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Eğitim Bilgileri

Doktora, Arizona State University, Electrical Engineering, Amerika Birleşik Devletleri 1991 - 1995

Araştırma Alanları

Elektromanyetik Dalgalar, Antenler ve Propagasyon

Akademik Unvanlar / Görevler

Ücr.Öğretim Görevlisi, Marmara Üniversitesi, Mühendislik Fakültesi, Elektrik ve Elektronik Mühendisliği Bölümü, 2017 - Devam Ediyor

Verdiği Dersler

Electronics 2, Lisans, 2020 - 2021

SCI, SSCI ve AHCI İndekslerine Giren Dergilerde Yayınlanan Makaleler

- I. **Analysis of emission properties of intermixed InGaN/GaN quantum wells using a concentration-dependent interdiffusion model**
Susilo T. B., Khan I., ALSUNAIĐI M.
European Physical Journal D, cilt.73, sa.12, 2019 (SCI-Expanded)
- II. **Characterization of atmospheric absorption in the 60 GHz frequency band using a multi-pole material model**
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Applied Computational Electromagnetics Society Journal, cilt.34, sa.12, ss.1881-1887, 2019 (SCI-Expanded)
- III. **Numerical study of propagation properties of surface plasmon polaritons in nonlinear media**

- Sagor R. H., Ghulam Saber M., Alsunaidi M.
European Physical Journal D, cilt.70, sa.3, 2016 (SCI-Expanded)
- IV. **A possible approach on optical analogues of gravitational attractors** Damián P. San-Román-Alerigi1
Slimane A. B., Ng T. K., Alsunaidi M., Ooi B. S.
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- V. **Electron irradiation induced reduction of the permittivity in chalcogenide glass (As₂S₃) thin film**
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- VI. **A simple FDTD algorithm for simulating EM-wave propagation in general dispersive anisotropic material**
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- VII. **Generation of J₀-Bessel-Gauss beam by a heterogeneous refractive index map**
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- VIII. **Efficient NL-FDTD solution schemes for the phase-sensitive second harmonic generation problem**
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- IX. **An efficient time-domain algorithm for the simulation of heterogeneous dispersive structures**
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Journal of Infrared, Millimeter, and Terahertz Waves, cilt.30, sa.11, ss.1226-1233, 2009 (SCI-Expanded)
- X. **A new carrier-free nonlinear FDTD algorithm suitable for the moving computational window technique**
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- XI. **A general ADE-FDTD algorithm for the simulation of dispersive structures**
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- XII. **A FDTD algorithm for the analysis of short optical pulse second harmonic generation in dispersive media**
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- XIII. **Vectorial FDTD technique for the analysis of optical second-harmonic generation**
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- XIV. **Influence of electrode parameters on the performance of optically controlled MESFETs**
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Optics and Laser Technology, cilt.40, sa.5, ss.711-715, 2008 (SCI-Expanded)
- XV. **Optoelectronic conversion of short pulses in sub-micrometer gaas active devices**
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- XVI. **FDTD analysis of microstrip patch antenna on ferrite substrate**
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- XVII. **Simulation of beam propagation in second-order nonlinear optical media**
Furati K., Alsunaidi M., Masoudi H.
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- XVIII. **An explicit finite-difference scheme for wave propagation in nonlinear optical structures**
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- XX. **Numerical investigations of optically induced Gunn oscillations in MESFET-like structures**
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- XXI. **Time-domain algorithm for the analysis of second-harmonic generation in nonlinear optical structures**
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- XXII. **Energy model for optically controlled MESFETs**
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- XXIII. **FDTD simulation of antenna coating effects on the radiation properties of cellular phones**
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- XXIV. **Time-domain finite-difference beam propagation method**
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- XXV. **PML-FDTD formulation for the simulation of optical structures**
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- XXVI. **Determination of the permittivity of spherical scatterers using a neural network approach**
Hamid A., Alsunaidi M.
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- XXVII. **A parallel implementation of a two-dimensional hydrodynamic model for microwave semiconductor device including inertia effects in momentum relaxation**
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- XXVIII. **Electromagnetic wave effects on microwave transistors using a full-wave time-domain model**
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Hakemli Kongre / Sempozyum Bildiri Kitaplarında Yer Alan Yayınlar

- I. **Analysis of oxygen absorption at 60 GHz frequency band**
Arvas M., ALSUNAIDI M.
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- II. **A novel EBG structure to improve isolation in MIMO antenna**
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- III. **Plasmonic Nanostructured Cellular Automata**
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- IV. **Analysis of nanoscale voids in nanorod plasmonic clusters for imaging applications**
Alkhazraji E., Alsunaidi M.
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- V. **Efficient light extraction from GaN LEDs using gold-coated ZnO nanoparticles**
Alhadidi A., Al-Taweel H., Al-Dakhil A., Al-Zahrani A., Alkhazraji E., Alsunaidi M.
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2015 IEEE 8th GCC Conference and Exhibition, GCCCE 2015, Muscat, Umman, 1 - 04 Şubat 2015
- VII. **Intermixing effects on emission properties of InGaN/GaN coupled Quantum wells**
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Shemis M., Gondal M., Alkhazraji E., Najmi M., Abalkhail M., Khan I., Susilo T., Rashid S., Alsunaidi M.
2014 11th Annual High Capacity Optical Networks and Emerging/Enabling Technologies (Photonics for Energy), HONET-PfE 2014, North-Carolina, Amerika Birleşik Devletleri, 15 - 17 Aralık 2014, ss.75-78
- IX. **An FDTD algorithm for simulating light propagation in anisotropic dynamic gain media**
Al-Jabr A., San Roman Alerigi D., Ooi B., Alsunaidi M.
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- X. **Photonic analogies of gravitational attractors**
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- XI. **Effective antireflection properties of porous silicon nanowires for photovoltaic applications**
Najar A., Al-Jabr A. A., Slimane A. B., Alsunaidi M., Ng T. K., Ooi B. S., Sougrat R., Anjum D. H.
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- XII. **TE photonic modes in metal-insulator-metal structures**
Khan M. Z. U., Mujahid M., Alsunaidi M.
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- XIII. **Plasmonic cavities for enhanced optical confinement**
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- XIV. **An FDTD algorithm for simulation of em waves propagation in laser with static and dynamic gain models**
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- XV. **Sensing properties of plasmonic ring resonators**
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- XVI. **SPP propagation in nonlinear glass-metal interface**
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- XVII. **Time-domain BPM for modeling ultrashort pulsed optical beams in dispersive medium**
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- XXII. **Full-wave solution of the second harmonic generation problem using a nonlinear FDTD algorithm**
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- XXV. **DC characteristic analysis using physical model and the FDTD method for the illuminated MESFET**
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- XXVIII. **Performance comparison of MODFET and MESFET using combined electromagnetic and solid-state simulator**
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XXX. High-frequency large-signal physical modeling of microwave semiconductor devices

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Metrikler

Yayın: 61

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Atıf (Scopus): 399

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H-İndeks (Scopus): 9