

## Assoc. Prof. SEZAI EMRE TUNA

### Personal Information

**Email:** etuna@metu.edu.tr

**Web:** <https://avesis.metu.edu.tr/etuna>

### Education Information

Doctorate, University of California, Santa Barbara, United States Of America 2001 - 2005

Undergraduate, Middle East Technical University, Faculty Of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1996 - 2000

### Dissertations

Doctorate, Generalized Dilations and Homogeneity, University Of California, Santa Barbara, 2005

### Academic Titles / Tasks

Associate Professor, Middle East Technical University, Faculty Of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 2013 - Continues

Assistant Professor, Middle East Technical University, Faculty Of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 2009 - 2013

Lecturer PhD, Middle East Technical University, Faculty Of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 2007 - 2008

Lecturer PhD, Université de Liège, 2006 - 2007

Research Assistant, University of California, Santa Barbara, Engineering, Electrical And Computer Engineering, 2000 - 2005

### Advising Theses

TUNA S. E. , Synchronization of linearly and nonlinearly coupled harmonic oscillators, Postgraduate, A.YETKİN(Student), 2011

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

- I. **Harmonic synchronization under all three types of coupling: Position, velocity, and acceleration**  
TUNA S. E.  
Automatica, vol.130, 2021 (Journal Indexed in SCI)
- II. **Synchronization of linear oscillators coupled through a dynamic network with interior nodes**  
TUNA S. E.  
AUTOMATICA, vol.117, 2020 (Journal Indexed in SCI)
- III. **Synchronization of linear systems via relative actuation**  
TUNA S. E.  
SYSTEMS & CONTROL LETTERS, vol.134, 2019 (Journal Indexed in SCI)

- IV. **Synchronization of small oscillations**  
TUNA S. E.  
AUTOMATICA, vol.107, pp.154-161, 2019 (Journal Indexed in SCI)
- V. **Observability Through a Matrix-Weighted Graph**  
TUNA S. E.  
IEEE TRANSACTIONS ON AUTOMATIC CONTROL, vol.63, no.7, pp.2061-2074, 2018 (Journal Indexed in SCI)
- VI. **Synchronization of harmonic oscillators under restorative coupling with applications in electrical networks**  
TUNA S. E.  
AUTOMATICA, vol.75, pp.236-243, 2017 (Journal Indexed in SCI)
- VII. **Synchronization under matrix-weighted Laplacian**  
TUNA S. E.  
AUTOMATICA, vol.73, pp.76-81, 2016 (Journal Indexed in SCI)
- VIII. **A dual pair of optimization-based formulations for estimation and control**  
Tuna S. E.  
AUTOMATICA, vol.51, pp.18-26, 2015 (Journal Indexed in SCI)
- IX. **State deadbeat control of nonlinear systems: Construction via sets**  
Tuna S. E.  
AUTOMATICA, vol.48, no.9, pp.2201-2206, 2012 (Journal Indexed in SCI)
- X. **Deadbeat Observer: Construction via Sets**  
Tuna S. E.  
IEEE TRANSACTIONS ON AUTOMATIC CONTROL, vol.57, no.9, pp.2333-2337, 2012 (Journal Indexed in SCI)
- XI. **Synchronization analysis of coupled Lienard-type oscillators by averaging**  
Tuna S. E.  
AUTOMATICA, vol.48, no.8, pp.1885-1891, 2012 (Journal Indexed in SCI)
- XII. **Sufficient Conditions on Observability Grammian for Synchronization in Arrays of Coupled Linear Time-Varying Systems**  
TUNA S. E.  
IEEE TRANSACTIONS ON AUTOMATIC CONTROL, vol.55, no.11, pp.2586-2590, 2010 (Journal Indexed in SCI)
- XIII. **Conditions for Synchronizability in Arrays of Coupled Linear Systems**  
Tuna S. E.  
IEEE TRANSACTIONS ON AUTOMATIC CONTROL, vol.54, no.10, pp.2416-2420, 2009 (Journal Indexed in SCI)
- XIV. **Growth rate of switched homogeneous systems**  
Tuna S. E.  
AUTOMATICA, vol.44, no.11, pp.2857-2862, 2008 (Journal Indexed in SCI)
- XV. **Synchronizing linear systems via partial-state coupling**  
Tuna S. E.  
AUTOMATICA, vol.44, no.8, pp.2179-2184, 2008 (Journal Indexed in SCI)

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **Synchronization of nonlinearly coupled harmonic oscillators**  
Cai C., TUNA S. E.  
American Control Conference, Maryland, United States Of America, 30 June - 02 July 2010, pp.1767-1771

## **Citations**

Total Citations (WOS):508

h-index (WOS):8