



# ZÜBEYİR BAYRAKTAROĞLU

## PROF.

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### International Researcher IDs

ScholarID: LmOja3AAAAAJ

ORCID: 0000-0001-5118-4776

Publons / Web Of Science ResearcherID: G-6750-2011

ScopusID: 6602149868

Yoksis Researcher ID: 190220



### Learning Knowledge

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Doctorate 2003 - 2009	Istanbul University, İstanbul Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, Turkey
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Undergraduate 1997 - 2003	Istanbul University, İstanbul Tıp Fakültesi, İstanbul Tıp Pr., Turkey
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### Dissertations

Doctorate, Durağan Hal Yanıtlarına Dayalı Hızlı Beyin Bilgisayar Arayüzü Algoritmalarının Geliştirilmesi, Istanbul University, İstanbul Tıp Fakültesi, Temel Tıp Bilimleri Bölümü, 2009

### Academic Titles / Tasks

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Professor 2020 - Continues	Istanbul Medipol University, Uluslararası Tıp Fakültesi, Temel Tıp Bilimleri Bölümü
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Associate Professor 2016 - 2020	Istanbul Medipol University, Uluslararası Tıp Fakültesi, Temel Tıp Bilimleri Bölümü
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Associate Professor 2014 - 2016	Istanbul University, Istanbul Medical Faculty, Basic Medical Sciences
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Lecturer 2012 - 2014	Istanbul University, Istanbul Medical Faculty, Basic Medical Sciences
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Researcher  
2010 - 2012

Charite Universitaetsmedizin Berlin, Tıp Fakültesi

Research Assistant  
2004 - 2009

Istanbul University, Istanbul Medical Faculty, Basic Medical Sciences

## Published journal articles indexed by SCI, SSCI, and AHCI

- 1. Priming constraint-induced movement therapy with intermittent theta burst stimulation to enhance upper extremity recovery in patients with stroke: protocol for a randomized controlled study**  
Kolbaşı E. N., ERSÖZ HÜSEYİNSİNOĞLU B., Ozdemir Z., BAYRAKTAROĞLU Z., Soysal A.  
Acta Neurologica Belgica, vol.124, no.3, pp.887-893, 2024 (SCI-Expanded)
- 2. Functional neural networks stratify Parkinson's disease patients across the spectrum of cognitive impairment**  
HAJEBRAHIMI F., BUDAK M., SARICAOĞLU M., Temel Z., Demir T. K., HANOĞLU L., YILDIRIM S., BAYRAKTAROĞLU Z.  
Brain and Behavior, vol.14, no.1, 2024 (SCI-Expanded)
- 3. A structural and resting-state functional connectivity investigation of the pulvinar in elderly individuals and Alzheimer's disease patients**  
Velioglu H. A., Ayyildiz B., Ayyildiz S., SÜTÇÜBAŞI B., HANOĞLU L., BAYRAKTAROĞLU Z., Yulug B.  
Alzheimer's and Dementia, vol.19, no.7, pp.2774-2789, 2023 (SCI-Expanded)
- 4. Abnormal Cross Frequency Coupling of Brain Electroencephalographic Oscillations Related to Visual Oddball Task in Parkinson's Disease with Mild Cognitive Impairment**  
BAYRAKTAROĞLU Z., AKTÜRK T., Yener G., de Graaf T. A., HANOĞLU L., YILDIRIM E., Hünerli Gündüz D., Kıyı İ., Sack A. T., Babiloni C., et al.  
Clinical EEG and Neuroscience, vol.54, no.4, pp.379-390, 2023 (SCI-Expanded)
- 5. Enhancement of motor skill acquisition by intermittent theta burst stimulation: a pilot study**  
Kolbaşı E. N., ERSÖZ HÜSEYİNSİNOĞLU B., Özdemir Z., BAYRAKTAROĞLU Z., Soysal A.  
Acta Neurologica Belgica, vol.123, no.3, pp.971-977, 2023 (SCI-Expanded)
- 6. Differentiation of claustrum resting-state functional connectivity in healthy aging, Alzheimer's disease, and Parkinson's disease**  
Ayyildiz S., Velioglu H. A., Ayyildiz B., Sütçübaşı B., Hanoğlu L., Bayraktaroğlu Z., Yıldırım S., Atasever A., Yulug B.  
Human Brain Mapping, vol.44, no.4, pp.1741-1750, 2023 (SCI-Expanded)
- 7. The effects of repetitive transcranial magnetic stimulation and aerobic exercise on cognition, balance and functional brain networks in patients with Alzheimer's disease**  
BUDAK M., BAYRAKTAROĞLU Z., HANOĞLU L.  
Cognitive Neurodynamics, vol.17, no.1, pp.39-61, 2023 (SCI-Expanded)
- 8. Clinical evaluation and resting state fMRI analysis of virtual reality based training in Parkinson's disease through a randomized controlled trial**  
HAJEBRAHIMI F., VELİOĞLU H. A., BAYRAKTAROĞLU Z., HELVACI YILMAZ N., HANOĞLU L.  
Scientific Reports, vol.12, no.1, 2022 (SCI-Expanded)
- 9. Effect of upper limb focal muscle vibration on cortical activity: A systematic review with a focus on primary motor cortex**  
Kolbaşı E. N., ERSÖZ HÜSEYİNSİNOĞLU B., BAYRAKTAROĞLU Z.  
European Journal of Neuroscience, vol.56, no.3, pp.4141-4153, 2022 (SCI-Expanded)
- 10. Left lateral parietal rTMS improves cognition and modulates resting brain connectivity in patients with Alzheimer's disease: Possible role of BDNF and oxidative stress**  
VELİOĞLU H. A., HANOĞLU L., BAYRAKTAROĞLU Z., Toprak G., Guler E. M., BEKTAY M. Y., Mutlu-Burnaz O., Yulug B.

Neurobiology of Learning and Memory, vol.180, 2021 (SCI-Expanded)

11. **Topological network mechanisms of clinical response to antidepressant treatment in drug-naive major depressive disorder**  
Uykur A. B., YILDIZ S., VELİOĞLU H. A., Ozsimsek A., Oktem E. O., BAYRAKTAROĞLU Z., Ergun T., Lakadamyali H., HANOĞLU L., Cankaya S., et al.  
Journal of Clinical Neuroscience, vol.84, pp.82-90, 2021 (SCI-Expanded)
12. **Neuronavigated rTMS inhibition of right pars triangularis anterior in stuttering: Differential effects on reading and speaking**  
Tezel-Bayraktaroglu O., BAYRAKTAROĞLU Z., Demirtas-Tatlidede A., DEMİRALP T., Oge A. E.  
Brain and Language, vol.210, 2020 (SCI-Expanded)
13. **Lower prepulse inhibition in clinical high-risk groups but not in familial risk groups for psychosis compared with healthy controls**  
Togay B., Çıkrıkçılı U., BAYRAKTAROĞLU Z., Uslu A., Noyan H., Üçok A.  
Early Intervention in Psychiatry, vol.14, no.2, pp.196-202, 2020 (SCI-Expanded)
14. **Resting-state FMRI analysis in apathetic alzheimer's disease**  
Büyükgök D., BAYRAKTAROĞLU Z., Seda Buker H., Işın Baral Kulaksızoğlu M., Hakan Gurvit İ.  
Diagnostic and Interventional Radiology, vol.26, no.4, pp.363-369, 2020 (SCI-Expanded)
15. **Voluntary control of corticomuscular coherence through neurofeedback: A proof-of-principle study in healthy subjects**  
von Carlowitz-Ghori K., BAYRAKTAROĞLU Z., Waterstraat G., Curio G., Nikulin V.  
Neuroscience, vol.290, pp.243-254, 2015 (SCI-Expanded)
16. **Corticomuscular coherence in acute and chronic stroke**  
von Carlowitz-Ghori K., BAYRAKTAROĞLU Z., Hohlefeld F. U., Losch F., Curio G., Nikulin V. V.  
Clinical Neurophysiology, vol.125, no.6, pp.1182-1191, 2014 (SCI-Expanded)
17. **It is not all about phase: Amplitude dynamics in corticomuscular interactions**  
BAYRAKTAROĞLU Z., von Carlowitz-Ghori K., Curio G., Nikulin V. V.  
NeuroImage, vol.64, no.1, pp.496-504, 2013 (SCI-Expanded)
18. **Optimal imaging of cortico-muscular coherence through a novel regression technique based on multi-channel EEG and un-rectified EMG**  
BAYRAKTAROĞLU 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)
19. **Simultaneous EEG/fMRI analysis of the resonance phenomena in steady-state visual evoked responses**  
BAYRAM A., BAYRAKTAROĞLU Z., Karahan E., Erdogan B., BİLGİÇ B., Özker M., Kasıkcı I., DURU A. D., Ademoglu A., Öztürk C., et al.  
Clinical EEG and Neuroscience, vol.42, no.2, pp.98-106, 2011 (SCI-Expanded)
20. **Changes in BOLD transients with visual stimuli across 1-44 Hz**  
Emir U. E., BAYRAKTAROĞLU Z., Ozturk C., Ademoglu A., DEMİRALP T.  
Neuroscience Letters, vol.436, no.2, pp.185-188, 2008 (SCI-Expanded)
21. **Gamma amplitudes are coupled to theta phase in human EEG during visual perception**  
DEMİRALP T., BAYRAKTAROĞLU 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)
22. **Comparative analysis of event-related potentials during Go/NoGo and CPT: Decomposition of electrophysiological markers of response inhibition and sustained attention**  
Kirmizi-Alsan E., BAYRAKTAROĞLU Z., Gurvit H., Keskin Y. H., Emre M., DEMİRALP T.  
Brain Research, vol.1104, no.1, pp.114-128, 2006 (SCI-Expanded)
23. **Alpha rhythm of the EEG modulates visual detection performance in humans**  
Ergenoglu T., DEMİRALP T., BAYRAKTAROĞLU Z., ERGEN M., Beydagi H., Uresin Y.  
Cognitive Brain Research, vol.20, no.3, pp.376-383, 2004 (SCI-Expanded)

## Articles Published in Other Journals

1. **The effect of rifampicin on the neuronal cell survival in primary cortical neuron culture after laser axotomy**  
OZANSOY M., COŞKUN E., OZANSOY M. B., ÇANKAYA Ş., GÜNAL M. Y., BAYRAKTAROĞLU Z., YULUĞ B., HANOĞLU L.  
Acta Medica Alanya, vol.3, no.2, pp.135-140, 2019 (Peer-Reviewed Journal)
2. **Lazer aksotomi sonrası primer kortikal nöron kültüründe rifampisin n nöroneal hücre sağkalımı üzerine etkisi**  
OZANSOY M., Coşkun E., OZANSOY M. B., ÇANKAYA Ş., GÜNAL M. Y., BAYRAKTAROĞLU Z., YULUĞ B., HANOĞLU L.  
ACTA MEDICA ALANYA, pp.134-139, 2019 (Peer-Reviewed Journal)

## Books & Book Chapters

1. **Alzheimer Hastalığı ve İlişkili Hastalıklar Yıllığı 5**  
ERGEN M., BAYRAKTAROĞLU Z.  
CSA Global Publishing, 2006

## Refereed Congress / Symposium Publications in Proceedings

1. **MEZUNİYET ÖNCESİ TIP EĞİTİMİ ORTAMININ DEĞERLENDİRİLMESİ: BİR VAKIF ÜNİVERSİTESİ İKİ TIP FAKÜLTESİ ÖRNEĞİ**  
Dirimen Arıkan A. G., Çopur Çiçek A., Yiğit P., Yılmaz M., Bayraktaroğlu Z., Akan H.  
XIII. Ulusal Tıp Eğitimi Kongresi, Ankara, Turkey, 16 - 18 November 2023, pp.1
2. **Alzheimer hastalığında APOE polimorfizminin bilişsel bozulma paterni ve kortikal atrofi ile ilişkisi**  
ŞENTÜRK H., AKBAŞ S., BUDAK M., HAJEBRAHİMİ F., BAYRAKTAROĞLU Z., HANOĞLU L.  
20. Ulusal Sinirbilim Kongresi, 20 October 2022
3. **Alzheimer Hastalığında Konfabulasyonun Bilişsel Bozukluk Paterni ve Kortikal Atrofi ile İlişkisi**  
AKBAŞ S., ŞENTÜRK H., BUDAK M., HAJEBRAHİMİ F., BAYRAKTAROĞLU Z., HANOĞLU L.  
20. Ulusal Sinirbilim Kongresi, 20 October 2022
4. **Effects of High-Frequency Repetitive Transcranial Magnetic Stimulation on Cognitive Functions, Behavioral Status, Quality of Life and Functional Brain Connectivity in Alzheimer's Disease.**  
BUDAK M., BAYRAKTAROĞLU Z., HANOĞLU L.  
European Congress of NeuroRehabilitation 2019 (ECNR), 09 October 2019
5. **The effects of rTMS on motor signs and resting state fMRI in freezing of gait in Parkinson's Disease**  
SARICAOĞLU M., VELİOĞLU H. A., BAYRAKTAROĞLU Z., HANOĞLU L.  
Organization Human Brain Mapping, Italy, 09 June 2019
6. **The effect of lateral parietal cortex TMS stimulation on memory functions and brain connection in Alzheimer patients**  
VELİOĞLU H. A., HANOĞLU L., BAYRAKTAROĞLU Z., Toprak G., SARICAOĞLU M.  
Annual Meeting Of The Organization For Human Brain Mapping (OHBM), Roma, Italy, 9 - 13 June 2019
7. **The effect of lateral parietal cortex TMS stimulation on memory functions in patients with Alzheimer disease**  
VELİOĞLU H. A., BAYRAKTAROĞLU Z., TOPRAK G., YAMANOĞLU M., Soğukkanlı Kadak K., HANOĞLU L.  
16. ULUSAL SİNİR BİLİM KONGRESİ, Turkey, 20 May 2018
8. **LOWER PREPULSE INHIBITION IN CLINICAL HIGH-RISK GROUP BUT NOT IN FAMILIAL RISK GROUP FOR PSYCHOSIS COMPARED TO HEALTHY CONTROLS**  
ÜÇOK V. A., Togay B., Çıkrıkçılı U., BAYRAKTAROĞLU Z.  
SCHIZOPHRENIA BULLETIN, San Diego, 24 - 28 March 2017, vol.43, pp.70-71
9. **Event related alpha oscillations during encoding and retention phases of the Sternberg Paradigm**

ERGEN M., USLU A., YILDIRIM E., BAYRAKTAROĞLU Z., GÜRVİT İ. H., DEMİRALP T.

13th World Congress of Psychophysiology, İstanbul, Turkey, 28 August 2006, vol.61, pp.372-373

10. **Event related potentials (ERP) during memory retrieval**

ERGEN M., YILDIRIM E., BAYRAKTAROĞLU Z., KESKİN ERGEN H. Y., GÜRVİT İ. H., DEMİRALP T.

4. Ulusal Sinirbilim Kongresi, Mersin, Turkey, 29 March 2005, vol.61, pp.372

11. **Brain potentials during encoding and retention processes of short term memory**

ERGEN M., USLU A., YILDIRIM E., BAYRAKTAROĞLU Z., GÜRVİT İ. H., DEMİRALP T.

5. Ulusal Sinirbilim Kongresi, Zonguldak, Turkey, 10 April 2006, vol.5, pp.13

## Academic and Administrative Experience

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2020 - Continues **Vice Dean**

Istanbul Medipol University

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## Courses

Fizyoloji Laboratuvarı, Undergraduate, 2015 - 2016, 2014 - 2015, 2013 - 2014, 2012 - 2013, 2008 - 2009, 2007 - 2008, 2006 - 2007, 2005 - 2006, 2004 - 2005

TIPF2120 - Endokrin I, Undergraduate, 2015 - 2016

FITR1010 - Fizyoloji II, Undergraduate, 2015 - 2016

Fizyoloji, Undergraduate, 2015 - 2016, 2014 - 2015

FZYT7004 - Fizyoloji B, Postgraduate, 2015 - 2016

FZYT9032 - Fizyolojide Güncel Konular, Doctorate, 2015 - 2016

FZYT9014 - Bilimsel Araştırma Yöntemleri, Doctorate, 2015 - 2016

FZYT9015 - Fizyolojide Deney Teknikleri, Doctorate, 2015 - 2016

FZYT7005 - Temel Laboratuvar Teknikleri, Postgraduate, 2015 - 2016

Fonksiyonel Beyin Görüntüleme, Doctorate, 2014 - 2015

Kognitif Elektrofizyoloji, Doctorate, 2014 - 2015

Fizyoloji Laboratuvarı, Undergraduate, 2003 - 2004

## Advising Theses

Zübeyir B., Parkinson hastalığında gözlenen apati ve halüsinasyonun dinlenme durumu ağ özellikleri ve bilişsel işlevlerle ilişkisi, Doctorate, Z.YILDIZ(Student), 2022

Zübeyir B., Farklı etyolojiye sahip görsel halüsinasyonların patofizyolojisinin istirahat durumu fonksiyonel nöral ağları ile karşılaştırılması, Doctorate, T.HANOĞLU(Student), 2021

Zübeyir B., Hafif bilişsel bozukluğu olan parkinson hastalarında bellek fonksiyonları: Kayıt ve geri getirme süreçlerinin nöropsikometrik profili ile beyin gri madde hacimlerinin ilişkisi, Postgraduate, S.ŞAHİN(Student), 2021

Zübeyir B., Rifampisin'in in vitro aksotomi modelinde nörorejenerasyona etkisinin araştırılması, Postgraduate, E.COŞKUN(Student), 2018

## Metrics

Publication: 37

Citation (Scopus): 1034

H-Index (Scopus): 11

## Research Areas

Medicine, Health Sciences, Fundamental Medical Sciences, Human Physiology, Neurophysiology, Biomedical Image Processing, Biomedical Image Processing, Biosignal Processing, Biosignal Processing, Life Sciences, Neurophysiology, Neurosystems, Natural Sciences, Engineering and Technology

## Non Academic Experience

Charite Universitaetmedizin Berlin, Center Stroke Research Berlin, Neurophysics Group