

CONTENTS

Comparative Evaluation of U-Net-Based Models for Lung Lesion Segmentation in CT Images

Murat KILIÇ¹ , Abdulkadir YELMAN^{2*} , Hüseyin ÜZEN³ , Hüseyin FIRAT⁴ , İpek BALIKÇI ÇİÇEK⁵ , Merve BIYIKLI⁶ , Abdulkadir ŞENGÜR⁷ 

¹ Department of Thoracic Surgery, Faculty of Medicine, Inonu University Turgut Ozal Medical Center, Malatya, Türkiye

² Department of Computer Technologies, Genç Vocational School, Bingöl University, Bingöl, Türkiye

³ Department of Computer Engineering, Faculty of Engineering and Architecture, Bingöl University, Bingöl, Türkiye

⁴ Department of Computer Engineering, Faculty of Engineering, Dicle University, Diyarbakır, Türkiye

⁵ Department of Biostatistics and Medical Informatics, Faculty of Medicine, Inonu University Turgut Ozal Medical Center, Malatya, Türkiye

⁶ Department of Thoracic Surgery, Faculty of Medicine, Inonu University Turgut Ozal Medical Center, Malatya, Türkiye

⁷ Department of Electrical and Electronics Engineering, Faculty of Technology, Fırat University, Elazığ, Türkiye

*Corresponding author: Abdulkadir YELMAN, ayelman@bingol.edu.tr

A Comprehensive Evaluation of Word Embedding Methods with Deep Learning Models for Multi-Label Emotion Classification

Zeynep KARACA^{1*} , İlhan AYDIN² 

¹ Fırat University, Engineering Faculty, Computer Engineering Department, Elazığ, Türkiye

*Corresponding author: zkaraca@firat.edu.tr

Newly Synthesized Imidazoline Compound Regulates Apoptosis and Toll-Like Receptor Signaling in Lung Adenocarcinoma and Normal Epithelial Cells

Yavuz DODURGA^{1*} , Sevda SAĞ BAYAV¹ , Çağatay YETİM¹ , Begüm Gülce BİZİMYER² , Melike GÜÇLÜ² , Nevriye URHAN² , Buse ELDEMİR² 

¹Pamukkale University, Medicine Faculty, Medical Biology Department, Denizli, Türkiye

²NF Chemical, Research and Development Department, Denizli, Türkiye

*Corresponding author: ydodurga@pau.edu.tr

Retrospective Investigation of *Toxoplasma gondii* Infection in Goats from Marmara Region, Türkiye

Taraneh ÖNCEL ^{1*}, Nesrin TURAN ¹, Sezai ARSLAN ²

¹ Pendik Veterinary Control Institute, Istanbul, Türkiye

² University of Tekirdag Namik, Faculty of Veterinary Medicine, Department of Internal Diseases, Tekirdağ, Türkiye

*Corresponding author: Taraneh.oncel@tarimorman.gov.tr

34

A Generalizable Deep Learning Approach to Classifying Ground Radar Images

Mehmet Zahid YILDIRIM ¹, Emrah ÖZKAYNAK ^{2*}, Furkan SABAZ ³

¹ Karabük University, Faculty of Computing and Informatics Science, Computer Engineering, Karabük, Türkiye

² Karabük University, Faculty of Computing and Informatics Science, Software Engineering, Karabük, Türkiye

³ Karabük University, Faculty of Computing and Informatics Science, Software Engineering, Karabük, Türkiye

*Corresponding author: eozkaynak@karabuk.edu.tr

39

Global Research Trends in g-C₃N₄-Supported Catalysts for Sustainable Hydrogen Production

Bedirhan YILMAZ ^{1*}, Burak Can ÇELİK ², Hüseyin ELÇİÇEK ², Asım Sinan KARAKURT ¹

¹ Yıldız Technical University, Naval Architecture and Maritime Faculty, Naval Architecture and Marine Engineering Department, İstanbul, Türkiye

² Yıldız Technical University, Naval Architecture and Maritime Faculty, Marine Engineering Department, İstanbul, Türkiye

*Corresponding author: bedirhan.yilmaz@yildiz.edu.tr

49

Effect of Boron Additive Silver Nanoparticle Green Synthesis of *Abelmoschus Esculentus* Stem on Vase Life of Tulip Sinfonie (Tulipa Hybrida) Flowers

Arzu EKİNCİ ¹, Orhan BAYTAR ², Ömer ŞAHİN ³, Rukiye GEZER ^{4*}

¹ Siirt University, Faculty of Health Sciences, Department of Occupational Health and Safety, Siirt, Türkiye

² Siirt University, Faculty of Engineering, Department of Chemical Engineering, Siirt, Türkiye

³ Istanbul Technical University, Faculty of Chemical and Metallurgical Engineering, Department of Chemical Engineering, Istanbul, Türkiye

⁴ Siirt University, Faculty of Agriculture, Department of Horticulture, Siirt, Türkiye

*Corresponding author: rukiyekeles@siirt.edu.tr

62

Assessment of Heavy Metal Accumulation in Some Fish Species Offered for Sale in Bingöl Province

Mehmet Reşit TAYSI ^{1*}

¹ Faculty of Agriculture, Department of Animal Sciences Bingol University, Bingöl, Türkiye

*Corresponding author: mrtaysi@yahoo.com

72

Simulation and Estimating of Monthly Energy Production of Solar Power Plant Using PVsyst Program and Advanced Deep Learning Algorithms

Mehmet ÇINAR^{1*} , İrfan ÖKTEN² 

¹ Bitlis Eren University, Organized Industrial Zone Vocational School, Electrical Department, Bitlis, Türkiye

² Bitlis Eren University, Faculty of Engineering and Architecture, Department of Computer Engineering, Bitlis, Türkiye

**Corresponding author: mcinar@beu.edu.tr*

78

Computational Analysis of Dimeric Bismuth(III) Halide Complexes Bearing Thioamide Ligands: Geometry, Reactivity, and Electronic Properties

Okan UÇAR^{1*} 

¹Yozgat Bozok University, Faculty of Arts and Science, Department of Chemistry, Yozgat, Türkiye

**Corresponding author: okanucar@nku.edu.tr*

89

Novel Distance Measure for Linear Diophantine Fuzzy Sets with CODAS-Based Decision-Making

Ebru AYDOĞDU^{*} 

Turkish National Defence University, Naval Academy, Department of Basic Sciences, İstanbul, Türkiye

**Corresponding author: ebru.aydogdu@msu.edu.tr, ebrudiyarbakirli@gmail.com*

97

SE-ResNet18: Attention-Enhanced Deep Learning for Multi-Class Classification of Tuberculosis and Pneumonia from Chest X-ray Images

Hind Ayad Majeed ALKAKJEA¹ , Erdal ÖZBAY^{1*} 

¹ Fırat University, Engineering Faculty, Department of Computer Engineering, Elazığ, Türkiye

**Corresponding author: erdalozbay@firat.edu.tr*

109

Biomechanical Evaluation of PEEK Material on Three-Unit Tooth-Implant-Supported Fixed Partial Dentures: A Finite Element Analysis

Samet TEKİN¹ , Ayşe RENÇBER KIZILKAYA^{2*} 

¹ Fırat University, Faculty of Dentistry, Department of Prosthodontics, Elazığ, Türkiye

**Corresponding author: arencber@firat.edu.tr*

125

Expansion Without Efficiency: A 16-Year Analysis of Beekeeping Productivity in Bingöl, Türkiye

Fatih ÇAKAR^{1*} 

¹ Bingol University, Vocational School of Health Services, Bingöl, Türkiye

**Corresponding author: fcakar@bingol.edu.tr*

135

Development and Characterization of a Novel Probiotic Ice Cream Fortified with Blackthorn (*Prunus spinosa* L.): Physicochemical, Textural, and Probiotic Viability Properties

Aysun ORAÇ^{1,2*} , Çiğdem KONAK GÖKTEPE^{1,2} , Can OLKUN¹ 

¹ Selçuk University, Karapınar Aydoğanlar Vocational School, Department of Food Processing, Konya, Türkiye

² Selçuk University, Faculty of Agriculture, Department of Food Engineering, Konya, Türkiye

*Corresponding author: aysunorac@selcuk.edu.tr

143

Investigation of the Effects of Extracts of *Ornithogalum sigmoideum* Freyn & Sint. and *Smilax excelsa* L. on GST Isozymes in the HepG2 Cell Line

Tuğbağ Bayram¹ , Buse Ceyda Öncel² , Ceylan Fidan Babat³ , Onur Dirican⁴ , Metin Konuş⁵ , Can Yılmaz⁶ , Erkan Yurtçu⁷ , Serpil Oguztuzun⁸ 

¹ Kırıkkale University, Faculty of Art and Sciences, Department of Biology, Kırıkkale, Türkiye

² Başkent University, Faculty of Art and Sciences, Department of Molecular Biology and Genetic, Ankara, Türkiye

^{3,5,6} Yüzüncü Yıl University, Faculty of Art and Sciences, Department of Molecular Biology and Genetic, Van, Türkiye

⁴ İstanbul Gelişim University, Vocational School of Health Services, Department of Pathology Laboratory Techniques, İstanbul, Türkiye

⁷ TOBB University of Economics and Technology, Medical School, Department of Medical Biology, Ankara, Türkiye

⁸ Kırıkkale University, Faculty of Engineering and Natural Sciences, Department of Biology, Kırıkkale Türkiye

*Corresponding author: tugbagbayram@hotmail.com

154

Enzymatic Oligomerization of Ampyrone- and Phenylhydrazine-Based Monomers: Structural, Thermal, and Antioxidant Functional Analysis

Kevser TEMİZKAN ÖZDAMAR^{1*} 

¹ İstanbul Health and Technology University, Faculty of Engineering and Natural Sciences, Department of Chemical Engineering, İstanbul, Türkiye

*Corresponding author: kevser.ozdamar@istun.edu.tr

163

Evaluation of Freeze-Thaw Behavior of Ground Granulated Blast Furnace Slag Stabilized Bentonite Subgrade Soils

Bahadır KARABAŞ^{1*} , Ali Ulvi UZER² 

¹ İnönü University, Faculty of Engineering, Department of Civil Engineering, Malatya, Türkiye

² Kayseri University, Department of Construction, Vocational School of Technical Sciences, Kayseri, Türkiye

*Corresponding author: karabasbaha@gmail.com

175

Multiscale Hybrid Attention Network for Automated Segmentation of Colorectal Polyps

Ersan YAZAN^{1*} 

187

Adiyaman University, Faculty of Engineering, Department of Computer Engineering, Adiyaman, Türkiye

**Corresponding author: eyazan@adiyaman.edu.tr*

Functional and Probiotic Characterization of White Cheese-Derived *Lentilactobacillus kefir* with Cholesterol-Lowering and Conjugated Linoleic Acid Producing Potential

Sümeyye AKBULUT^{*} 

196

¹Department of Molecular Biology and Genetics, Faculty of Science, Ataturk University, 25240, Erzurum, Türkiye

**Corresponding author: sumeyya.arslan@atauni.edu.tr*

Design and Experimental Evaluation of a Spring-Supported Double-Layer Piezoelectric Energy Harvester

Ahmet YILDIZ^{1*} 

205

¹Firat University, Engineering Faculty, Mechatronics Engineering Department, Elazığ, Türkiye

**Corresponding author: ayildiz@firat.edu.tr*

Time Series–Based Population Forecasting: A Comparative Analysis of Linear Regression and Exponential Smoothing

Ayla KAYABAŞ 

214

Kirsehir Ahi Evran University, Faculty of Engineering and Architecture, Department of Computer Engineering, Kirsehir, Türkiye

ayla.kayabas@ahievran.edu.tr

Determination of Some Important Properties of *Lavandula Stoechas* (Lavender) Plant for Human Health

Mustafa Yunus EMRE^{1*} , Muhammed GÜNGÖREN² 

221

¹ Mardin Artuklu University, Faculty of Health Sciences, Department of Nursing, Mardin, Türkiye

² Mardin Artuklu University, Vocational School of Health Services, Department of Medical Services and Techniques, Mardin, Türkiye

**Corresponding author: myemre@artuklu.edu.tr*

Comparative MATLAB-Based Analysis of PI, PID, AI-PI and AI-PID Controllers for Inverter Dynamic Performance under EV Penetration Variations

Ozan GÜL^{1*} 

231

¹ Bingöl University, Faculty of Engineering and Architecture, Electrical-Electronics Engineering, Bingöl, Türkiye

**Corresponding author: ogul@bingol.edu.tr*

Optimization of the Sensory Properties of Cocoa Hazelnut Cream Supplemented with Bingöl Honey and Bee Pollen Using Response Surface Methodology (RSM)

Jamal MEREE¹ , Bayram YURT^{2*} 

¹ Bingöl University, Institute of Science and Technology, Bee and Bee Products Department, Bingöl, Türkiye

² Bingöl University, Faculty of Engineering and Architecture, Food Engineering Department, Bingöl, Türkiye

**Corresponding author: byurt@bingol.edu.tr*

243

SAGSU-U-6G: A Real-Time Dynamic CNN+BiLSTM Framework for Physical-Layer Intrusion Detection in Multi-Domain 6G Networks

Onur POLAT¹ , Esra SÖĞÜT^{2*} , Zahra Şeyh NEBİ¹ 

¹ Bingöl University, Engineering and Architecture Faculty, Computer Engineering Department, Bingöl, Türkiye

² Gazi University, Technology Faculty, Computer Engineering Department, Ankara, Türkiye

**Corresponding author: esrasogut@gazi.edu.tr*

258
