

Prof. YALIN ARICI

Personal Information

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Education Information

Doctorate, University Of California, Berkeley, Civ. Eng., United States Of America 1999 - 2005

Undergraduate, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, Turkey 1994 - 1998

Foreign Languages

English, C1 Advanced

Dissertations

Doctorate, Use of Seismic Acceleration Records for Modal Identification and Health Monitoring of Instrumented Bridges, University Of California, Berkeley, Civ. Eng., 2005

Research Areas

Civil Engineering, Engineering and Technology

Academic Titles / Tasks

Associate Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2013 - Continues

Assistant Professor, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2009 - 2013

Lecturer, Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2007 - 2009

Research Assistant, University Of California, Berkeley, Muhendislik Fak., Insaat Muh., 1999 - 2005

Academic and Administrative Experience

Middle East Technical University, Faculty of Engineering, Department of Civil Engineering, 2008 - Continues

Advising Theses

ARICI Y., Development of an applied element based tool for prediction of collapse behavior of concrete dam monoliths, Postgraduate, H.Hassan(Student), 2020

ARICI Y., Addressing the near-fault directivity effects for their implementation to design spectrum, Doctorate, S.MOGHIMI(Student), 2017

ARICI Y., 3D modeling and ground motion scaling for the prediction of seismic demands on the gravity dams, Postgraduate, M.BYBORDIANI(Student), 2016

ARICI Y., Comparison of ASCE/SEI Standard (2010) and Modal Pushover Based Ground Motion Scaling Procedures for Pre-Tensioned Concrete Bridges, Postgraduate, M.ÖZGENOĞLU(Student), 2015

ARICI Y., Performance of concrete gravity dams under earthquake effects, Postgraduate, B.FEYZA(Student), 2014

ARICI Y., BİNİCİ B., State of the art in roller compacted concrete (RCC) dams: Design and construction, Postgraduate, S.SÖĞÜT(Student), 2014

ARICI Y., Ground motion scaling for the prediction of the seismic response of concrete gravity dams, Postgraduate, M.BERK(Student), 2014

ARICI Y., Quantitative comparison of 2D and 3D modeling for concrete gravity dams, Postgraduate, E.ERDEM(Student), 2014

ARICI Y., BİNİCİ B., Three dimensional dynamic response of a concrete gravity dam, Postgraduate, S.MELEK(Student), 2013

ARICI Y., Comparison of the 2D and 3D analyses methods for CFRDS, Postgraduate, H.FIRAT(Student), 2012

ARICI Y., Investigation of the effect of soil structure interaction on the behavior of concrete faced rockfill dams and assesment of current analysis methodologies, Postgraduate, E.ERŞAN(Student), 2012

ARICI Y., Investigation of the effect of soil structure interaction on the behavior of concrete faced rockfill dams and assessment of current analysis methodologies, Postgraduate, E.Erşan(Student), 2012

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

- I. **An Investigation of the Ground Motion Scaling Procedures for the Nonlinear Seismic Analyses of Concrete Gravity Dams**
Soysal B. F. , AY B. Ö. , ARICI Y.
JOURNAL OF EARTHQUAKE ENGINEERING, vol.23, no.6, pp.930-953, 2019 (Journal Indexed in SCI)
- II. **Structure-soil-structure interaction of adjacent buildings subjected to seismic loading**
Bybordiani M., ARICI Y.
EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS, vol.48, no.7, pp.731-748, 2019 (Journal Indexed in SCI)
- III. **A study on major seismological and fault-site parameters affecting near-fault directivity ground-motion demands for strike-slip faulting for their possible inclusion in seismic design codes**
Akkar S., MOGHIMI S., ARICI Y.
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.104, pp.88-105, 2018 (Journal Indexed in SCI)
- IV. **Effectiveness of motion scaling procedures for the seismic assessment of concrete gravity dams for near field motions**
Bybordiani M., ARICI Y.
STRUCTURE AND INFRASTRUCTURE ENGINEERING, vol.14, no.10, pp.1339-1354, 2018 (Journal Indexed in SCI)
- V. **The use of 3D modeling for the prediction of the seismic demands on the gravity dams**
Bybordiani M., ARICI Y.
EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS, vol.46, no.11, pp.1769-1789, 2017 (Journal Indexed in SCI)
- VI. **Comparison of ASCE/SEI Standard and modal pushover-based ground motion scaling procedures for pre-tensioned concrete bridges**
ÖZGENOĞLU M., ARICI Y.
STRUCTURE AND INFRASTRUCTURE ENGINEERING, vol.13, no.12, pp.1609-1623, 2017 (Journal Indexed in SCI)
- VII. **Investigation of the relationship of seismic intensity measures and the accumulation of damage on concrete gravity dams using incremental dynamic analysis**
Soysal B. F. , BİNİCİ B., ARICI Y.
EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS, vol.45, no.5, pp.719-737, 2016 (Journal Indexed in SCI)

- VIII. **Seismic assessment of a monolithic RCC gravity dam including three dimensional dam-foundation-reservoir interaction**
Yilmazturk S. M. , ARICI Y., BİNİCİ B.
ENGINEERING STRUCTURES, vol.100, pp.137-148, 2015 (Journal Indexed in SCI)
- IX. **Pseudo-dynamic testing of a concrete gravity dam**
Aldemir A., BİNİCİ B., ARICI Y., KURÇ Ö., CANBAY E.
EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS, vol.44, no.11, pp.1747-1763, 2015 (Journal Indexed in SCI)
- X. **Analysis Methods for the Investigation of the Seismic Response of Concrete Dams**
Aldemir A., Yilmazturk S. M. , Yucel A. R. , BİNİCİ B., ARICI Y., Akman A.
TEKNIK DERGI, vol.26, no.1, pp.6943-6968, 2015 (Journal Indexed in SCI)
- XI. **Comparison of the expected damage patterns from two- and three-dimensional nonlinear dynamic analyses of a roller compacted concrete dam**
ARICI Y., BİNİCİ B., Aldemir A.
STRUCTURE AND INFRASTRUCTURE ENGINEERING, vol.10, no.3, pp.305-315, 2014 (Journal Indexed in SCI)
- XII. **Earthquake stresses and effective damping in concrete gravity dams**
Akpınar U., BİNİCİ B., ARICI Y.
EARTHQUAKES AND STRUCTURES, vol.6, no.3, pp.251-266, 2014 (Journal Indexed in SCI)
- XIII. **Comparison of 2D versus 3D modeling approaches for the analysis of the concrete faced rock-fill Cokal Dam**
ARICI Y., ÖZEL H. F.
EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS, vol.42, no.15, pp.2277-2295, 2013 (Journal Indexed in SCI)
- XIV. **Evaluation of the performance of the face slab of a CFRD during earthquake excitation**
ARICI Y.
SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, vol.55, pp.71-82, 2013 (Journal Indexed in SCI)
- XV. **Behaviour of the reinforced concrete face slabs of concrete faced rockfill dams during impounding**
ARICI Y.
STRUCTURE AND INFRASTRUCTURE ENGINEERING, vol.9, no.9, pp.877-890, 2013 (Journal Indexed in SCI)
- XVI. **Investigation of the cracking of CFRD face plates**
ARICI Y.
COMPUTERS AND GEOTECHNICS, vol.38, no.7, pp.905-916, 2011 (Journal Indexed in SCI)
- XVII. **Health monitoring of a bridge system using strong motion data**
Mosalam K. M. , ARICI Y.
SMART STRUCTURES AND SYSTEMS, vol.5, no.4, pp.427-442, 2009 (Journal Indexed in SCI)
- XVIII. **Statistical significance of modal parameters of bridge systems identified from strong motion data**
Arici Y., Mosalam K.
EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS, vol.34, no.10, pp.1323-1341, 2005 (Journal Indexed in SCI)
- XIX. **Modal identification of bridge systems using state-space methods**
Arici Y., Mosalam K.
STRUCTURAL CONTROL & HEALTH MONITORING, vol.12, pp.381-404, 2005 (Journal Indexed in SCI)
- XX. **System identification of instrumented bridge systems**
Arici Y., Mosalam K.
EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS, vol.32, no.7, pp.999-1020, 2003 (Journal Indexed in SCI)

Refereed Congress / Symposium Publications in Proceedings

- I. **MODELLING FROM ELASTIC RANGE TO FAILURE LEVEL USING THE MODIFIED APPLIED ELEMENT METHOD**

Soysal B. F. , Arıcı Y.

5. International Conference on Earthquake Engineering and Seismology, Ankara, Turkey, 8 - 11 October 2019

II. Experimental Studies on Reinforced Concrete Pressure Tunnels

Kalaycıoğlu M., Albostan U., Işık G., CANBAY E., ARICI Y., BİNİCİ B., TUNCAY K.

13th International Congress on Advances in Civil Engineering, İzmir, Turkey, 12 - 14 September 2018

III. Numerical Modeling of Reinforced Concrete Pressure Tunnels Using the Overlapping Lattice Method

Işık G., Kalaycıoğlu M., Albostan U., CANBAY E., ARICI Y., BİNİCİ B., TUNCAY K.

13th International Congress on Advances in Civil Engineering, İzmir, Turkey, 12 - 14 September 2018

IV. STRUCTURE-SOIL-STRUCTUREINTERACTION OF ADJACENT BUILDINGS SUBJECTED TO SEISMIC LOADING

BYBORDIANI M., ARICI Y.

4th International Conference on Earthquake Engineering and Seismology, 11 - 13 October 2017

V. COMPARISON OF ASCE/SEI STANDARD (2010) AND MODAL PUSHOVER BASED GROUND MOTION SCALING PROCEDURES FOR PRE-TENSIONED CONCRETE BRIDGES

ÖZGENOĞLU M., ARICI Y.

4th International Conference on Earthquake Engineering and Seismology, 11 - 13 October 2017

VI. Evaluation of Motion Selection and Scaling for the Nonlinear Seismic Analysis of Concrete Gravity Dams

SOYSAL B. F. , AY B. Ö. , ARICI Y.

4th International Conference on Earthquake Engineering and Seismology, Eskişehir, Turkey, 11 - 13 October 2017, pp.1-8

VII. Comparison of the Overlapping Lattice and the Finite Element Approaches for the Prediction of the Collapse State of Concrete Gravity Dams

Soysal Albostan B. F. , Arıcı Y., Binici B., Tuncay K.

4th International Conference on Earthquake Engineering and Seismology, Eskişehir, Turkey, 11 - 13 October 2017, pp.1-8

VIII. COMPARISON OF THE OVERLAPPING LATTICE AND THEFINITE ELEMENT APPROACHES FOR THE PREDICTION OF THE COLLAPSE STATE OF CONCRETE GRAVITY DAMS

SOYSAL B. F. , ARICI Y., BİNİCİ B., TUNCAY K.

4th International Conference on Earthquake Engineering and Seismology, Eskişehir, Turkey, 11 - 13 October 2017

IX. MASIF BETON YAPILARDA HASAR İLERLEMESİ SIMULASYONU, ORTUŞMELİ KAFES MODELİ VE SONLU ELEMENLAR YAKLAŞIMLARI KARŞILAŞTIRMASI

SOYSAL B. F. , ARICI Y., BİNİCİ B., TUNCAY K.

4. Uluslararası Deprem Mühendisliği ve Sismoloji Konferansı, 11 - 13 October 2017

X. BETON AĞIRLIK BARAJLARININ GOÇME DURUMLARININ BELİRLENMESİNDE ORTUŞMELİ KAFES VE SONLU ELEMEN YAKLAŞIMLARININ KARŞILAŞTIRILMASI

SOYSAL B. F. , ARICI Y., BİNİCİ B., TUNCAY K.

4. Uluslararası Deprem Mühendisliği ve Sismoloji Konferansı, 11 - 13 October 2017

XI. SIMULATION OF DAMAGE PROPAGATION ON MASSIVECONCRETE STRUCTURES, THE OVERLAPPING LATTICE MODEL VS. THE FINITE ELEMENT APPROACH

SOYSAL B. F. , ARICI Y., BİNİCİ B., TUNCAY K.

4th International Conference on Earthquake Engineering and Seismology, Eskişehir, Turkey, 11 - 13 October 2017

XII. Evaluation of the Ground Motion Scaling Procedures for Concrete Gravity Dams

SOYSAL B. F. , AY B. Ö. , ARICI Y.

10th International Conference on Structural Dynamics (EURODYN), Rome, Italy, 10 - 13 September 2017, vol.199, pp.844-849

XIII. Nonlinear Seismic Dam and Foundation Analysis Using Explicit Newmark Integration Method with Static Condensation

Albostan U., Bahcecioglu T., ARICI Y., KURÇ Ö.

10th International Conference on Structural Dynamics (EURODYN), Rome, Italy, 10 - 13 September 2017, vol.199, pp.316-321

- XIV. **Overlapping Lattice Simulation of Concrete Gravity Dam Collapse Simulations**
SOYSAL B. F. , AYDIN B. B. , TUNCAY K., ARICI Y., BİNİCİ B.
COMPDYN 6th International Conference on Computational Methods in Structural Dynamics and Earthquake Engineering, 15 - 17 June 2017
- XV. **THE USE OF 3D MODELING FOR THE PREDICTION OF THE SEISMIC DEMANDS ON THE GRAVITY DAMS**
BYBORDIANI M., ARICI Y.
16TH WORLD EARTHQUAKE ENGINEERING CONFERENCE, 9 - 13 January 2017
- XVI. **Seismic Fragility Assessment of Concrete Gravity Dams using Incremental Dynamic Analysis**
SOYSAL B. F. , ARICI Y.
12th International Congress on Advances in Civil Engineering, 21 - 23 September 2016
- XVII. **Motion Selection and Scaling for the Seismic Investigation of the Concrete Gravity Dams**
Bybordiani M., ARICI Y.
ACE2016, 21 - 23 September 2016
- XVIII. **Deficiencies of 2D Modelling for the Prediction of Seismic demands on the Concrete Gravity Dams**
Bybordiani M., ARICI Y.
ACE2016, 21 - 23 September 2016
- XIX. **Quantification of the damage states and levels on concrete gravity dams using seismic intensity measures**
SOYSAL B. F. , ARICI Y.
1st International Conference on Natural Hazards and Infrastructure, 28 - 30 June 2016
- XX. **Prediction of the Seismic Demands on Concrete Gravity Dams using 3D vs 2D Modeling**
Bybordiani M., ARICI Y.
ICONHIC2016, 28 - 30 June 2016
- XXI. **Artımlı Dinamik Analiz Yöntemi ile Beton Ağırlık Barajlardaki Hasar Belirlenmesi**
SOYSAL B. F. , ARICI Y.
3. Türkiye Deprem Mühendisliği ve Sismoloji Konferansı, Turkey, 14 - 16 October 2015
- XXII. **Beton Ağırlık Barajların Sismik Davranışını Etkileyen Parametreler**
SOYSAL B. F. , ARICI Y.
3. Türkiye Deprem Mühendisliği ve Sismoloji Konferansı, Turkey, 14 - 16 October 2015
- XXIII. **The Use of Nonlinear Analyses Tools for the Structural Design of Concrete Dams**
SOYSAL B. F. , ARICI Y.
Symposium Hydropower '15, Norway, 13 - 20 June 2015
- XXIV. **The Use of Nonlinear Analysis Tools for the Structural Design of Concrete Dams**
SOYSAL B. F. , ARICI Y.
Symposium Hydropower 15, Stavanger, Norway, 15 - 19 June 2015
- XXV. **Development of a software suite for the structural analysis and design of concrete gravity dams**
Altuğ A., ARICI Y., BİNİCİ B., KURÇ Ö.
ICOLD 25th Congress/ICOLD 83rd Annual Meeting Symposium Hydropower' 15, 13 - 20 June 2015
- XXVI. **A Cloud Based Workflow for a Finite Element Analysis Preprocessor**
KURT T., ARICI Y., KURÇ Ö.
Fourth International Conference on Parallel, Distributed, Grid and Cloud Computing for Engineering, 24 - 27 March 2015
- XXVII. **Nonlinear Behavior of Concrete Gravity Dams**
SOYSAL B. F. , ARICI Y.
11th International Congress on Advances in Civil Engineering, 21 - 25 October 2014
- XXVIII. **Incremental Dynamic Analysis of a Gravity Dam**
SOYSAL B. F. , ARICI Y.
Tenth U.S. National Conference on Earthquake Engineering, 21 - 25 July 2014
- XXIX. **Pseudo dynamic test results of a concrete gravity dam**
Aldemir A., BİNİCİ B., CANBAY E., KURÇ Ö., ARICI Y.

- 10th U.S. National Conference on Earthquake Engineering: Frontiers of Earthquake Engineering, NCEE 2014, Alaska, United States Of America, 21 - 25 July 2014
- XXX. **Türkiye de Baraj Mühendisliği Gelişimi Üzerine Bir Değerlendirme**
ÇALAMAK M., ARICI Y., YANMAZ A. M.
3. Su Yapıları Sempozyumu, Ankara, Turkey, 7 - 08 December 2013, pp.73-83
- XXXI. **Sarsma Tablası Testi ile Beton Barajların Doğrusal Olmayan Analiz Parametreleri Kalibrasyonu**
SOYSAL B. F. , ARICI Y.
2. Türkiye Deprem Mühendisliği ve Sismoloji Konferansı, Turkey, 25 - 27 September 2013
- XXXII. **Towards health monitoring of bridge systems using strong motion data**
Arici Y., Mosalam K. M.
10th International Conference on Application of Statistics and Probability in Civil Engineering, Tokyo, Japan, 31 July - 03 August 2007, pp.69-70
- XXXIII. **Modal analysis of a densely instrumented building using strong motion data**
Arici Y., Mosalam K.
9th International Conference on Applications of Statistics and Probability in Civil Engineering, San-Francisco, Costa Rica, 6 - 09 July 2003, pp.419-426
- XXXIV. **System identification and modeling of bridge systems for assessing current design procedures**
ARICI Y., Mosalam K.
SMIP2000 Seminar, 14 September 2000

Supported Projects

- Arıcı Y., Köken M., TUBITAK Project, Uygulamalı Eleman Metodu ile Barajların Göçme Davranışının İncelenmesi, 2017 - 2020
- ARICI Y., TUBITAK Project, BARAJLARIN ANALİZİ İÇİN SONLU ELEMAN YAZILIMHAZIRLANMASI, 2013 - 2016
- ARICI Y., Project Supported by Other Private Institutions, Ruzgar Turbini Temel Dayanımı İncelenmesi, 2015 - 2015
- ARICI Y., Project Supported by Higher Education Institutions, FEN BİLİMLERİ ENSTİTÜSÜ/LİSANSÜSTÜ TEZ PROJESİ, 2014 - 2015
- ARICI Y., TUBITAK Project, Silindire Sıkıştırılmış Beton Ağırlık Barajların Sismik Performanslarının Belirlenmesi için Dinamik Benzeri Deney Uygulamaları, 2012 - 2014

Scientific Refereeing

- STRUCTURES, Journal Indexed in SCI-E, December 2019
- Soil Dynamics And Earthquake Engineering, SCI Journal, October 2019
- Journal Of Structural Engineering-Asce, SCI Journal, July 2019
- SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, SCI Journal, March 2019
- JOURNAL OF VIBRATION ENGINEERING & TECHNOLOGIES, Journal Indexed in SCI-E, March 2019
- MEASUREMENT, Journal Indexed in SCI-E, January 2019
- SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, SCI Journal, January 2019
- EARTHQUAKE ENGINEERING & STRUCTURAL DYNAMICS, Journal Indexed in SCI-E, December 2018
- JOURNAL OF PERFORMANCE OF CONSTRUCTED FACILITIES, Journal Indexed in SCI-E, November 2018
- JOURNAL OF PERFORMANCE OF CONSTRUCTED FACILITIES, Journal Indexed in SCI-E, September 2018
- STRUCTURAL ENGINEERING INTERNATIONAL, Journal Indexed in SCI-E, September 2018
- ARABIAN JOURNAL FOR SCIENCE AND ENGINEERING, Journal Indexed in SCI-E, July 2018
- INTERNATIONAL JOURNAL OF DISTRIBUTED SENSOR NETWORKS, Journal Indexed in SCI-E, June 2018
- ENGINEERING STRUCTURES, Journal Indexed in SCI-E, April 2018
- ENGINEERING STRUCTURES, Journal Indexed in SCI-E, April 2018
- STRUCTURE AND INFRASTRUCTURE ENGINEERING, Journal Indexed in SCI-E, April 2018

MATHEMATICAL PROBLEMS IN ENGINEERING, Journal Indexed in SCI-E, March 2018

EARTHQUAKE ENGINEERING AND ENGINEERING VIBRATION, Journal Indexed in SCI-E, February 2018

SOIL DYNAMICS AND EARTHQUAKE ENGINEERING, Journal Indexed in SCI-E, February 2018

Citations

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