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Publons / Web Of Science ResearcherID: ABB-2931-2020

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Education Information

Doctorate, Istanbul Technical University, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 2004 - 2012

Postgraduate, Istanbul Technical University, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 2002 - 2004

Undergraduate, Istanbul Technical University, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, Turkey 1997 - 2002

Foreign Languages

English

Dissertations

Doctorate, Betonarme elemanların plastisite ve hasar mekaniği esasları kullanılarak doğrusal olmayan analizi, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, 2012

Postgraduate, Betonarme Yüksek Binalarda Sünme Büzülme Ve Sıcaklık Etkilerinin Yapım Süresince Kontrolü, İstanbul Teknik Üniversitesi, İnşaat Fakültesi, İnşaat Mühendisliği Bölümü, 2004

Research Areas

Technical Sciences, Civil Engineering, Structure, Structural Engineering, Concrete Structures

Academic Titles / Tasks

Research Assistant, Istanbul Technical University, İnşaat, İnşaat Mühendisliği, 2005 - Continues

Courses

Betonarme-I, Undergraduate, 2016 - 2017

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Modeling strain rate effect on tensile strength of concrete using damage plasticity model**
Ayhan B., Lale E.
International Journal Of Impact Engineering, vol.162, 2022 (SCI-Expanded)
- II. **Symmetric high order microplane model for damage localization and size effect in quasi-brittle materials**
Lale E., Cusatis G.
INTERNATIONAL JOURNAL FOR NUMERICAL AND ANALYTICAL METHODS IN GEOMECHANICS, vol.45, no.10, pp.1458-1476, 2021 (SCI-Expanded)
- III. **Centrifuge modeling testing and multiscale analysis of cemented sand and gravel (CSG) dams**
Chen J., Cai X., Lale E., Yang J., Cusatis G.
CONSTRUCTION AND BUILDING MATERIALS, vol.223, pp.605-615, 2019 (SCI-Expanded)
- IV. **Homogenization coarse graining (HCG) of the lattice discrete particle model (LDPM) for the analysis of reinforced concrete structures**
Lale E., Rezakhani R., Alnaggar M., Cusatis G.
ENGINEERING FRACTURE MECHANICS, vol.197, pp.259-277, 2018 (SCI-Expanded)
- V. **Isogeometric Implementation of High-Order Microplane Model for the Simulation of High-Order Elasticity, Softening, and Localization**
Lale E., Zhou X., Cusatis G.
JOURNAL OF APPLIED MECHANICS-TRANSACTIONS OF THE ASME, vol.84, no.1, 2017 (SCI-Expanded)
- VI. **Non-linear analysis of steel fibre reinforced concrete-filled steel tube columns**
Guler S., Lale E., Aydogan M.
PROCEEDINGS OF THE INSTITUTION OF CIVIL ENGINEERS-STRUCTURES AND BUILDINGS, vol.166, no.6, pp.298-306, 2013 (SCI-Expanded)
- VII. **BEHAVIOUR OF SFRC FILLED STEEL TUBE COLUMNS UNDER AXIAL LOAD**
Guler S., Lale E., Aydogan M.
ADVANCED STEEL CONSTRUCTION, vol.9, no.1, pp.14-25, 2013 (SCI-Expanded)

Articles Published in Other Journals

- I. **Size Effect Analysis of Concrete Beams Under Bending Using Crack-Band Approach**
Ayhan B., Lale E., Çelik Muhtaroğlu N.
Politeknik Dergisi, pp.1, 2021 (ESCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **3D FINITE ELEMENT SIMULATIONS OF REINFORCED CONCRETE ELEMENTS EXPOSED TO FIRE**
Lale E., Ceccato C.
14th International Conference on Computational Plasticity - Fundamentals and Applications (COMPLAS), Barcelona, Spain, 5 - 07 September 2017, pp.712-722
- II. **Ultra - High Performance Concrete Compression and Fracture Response Parameters for Lattice Discrete Particle Model Simulations**
EL-HELOU R. G., Lale E., CUSATIS G., MOEN C.
First International Interactive Symposium on UHPC – 2016, Des Moines, Iowa, United States Of America, 18 - 20 July 2016, pp.1-11
- III. **ISOGEOMETRIC IMPLEMENTATION OF THE HIGH-ORDER MICROPLANE MODEL FOR SOFTENING AND LOCALIZATION**
Lale E., CUSATIS G.
9th International Conference on Fracture Mechanics of Concrete and Concrete Structures, Berkeley, United States Of America, 29 May - 01 June 2016, vol.1, pp.1-8

- IV. **Homogenization-based coarse graining framework for the analysis of reinforced concrete structural elements**
Lale E., Rezakhani R., ALNAGGAR M., CUSATIS G.
Engineering Mechanics Institute Conference 2015, Palo Alto, United States Of America, 16 - 19 June 2015, pp.1
- V. **Lattice discrete particle modeling of buckling deformation in thin ultra-high-performance fiber-reinforced concrete plates**
El-Helou R., Moen C., Lale E., Cusatis G.
EURO-C 2014 Conference, St. Anton am Arlberg, Austria, 24 - 27 March 2014, vol.1, pp.365-371
- VI. **An elasto-plastic damage model for concrete**
Lale E., AYDOGAN M.
11th International Conference on Computational Plasticity, COMPLAS XI, Barcelona, Spain, 7 - 09 September 2011, pp.1584-1595

Scientific Refereeing

Arabian Journal for Science and Engineering, SCI Journal, January 2017
Journal of Engineering Mechanics, ASCE, SCI Journal, January 2016

Metrics

Publication: 17
Citation (WoS): 46
Citation (Scopus): 50
H-Index (WoS): 4
H-Index (Scopus): 4

Scholarships

2219 Yurtdışı Doktora Sonrası Araştırma Burs Programı, University, 2013 - Continues
2211 Yurt İçi Doktora Burs Programı, University, 2006 - Continues