul Medical Faculty, Fizyoloji, Turkey 2003 - 2009

Undergraduate, Istanbul University, Istanbul Medical Faculty, Tıp, Turkey 1997 - 2003

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Durağan Hal Yanıtlarına Dayalı Hızlı Beyin-Bilgisayar Arayüzü Algoritmalarının Geliştirilmesi, Istanbul University, Health Sciences Institute, Fizyoloji, 2009

Research Areas

Medicine, Health Sciences, Fundamental Medical Sciences, Human Physiology, Neurophysiology

Academic Titles / Tasks

Lecturer PhD, Istanbul University, Istanbul Medical Faculty, Fizyoloji, 2012 - Continues

Expert, Charite Universitaetsmedizin Berlin, Tıp Fakültesi, Nöroloji, 2010 - 2012

Research Assistant, Istanbul University, Istanbul Medical Faculty, Fizyoloji, 2004 - 2009

Courses

Temel Laboratuvar Teknikleri, Postgraduate, 2015 - 2016

Fizyoloji - B, Postgraduate, 2015 - 2016

Fizyoloji II, Undergraduate, 2015 - 2016

Fizyoloji , Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014

Bilimsel Araştırma Yöntemleri, Doctorate, 2015 - 2016

Fizyolojide Deney Teknikleri, Doctorate, 2015 - 2016

Fizyolojide Güncel Konular, Doctorate, 2015 - 2016

Fonksiyonel Beyin Görüntülemesi, Doctorate, 2014 - 2015

Kognitif Elektrofizyoloji, Doctorate, 2014 - 2015

Fiziyoloji, Undergraduate, 2014 - 2015

Fizyoloji , Undergraduate, 2012 - 2013

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Effectiveness of Anodal otDCS Following with Anodal tDCS Rather than tDCS Alone for Increasing of Relative Power of Intrinsic Matched EEG Bands in Rat Brains**
Al-Tawarah N. M., Kaptan Z., Abu-Harirah H. A., Nofal M., Almajali B., Jarrar S., Bayraktaroğlu Z., Qaralleh H., Khleifat K. M., Ziylan Z. Y., et al.
Brain Sciences, vol.13, no.1, 2023 (SCI-Expanded)
- II. **Effect of upper limb focal muscle vibration on cortical activity: A systematic review with a focus on primary motor cortex**
KOLBAŞI E. N., Huseyinsinoglu B. E., Bayraktaroglu Z.
EUROPEAN JOURNAL OF NEUROSCIENCE, vol.56, no.3, pp.4141-4153, 2022 (SCI-Expanded)
- III. **Lower prepulse inhibition in clinical high-risk groups but not in familial risk groups for psychosis compared with healthy controls**
Togay B., Cikrikcili U., Bayraktaroglu Z., Uslu A., Noyan H., Uçok A.
EARLY INTERVENTION IN PSYCHIATRY, 2019 (SCI-Expanded)
- IV. **VOLUNTARY CONTROL OF CORTICOMUSCULAR COHERENCE THROUGH NEUROFEEDBACK: A PROOF-OF-PRINCIPLE STUDY IN HEALTHY SUBJECTS**
VON CARLOWITZ-GHORI K., Bayraktaroglu Z., WATERSTRAAT G., CURIO G., NIKULIN V. V.
NEUROSCIENCE, vol.290, pp.243-254, 2015 (SCI-Expanded)
- V. **Corticomuscular coherence in acute and chronic stroke**
VON CARLOWITZ-GHORI K., Bayraktaroglu Z., HOHLEFELD F. U., LOSCH F., CURIO G., NIKULIN V. V.
CLINICAL NEUROPHYSIOLOGY, vol.125, no.6, pp.1182-1191, 2014 (SCI-Expanded)
- VI. **It is not all about phase: Amplitude dynamics in corticomuscular interactions**
Bayraktaroglu Z., VON CARLOWITZ-GHORI K., CURIO G., NIKULIN V. V.
NEUROIMAGE, vol.64, pp.496-504, 2013 (SCI-Expanded)
- VII. **Optimal imaging of cortico-muscular coherence through a novel regression technique based on multi-channel EEG and un-rectified EMG**
Bayraktaroglu Z., VON CARLOWITZ-GHORI K., LOSCH F., NOLTE G., CURIO G., NIKULIN V. V.
NEUROIMAGE, vol.57, no.3, pp.1059-1067, 2011 (SCI-Expanded)
- VIII. **Effect of complete stimulus predictability on P3 and N2 components: an electroencephalographic study**
VON CARLOWITZ-GHORI K. M. B., HOHLEFELD F. U., Bayraktaroglu Z., CURIO G., NIKULIN V. V.
NEUROREPORT, vol.22, no.9, pp.459-463, 2011 (SCI-Expanded)
- IX. **Simultaneous EEG/fMRI Analysis of the Resonance Phenomena in Steady-State Visual Evoked Responses**
Bayram A., Bayraktaroglu Z., Karahan E., Erdogan B., Bilgic B., Ozker M., Kasikci I., Duru A. D., Ademoglu A., Ozturk C., et al.
CLINICAL EEG AND NEUROSCIENCE, vol.42, no.2, pp.98-106, 2011 (SCI-Expanded)
- X. **Changes in BOLD transients with visual stimuli across 1-44 Hz**
Emir U. E., Bayraktaroglu Z., Ozturk C., Ademoglu A., Demiralp T.
NEUROSCIENCE LETTERS, vol.436, no.2, pp.185-188, 2008 (SCI-Expanded)
- XI. **Gamma amplitudes are coupled to theta phase in human EEG during visual perception**
Demiralp T., Bayraktaroglu Z., Lenz D., Junge S., Busch N. A., Maess B., Ergen M., Herrmann C. S.
INTERNATIONAL JOURNAL OF PSYCHOPHYSIOLOGY, vol.64, no.1, pp.24-30, 2007 (SCI-Expanded)
- XII. **Event related alpha oscillations during encoding and retention phases of the Sternberg paradigm**

- ERGEN M., USLU A., YILDIRIM E., Bayraktaroglu Z., GURVIT H., DEMIRALP T.
INTERNATIONAL JOURNAL OF PSYCHOPHYSIOLOGY, vol.61, no.3, pp.372, 2006 (SCI-Expanded)
- XIII. **Time frequency analysis of Event-Related Potentials associated with the Stroop task**
SABAN S., ERGEN M., KIRMIZI E., Bayraktaroglu Z., GURVIT H., DEMIRALP T.
INTERNATIONAL JOURNAL OF PSYCHOPHYSIOLOGY, vol.61, no.3, pp.371, 2006 (SCI-Expanded)
- XIV. **The interaction of theta and gamma oscillations in human cognition**
DEMIRALP T., Bayraktaroglu Z., LENZ D., JUNGE S., BUSCH N. A., HERRMANN C. S.
INTERNATIONAL JOURNAL OF PSYCHOPHYSIOLOGY, vol.61, no.3, pp.309, 2006 (SCI-Expanded)
- XV. **Bold changes during driven electrical oscillations in human brain**
Bayraktaroglu Z., EMIR U. E., OZTURK C., ADEOROGLU A., DEMIRALP T.
INTERNATIONAL JOURNAL OF PSYCHOPHYSIOLOGY, vol.61, no.3, pp.368, 2006 (SCI-Expanded)
- XVI. **Event-related oscillations (EROs) in mesial temporal sclerosis (MTS) and Alzheimer's disease (AD)**
GURVIT H., Bayraktaroglu Z., HANAGASI H. A., HANAGASI F., GOKYIGIT A. Z., DEMIRALP T.
INTERNATIONAL JOURNAL OF PSYCHOPHYSIOLOGY, vol.61, no.3, pp.299-300, 2006 (SCI-Expanded)
- XVII. **Decomposition of the response mode effects in oddball ERPs**
Bayraktaroglu Z., ERGENOGLU T., KIRMIZI-ALSAN E., DEMIRALP T.
INTERNATIONAL JOURNAL OF PSYCHOPHYSIOLOGY, vol.61, no.3, pp.370, 2006 (SCI-Expanded)
- XVIII. **Comparative analysis of event-related potentials during Go/NoGo and CPT: Decomposition of electrophysiological markers of response inhibition and sustained attention**
KIRMIZI-ALSAN E., Bayraktaroglu Z., Gurvit H., Keskin Y. H., EMRE M., Demiralp T.
Brain Research, vol.1104, no.1, pp.114-128, 2006 (SCI-Expanded)
- XIX. **Genetic subtypes of human immunodeficiency virus type 1 (HIV-1) in Istanbul, Turkey**
Yilmaz G., Midilli K., Turkoglu S., Bayraktaroglu Z., Kuskucu A. M., Ozkan E., Atasever L., Calangu S., Altas K.
International Journal of Infectious Diseases, vol.10, no.4, pp.286-290, 2006 (SCI-Expanded)
- XX. **Alpha rhythm of the EEG modulates visual detection performance in humans**
Ergenoglu T., Demiralp T., Bayraktaroglu Z., Ergen M., Beydagi H., Uresin Y.
COGNITIVE BRAIN RESEARCH, vol.20, no.3, pp.376-383, 2004 (SCI-Expanded)

Refereed Congress / Symposium Publications in Proceedings

- I. **Source concordance analysis of simultaneously recorded steady state visual evoked potentials & fMRI**
Duru A. D., BAYRAKTAROĞLU Z., KURT E., YILDIZ C. U., Göksel Duru D., Ademoğlu A., DEMİRALP T.
OHBM 2014 Annual Meeting, Hamburg, Germany, 8 - 12 June 2014, pp.130
- II. **Stimulating the intrinsic connectivity: steady-state visual responses in EEG/fMRI measurements**
Duru A. D., KURT E., BAYRAM A., Erdoğan B., Deniz S. M., BAYRAKTAROĞLU Z.
Mind-Brain Symposium (in the framework of the International Brain Awareness Week), Berlin, Germany, 13 - 14 March 2013, pp.11-12
- III. **Amnezi simülasyonunun elektrofizyolojik göstergeleri, Electrophysiological indicators of amnesia simulation**
Yıldırım E., Bayraktaroğlu Z., Uslu A., Demiralp T.
8th National Congress of Neuroscience, Bolu, Turkey, 18 - 22 April 2009, vol.15, no.1, pp.231-232
- IV. **Detection of malingering by electrophysiological methods**
Yıldırım E., Uslu A., Bayraktaroğlu Z., Demiralp T.
Cognitive VI, International Cognitive Neuroscience Meeting, Muğla, Turkey, 14 - 18 April 2009, vol.4, no.2, pp.129-130
- V. **Projection of the Steady State Visual Evoked Potentials on Prefrontal Cortex**
Ozker M., Bayraktaroglu Z., Kasikci I., Erdogan B., Akin A., Demiralp T.
14th National Biomedical Engineering Meeting, İzmir, Turkey, 20 - 22 May 2009, pp.470-471
- VI. **Event-related brain oscillations associated with color-word interference**

- Ergen M., Saban S., Kırmızı-Alsan E., Bayraktaroğlu Z., Uslu A., Gürvit İ. H., Demiralp T.
10th International Conference on Cognitive Neuroscience, Muğla, Turkey, 1 - 05 September 2008, pp.146
- VII. **Estimating sedation depth using correlation dimension of spontaneous EEG and auditory steady-state responses**
Cebeci B., Gürkan G., Bayraktaroğlu Z., Uslu A., Olmez T., Akan A.
10th International Conference on Cognitive Neuroscience, Muğla, Turkey, 1 - 05 September 2008, pp.402
- VIII. **Long-term cognitive effect of SCUBA diving**
Uslu A., Caglar O., Ergen M., Keskin Ergen Y., Bayraktaroğlu Z., Gürvit İ. H., Demiralp T., Çimşit M.
Cognitive V, International Cognitive Neuroscience Meeting, Muğla, Turkey, 17 - 21 May 2008, vol.3, no.2, pp.113
- IX. **Neuropsychological Tests (NpTs) and event-related potentials (ERPs) records in SCUBA divers**
Uslu A., Caglar O., Ergen M., Keskin-Ergen Y., Bayraktaroğlu Z., Gürvit İ. H., Demiralp T., Çimşit M.
7th National Congress of Neuroscience, Adana, Turkey, 16 - 20 April 2008, vol.7, no.1, pp.1
- X. **Relationship of BOLD response with steady state evoked potentials**
Bayraktaroğlu Z., Emir U. E., Uslu A., Öztürk C., Ademoğlu A., Demiralp T.
6th National Congress of Neuroscience, Karabük, Turkey, 9 - 13 April 2007, vol.6, no.1, pp.23
- XI. **Implementation of low resolution electro-magnetic tomography with fMRI statistical maps on realistic head models**
Duru A. D., Eryilmaz H., Emir U., Bayraktaroglu Z., Demiralp T., Ademoglu A.
29th Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society, Lyon, France, 22 - 26 August 2007, pp.5239-5240
- XII. **Event related alpha oscillations during encoding and retention phases of the stenberg paradigm**
Ergen M., Uslu A., Yıldırım E., Bayraktaroğlu Z., Gürvit İ. H., Demiralp T.
International Organization of Psychophysiology, Associated with the United Nations (New York). 13th World Congress of Psychophysiology - THE OLYMPICS OF THE BRAIN, İstanbul, Turkey, 28 August - 02 September 2006, vol.61, no.3, pp.372
- XIII. **Brain potentials during encoding and retention processes of short term memory**
Ergen M., Uslu A., Yıldırım E., Bayraktaroğlu Z., Gürvit İ. H., Demiralp T.
5th National Congress of Neuroscience, Zonguldak, Turkey, 10 - 14 April 2006, vol.5, no.1, pp.13
- XIV. **Interactions between the theta and gamma oscillations in human EEG**
Bayraktaroğlu Z., Uslu A., Lenz D., Junge S., Busch N. A., Maess B., Ergen M., Demiralp T.
5th National Congress of Neuroscience, Zonguldak, Turkey, 10 - 14 April 2006, pp.38
- XV. **Interactions of gamma and theta oscillations in the electroencephalogram (EEG) during memory processes**
Bayraktaroglu Z., Demiralp T., LENZ D., JUNGE S., BUSCH N. A., MAESS B., Ergen M., HERRMANN C. S.
IEEE 14th Signal Processing and Communications Applications, Antalya, Turkey, 16 - 19 April 2006, pp.802-804

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