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Education Information

Doctorate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1981 - 1986
Postgraduate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1979 - 1981
Undergraduate, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, Turkey 1975 - 1979

Dissertations

Doctorate, A new finite element method for electromagnetic boundary value problems in combined interior and exterior regions, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 1986
Postgraduate, Transient radiation and scattering from thin wires and conducting cylindres of arbitrary cross-section, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 1981

Research Areas

Engineering and Technology

Academic Titles / Tasks

Professor, Middle East Technical University, Faculty of Engineering, Elektrik-Elektronik Mühendisliği Bölümü, 1998 - Continues

Advising Theses

KUZUOĞLU M., Group representation theory and radar ambiguity functions, Postgraduate, E.BERK(Student), 2022
KUZUOĞLU M., Modeling monostatic sea clutter at low grazing angles by using method of moments, Postgraduate, E.ÖZBAŞ(Student), 2021

KUZUOĞLU M., Super-gain parametric wave amplification in optical micro-resonators using ultrashort pump waves, Doctorate, Ö.Emre(Student), 2020
Kuzuoğlu M., Detection of mini/micro unmanned air vehicle (UAV) under clutter presence and environmental effects, Postgraduate, İ.GÖKHAN(Student), 2019
Kuzuoğlu M., Radar resource allocation optimization in phased array radar systems, Postgraduate, İ.SERBEST(Student), 2019
KUZUOĞLU M., Radar performance analysis approaches for the evaluation of radar systems, Postgraduate, Ü.YENER(Student), 2018
KUZUOĞLU M., Finite element modeling of scattering from objects in rectangular waveguides, Postgraduate, H.GÜLBAŞ(Student), 2017
KUZUOĞLU M., Continuous-time nonlinear estimation filters using UKF-aided Gaussian sum representations, Doctorate, M.GÖKCE(Student), 2014
KUZUOĞLU M., Monte Carlo analysis of the effects of the material and shape uncertainties on radar cross section by the finite difference time domain method, Postgraduate, A.Kemal(Student), 2013
KUZUOĞLU M., Investigation of rough surface scattering of electromagnetic waves using finite element method, Postgraduate, Ö.EMRE(Student), 2013
KUZUOĞLU M., Monte Carlo analysis of the effects of material and shape uncertainties on radar cross section by the finite difference time domain method, Postgraduate, A.KEMAL(Student), 2013
KUZUOĞLU M., Comparison of Bayesian networks and Dempster-Shafer theory in attribute tracking systems, Postgraduate, Ç.SAKA(Student), 2013
KUZUOĞLU M., Optimum search strategies for electronic support measures receivers, Postgraduate, H.SİNAN(Student), 2012
KUZUOĞLU M., TANIK Y., Low elevation target detection and direction finding, Postgraduate, G.UYAR(Student), 2012
KUZUOĞLU M., ALATAN L., Analysis and design of microstrip patch antennas with arbitrary slot shapes, Doctorate, G.ŞENER(Student), 2011
KUZUOĞLU M., Target tracking with phased array radar by using adaptive update rate, Postgraduate, Ö.İPEK(Student), 2010
KUZUOĞLU M., Solution of the antenna placement problem by means of global optimization techniques, Postgraduate, M.URAL(Student), 2010
KUZUOĞLU M., Solution of the antenna palcement problem by means of global optimization techniques, Postgraduate, M.Ural(Student), 2010
KUZUOĞLU M., Periodic search strategies for electronic countermeasure receivers with desired probability of intercept for each frequency band, Postgraduate, E.KÖKSAL(Student), 2010
KUZUOĞLU M., Computation of radar cross sections of complex targets by shooting and bouncing ray method, Postgraduate, S.ÖZGÜN(Student), 2009
KUZUOĞLU M., Multiple classifier systems for a generic missle warner, Postgraduate, K.BAŞIBÜYÜK(Student), 2009
KUZUOĞLU M., Computation of radar cross sections of complex targets by physical optics with modified surface normals, Postgraduate, A.CEMAL(Student), 2008
KUZUOĞLU M., Investigation of electromagnetic wave propagation in double negative materials, Doctorate, S.GÖKÇEN(Student), 2008
KUZUOĞLU M., Finite element modeling of electromagnetic radiation, Doctorate, Ö.Özgün(Student), 2007
KUZUOĞLU M., Finite element modeling of electromagnetic radiation/scattering problems by domain decomposition, Doctorate, Ö.ÖZGÜN(Student), 2007
KUZUOĞLU M., Finite element modeling of electromagnetic scattering problems via hexahedral edge elements, Doctorate, A.EGEMEN(Student), 2007
KUZUOĞLU M., Performance metrics for fundamental estimation filters, Postgraduate, K.AKÇAY(Student), 2005
KUZUOĞLU M., Evaluation of multi target tracking algorithms in the presence of clutter, Postgraduate, O.GÜNER(Student), 2005
KUZUOĞLU M., Identification of electromagnetic scattering mechanisms by two dimensional windowed fourier transform approach, Postgraduate, K.Egemen(Student), 2004
KUZUOĞLU M., Indentification of elecromagnetic scattering mechanisms by two dimensional windowed fourier

transform approach, Postgraduate, K.EGEMEN(Student), 2004
KUZUOĞLU M., Specific absorption rate calculations using finite difference time domain method, Postgraduate, İ.TÜRER(Student), 2004
KUZUOĞLU M., Development of a software involving a group of iterative solvers and preconditioners for sparse matrix equations of computational electromagnetics, Postgraduate, N.ÜNSOY(Student), 2001
KUZUOĞLU M., Implementation of mesh generation algorithms, Postgraduate, Ö.YILDIZ(Student), 2001
KUZUOĞLU M., Development of a mesh generation software for computational electromagnetics, Postgraduate, B.BARIŞ(Student), 2000
KUZUOĞLU M., Analysis of electromagnetic scattering problems with the finite element method, Postgraduate, Y.ASIM(Student), 2000
LEBLEBİCİOĞLU M. K., KUZUOĞLU M., A Four-parameter atomic decomposition and the related time-frequency distribution, Doctorate, A.BULTAN(Student), 1995
KUZUOĞLU M., Finite-dimensional state-space approximations of transient electromanyetic systems, Postgraduate, N.KINAYMAN(Student), 1993
KUZUOĞLU M., Optimal control approach for the solution of electromagnetic inverse scattering problems., Doctorate, M.ÖNDER(Student), 1993
KUZUOĞLU M., Finite-dimensional state-space approximations of transient Electromagnetic systems., Postgraduate, N.Kınayman(Student), 1993
KUZUOĞLU M., Investigation and development of some algorithms in time optimal control, Postgraduate, S.TUNÇÖZ(Student), 1992
KUZUOĞLU M., Iterative calculation of optimal output feedback matrices, Postgraduate, K.YEHYA(Student), 1991
KUZUOĞLU M., Coherent detection of target signals in non Gaussian clutter, Postgraduate, S.BAYRAKERİ(Student), 1990
KUZUOĞLU M., Radar range performance analysis for different target fluctuation models, Postgraduate, M.EMRE(Student), 1989
KUZUOĞLU M., Analysis of microstrip and microstrip-like structures by the finite element method, Postgraduate, T.AKDENİZ(Student), 1989
KUZUOĞLU M., A Finite element method for the solution of three-dimensional electromagnetic boundary valve problems with real and artificial boundary conditions, Postgraduate, Ü.PEKEL(Student), 1987
KUZUOĞLU M., A finite element method for the solution of three-dimensional electromagnetic boundary value problems with real and artificial boundary conditions, Postgraduate, Ü.Pekel(Student), 1987

Published journal articles indexed by SCI, SSCI, and AHCI

I. **Self-Tuning Locally-Conformal PML Mesh Truncation for 3D Vector Finite Element Method**
ÖZGÜN Ö., KUZUOĞLU M., Mittra R.
IEEE Transactions on Antennas and Propagation, vol.72, no.2, pp.2036-2040, 2024 (SCI-Expanded)

II. **Parametrization-free locally-conformal perfectly matched layer method for finite element solution of Helmholtz equation**
ÖZGÜN Ö., KUZUOĞLU M., Beriot H., Mittra R.
Computer Physics Communications, vol.288, 2023 (SCI-Expanded)

III. **Analytic and numeric perturbation techniques approach for the solution of electromagnetic wave problems Elektromanyetik dalga yayılım ve saçılım problemlerine analitik ve sayısal pertürbasyon teknikleri ile çözüm yaklaşımı**
Akkaya M. K., YILMAZ A. E., KUZUOĞLU M.
Journal of the Faculty of Engineering and Architecture of Gazi University, vol.39, no.1, pp.299-314, 2023 (SCI-Expanded)

IV. **Nanoscale optical parametric amplification through super-nonlinearity induction**
Aşırım Ö. E., KUZUOĞLU M.
Applied Nanoscience (Switzerland), vol.12, no.8, pp.2429-2441, 2022 (SCI-Expanded)

V. **Nanoscale active tuning of the second harmonic generation efficiency in semiconductors from super-**

low to gigantic values
Asirim O. E., KUZUOĞLU M.
NEW JOURNAL OF PHYSICS, vol.24, no.8, 2022 (SCI-Expanded)

VI. **Physics-based modeling of sea clutter phenomenon by a full-wave numerical solver**
ÖZGÜN Ö., KUZUOĞLU M.
WAVE MOTION, vol.109, 2022 (SCI-Expanded)

VII. **A novel beamforming emulating photonic nanojets for wireless relay networks**
Alabed S., Mahariq I., Salman M., KUZUOĞLU M.
Computers, Materials and Continua, vol.69, no.1, pp.575-588, 2021 (SCI-Expanded)

VIII. **PETOOL v2.0: Parabolic Equation Toolbox with evaporation duct models and real environment data**
ÖZGÜN Ö., Sahin V., Erguden M. E., Apaydin G., YILMAZ A. E., KUZUOĞLU M., SEVGİ L.
COMPUTER PHYSICS COMMUNICATIONS, vol.256, 2020 (SCI-Expanded)

IX. **Enhancement of optical parametric amplification in microresonators via gain medium parameter selection and mean cavity wall reflectivity adjustment**
Asirim O. E., KUZUOĞLU M.
JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS, vol.53, no.18, 2020 (SCI-Expanded)

X. **High-Fidelity Harmonic Generation in Optical Micro-Resonators Using BFGS Algorithm**
Asirim O. E., Yolalmaz A., KUZUOĞLU M.
MICROMACHINES, vol.11, no.7, 2020 (SCI-Expanded)

XI. **A novel CEM technique for modeling electromagnetic scattering from metasurfaces**
ÖZGÜN Ö., Mittra R., KUZUOĞLU M.
INTERNATIONAL JOURNAL OF NUMERICAL MODELLING-ELECTRONIC NETWORKS DEVICES AND FIELDS, vol.33, no.2, 2020 (SCI-Expanded)

XII. **Numerical Study of Resonant Optical Parametric Amplification via Gain Factor Optimization in Dispersive Microresonators**
Asirim O. E., KUZUOĞLU M.
PHOTONICS, vol.7, no.1, 2020 (SCI-Expanded)

XIII. **Super-Gain Optical Parametric Amplification in Dielectric Micro-Resonators via BFGS Algorithm-Based Non-Linear Programming**
Asirim O. E., KUZUOĞLU M.
APPLIED SCIENCES-BASEL, vol.10, no.5, 2020 (SCI-Expanded)

XIV. **A Domain Decomposition Finite-Element Method for Modeling Electromagnetic Scattering From Rough Sea Surfaces With Emphasis on Near-Forward Scattering**
ÖZGÜN Ö., KUZUOĞLU M.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.67, no.1, pp.335-345, 2019 (SCI-Expanded)

XV. **Coordinate transformation aided finite element method for contour detection of breast tumors in microwave imaging**
ÖZGÜN Ö., KUZUOĞLU M.
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN BIOMEDICAL ENGINEERING, vol.34, no.10, 2018 (SCI-Expanded)

XVI. **Remesh-Free Shape Optimization by Transformation Optics**
ÖZGÜN Ö., KUZUOĞLU M.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.64, no.12, pp.5479-5482, 2016 (SCI-Expanded)

XVII. **Implementation of coordinate transformations in periodic finite-element method for modeling rough surface scattering problems**
ÖZGÜN Ö., KUZUOĞLU M.
INTERNATIONAL JOURNAL OF RF AND MICROWAVE COMPUTER-AIDED ENGINEERING, vol.26, no.4, pp.322-329, 2016 (SCI-Expanded)

XVIII. **Questioning Degree of Accuracy Offered by the Spectral Element Method in Computational Electromagnetics**
Mahariq I., KURT H., KUZUOĞLU M.

APPLIED COMPUTATIONAL ELECTROMAGNETICS SOCIETY JOURNAL, vol.30, no.7, pp.698-705, 2015 (SCI-Expanded)

XIX. **Monte Carlo simulations of Helmholtz scattering from randomly positioned array of scatterers by utilizing coordinate transformations in finite element method**
ÖZGÜN Ö., KUZUOĞLU M.
WAVE MOTION, vol.56, pp.165-182, 2015 (SCI-Expanded)

XX. **Unscented Kalman filter-aided Gaussian sum filter**
Gokce M., KUZUOĞLU M.
IET RADAR SONAR AND NAVIGATION, vol.9, no.5, pp.589-599, 2015 (SCI-Expanded)

XXI. **Excessive Memory Usage of the ELLPACK Sparse Matrix Storage Scheme throughout the Finite Element Computations**
Akinci G., YILMAZ A. E., KUZUOĞLU M.
RADIOENGINEERING, vol.23, no.4, pp.997-1004, 2014 (SCI-Expanded)

XXII. **Approximation of transformation media-based reshaping action by genetic optimization**
Ozgun O., KUZUOĞLU M.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.117, no.2, pp.597-604, 2014 (SCI-Expanded)

XXIII. **Combining perturbation theory and transformation electromagnetics for finite element solution of Helmholtz-type scattering problems**
KUZUOĞLU M., Ozgun O.
JOURNAL OF COMPUTATIONAL PHYSICS, vol.274, pp.883-897, 2014 (SCI-Expanded)

XXIV. **Photonic Nanojet Analysis by Spectral Element Method**
Mahariq I., KUZUOĞLU M., TARMAN I. H., KURT H.
IEEE PHOTONICS JOURNAL, vol.6, no.5, 2014 (SCI-Expanded)

XXV. **On the Attenuation of the Perfectly Matched Layer in Electromagnetic Scattering Problems with the Spectral Element Method**
Mahariq I., KUZUOĞLU M., TARMAN I. H.
APPLIED COMPUTATIONAL ELECTROMAGNETICS SOCIETY JOURNAL, vol.29, no.9, pp.701-710, 2014 (SCI-Expanded)

XXVI. **Comments on "Propagation Modeling Over Irregular Terrain by the Improved Two-Way Parabolic Equation Method"**
Ozgun O., Apaydin G., KUZUOĞLU M., Sevgi L.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.62, no.7, pp.3894, 2014 (SCI-Expanded)

XXVII. **A coordinate transformation approach for efficient repeated solution of Helmholtz equation pertaining to obstacle scattering by shape deformations**
Ozgun O., KUZUOĞLU M.
COMPUTER PHYSICS COMMUNICATIONS, vol.185, no.6, pp.1616-1627, 2014 (SCI-Expanded)

XXVIII. **Cartesian Grid Mapper: Transformation Media for Modeling Arbitrary Curved Boundaries With Cartesian Grids**
ÖZGÜN Ö., KUZUOĞLU M.
IEEE ANTENNAS AND WIRELESS PROPAGATION LETTERS, vol.13, pp.1771-1774, 2014 (SCI-Expanded)

XXIX. **PERFORMANCE COMPARISON OF VARIOUS HEXAHEDRAL ELEMENT QUALITY METRICS VIA PARAMETRIC DISTORTION OF AN IDEAL ELEMENT**
Yalcin E., YILMAZ A. E., KUZUOĞLU M.
INTERNATIONAL JOURNAL OF COMPUTATIONAL METHODS, vol.10, no.4, 2013 (SCI-Expanded)

XXX. **Monte Carlo analysis of ridged waveguides with transformation media**
Ozgun O., KUZUOĞLU M.
INTERNATIONAL JOURNAL OF RF AND MICROWAVE COMPUTER-AIDED ENGINEERING, vol.23, no.4, pp.476-481, 2013 (SCI-Expanded)

XXXI. **Software metamaterials: Transformation media based multi-scale techniques for computational electromagnetics**
Ozgun O., KUZUOĞLU M.

JOURNAL OF COMPUTATIONAL PHYSICS, vol.236, pp.203-219, 2013 (SCI-Expanded)

XXXII. **A Transformation Media Based Approach for Efficient Monte Carlo Analysis of Scattering From Rough Surfaces With Objects**
Ozgun O., KUZUOĞLU M.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.61, no.3, pp.1352-1362, 2013 (SCI-Expanded)

XXXIII. **Transformation Electromagnetics Based Analysis of Waveguides With Random Rough or Periodic Grooved Surfaces**
Ozgun O., KUZUOĞLU M.
IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.61, no.2, pp.709-719, 2013 (SCI-Expanded)

XXXIV. **Transformation-based metamaterials to eliminate the staircasing error in the finite difference time domain method**
Ozgun O., KUZUOĞLU M.
INTERNATIONAL JOURNAL OF RF AND MICROWAVE COMPUTER-AIDED ENGINEERING, vol.22, no.4, pp.530-540, 2012 (SCI-Expanded)

XXXV. **Monte Carlo-Based Characteristic Basis Finite-Element Method (MC-CBFEM) for Numerical Analysis of Scattering From Objects On/Above Rough Sea Surfaces**
Ozgun O., KUZUOĞLU M.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.50, no.3, pp.769-783, 2012 (SCI-Expanded)

XXXVI. **PETOOL: MATLAB-based one-way and two-way split-step parabolic equation tool for radiowave propagation over variable terrain**
Ozgun O., Apaydin G., KUZUOĞLU M., Sevgi L.
COMPUTER PHYSICS COMMUNICATIONS, vol.182, no.12, pp.2638-2654, 2011 (SCI-Expanded)

XXXVII. **A Novel Two-Way Finite-Element Parabolic Equation Groundwave Propagation Tool: Tests With Canonical Structures and Calibration**
Apaydin G., Ozgun O., KUZUOĞLU M., Sevgi L.
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.49, no.8, pp.2887-2899, 2011 (SCI-Expanded)

XXXVIII. **Trying to Interpret Modern Art as a Finite-Element Practitioner**
YILMAZ A. E., KUZUOĞLU M.
IEEE ANTENNAS AND PROPAGATION MAGAZINE, vol.53, no.3, pp.158-166, 2011 (SCI-Expanded)

XXXIX. **Form Invariance of Maxwell's Equations: The Pathway to Novel Metamaterial Specifications for Electromagnetic Reshaping**
Ozgun O., KUZUOĞLU M.
IEEE ANTENNAS AND PROPAGATION MAGAZINE, vol.52, no.3, pp.51-65, 2010 (SCI-Expanded)

XL. **PO-BASED CHARACTERISTIC BASIS FINITE ELEMENT METHOD (CBFEM-PO)-A PARALLEL, ITERATION-FREE DOMAIN DECOMPOSITION ALGORITHM USING PERFECTLY MATCHED LAYERS FOR LARGE-SCALE ELECTROMAGNETIC SCATTERING PROBLEMS**
Ozgun O., Mittra R., KUZUOĞLU M.
MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.52, no.5, pp.1053-1060, 2010 (SCI-Expanded)

XLI. **Iterative leap-field domain decomposition method: a domain decomposition finite element algorithm for 3D electromagnetic boundary value problems**
Ozgun O., KUZUOĞLU M.
IET MICROWAVES ANTENNAS & PROPAGATION, vol.4, no.4, pp.543-552, 2010 (SCI-Expanded)

XLII. **Domain compression via anisotropic metamaterials designed by coordinate transformations**
Ozgun O., KUZUOĞLU M.
JOURNAL OF COMPUTATIONAL PHYSICS, vol.229, no.3, pp.921-932, 2010 (SCI-Expanded)

XLIII. **General-Purpose Characteristic Basis Finite Element Method for Multi-Scale Electrostatic and Electromagnetic Problems**
Ozgun O., Mittra R., KUZUOĞLU M.
ELECTROMAGNETICS, vol.30, pp.205-221, 2010 (SCI-Expanded)

XLIV. **Computation of physical optics integral by Levin's integration algorithm**
Durgun A. C., KUZUOĞLU M.

Progress In Electromagnetics Research M, vol.6, pp.59-74, 2009 (SCI-Expanded)

XLV. **Multilevel Characteristic Basis Finite-Element Method (ML-CBFEM)-An Efficient Version of a Domain Decomposition Algorithm for Large-Scale Electromagnetic Problems**
Ozgun O., Mittra R., KUZUOĞLU M.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.57, no.10, pp.3381-3387, 2009 (SCI-Expanded)

XLVI. **Design of the Square Loop Frequency Selective Surfaces with Particle Swarm Optimization via the Equivalent Circuit Model**
YILMAZ A. E., KUZUOĞLU M.
RADIOENGINEERING, vol.18, no.2, pp.95-102, 2009 (SCI-Expanded)

XLVII. **A particle swarm optimization approach for hexahedral mesh smoothing**
Yilmaz A. E., KUZUOĞLU M.
INTERNATIONAL JOURNAL FOR NUMERICAL METHODS IN FLUIDS, vol.60, no.1, pp.55-78, 2009 (SCI-Expanded)

XLVIII. **Parallelized Characteristic Basis Finite Element Method (CBFEM-MPI)-A non-iterative domain decomposition algorithm for electromagnetic scattering problems**
Ozgun O., Mittra R., KUZUOĞLU M.
JOURNAL OF COMPUTATIONAL PHYSICS, vol.228, no.6, pp.2225-2238, 2009 (SCI-Expanded)

XLIX. **CBFEM-MPI: A Parallelized Version of Characteristic Basis Finite Element Method for Extraction of 3-D Interconnect Capacitances**
Ozgun O., Mittra R., KUZUOĞLU M.
IEEE TRANSACTIONS ON ADVANCED PACKAGING, vol.32, no.1, pp.164-174, 2009 (SCI-Expanded)

L. **Form-Invariance of Maxwell's Equations in Waveguide Cross-Section Transformations**
Ozgun O., KUZUOĞLU M.
ELECTROMAGNETICS, vol.29, no.4, pp.353-376, 2009 (SCI-Expanded)

LI. **Efficient finite element solution of low-frequency scattering problems via anisotropic metamaterial layers**
Ozgun O., KUZUOĞLU M.
MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.50, no.3, pp.639-646, 2008 (SCI-Expanded)

LII. **Finite element analysis of electromagnetic scattering problems via iterative leap-field domain decomposition method**
Ozgun O., KUZUOĞLU M.
JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, vol.22, pp.251-266, 2008 (SCI-Expanded)

LIII. **Recent advances in perfectly matched layers in finite element applications**
Ozgun O., KUZUOĞLU M.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.16, no.1, pp.57-66, 2008 (SCI-Expanded)

LIV. **Comparison of linear and quadratic hexahedral edge elements in electromagnetic scattering problems**
YILMAZ A., Kuzuoglu M.
AEU-INTERNATIONAL JOURNAL OF ELECTRONICS AND COMMUNICATIONS, vol.62, no.8, pp.582-587, 2008 (SCI-Expanded)

LV. **ANALYSIS OF HIGH FREQUENCY PLANE WAVE SCATTERING FROM A DOUBLE NEGATIVE CYLINDER VIA THE MODIFIED WATSON TRANSFORMATION AND DEBYE EXPANSION**
ŞEN S., KUZUOĞLU M.
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LVI. **My collaboration with Raj Mittra: Contributions to the theory of perfectly matched layers**
Kuzuoglu M.
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.16, no.1, pp.1-6, 2008 (SCI-Expanded)

LVII. **Near-field performance analysis of locally-conformal perfectly matched absorbers via Monte Carlo simulations**
Ozgun O., KUZUOĞLU M.

JOURNAL OF COMPUTATIONAL PHYSICS, vol.227, no.2, pp.1225-1245, 2007 (SCI-Expanded)

LVIII. **Calculation of optimized parameters of rectangular microstrip patch antenna using particle swarm optimization**
Yilmaz A. E., Kuzuoglu M.
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LIX. **Utilization of anisotropic metamaterial layers in waveguide miniaturization and transitions**
Ozgun O., Kuzuoglu M.
IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS, vol.17, no.11, pp.754-756, 2007 (SCI-Expanded)

LX. **Forward-backward domain decomposition method for finite element solution of electromagnetic boundary value problems**
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MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.49, no.10, pp.2582-2590, 2007 (SCI-Expanded)

LXI. **Electromagnetic metamorphosis: Reshaping scatterers via conformal anisotropic metamaterial coatings**
Ozgun O., Kuzuoglu M.
MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.49, no.10, pp.2386-2392, 2007 (SCI-Expanded)

LXII. **Multicenter perfectly matched layer implementation for finite element mesh truncation**
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LXIII. **Non-Maxwellian locally-conformal PML absorbers for finite element mesh truncation**
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LXIV. **Analysis of perfectly matched double negative layers via complex coordinate transformations**
Kuzuoglu M.
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.54, no.12, pp.3695-3699, 2006 (SCI-Expanded)

LXV. **Locally-conformal perfectly matched layer implementation for finite element mesh truncation**
Ozgun O., Kuzuoglu M.
MICROWAVE AND OPTICAL TECHNOLOGY LETTERS, vol.48, no.9, pp.1836-1839, 2006 (SCI-Expanded)

LXVI. **Full-wave analysis of microstrip lines on a highly lossy substrate**
Prakash V., Kuzuoglu M., Mittra R.
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LXVIII. **An efficient solution of the generalized eigenvalue problems for planar transmission lines**
Prakash V., Kuzuoglu M., Mittra R.
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LXIX. **Pole estimation for arbitrarily-shaped dielectric targets using genetic algorithm-based resonance annihilation technique**
Turhan-Sayan G., Kuzuoglu M.
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