

Prof. ZAHİR MURADOĞLU

Personal Information

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International Researcher IDs

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Education Information

Doctorate, Azerbaijan Bilimler Akademisi, Sibernetik Enstitüsü, Azerbaijan 1985 - 1990

Undergraduate, Azerbaijan Devlet Üniversitesi, Mekanik-Matematik, Azerbaijan 1976 - 1981

Foreign Languages

Russian, B2 Upper Intermediate

Dissertations

Doctorate, Belirsiz Sınırlı Elasto - plastik problemlerin Sayısal Çözümü, Azerbaijan Bilimler Akademisi, Sibernetik Enstitüsü, 1990

Research Areas

Mathematics, Numerical Analysis, Natural Sciences

Academic Titles / Tasks

Professor, Kocaeli University, Fen Edebiyat Fakültesi, Matematik, 2008 - Continues

Associate Professor, Kocaeli University, Fen Edebiyat Fakültesi, Matematik, 1994 - 2008

Associate Professor, Azerbaijan Devlet İktisat Üniversitesi, -, Bilimsel Araştırma Laboratuvarı, 1993 - 1994

Expert, Azerbaijan Devlet Üniversitesi, Mekanik-Matematik, Matematik, 1985 - 1990

Academic and Administrative Experience

Head of Department, Kocaeli University, Fen Edebiyat Fakültesi, Matematik, 2011 - 2020

Courses

Theory of Finite Elements II, Doctorate, 2022 - 2023
Applied Mathematics, Undergraduate, 2023 - 2024
Linear Algebra, Undergraduate, 2022 - 2023
Mathematical Modelling, Undergraduate, 2022 - 2023
History of Mathematics, Undergraduate, 2023 - 2024
Numerical Analysis II, Undergraduate, 2022 - 2023
Numerical Analysis I, Undergraduate, 2023 - 2024

Jury Memberships

Associate Professor Exam, Associate Professor Exam, Kocaeli University, December, 2023
Appointment to Academic Staff-Professorship, Appointment to Academic Staff-Professorship, Kocaeli Üniversitesi, November, 2023

Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Determining the Geometrical Sizes of Plates with Internal Hinges by Using Additional Conditions**
Yazici V., MURADOĞLU Z.
ADVANCES IN MATHEMATICAL PHYSICS, vol.2020, 2020 (SCI-Expanded)
- II. **A Mathematical Model and Numerical Solution of a Boundary Value Problem for a Multi-Structure Plate**
Yazici V., MURADOĞLU Z.
MATHEMATICS, vol.7, no.3, 2019 (SCI-Expanded)
- III. **Simultaneous determination of the strain hardening exponent, the shear modulus and the elastic stress limit in an inverse problem**
Tatar S., Tinaztepe R., MURADOĞLU Z.
APPLIED MATHEMATICAL MODELLING, vol.40, pp.6956-6968, 2016 (SCI-Expanded)
- IV. **Numerical solution of the nonlinear evolutionary inverse problem related to elastoplastic torsional problem**
Tatar S., MURADOĞLU Z.
APPLICABLE ANALYSIS, vol.93, no.6, pp.1187-1200, 2014 (SCI-Expanded)
- V. **A modification of the semi-analytic inversion method: determination of the yield stress and a comparison with the parametrization algorithm**
Tatar S., MURADOĞLU Z.
INVERSE PROBLEMS IN SCIENCE AND ENGINEERING, vol.22, no.4, pp.543-556, 2014 (SCI-Expanded)
- VI. **Fast inversion algorithm for identification of elastoplastic properties of power hardening materials from limited spherical indentation tests**
Hasanov A., MURADOĞLU Z.
INTERNATIONAL JOURNAL OF NON-LINEAR MECHANICS, vol.47, no.5, pp.526-536, 2012 (SCI-Expanded)

Articles Published in Other Journals

- I. **ON THE SOLUTION OF THE HOMOGENEOUS LINEAR CONJUGATION PROBLEM WITH SINGULARITIES OF NONINTEGER ORDER**
Urbanovich T., MURADOĞLU Z.
ADVANCES IN DIFFERENTIAL EQUATIONS AND CONTROL PROCESSES, vol.19, no.2, pp.127-138, 2018 (ESCI)
- II. **Determination of Young's Modulus by Using Initial Data for Different Boundary Conditions**
İLHAN F., MURADOĞLU Z.

Applied Mathematical Sciences, vol.11, no.19, pp.913-923, 2017 (Peer-Reviewed Journal)

- III. **Numerical solution of non linear biharmonic equation for elasto plastic bending plate**
İLHAN F., MURADOĞLU Z.
Applied Mathematical Sciences, vol.9, no.146, pp.7269-7280, 2015 (Peer-Reviewed Journal)
- IV. **Finite Difference Schemes Obtained by Finite Element Method for Lamé System of Equations**
Seyidmamedov Z.
Journal of Kocaeli University, no.3, pp.41-50, 1996 (Non Peer-Reviewed Journal)
- V. **FE Solution of an Axisymmetric Inverse Elasto Plastic Problem Using Penetration Diagram**
SEYİDMAMEDOV Z.
Journal of Kocaeli University, no.1, pp.7-14, 1994 (Non Peer-Reviewed Journal)
- VI. **Numerical solution of quasistatistical elastoplastic contact problem with unknown boundary**
SEYİDMAMEDOV Z.
Soviyet VINITI, no.1, pp.1-18, 1989 (Non Peer-Reviewed Journal)
- VII. **Axisymmetric elastoplastic signorini problem and the numerical method for determining a hardness of materials**
SEYİDMAMEDOV Z.
Soviyet VINITI, pp.1-20, 1989 (Non Peer-Reviewed Journal)
- VIII. **On the method of iteration for solving of elastoplastic contact problems**
HASANOĞLU A., Seyidmamedov Z.
"Numerical Methods of Analysis", no.1, pp.17-22, 1988 (Non Peer-Reviewed Journal)
- IX. **On an algorithms of numerical solution of nonlinear contact problems by program package DRIV SOLV03**
SEYİDMAMEDOV Z., HASANOĞLU A.
"Approximate Methods for Operator Equations", pp.24-34, 1986 (Non Peer-Reviewed Journal)

Refereed Congress / Symposium Publications in Proceedings

- I. **DETERMINATION INTERLAYER TRANSMISSION CONDITIONS FOR MULTILAYERED MATERIALS BY USING BIQUADRATIC FINITE ELEMENTS**
MURADOĞLU Z., URBANOVICH T., YAZICI V.
5th International Congress on Fundamental and Applied Sciences 2018 (ICFAS2018), 18 - 22 June 2018
- II. **DETERMINING THE SIZES OF PLATES IN THE PLATE SYSTEM BY USING ADDITIONAL CONDITIONS**
YAZICI V., MURADOĞLU Z.
9th International Symposium on Image Processing, Wavelet and Applications, 5 - 08 November 2017, pp.52
- III. **NUMERICAL ANALYSIS OF FRICTIONLESS CONTACT PROBLEM FOR A LAMINATED MEDIUM**
MURADOĞLU Z.
9th International Symposium on Image Processing, Wavelet and Applications, 5 - 08 November 2017, pp.47
- IV. **NUMERICAL APPROXIMATION OF TRANSMISSION CONDITIONS FOR BIHARMONIC EQUATION WITH DISCONTINUOUS COEFFICIENT ON NON-UNIFORM MESH**
YAZICI V., MURADOĞLU Z.
9th International Symposium on Image Processing, Wavelet and Applications, 5 - 08 November 2017, pp.53
- V. **Numerical Solution of the Non-Linear Biharmonic Equation for Different Boundary Conditions**
MURADOĞLU Z.
VIII Annual International Conference of the Georgian Mathematical Union, 4 - 08 September 2017, pp.137
- VI. **A study for decision making problems by using interval soft sets**
MURADOĞLU Z., GÜNDÜZ Ç.
International scientific conference «Algebraic and geometric methods of analysis», 31 May - 05 June 2017
- VII. **Transmission Conditions for Plates System Composed of Elastic Plates with Differing Properties**
MURADOĞLU Z., YAZICI V.
INTERNATIONAL CONFERENCE ON MATHEMATICS AND ENGINEERING, Turkey, 10 - 12 May 2017

- VIII. **Elasto plastic deformation of an incompressible bendingplate with clamped boundary**
İLHAN F., MURADOĞLU Z.
International Congress on Fundamental and Applied Sciences 2016 (ICFAS2016), 22 - 26 August 2016, pp.69
- IX. **Obtaining Transmission Conditions For Fourth order Ordinary Differential Equations With Discontinuous Coefficients**
YAZICI V., MURADOĞLU Z.
8th International Conference on Image Processing, Wavelet and Applications, 22 - 24 September 2016, pp.72
- X. **Determination of an unknown elasticmodulus in an elastoplastic bendingplate based on maximal deflection**
İLHAN F., MURADOĞLU Z.
8th International Conference "Inverse Problems: Modeling and Simulation", 23 - 28 May 2016
- XI. **On Elasto plastic Deformation of a Bending Plate with Simply Supported Boundary**
İLHAN F., MURADOĞLU Z.
International Conference on Applied Analysis and Mathematical Modelling, İstanbul, Turkey, 8 - 12 June 2015, pp.118
- XII. **Numerical Solution Of Inverse Coefficient Problem For Nonlinear Biharmonic Equation**
MURADOĞLU Z., İLHAN F.
The 7th International Conference "Inverse Problems: Modeling and Simulation"(IPMS-2014), Fethiye, 26 - 30 May 2014, pp.47
- XIII. **The Numerical Solution of the Problem Related to Bending of Beams System Which is Consisted of Thin Beams with Different Properties**
Yazıcı V., MURADOĞLU Z.
International Conference on Mathematical Analysis, Differential Equations and Their Applications, Mersin, Turkey, 4 - 09 September 2012, pp.109
- XIV. **Numerical Solution to the Bending Problem for Nonhomogeneous Plate with Different Boundary Conditions**
MURADOĞLU Z., İLHAN F.
International Conference on Mathematical Analysis, Differential Equations and Their Applications, Mersin, Turkey, 4 - 09 September 2012, pp.78-79
- XV. **The numerical solution of an optimal control problem related to the transmission bending problem for an elastic plate**
MURADOĞLU Z., Yazıcı V.
5th International Conference "Inverse Problems: Modeling and Simulation", Antalya, Turkey, 24 - 29 May 2010
- XVI. **Nonlokal Identification Problem in Nonlinear Ion Transport**
HASANOĞLU A., MURADOĞLU Z.
The Fourth International Conference "Inverse Problems : Modeling and Simulation", Fethiye, Turkey, 26 - 30 May 2008, pp.64-65
- XVII. **The Mathematical Model and Numerical Solution of the Transmission Problem in a Layered Medium for the Case of İsolation**
MURADOĞLU Z., ÖZBİLGE KAHVECİ E.
International Conference Pioneers Of Bulgarian Mathematics, Sofija, Bulgaria, 8 - 10 July 2006
- XVIII. **An Inversion Method for Identification of Elastoplastic Properties for Engineering Materials from Limited Spherical Indentation Measurements**
MURADOĞLU Z., HASANOĞLU A.
International Conference Tikhonov and Contemporary Mathematics, Moskva, Russia, 19 - 25 July 2006
- XIX. **The Mathematical Model of İnterface Problems Without Isolation and Behaviour of Numerical Solution**
ÖZBİLGE KAHVECİ E., MURADOĞLU Z.
International Conference on Modelling and Simulation (MS\ '06 Turkey), Konya, Turkey, 28 - 30 August 2006
- XX. **State discretization step as a regularization parameter in inverse elastoplastic problems**
Seyidmamedov Z.

The International Conference "Inverse Problems : Modeling and Simulation, Fethiye, 7 - 12 June 2004, pp.72-73

XXI. Modeling of Come off Effects for Deformable Layers Under Indentation

Seyidmamedov Z.

The First International Conference on Nonlinear Analysis and Nonlinear Modeling, Fethiye, 17 - 22 July 2001, pp.261-269

XXII. Reconstruction of The Coefficient of Sturm Liouville Equation by Boundary Measurements

Seyismamedov Z.

Int. Workshop on Nonlinear and Improperly Posed Problems, Kocaeli, Turkey, 17 - 22 August 1998, pp.67-71

XXIII. Malzemenin Elasto plastik Özelliklerinin Bulunması İle Bağlı Ters Problemin Sayısal Çözümü

Seyidmamedov Z.

7. Denizli Malzeme Sempozyumu, Denizli, Turkey, 2 - 04 April 1997, pp.459-464

XXIV. Numerical Solution of an Inverse Problem Related To Diagnostics of Materials

Seyidmamedov Z.

Türk Matematik Derneği, VIII. Ulusal Matematik Sempozyumu, Adana, Turkey, 21 - 23 September 1995, pp.68-71

Supported Projects

MURADOĞLU Z., Project Supported by Higher Education Institutions, Elastik Levhalar Sisteminin Eğilmesi İle İlgili Lineer Olmayan Biharmonik Denklem İçin Optimal Kontrol Probleminin Sayısal Çözümü, 2011 - 2014

Scientific Refereeing

JOURNAL OF INVERSE AND ILL-POSED PROBLEMS, SCI Journal, April 2023

CUMHURİYET SCIENCE JOURNAL, National Scientific Refreed Journal, April 2023

Metrics

Publication: 39

Citation (WoS): 16

Citation (Scopus): 20

H-Index (WoS): 3

H-Index (Scopus): 3

Non Academic Experience

Kocaeli Üniversitesi

Kocaeli Üniversitesi

Kocaeli Üniversitesi

Azerbaycan Eğitim Bakanlığı

Azerbaycan Eğitim Bakanlığı

Azerbaycan Bilimler Akademisi

Azerbaycan İstatistik Bakanlığı