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Personal Information

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Education Information

Doctorate, University of Pittsburgh, Elektrik Ve Bilgisayar Mühendisliği, United States Of America 2005 - Continues
Postgraduate, Istanbul Technical University, Bilişim Enstitüsü, Bilgisayar Bilimleri Anabilim Dalı, Turkey 2002 - 2004
Undergraduate, Istanbul Technical University, Elektrik-Elektronik Fakültesi, Elektronik Ve Haberleşme Mühendisliği Bölümü, Turkey 1998 - 2002

Dissertations

Postgraduate, İkizge Dilimi Kullanarak Metinden Bağımsız Konuşmacı Belirleme, İstanbul Teknik Üniversitesi, Bilgisayar Bilimleri Anabilim Dalı, 2016

Doctorate, Spatial filtering of Magnetoencephalographic Data in Spherical Harmonics Domain, University Of Pittsburgh, Elektrik Ve Bilgisayar Mühendisliği, 2009

Research Areas

Health Sciences, Social Sciences and Humanities, Natural Sciences, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Middle East Technical University, Graduate School Of Informatics, 2017 - Continues

Academic and Administrative Experience

Middle East Technical University, Graduate School of Informatics, 2016 - Continues

Advising Theses

ÖZKURT T. E. , BRAIN OSCILLATORY ANALYSIS OF VISUAL WORKING MEMORY ERRORS, Doctorate, I.MAPELLI(Student), 2019

ÖZKURT T. E. , Resting state brain connectivity via bicoherence and coherence, Postgraduate, A.LEVENT(Student), 2018

ÖZKURT T. E. , Cognitive aspects of brain-computer communication: An implementation and extension of the P300 speller paradigm, Postgraduate, U.ACAR(Student), 2018

ÖZKURT T. E. , Effect of bilateral somatosensory stimulus on oscillatory brain activity and long term memory, Postgraduate, G.GÖKTEPE(Student), 2017

ÖZKURT T. E. , Classification of emotions in vocal responses, Postgraduate, E.ÇAĞLAYAN(Student), 2017

ÖZKURT T. E. , Suppression of semantic interference during an auditory working memory task: An EEG study, Postgraduate, N.MELNIK(Student), 2015

ÖZKURT T. E. , Suppression of semantic interference during an auditory working memory task: an EEG study, Postgraduate, N.Melnik(Student), 2015

ÖZKURT T. E. , NEUROPSYCHOLOGICAL PROCESSING OF TURKISH MORPHOLOGY: INVESTIGATION OF INFLECTION, DERIVATION AND COMPOUNDING, Doctorate, S.ÖZER(Student), 2013

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- I. **Mean curve length: An efficient feature for brainwave biometrics**
Yahyaei R, Özkurt T. E.
Biomedical Signal Processing and Control, vol.76, 2022 (Journal Indexed in SCI Expanded)
- II. **A Basic Nietzschean Model in Lieu of the Causal Maxim**
ÖZKURT T. E.
PHILOSOPHIA, 2021 (Journal Indexed in AHCI)
- III. **Identification of nonlinear features in cortical and subcortical signals of Parkinson's Disease patients via a novel efficient measure**
Ozkurt T. E. , Akram H., Zrinzo L., Limousin P., Foltynie T., Oswal A., Litvak V.
NEUROIMAGE, vol.223, 2020 (Journal Indexed in SCI)
- IV. **Brain Oscillatory Correlates of Visual Short-Term Memory Errors**
Mapelli I, ÖZKURT T. E.
FRONTIERS IN HUMAN NEUROSCIENCE, vol.13, 2019 (Journal Indexed in SCI)
- V. **N1-P2: Neural markers of temporal expectation and response discrimination in interval timing**
Duzcu H., ÖZKURT T. E. , Mapelli I., Hohenberger A.
ACTA NEUROBIOLOGIAE EXPERIMENTALIS, vol.79, no.2, pp.193-204, 2019 (Journal Indexed in SCI)
- VI. **Unilateral deep brain stimulation suppresses alpha and beta oscillations in sensorimotor cortices**
Abbasi O., Hirschmann J., Storzer L., ÖZKURT T. E. , Elben S., Vesper J., Wojtecki L., Schmitz G., Schnitzler A., Butz M.
NEUROIMAGE, vol.174, pp.201-207, 2018 (Journal Indexed in SCI)
- VII. **Modulation of alpha oscillations is required for the suppression of semantic interference**
Melnik N., Mapelli I., ÖZKURT T. E.
NEUROBIOLOGY OF LEARNING AND MEMORY, vol.144, pp.11-18, 2017 (Journal Indexed in SCI)
- VIII. **Parkinsonian Rest Tremor Is Associated With Modulations of Subthalamic High-Frequency Oscillations**
Hirschmann J., Butz M., Hartmann C. J. , Hoogenboom N., ÖZKURT T. E. , Vesper J., Wojtecki L., Schnitzler A.
MOVEMENT DISORDERS, vol.31, no.10, pp.1551-1559, 2016 (Journal Indexed in SCI)
- IX. **Estimation of nonlinear neural source interactions via sliced bicoherence**
ÖZKURT T. E.
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.30, pp.43-52, 2016 (Journal Indexed in SCI)
- X. **A direct relationship between oscillatory subthalamic nucleus-cortex coupling and rest tremor in Parkinson's disease**
Hirschmann J., Hartmann C. J. , Butz M., Hoogenboom N., ÖZKURT T. E. , Elben S., Vesper J., Wojtecki L., Schnitzler A.
BRAIN, vol.136, pp.3659-3670, 2013 (Journal Indexed in SCI)
- XI. **Differential modulation of STN-cortical and cortico-muscular coherence by movement and levodopa in Parkinson's disease**
Hirschmann J., ÖZKURT T. E. , Butz M., Homburger M., Elben S., Hartmann C. J. , Vesper J., Wojtecki L., Schnitzler A.
NEUROIMAGE, vol.68, pp.203-213, 2013 (Journal Indexed in SCI)
- XII. **Statistically Reliable and Fast Direct Estimation of Phase-Amplitude Cross-Frequency Coupling**
Ozkurt T. E.
IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING, vol.59, no.7, pp.1943-1950, 2012 (Journal Indexed in SCI)
- XIII. **A critical note on the definition of phase-amplitude cross-frequency coupling**

- ÖZKURT T. E. , Schnitzler A.
 JOURNAL OF NEUROSCIENCE METHODS, vol.201, no.2, pp.438-443, 2011 (Journal Indexed in SCI)
- XIV. **High frequency oscillations in the subthalamic nucleus: A neurophysiological marker of the motor state in Parkinson's disease**
 Oezkurt T. E. , Butz M., Homburger M., Elben S., Vesper J., Wojtecki L., Schnitzler A.
 EXPERIMENTAL NEUROLOGY, vol.229, no.2, pp.324-331, 2011 (Journal Indexed in SCI)
- XV. **Distinct oscillatory STN-cortical loops revealed by simultaneous MEG and local field potential recordings in patients with Parkinson's disease**
 Hirschmann J., Oezkurt T. E. , Butz M., Homburger M., Elben S., Hartmann C. J. , Vesper J., Wojtecki L., Schnitzler A.
 NEUROIMAGE, vol.55, no.3, pp.1159-1168, 2011 (Journal Indexed in SCI)
- XVI. **Spatial Filtering of MEG Signals for User-Specified Spherical Regions**
 Oezkurt T. E. , Sun M., Jia W., Scabassi R. J.
 IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING, vol.56, no.10, pp.2429-2438, 2009 (Journal Indexed in SCI)
- XVII. **Decomposition of magnetoencephalographic data into components corresponding to deep and superficial sources**
 ÖZKURT T. E. , Sun M., Scabassi R. J.
 IEEE TRANSACTIONS ON BIOMEDICAL ENGINEERING, vol.55, no.6, pp.1716-1727, 2008 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **Neural oscillations, circular causality and the implications for nature**
 ÖZKURT T. E.
 Causality in the Neuro- and Psychological Sciences (CINAPS 2018), ANVERS, Belgium, 19 - 21 September 2018, pp.12-14
- II. **On the Most Informative Slice of Bicoherence That Characterizes Resting State Brain Connectivity**
 Kandemir A. L. , ÖZKURT T. E.
 European Signal Processing Conference (EUSIPCO), Rome, Italy, 3 - 07 August 2018, pp.1382-1386
- III. **Would somatosensory stimuli increase LTM performance? A preliminary EEG study**
 GÖKTEPE G., MAPELLI I., ÖZKURT T. E.
 International Conference for Cognitive Neuroscience, 5 - 08 August 2017
- IV. **Modeling deep brain stimulation effects on amplitude and coupling behavior of beta and high-frequency oscillations**
 ÖZKAN V. A. , ÖZKURT T. E.
 Coupling and Causality in Complex Systems, 25 - 27 September 2017
- V. **Sliced cross-channel bicoherence between local field potentials for patients with Parkinson's disease**
 ÖZKURT T. E. , HIRSCHMANN J., BUTZ M., SCHNITZLER A.
 Coupling and Causality in Complex Systems, 25 - 27 September 2017
- VI. **Alpha synchronization between occipital and frontal regions distinguishes errors in a visual working memory task**
 MAPELLI I., ÖZKURT T. E.
 BIOMAG 2016 - 20th International Conference on Biomagnetism, 1 - 08 October 2016
- VII. **ADAPTIVE IDENTIFICATION OF OSCILLATORY BANDS FROM SUBCORTICAL NEURAL DATA**
 ÖZKURT T. E. , Butz M., Hirschmann J., Schnitzler A.
 23rd European Signal Processing Conference (EUSIPCO), Nice, France, 31 August - 04 September 2015, pp.2586-2590
- VIII. **Alpha Activity in the Posterior Regions Distinguishes Visual False Memories and Other Memory Errors**
 MAPELLI I., NATALIA M., ÖZKURT T. E.
 Human Brain Mapping Annual Meeting, Honolulu, United States Of America, 14 - 18 June 2015
- IX. **Alpha activity reflects semantic interference resolution in an auditory working memory task**

MELNIK N., MAPELLI I., ÖZKURT T. E.

Human Brain Mapping Annual Meeting, Honolulu, United States Of America, 14 - 18 June 2015

X. **Spectral Features of Heart Rate Variability Obtained from a Video Camera**

ÇAĞLAYAN E., ÖZKURT T. E.

23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.955-957

Supported Projects

ÖZKURT T. E. , GÖKTEPE G., Project Supported by Higher Education Institutions, Bellek performansını arttırıcı dokunsal ve işitsel ritmik uyaran parametrelerinin belirlenimi, 2017 - 2017

YILDIRIM İ. S. , ÖZKURT T. E. , Project Supported by Higher Education Institutions, Elektronik Öğrenme Tasarım İlkelerinin EEG Verileri ile Doğrulanması: Deneysel Çalışma, 2016 - 2016

ÖZKURT T. E. , MAPELLI I., Project Supported by Higher Education Institutions, Sözel Bellek Performansının Nicelenmesi Ve Frontal İzdüşümü, 2012 - 2014

Citations

Total Citations (WOS):542

h-index (WOS):8