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### Education Information

Doctorate, Ataturk University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, Turkey 1990 - 1994

Postgraduate, Ataturk University, Fen Bilimleri Enstitüsü, Fizik Anabilim Dalı, Turkey 1988 - 1990

Undergraduate, Ataturk University, Kâzım Karabekir Eğitim Fakültesi, Turkey 1982 - 1986

### Research Areas

Engineering and Technology

### Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Exploring the influence of Zn impurities on the structural, optical, and H<sub>2</sub> sensor properties of ultrasonic spray pyrolysis-grown MgO thin films**  
SAĞLAM H. K., İSKENDEROĞLU D., Güldüren M. E., GÜNEY H., SARITAŞ S., ERTUĞRUL M.  
Optik, vol.315, 2024 (SCI-Expanded)
- II. **Physical properties of Cu<sub>2</sub>ZnSnS<sub>4</sub> absorber layer deposited by spray pyrolysis: Effect of the temperature associated with SCAPS 1D simulation**  
Smairi S., Hartiti B., Batan A., Ziti A., Nkuissi H. J. T., Rachidy C., Benali H., Keles S., Thevenin P., ERTUĞRUL M.  
Physica B: Condensed Matter, vol.691, 2024 (SCI-Expanded)
- III. **Na-doped ZnO thin film by USP method for amperometric detection of Alura Red (E129) azo dye**  
Topal M. B., SAĞLAM H. K., ERTUĞRUL M., TAŞĞIN E., NADAROĞLU H.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.35, no.30, 2024 (SCI-Expanded)
- IV. **Working Voltage Switching the Photo-/Thermo-Electric Effect for Distinct Ultraviolet and Infrared Signal Detection**  
Liu S., Ding Y., Rong W., Xu Y., Li Y., Onwudiwe D. C., Bae B. S., ERTUĞRUL M., Zhu Y., Wu Z., et al.  
ACS Nano, vol.18, no.36, pp.25226-25236, 2024 (SCI-Expanded)
- V. **Core-Shell Plasmonic Nanostructures for Hyperthermia of Cancer and Tumor Cells**  
Rajabpour V., Abbasian K., ERTUĞRUL M.  
PLASMONICS, 2024 (SCI-Expanded)
- VI. **Dual narrowband photodetectors based on halide perovskite single crystal heterojunctions with solution-processed epitaxial growth**

- Zhang D., Pan Y., Wang X., Wei Z., Xu Y., Onwudiwe D. C., Bae B. S., ERTUĞRUL M., Zhou J., Xu X., et al.  
JOURNAL OF MATERIALS CHEMISTRY C, vol.12, no.33, pp.12806-12817, 2024 (SCI-Expanded)
- VII. **Graphene/Al<sub>2</sub>O<sub>3</sub>/Si Schottky diode with integrated waveguide on a silicon-on-insulator wafer**  
Seven E., ORHAN E., Di Bartolomeo A., ERTUĞRUL M., Taştekin N. A.  
Indian Journal of Physics, vol.98, no.8, pp.2795-2803, 2024 (SCI-Expanded)
- VIII. **Investigation of hybrid wires combining superconductive MgB<sub>2</sub> and ultra-conductive Graphene/Cu sheath**  
Karaboga F., Farhangmehr M., Özmen A., Yetis H., Belenli I., ERTUĞRUL M.  
Journal of Alloys and Compounds, vol.973, 2024 (SCI-Expanded)
- IX. **Photoluminescence enhancement of chemical vapor-deposited MoSe<sub>2</sub> monolayers**  
KOPAR A. S., Coşkun A., Çağlar M., ERTUĞRUL M., Turgut G.  
Journal of Materials Science: Materials in Electronics, vol.35, no.6, 2024 (SCI-Expanded)
- X. **A Study of Nanostructured FeO Thin Film-Based Allure Red and Direct Blue 15 Azo Dyes Sensing Scheme**  
Gunduz S., Alaylı A., GÜNEY H., ÇOBAN Ö., ERTUĞRUL M., NADAROĞLU H.  
Journal of Nano Research, vol.82, pp.21-32, 2024 (SCI-Expanded)
- XI. **Substance discrimination imaging derived from switchable soft and hard x-ray sensing in direct x-ray detector**  
Zhao J., Wang X., Li Y., Cheng Q., Onwudiwe D. C., Bae B. S., ERTUĞRUL M., Zhu Y., Lei W., Xu X.  
InfoMat, 2024 (SCI-Expanded)
- XII. **Rational design of MXene/Boron Carbon Nitride nanotube composite electrode for supercapacitors with improved electrochemical properties**  
TUZLUCA YEŞİLBAĞ F. N., YEŞİLBAĞ Y. Ö., Huseyin A., Salih A. J. S., Ertugrul M.  
JOURNAL OF ENERGY STORAGE, vol.72, 2023 (SCI-Expanded)
- XIII. **Analyses of Cu impurity effects on the USP grown MgO thin films: Structural, optical and photocatalytic assessments**  
Saglam H. K., İSKENDERÖĞLU D., Gulduren M. E., Gueney H., Sahin B., ERTUĞRUL M.  
OPTICAL MATERIALS, vol.145, 2023 (SCI-Expanded)
- XIV. **Ta<sub>4</sub>C<sub>3</sub> MXene-based clover-shaped patch antenna for the treatment of lung cancer with TWA**  
GEYİKOĞLU M. D., Ertugrul M.  
OPTICAL AND QUANTUM ELECTRONICS, vol.55, no.12, 2023 (SCI-Expanded)
- XV. **Elaboration and characterization of quaternary material Cu<sub>2</sub>ZnSnS<sub>4</sub> by spray pyrolysis technique using Taguchi method**  
Salma S., Hartiti B., Ziti A., Nkuissi H. J. T., Benali H., Aykut Y., Fadili S., Thevenin P., Ertugrul M.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.129, no.9, 2023 (SCI-Expanded)
- XVI. **Extraction Method for Unique Determination of Complex Permittivity from Graphical Analysis of Natural Frequencies**  
Hasar U. C., ÖZTÜRK G., Kaya Y., Alfaqawi M. S. S., Barroso J. J., ERTUĞRUL M., Ramahi O. M.  
IEEE Transactions on Antennas and Propagation, vol.71, no.9, pp.7690-7693, 2023 (SCI-Expanded)
- XVII. **Enhancing radar absorption performance of Sr-hexaferrite by hybridization with coiled carbon nanotubes via chemical vapour deposition method**  
Zulkimi M. M. M., Azis R. S., Ismail I., Mokhtar N., Ertugrul M., Hamidon M. N., Hasan I. H., YEŞİLBAĞ Y. Ö., TUZLUCA YEŞİLBAĞ F. N., ÖZTÜRK G., et al.  
DIAMOND AND RELATED MATERIALS, vol.137, 2023 (SCI-Expanded)
- XVIII. **An efficient cost effective wide-angle metasurface-based linear and circular polarization converter for X-, Ku- and K-band applications**  
ÖZTÜRK G., Hasar U. C., Ertugrul M., Tutar F., ÇORAPSIZ M. F., Kurt M., Donmez K., Ismail I., Alfaqawi M. S. S.  
OPTICS AND LASER TECHNOLOGY, vol.163, 2023 (SCI-Expanded)
- XIX. **Excitation wavelength dependent triple-mode photoluminescence of copper-based halides for advanced anti-counterfeiting**

Liu C., Zhang Y., Luo M., Wang L., Liu X., Pan J., Zhao Z., Fang F., Mao L., Huang Y., et al.

APL MATERIALS, vol.11, no.7, 2023 (SCI-Expanded)

- XX. **A Comparative Study of the Structural and Optical Properties of ZnS Films Deposited by Spray-Pyrolysis Technique**  
Najim A., Hartiti B., Nkuisi H. J. T., Labrim H., Fadili S., Ertugrul M., Thevenin P., BUDAK H. F., KASAPOĞLU A. E.  
CRYSTAL RESEARCH AND TECHNOLOGY, vol.58, no.7, 2023 (SCI-Expanded)
- XXI. **Temporal Reflection Response of Plane Waves Within an  $N$ -Layer Structure Involving Bianisotropy**  
Hasar U. C., ÖZTÜRK G., Kaya Y., Barroso J. J., ERTUĞRUL M., Ramahi O. M., Alfaqawi M. S. S.  
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.71, no.7, pp.5946-5953, 2023 (SCI-Expanded)
- XXII. **Reconfigurable multifunctional graphene-based antenna for cancer therapy with THz wave ablation**  
GEYİKOĞLU M. D., Polat H. K., Cavusoglu B., Ertugrul M.  
OPTICAL AND QUANTUM ELECTRONICS, vol.55, no.7, 2023 (SCI-Expanded)
- XXIII. **Parameter extraction method for reflection-asymmetric bianisotropic metamaterial slabs using one-port measurements**  
Hasar U. C., Kaya Y., Ozturk H., Ertugrul M., Ramahi O. M.  
MEASUREMENT, vol.211, 2023 (SCI-Expanded)
- XXIV. **Structural, mechanical and cytotoxic properties of Ta-doped diamond-like carbon films deposited via radio frequency magnetron sputtering on polyether ether ketone**  
Keles S., YEŞİL Z., SADELER R., Ertugrul M., Meletlioglu E.  
THIN SOLID FILMS, vol.769, 2023 (SCI-Expanded)
- XXV. **Mechanical Properties of Polymer-Infiltrated Fluorapatite Glass Ceramics Fabricated from Clam Shell and Soda Lime Silicate Glass**  
KUL E., Matori K. A., Karadeniz S., Arslan E., Ertugrul M.  
MATERIALE PLASTICE, vol.60, no.1, pp.128-136, 2023 (SCI-Expanded)
- XXVI. **Investigation of the growth temperature effect on H<sub>2</sub> gas detection for ZnO thin films**  
SAĞLAM H. K., GÜR E., Ertugrul M.  
OPTICAL MATERIALS, vol.137, 2023 (SCI-Expanded)
- XXVII. **Experimental and theoretical insights on the structural and optical properties of GeO<sub>x</sub> thin films deposited via RF magnetron sputtering under varying oxygen percentage**  
ŞENADIM TÜZEMEN E., Hopoglu H., SARITAŞ S., AYDINOĞLU H. S., ERTUĞRUL M., Maslov M. M., KAYA S., UNGAN F., GÜR E.  
PHYSICA B-CONDENSED MATTER, vol.650, 2023 (SCI-Expanded)
- XXVIII. **Honey-Water Content Analysis by Mixing Models Using a Self-Calibrating Microwave Method**  
Hasar H., Hasar U. C., Kaya Y., Ozturk H., Izginli M., ÖZTAŞ T., Aslan N., Ertugrul M., Barroso J. J., Ramahi O. M.  
IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.71, no.2, pp.691-697, 2023 (SCI-Expanded)
- XXIX. **Permittivity Extraction of Soil Samples Using Coaxial-Line Measurements by a Simple Calibration**  
Hasar H., Hasar U. C., Ozturk H., Izginli M., Aslan N., ÖZTAŞ T., Ertugrul M., Karayilan M., Ramahi O. M.  
IEEE TRANSACTIONS ON GEOSCIENCE AND REMOTE SENSING, vol.61, 2023 (SCI-Expanded)
- XXX. **Artificial Neural Network Model for Evaluating Parameters of Reflection-Asymmetric Samples From Reference-Plane-Invariant Measurements**  
Hasar U. C., Ozturk H., Ertugrul M., Barroso J. J., Ramahi O. M.  
IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, vol.72, 2023 (SCI-Expanded)
- XXXI. **Synthesis and characterization of graphene/carbon nanotube hybrid: effects of Ni catalyst thickness and H<sub>2</sub> flow rate on growth and morphological structure**  
YEŞİLBAĞ Y. Ö., TUZLUCA YEŞİLBAĞ F. N., Huseyin A., Tuzluca M., Ismail I., ERTUĞRUL M.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, vol.32, no.6, pp.7943-7955, 2021 (SCI-Expanded)
- XXXII. **Parameter Retrieval of Samples on a Substrate From Reflection-Only Waveguide Measurements**  
Hasar U. C., Ozturk H., Kaya Y., Izginli M., ERTUĞRUL M.  
IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS, vol.31, no.3, pp.320-323, 2021 (SCI-Expanded)

- XXXIII. **Analysis of Solution Pattern of Natural Frequencies by a Graphical Method**  
Hasar U. C., ÖZTÜRK G., Bute M., ERTUĞRUL M., Barroso J. J.  
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.69, no.2, pp.1209-1212, 2021 (SCI-Expanded)
- XXXIV. **Determination of Constitutive Parameters of Strong-Coupled Bianisotropic Metamaterials Using Oblique Incidence Scattering Parameters**  
ÖZTÜRK G., Hasar U. C., Bute M., ERTUĞRUL M.  
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.69, no.2, pp.918-927, 2021 (SCI-Expanded)
- XXXV. **Single-step, large-area, variable thickness sputtered WS<sub>2</sub> film-based field effect transistors**  
ACAR M., Mobtakeri S., EFEOĞLU H., ERTUĞRUL M., GÜR E.  
CERAMICS INTERNATIONAL, vol.46, no.17, pp.26854-26860, 2020 (SCI-Expanded)
- XXXVI. **A Study on Microwave Absorption Properties of Carbon Black and Ni<sub>0.6</sub>Zn<sub>0.4</sub>Fe<sub>2</sub>O<sub>4</sub> Nanocomposites by Tuning the Matching-Absorbing Layer Structures**  
Ibrahim I. R., Matori K. A., Ismail I., Awang Z., Rusly S. N. A., Nazlan R., Idris F. M., Zulkimi M. M. M., Abdullah N. H., Mustafa M. S., et al.  
SCIENTIFIC REPORTS, vol.10, no.1, 2020 (SCI-Expanded)
- XXXVII. **Propagation constant measurements of reflection-asymmetric and nonreciprocal microwave networks from S-parameters without using a reflective standard**  
Hasar U. C., Kaya Y., ÖZTÜRK G., ERTUĞRUL M.  
MEASUREMENT, vol.165, 2020 (SCI-Expanded)
- XXXVIII. **Comparative study of single- and double-layer BaFe<sub>12</sub>O<sub>19</sub>-Graphite nanocomposites for electromagnetic wave absorber applications**  
Ismail I., Ibrahim I. R., Matori K. A., Awang Z., Zulkimi M. M. M., Idris F. M., Nazlan R., Azis R. S., Zaid M. H. M., Rusly S. N. A., et al.  
MATERIALS RESEARCH BULLETIN, vol.126, 2020 (SCI-Expanded)
- XXXIX. **A comprehensive study of molybdenum boats behavior during service life for continuous thermal evaporation technique, used in thin film technology**  
Rouhi S., Martinez-Medina J. E., Ozdemir M., ERTUĞRUL M., Aygun G., Ozyuzer L.  
VACUUM, vol.176, 2020 (SCI-Expanded)
- XL. **Influence of B<sub>2</sub>O<sub>3</sub> Addition on the Properties of TiO<sub>2</sub> Thick Film at Various Annealing Temperatures for Hydrogen Sensing**  
Chachuli S. A. M., Hamidon M. N., ERTUĞRUL M., Mamat M. S., Jaafar H., Aris N.  
JOURNAL OF ELECTRONIC MATERIALS, vol.49, no.5, pp.3340-3349, 2020 (SCI-Expanded)
- XLI. **Effect of nanometric and micronic particles size on physical and electrical properties of graphite thick film**  
Shafiee F. N., Hamidon M. N., Wahid M. H., Shaari A. H., ERTUĞRUL M., Abdullah N. H., Kusaimi M. A. M., Mustafa M. S., Hasan I. H., Ibrahim I. R.  
INTERNATIONAL JOURNAL OF NANOTECHNOLOGY, no.11-12, pp.825-839, 2020 (SCI-Expanded)
- XLII. **Method for Electromagnetic Property Extraction of Sublayers in Metal-Backed Inhomogeneous Metamaterials**  
Hasar U. C., ÖZTÜRK G., Bute M., ERTUĞRUL M.  
IEEE ACCESS, vol.8, pp.151705-151718, 2020 (SCI-Expanded)
- XLIII. **Magnetic phase transition of mechanically alloyed single sample Co<sub>0.5</sub>Ni<sub>0.5</sub>Fe<sub>2</sub>O<sub>4</sub>**  
Low Z. H., Ismail I., Shafie M. S. E., Ibrahim I. R., ERTUĞRUL M., Azis R. S., Saiden N. M., Hasan I. H., Idris F. M., Nazlan R.  
RESULTS IN PHYSICS, vol.15, 2019 (SCI-Expanded)
- XLIV. **Synthesis of ultra-long boron nanowires as supercapacitor electrode material**  
TUZLUCA YEŞİLBAĞ F. N., YEŞİLBAĞ Y. Ö., ERTUĞRUL M.  
APPLIED SURFACE SCIENCE, vol.493, pp.787-794, 2019 (SCI-Expanded)

- XLV. Feasibility and performance investigation of a new smart system integrating planar/tubular thermoelectric generators with solar flat plate collector**  
Faddouli A., Labrim H., Fadili S., Hartiti B., Habchi A., ERTUĞRUL M., ÇAVUŞOĞLU B., Ntsoenzok E.  
ENERGY CONVERSION AND MANAGEMENT, vol.199, 2019 (SCI-Expanded)
- XLVI. Response of TiO<sub>2</sub>/MWCNT/B<sub>2</sub>O<sub>3</sub> gas sensor to hydrogen using different organic binder**  
Chachuli S. A. M., Hamidon M. N., Mamat M. S., ERTUĞRUL M., Abdullah N. H.  
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.99, pp.140-148, 2019 (SCI-Expanded)
- XLVII. The use of -MnOOH nanosheets as battery-type electrode for supercapacitor applications**  
YEŞİLBAĞ Y. Ö., TUZLUCA YEŞİLBAĞ F. N., ERTUĞRUL M.  
JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS, no.9, pp.8201-8209, 2019 (SCI-Expanded)
- XLVIII. Structural, Optical and Electrochromic Properties of WO<sub>3</sub> Thin Films Prepared by Chemical Spray Pyrolysis Versus Spin Coating Technique**  
MORKOÇ KARADENİZ S., İSKENDEROĞLU D., ERTUĞRUL M., EKİNCİ A. E.  
SPECTROSCOPY AND SPECTRAL ANALYSIS, vol.38, no.9, pp.2982-2988, 2018 (SCI-Expanded)
- XLIX. A Hydrogen Gas Sensor Based on TiO<sub>2</sub> Nanoparticles on Alumina Substrate**  
Chachuli S. A. M., Hamidon M. N., Mamat M. S., ERTUĞRUL M., Abdullah N. H.  
SENSORS, vol.18, no.8, 2018 (SCI-Expanded)
- L. Silicon-doping influence on the crystalline, surface and optical features of cadmium oxide films deposited by sol-gel spin route**  
Turgut G., Kurt M. S., ERTUĞRUL M., İSKENDEROĞLU D., Duman S., GÜRBULAK B.  
OPTİK, vol.165, pp.310-318, 2018 (SCI-Expanded)
- LI. Synthesis of In<sub>2</sub>O<sub>3</sub> nanostructures with different morphologies as potential supercapacitor electrode materials**  
TUZLUCA YEŞİLBAĞ F. N., YEŞİLBAĞ Y. Ö., ERTUĞRUL M.  
APPLIED SURFACE SCIENCE, vol.427, pp.956-964, 2018 (SCI-Expanded)
- LII. Investigation of temperature, catalyst thickness and substrate effects in In<sub>2</sub>O<sub>3</sub> nanostructures**  
TUZLUCA YEŞİLBAĞ F. N., YEŞİLBAĞ Y. Ö., ERTUĞRUL M.  
JOURNAL OF PHYSICS AND CHEMISTRY OF SOLIDS, vol.111, pp.439-446, 2017 (SCI-Expanded)
- LIII. A device for X-Ray elemental mapping using annular radioisotope source**  
Ahmadi N., Kavaz Uştu E., ERTUĞRUL M., ÖZDEMİR Y.  
X-RAY SPECTROMETRY, vol.46, no.6, pp.486-491, 2017 (SCI-Expanded)
- LIV. Effects of graphite on the synthesis of 1-D single crystal In<sub>2</sub>O<sub>3</sub> nanostructures at high temperature**  
TUZLUCA YEŞİLBAĞ F. N., YEŞİLBAĞ Y. Ö., AKKUŞ T., ERTUĞRUL M.  
MATERIALS SCIENCE IN SEMICONDUCTOR PROCESSING, vol.66, pp.62-68, 2017 (SCI-Expanded)
- LV. Effective Constitutive Parameters Retrieval Method for Bianisotropic Metamaterials Using Waveguide Measurements**  
Hasar U. C., MURATOĞLU A., Bute M., Barroso J. J., ERTUĞRUL M.  
IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.65, no.5, pp.1488-1497, 2017 (SCI-Expanded)
- LVI. Investigation of K X-ray intensity ratios of some 4d transition metals depending on the temperature**  
ÖZDEMİR Y., Kavaz Uştu E., Ahmadi N., ERTUĞRUL M., EKİNCİ N.  
APPLIED RADIATION AND ISOTOPES, vol.115, pp.147-154, 2016 (SCI-Expanded)
- LVII. Boundary Effects on the Determination of Electromagnetic Properties of Bianisotropic Metamaterials From Scattering Parameters**  
Hasar U. C., Barroso J. J., Bute M., MURATOĞLU A., ERTUĞRUL M.  
IEEE TRANSACTIONS ON ANTENNAS AND PROPAGATION, vol.64, no.8, pp.3459-3469, 2016 (SCI-Expanded)
- LVIII. Structural, Morphological and Optical Properties of Well-Ordered CdO Nanostructures Synthesized by Easy-Economical Chemical Bath Deposition Technique**

- MORKOÇ KARADENİZ S., Kilinc T., BOZKURT ÇIRAK B., Sakaoglu T. I., ÇIRAK Ç., ERTUĞRUL M., EKİNCİ A. E. SPECTROSCOPY AND SPECTRAL ANALYSIS, vol.36, no.6, pp.1998-2000, 2016 (SCI-Expanded)
- LIX. **A Comparative Study on Structural and Optical Properties of ZnO Micro-Nanorod Arrays Grown on Seed Layers Using Chemical Bath Deposition and Spin Coating Methods**  
MORKOÇ KARADENİZ S., BOZKURT ÇIRAK B., Kilinc T., ÇIRAK Ç., Inal M., Turgut Z., EKİNCİ A. E., ERTUĞRUL M. MATERIALS SCIENCE-MEDZIAGOTYRA, vol.22, no.4, pp.476-480, 2016 (SCI-Expanded)
- LX. **Reference-Plane-Invariant Effective Thickness and Electromagnetic Property Determination of Isotropic Metamaterials Involving Boundary Effects**  
Hasar U. C., Barroso J. J., Buldu G., Bute M., Kaya Y., KARACALI T., ERTUĞRUL M. IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, vol.21, no.4, pp.301-311, 2015 (SCI-Expanded)
- LXI. **Determination of Reference-Plane Invariant, Thickness-Independent, and Broadband Constitutive Parameters of Thin Materials**  
Hasar U. C., Kaya Y., Barroso J. J., ERTUĞRUL M. IEEE TRANSACTIONS ON MICROWAVE THEORY AND TECHNIQUES, vol.63, no.7, pp.2313-2321, 2015 (SCI-Expanded)
- LXII. **Characterization of Porous Silicon Fabry-Perot Optical Sensors for Reflectivity and Transmittivity Measurements**  
Hasar U. C., ÖZBEK İ. Y., ÇAVUŞOĞLU B., KARACALI T., EFEOĞLU H., ERTUĞRUL M., Barroso J. J. IEEE JOURNAL OF SELECTED TOPICS IN QUANTUM ELECTRONICS, vol.21, no.4, pp.174-183, 2015 (SCI-Expanded)
- LXIII. **Semi-Infinite Reflection Coefficients of Bi-Anisotropic Metamaterial Slabs Including Boundary Effects**  
Hasar U. C., Barroso J. J., KARACALI T., ERTUĞRUL M. IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS, vol.25, no.5, pp.283-285, 2015 (SCI-Expanded)
- LXIV. **Identification of Gases by Porous Optical Sensors Using Reflectivity Difference and Wavelength Shift**  
Hasar U. C., ÖZBEK İ. Y., ÇAVUŞOĞLU B., KARACALI T., EFEOĞLU H., ERTUĞRUL M., Barroso J. J. IEEE PHOTONICS TECHNOLOGY LETTERS, vol.27, no.6, pp.596-599, 2015 (SCI-Expanded)
- LXV. **The effects of heat treatment on the synthesis of nickel ferrite (NiFe<sub>2</sub>O<sub>4</sub>) nanoparticles using the microwave assisted combustion method**  
KARCIOĞLU KARAKAŞ Z., BONCUKCUOĞLU R., Karakas I. H., ERTUĞRUL M. JOURNAL OF MAGNETISM AND MAGNETIC MATERIALS, vol.374, pp.298-306, 2015 (SCI-Expanded)
- LXVI. **Reference-plane-invariant and thickness- and branch-index-independent retrieval of effective parameters of bi-anisotropic metamaterials**  
Hasar U. C., Barroso J. J., KARACALI T., ERTUĞRUL M. AIP ADVANCES, vol.5, no.1, 2015 (SCI-Expanded)
- LXVII. **Investigation of transmitted, reflected, and absorbed powers of periodic and aperiodic multilayered structures composed of bi-anisotropic metamaterial slab and conventional material**  
Hasar U. C., Banos J. J., Kaya Y., KARACALI T., ERTUĞRUL M. PHOTONICS AND NANOSTRUCTURES-FUNDAMENTALS AND APPLICATIONS, vol.13, pp.106-119, 2015 (SCI-Expanded)
- LXVIII. **Determination of constitutive parameters of homogeneous metamaterial slabs by a novel calibration-independent method**  
Hasar U. C., Buldu G., Bute M., Barroso J. J., KARACALI T., ERTUĞRUL M. AIP ADVANCES, no.10, 2014 (SCI-Expanded)
- LXIX. **Simple procedure for robust and accurate complex permittivity measurements of low-loss materials over a broad frequency band**  
Hasar U. C., Barroso J. J., Kaya Y., Bute M., ERTUĞRUL M. JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, vol.28, no.8, pp.903-915, 2014 (SCI-Expanded)
- LXX. **Power analysis of multilayer structures composed of conventional materials and bi-anisotropic metamaterial slabs**  
Hasar U. C., Bute M., Barroso J. J., SABAH C., Kaya Y., ERTUĞRUL M. JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, vol.31, no.5, pp.939-947, 2014 (SCI-

Expanded)

- LXXI. **Attractive method for thickness-independent permittivity measurements of solid dielectric materials**  
Hasar U. C., Barroso J. J., Bute M., Kaya Y., KOCADAĞIŞTAN M. E., ERTUĞRUL M.  
SENSORS AND ACTUATORS A-PHYSICAL, vol.206, pp.107-120, 2014 (SCI-Expanded)
- LXXII. **Two-step numerical procedure for complex permittivity retrieval of dielectric materials from reflection measurements**  
Hasar U. C., Barroso J. J., Kaya Y., ERTUĞRUL M., Bute M., Catala-Civera J. M.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.116, no.4, pp.1701-1710, 2014 (SCI-Expanded)
- LXXIII. **Microwave method for reference-plane-invariant and thickness-independent permittivity determination of liquid materials**  
Hasar U. C., Kaya Y., Bute M., Barroso J. J., ERTUĞRUL M.  
REVIEW OF SCIENTIFIC INSTRUMENTS, vol.85, no.1, 2014 (SCI-Expanded)
- LXXIV. **The domestic livestock resources of Turkey: inventory of pigeon groups and breeds with notes on breeder organizations**  
Yilmaz O., SAVAŞ T., ERTUĞRUL M., Wilson R. T.  
WORLDS POULTRY SCIENCE JOURNAL, vol.69, no.2, pp.265-278, 2013 (SCI-Expanded)
- LXXV. **Influence of Deposition Pressure ( $2 \times 10^{-2}$ ) on the YBCO (Y123) Thin Films Prepared by Pulsed Laser Deposition**  
YURTCAN M. T., ŞİMŞEK Ö., YILMAZ M., Hasar U. C., ERTUĞRUL M., Bayram O. S.  
JOURNAL OF SUPERCONDUCTIVITY AND NOVEL MAGNETISM, vol.26, no.5, pp.1873-1877, 2013 (SCI-Expanded)
- LXXVI. **Enhanced critical current density using  $\text{Nd}_2\text{O}_3$  nano-islands on  $\text{NdBa}_2\text{Cu}_3\text{O}_{7-\delta}$  thin films prepared by PLD**  
SÖNMEZ E., ERTUĞRUL M.  
EUROPEAN PHYSICAL JOURNAL-APPLIED PHYSICS, vol.62, no.1, pp.10403-0, 2013 (SCI-Expanded)
- LXXVII. **Effect of Nb doping on structural, electrical and optical properties of spray deposited  $\text{SnO}_2$  thin films**  
Turgut G., KESKENLER E. F., AYDIN S., SÖNMEZ E., Dogan S., Duzgun B., ERTUĞRUL M.  
SUPERLATTICES AND MICROSTRUCTURES, vol.56, pp.107-116, 2013 (SCI-Expanded)
- LXXVIII. **Nanostructured columnar heterostructures of  $\text{TiO}_2$  and  $\text{Cu}_2\text{O}$  enabled by a thin-film self-assembly approach: Potential for photovoltaics**  
Polat O., Aytug T., Lupini A. R., Paranthaman P. M., ERTUĞRUL M., Bogorin D. F., Meyer H. M., Wang W., Pennycook S. J., Christen D. K.  
MATERIALS RESEARCH BULLETIN, vol.48, no.2, pp.352-356, 2013 (SCI-Expanded)
- LXXIX. **Reference-plane invariant transmission-reflection method for measurement of constitutive parameters of liquid materials**  
Hasar U. C., Barroso J. J., Kaya Y., ERTUĞRUL M., Bute M.  
SENSORS AND ACTUATORS A-PHYSICAL, vol.203, pp.346-354, 2013 (SCI-Expanded)
- LXXX. **Stepwise technique for accurate and unique retrieval of electromagnetic properties of bianisotropic metamaterials**  
Hasar U. C., Barroso J. J., SABAH C., Kaya Y., ERTUĞRUL M.  
JOURNAL OF THE OPTICAL SOCIETY OF AMERICA B-OPTICAL PHYSICS, vol.30, no.4, pp.1058-1068, 2013 (SCI-Expanded)
- LXXXI. **Differential uncertainty analysis for evaluating the accuracy of S-parameter retrieval methods for electromagnetic properties of metamaterial slabs**  
Hasar U. C., Barroso J. J., SABAH C., Kaya Y., ERTUĞRUL M.  
OPTICS EXPRESS, vol.20, no.27, pp.29002-29022, 2012 (SCI-Expanded)
- LXXXII. **HIGHLY EFFICIENT OPTOELECTRONIC PROPERTIES OF DOUBLY DOPED  $\text{SnO}_2$  THIN FILM DEPOSITED BY SPIN COATING TECHNIQUE**  
KOÇYİĞİT A., Tatar D., Battal A., ERTUĞRUL M., Duzgun B.  
JOURNAL OF OVONIC RESEARCH, no.6, pp.171-178, 2012 (SCI-Expanded)
- LXXXIII. **Phenotypic Characteristics of Turkish Mules**

- Yilmaz O., Boztepe S., ERTUĞRUL M.  
INTERNATIONAL JOURNAL OF AGRICULTURE AND BIOLOGY, vol.14, no.3, pp.450-452, 2012 (SCI-Expanded)
- LXXXIV. **Domestic livestock resources of Turkey Water buffalo**  
Yilmaz O., ERTUĞRUL M., Wilson R. T.  
TROPICAL ANIMAL HEALTH AND PRODUCTION, vol.44, no.4, pp.707-714, 2012 (SCI-Expanded)
- LXXXV. **LiCoO<sub>2</sub> Structures by Spray Pyrolysis Technique for Rechargeable Li-ion Battery**  
YILMAZ M., Turgut G., AYDIN S., ERTUĞRUL M.  
JOURNAL OF THE CHEMICAL SOCIETY OF PAKISTAN, no.2, pp.283-286, 2012 (SCI-Expanded)
- LXXXVI. **Superconducting properties of YBa<sub>2</sub>Cu<sub>3</sub>O<sub>7-δ</sub> films deposited on commercial tape substrates, decorated with Pd or Ta nano-islands**  
Polat O., ERTUĞRUL M., Thompson J. R., Leonard K. J., Sinclair J. W., Paranthaman M. P., Wee S. H., Zuev Y. L., Xiong X., Selvamanickam V., et al.  
SUPERCONDUCTOR SCIENCE & TECHNOLOGY, vol.25, no.2, 2012 (SCI-Expanded)
- LXXXVII. **PERMEABILITY MEASUREMENT OF SPLIT-RING-RESONATOR METAMATERIALS FROM FREE-SPACE TRANSMISSION-ONLY CALIBRATION-INDEPENDENT METHODS**  
Hasar U. C., Barroso J. J., ERTUĞRUL M.  
JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, vol.26, no.1, pp.54-63, 2012 (SCI-Expanded)
- LXXXVIII. **Study of Structural and Optical Properties of Zinc Oxide Rods Grown on Glasses by Chemical Spray Pyrolysis**  
SÖNMEZ E., AYDIN S., YILMAZ M., YURTCAN M. T., KARACALI T., ERTUĞRUL M.  
JOURNAL OF NANOMATERIALS, vol.2012, 2012 (SCI-Expanded)
- LXXXIX. **APPLICATION OF A USEFUL UNCERTAINTY ANALYSIS AS A METRIC TOOL FOR ASSESSING THE PERFORMANCE OF ELECTROMAGNETIC PROPERTIES RETRIEVAL METHODS OF BIANISOTROPIC METAMATERIALS**  
Hasar U. C., Barroso J. J., ERTUĞRUL M., SABAH C., ÇAVUŞOĞLU B.  
PROGRESS IN ELECTROMAGNETICS RESEARCH-PIER, vol.128, pp.365-380, 2012 (SCI-Expanded)
- XC. **ZnS Thin Film Prepared by Using Chemical Spray Pyrolysis Method**  
MORKOÇ KARADENİZ S., EKİNCİ A. E., TUZLUCA YEŞİLBAĞ F. N., ERTUĞRUL M.  
ASIAN JOURNAL OF CHEMISTRY, vol.24, no.1, pp.220-222, 2012 (SCI-Expanded)
- XCII. **SOME MORPHOLOGICAL CHARACTERISTICS OF TURKISH TAZI (SIGHT HOUND)**  
Yilmaz O., ERTUĞRUL M.  
JOURNAL OF ANIMAL AND PLANT SCIENCES, vol.21, no.4, pp.794-799, 2011 (SCI-Expanded)
- XCIII. **Synthesis and characterization Li<sub>4</sub>Ti<sub>5</sub>O<sub>12</sub> for Li-ion batteries**  
YILMAZ M., AYDIN S., Turgut G., YURTCAN M. T., Demir Y., ERTUĞRUL M.  
ENERGY EDUCATION SCIENCE AND TECHNOLOGY PART A-ENERGY SCIENCE AND RESEARCH, no.1, pp.411-416, 2011 (SCI-Expanded)
- XCIV. **THE DOMESTIC LIVESTOCK RESOURCES OF TURKEY: CAMELS**  
Yilmaz O., ERTUĞRUL M., Wilson R. T.  
JOURNAL OF CAMEL PRACTICE AND RESEARCH, vol.18, no.1, pp.21-24, 2011 (SCI-Expanded)
- XCV. **Optical Properties of ZnO Nanorods on Glass Via Spray Deposition of Solution Containing Zinc Chloride and Thiourea**  
SÖNMEZ E., KARACALI T., EKİNCİ A. E., ERTUĞRUL M.  
IEEE TRANSACTIONS ON NANOTECHNOLOGY, vol.10, no.3, pp.532-536, 2011 (SCI-Expanded)
- XCVI. **Effect of different housing systems on fattening performance, slaughter and carcass characteristics of Akkeci (White Goat) male kids**  
Kor A., Karaca S., ERTUĞRUL M.  
TROPICAL ANIMAL HEALTH AND PRODUCTION, vol.43, no.3, pp.591-596, 2011 (SCI-Expanded)
- XCVII. **Average 2p subshells fluorescence yield values of some elements in the atomic number range  $60 \leq Z \leq 90$**   
ERTUĞRUL M., ORHAN E., ŞİMŞEK Ö., Sahin Y.



JOURNAL OF ELECTRON SPECTROSCOPY AND RELATED PHENOMENA, vol.177, no.1, pp.19-23, 2010 (SCI-Expanded)

**XCVII. Permittivity determination of liquid materials using waveguide measurements for industrial applications**

Hasar U. C., Westgate C. R., ERTUĞRUL M.

IET MICROWAVES ANTENNAS & PROPAGATION, vol.4, no.1, pp.141-152, 2009 (SCI-Expanded)

**XCVIII. Noniterative Permittivity Extraction of Lossy Liquid Materials From Reflection Asymmetric Amplitude-Only Microwave Measurements**

Hasar U. C., Westgate C. R., ERTUĞRUL M.

IEEE MICROWAVE AND WIRELESS COMPONENTS LETTERS, vol.19, no.6, pp.419-421, 2009 (SCI-Expanded)

**XCIX. Measurements of K X-ray fluorescence cross sections of Fe, Co, and Ni in an external magnetic field**

GÜROL A., KARABULUT A., ERTUĞRUL M., Budak G.

JOURNAL OF RADIOANALYTICAL AND NUCLEAR CHEMISTRY, vol.279, no.1, pp.171-178, 2009 (SCI-Expanded)

## Articles Published in Other Journals

**I. A LOCAL LIVESTOCK PROTECTION DOG TYPE RAISED IN COKELEZ MOUNTAIN REGION IN DENIZLI PROVINCE OF TURKEY**

Yilmaz O., ERTUĞRUL M.

SCIENTIFIC PAPERS-SERIES D-ANIMAL SCIENCE, pp.63-67, 2015 (ESCI)

**II. Livestock Damage by Carnivores and Use of Livestock Guardian Dogs for its Prevention in Europe - A review**

Yilmaz O., Coskun F., ERTUĞRUL M.

JOURNAL OF LIVESTOCK SCIENCE, pp.23-35, 2015 (ESCI)

**III. Some phenotypic traits of mules raised in Sirnak province of Turkey**

Yilmaz O., ERTUĞRUL M., Boztepe S.

JOURNAL OF LIVESTOCK SCIENCE, pp.94-97, 2012 (ESCI)

**IV. Live weight and some morphological characteristics of Turkish Tazi (Sighthound) raised in Province of Konya in Turkey**

Yilmaz O., Coskun F., ERTUĞRUL M.

JOURNAL OF LIVESTOCK SCIENCE, pp.98-103, 2012 (ESCI)

**V. SOME MORPHOLOGICAL TRAITS OF THOROUGHBRED HORSES IN TURKEY**

Yilmaz O., ERTUĞRUL M.

AGROLIFE SCIENTIFIC JOURNAL, pp.157-160, 2012 (ESCI)

**VI. DETERMINATION OF ZERDAVA DOG (KAPI KOPEGI) RAISED IN NORTHEAST OF TURKEY**

Yilmaz O., ERTUĞRUL M.

SCIENTIFIC PAPERS-SERIES D-ANIMAL SCIENCE, pp.258-261, 2012 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

**I. 2nd International Conference on Recent Academic Studies ICRAS 2023**

COŞKUN A., ERTUĞRUL M.

Serigrafi Metodu ile YBCO Süperiletken Mikrodalga Rezonatörü Üretimi ve Karakterizasyonu, Konya, Turkey, 19 - 20 October 2023, vol.2, pp.465-468

**II. Investigation and Production of Hybrid Wires Combining Superconductive MgB<sub>2</sub> and Ultra-conductive Graphene/Cu sheath**

KARABOĞA F., FARHANGMEHR M., ÖZMEN A., YETİŞ H., BELENLİ İ., ERTUĞRUL M.

International Conference on Sensor, Detector, Materials Science and Technologies (SensTech-2023), Turkey, 05 October 2023

- III. **Comparative study of a normal solar water heater and smart thermal/thermoelectric hybrid systems**  
Faddouli A., Fadili S., Labrim H., Hartiti B., ERTUĞRUL M., Belouaggadia N., Stitou M.  
International Conference on Renewable Energy and Applications (ICREA), Casablanca, Morocco, 4 - 05 December 2019, pp.1039-1042
- IV. **Effect of the Sensing Layer Resistivity on Sensitivity in DSAWR Sensors**  
SAĞLAM H. K., Hamidon M. N., ÇOBAN Ö., ERTUĞRUL M.  
IEEE Regional Symposium on Micro and Nanoelectronics (IEEE-RSM), Putrajaya, Malaysia, 21 - 23 August 2019, pp.24-26
- V. **Two Dimensional  $Ti_3C_2Tx$  MXene Electrode For Supercapacitor Application**  
TUZLUCA YEŞİLBAĞ F. N., YEŞİLBAĞ Y. Ö., Shafiee F. N., Hamidon M. N., ERTUĞRUL M.  
IEEE Regional Symposium on Micro and Nanoelectronics (IEEE-RSM), Putrajaya, Malaysia, 21 - 23 August 2019, pp.27-29
- VI. **A Microstrip Patch Antenna Operation on Cylindrical Structures Based on Silicon Rubber**  
KARATAŞ E. T., GEYİKOĞLU M. D., KABURCUK F., ÇAVUŞOĞLU B., ERTUĞRUL M.  
26th IEEE Signal Processing and Communications Applications Conference (SIU), İzmir, Turkey, 2 - 05 May 2018
- VII. **Fetal Heart Rate Monitoring System (FHRMS)**  
Ertugrul D. C., Kanmaz H., Yuksel M. U., Elci A., ERTUĞRUL M.  
40th Annual IEEE Computer Software and Applications Conference Symposium (COMPSAC) / Symposium on Software Engineering Technology and Applications (SETA), Georgia, United States Of America, 10 - 14 June 2016, pp.65-70
- VIII. **Fabrication of Superconducting YBCO Microwave Microstrip Resonators**  
ERTUĞRUL M., Aras G., Hasar U. C., YURTCAN M. T., SÖNMEZ E., ŞİMŞEK Ö.  
IEEE Regional Symposium on Micro and Nanoelectronics (RSM), Kuala-Terengganu, Malaysia, 19 - 21 August 2015, pp.105-107
- IX. **Improving The Limit of Detection (LOD) of Microsensor Used in Detection of Brain Diseases via Wavelet Filter**  
KARATAŞ E. T., Kadıhasanoglu G., GEYİKOĞLU M. D., DERTLİ M. E., ÇAVUŞOĞLU B., ÖZBEK İ. Y., ORAL E. A., HACİMÜFTÜOĞLU A., SÖNMEZ E., KARACALI T., et al.  
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.1676-1679
- X. **Microelectrod Fabrication For Diagnosis And Treatment Of Brain Disorders**  
ACAR M., Shamsi H., Oyar O., ÖZBEK İ. Y., HACİMÜFTÜOĞLU A., ÇAVUŞOĞLU B., ORAL E. A., KARACALI T., SÖNMEZ E., ERTUĞRUL M., et al.  
23rd Signal Processing and Communications Applications Conference (SIU), Malatya, Turkey, 16 - 19 May 2015, pp.2058-2061
- XI. **Constitutive Parameters Determination of Bi-anisotropic Metamaterials using a Waveguide Method**  
Hasar U. C., Bute M., MURATOĞLU A., Barroso J. J., KARACALI T., ERTUĞRUL M.  
Microwave and Optoelectronics Conference (IMOC), 2015 SBMO/IEEE MTT-S International, Ipojuca, Brazil, 3 - 06 November 2015
- XII. **Artificial Pinning Centers for Superconducting Microwave Resonators**  
ERTUĞRUL M.  
IEEE Regional Symposium on Micro and Nanoelectronics (RSM), Malaysia, 25 - 27 September 2013

## Patent

Ertuğrul M., Gür E., Koçak Y., Hamidon M. N., Özmen A., CNT-METAL (Al, Cu, VD) ULTRAİLETKEN KOMPOZİT TELLER VE ULTRAİLETKEN TEL ÜRETİMİ İÇİN YÖNTEM VE SİSTEM, Patent, CHAPTER H Electricity, The Invention Registration Number: 2020 15500 , Standard Registration, 2023

Akncioğlu A., Ertuğrul M., Özmen A., ENDÜSTRİYEL MİKRODALGA METAL ERİTME FIRINI, Patent, CHAPTER H Electricity,

The Invention Recourse Number: 2023/009060 , Standard Registration, 2023

Ertuğrul M., Mavi A., Aydın S., Sönmez E., Yüksek akım diyotları için paket sistemi, Patent, CHAPTER H Electricity, The

Invention Registration Number: 2020 22678 , Standard Registration, 2023

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## **Non Academic Experience**

TÜBİTAK

Üniversiteler Arası Kurul

Oak Ridge National Labotatory (USA)

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