

## Prof. MUTLU AVCI

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Yildiz Technical University, Graduate School Of Natural And Applied Sciences, Elektronik Ve Haberleşme Mühendisliği, Turkey 2001 - 2005

Postgraduate, Cukurova University, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Turkey 1999 - 2001

Undergraduate, Gaziantep University, Faculty Of Engineering, Department Of Electrical And Electronics Engineering (English), Turkey 1992 - 1999

### Foreign Languages

English, C1 Advanced

### Research Areas

Computer Sciences, Artificial Intelligence, Computer Learning and Pattern Recognition, Electrical and Electronics Engineering, Electronic, Electronic Circuits, MEMS, Semiconducting Materials and Devices, Engineering and Technology

### Academic Titles / Tasks

Professor, Cukurova University, Mühendislik Fakültesi, Biyomedikal Mühendisliği, 2019 - Continues

Associate Professor, Cukurova University, Mühendislik Fakültesi, Biyomedikal Mühendisliği, 2012 - 2019

Assistant Professor, Cukurova University, Mühendislik Fakültesi, Bilgisayar Mühendisliği, 2005 - 2012

Research Assistant, Yildiz Technical University, Faculty Of Electrical & Electronics, Elektronik Ve Haberleşme Mühendisliği, 2001 - 2005

### Supervised Theses

Avcı M., Prosopagnozi hastaları için yüz tanıma özelliği bir tedavi ve destek sistemi tasarımı, Postgraduate, M.BALLI(Student), 2021

Avcı M., Design and simulation of carbon nanotube hybridized field effect transistor biopotential sensor, Doctorate, M.İSTANBULLU(Student), 2020

Avcı M., An artificial neural network based nanoscale device modeling approach and tfet implemantation, Doctorate, A.ÖZGÜR(Student), 2020

AVCI M., A New Deep Learning Approach:Differential Convolutional Neural Network, Doctorate, M.Sarıgül(Student), 2019

Avcı M., Development of text synthesis software utilizing EEG signals, Postgraduate, İ.SEFA(Student), 2019

AVCI M., A new memory allocator selection method for reducing memory fragmentation, Doctorate, O.Ülgen(Student), 2016

AVCI M., Prediction of carbon nanotube atomic coordinates based on machine learning algorithms, Doctorate, M.Acı(Student), 2016

AVCI M., A New classifier Topology - Generalized Classifier Neural Network and Hardware implementations, Doctorate, B.Melis(Student), 2015

AVCI M., A Fluid Dynamics Based Image Segmentation Approach And Pap-Smear Image Data Classification, Postgraduate, Ç.Cengizler(Student), 2013

AVCI M., Q Regression Neural Network, Postgraduate, M.Sarıgül(Student), 2013

AVCI M., An Error Correcting Code Based SVM Approach for Multiclass Classification, Postgraduate, B.Melis(Student), 2012

AVCI M., Artificial Neural Network Based Microelectromechanical Accelerometer, Doctorate, Z.Kesilmiş(Student), 2011

AVCI M., A Multi Agent System Based Solution for Deadlock Prevention in Operating Systems, Postgraduate, F.Soleimanian(Student), 2011

AVCI M., Carbon Nanotube Interconnects, Capacitors and Field Effect Transistors : Ab-initio based circuit level macro modeling for VLSI, Doctorate, S.Yamaçlı(Student), 2011

AVCI M., Microfabrication based design and simulation of heterojunction solar cell, Postgraduate, F.Kürker(Student), 2010

AVCI M., Initialization and training improvements on Conic Section Function Neural Networks, Postgraduate, C.Çelik(Student), 2010

AVCI M., Development of a hybrid classification method for machine learning, Postgraduate, M.Acı(Student), 2009

AVCI M., Artificial Neural Network Based Solutions of Interprocess Communication Problems, Postgraduate, O.Ülgen(Student), 2008

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

- I. **Logarithmic Learning Differential Convolutional Neural Network**  
Yasin M., SARIGÜL M., AVCI M.  
Neural Networks, vol.172, 2024 (SCI-Expanded)
- II. **Estimation of monthly sunshine duration using satellite derived cloud data**  
KABA K., Erdi E., AVCI M., KANDIRMAZ H.  
Theoretical and Applied Climatology, 2024 (SCI-Expanded)
- III. **Investigation and comparison of graphene nanoribbon and carbon nanotube based SARS-CoV-2 detection sensors: An ab initio study**  
Yamaçlı S., Avcı M.  
PHYSICA B: CONDENSED MATTER, vol.648, pp.1-8, 2023 (SCI-Expanded)
- IV. **Computation of the Binding Energies between Human ACE2 and Spike RBDs of the Original Strain, Delta and Omicron Variants of the SARS-CoV-2: A DFT Simulation Approach**  
YAMAÇLI S., AVCI M.  
ADVANCED THEORY AND SIMULATIONS, vol.5, 2022 (SCI-Expanded)
- V. **Density functional theory computation of the binding free energies between various mutations of SARS-CoV-2 RBD and human ACE2: molecular level roots of the contagiousness**  
Yamaçlı S., AVCI M.

HELIYON, vol.8, no.8, 2022 (SCI-Expanded)

- VI. **Modified GRNN based atomic modeling approach for nanoscale devices and TFET implementation**  
Polat A. O., AVCI M.  
MATERIALS TODAY COMMUNICATIONS, vol.27, 2021 (SCI-Expanded)
- VII. **An ANN-Based Single Calibration Impedance Measurement System for Skin Impedance Range**  
İstanbul M., Avcı M.  
IEEE Sensors Journal, vol.21, no.3, pp.3776-3783, 2021 (SCI-Expanded)
- VIII. **Deep Convolutional Generalized Classifier Neural Network**  
Sarigul M., ÖZYILDIRIM B. M., AVCI M.  
NEURAL PROCESSING LETTERS, vol.51, no.3, pp.2839-2854, 2020 (SCI-Expanded)
- IX. **Novel multiwalled carbon nanotube (MWCNT) modified metal oxide semiconductor field effect transistor (MOSFET) based electrode for electrophysiological measurements on human skin**  
İSTANBULLU M., AVCI M.  
INSTRUMENTATION SCIENCE & TECHNOLOGY, vol.47, no.5, pp.545-563, 2019 (SCI-Expanded)
- X. **Differential convolutional neural network**  
Sarigul M., ÖZYILDIRIM B. M., AVCI M.  
NEURAL NETWORKS, vol.116, pp.279-287, 2019 (SCI-Expanded)
- XI. **Estimation of daily global solar radiation using deep learning model**  
Kaba K., Sarigul M., AVCI M., KANDIRMAZ H.  
ENERGY, vol.162, pp.126-135, 2018 (SCI-Expanded)
- XII. **Q LEARNING REGRESSION NEURAL NETWORK**  
SARIGUL M., AVCI M.  
NEURAL NETWORK WORLD, vol.28, no.5, pp.415-431, 2018 (SCI-Expanded)
- XIII. **Estimation of daily sunshine duration using support vector machines**  
Kaba K., KANDIRMAZ H., AVCI M.  
INTERNATIONAL JOURNAL OF GREEN ENERGY, vol.14, no.4, pp.430-441, 2017 (SCI-Expanded)
- XIV. **Reducing simulation duration of carbon nanotube using support vector regression method**  
Aci M., AVCI M., Aci c.  
JOURNAL OF THE FACULTY OF ENGINEERING AND ARCHITECTURE OF GAZI UNIVERSITY, vol.32, no.3, pp.901-907, 2017 (SCI-Expanded)
- XV. **Artificial neural network approach for atomic coordinate prediction of carbon nanotubes**  
Aci M., AVCI M.  
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING, vol.122, no.7, 2016 (SCI-Expanded)
- XVI. **One pass learning for generalized classifier neural network**  
Özyıldırım B. M., AVCI M.  
NEURAL NETWORKS, vol.73, pp.70-76, 2016 (SCI-Expanded)
- XVII. **The intelligent memory allocator selector**  
ÜLGEN O., AVCI M.  
COMPUTER LANGUAGES SYSTEMS & STRUCTURES, vol.44, pp.342-354, 2015 (SCI-Expanded)
- XVIII. **A fluid dynamics-based deformable model for segmentation of cervical cell images**  
CENGİZLER Ç., GÜVEN M., AVCI M.  
SIGNAL IMAGE AND VIDEO PROCESSING, vol.8, 2014 (SCI-Expanded)
- XIX. **Logarithmic learning for generalized classifier neural network**  
Özyıldırım B. M., AVCI M.  
NEURAL NETWORKS, vol.60, pp.133-140, 2014 (SCI-Expanded)
- XX. **Estimation of Monthly Sunshine Duration in Turkey Using Artificial Neural Networks**  
KANDIRMAZ H., Kaba K., Avcı M.  
INTERNATIONAL JOURNAL OF PHOTOENERGY, 2014 (SCI-Expanded)
- XXI. **Accurate SPICE compatible CNT interconnect and CNTFET models for circuit design and simulation**  
Yamacli S., Avci M.  
MATHEMATICAL AND COMPUTER MODELLING, vol.58, pp.368-378, 2013 (SCI-Expanded)

- XXII. **Generalized classifier neural network**  
Özyıldırım B. M., AVCI M.  
NEURAL NETWORKS, vol.39, pp.18-26, 2013 (SCI-Expanded)
- XXIII. **K nearest neighbor reinforced expectation maximization method**  
ACI M., AVCI M.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.38, no.10, pp.12585-12591, 2011 (SCI-Expanded)
- XXIV. **ACCURATE VOLTAGE-DEPENDENT TRANSMISSION LINE MODEL FOR CARBON NANOTUBE INTERCONNECTS AND THE DELAY CALCULATION**  
Yamacli S., AVCI M.  
JOURNAL OF ELECTROMAGNETIC WAVES AND APPLICATIONS, vol.25, no.4, pp.553-563, 2011 (SCI-Expanded)
- XXV. **Use of BDST and an ANN model for prediction of dye adsorption efficiency of Eucalyptus camaldulensis barks in fixed-bed system**  
BALCI B., KESKİNKAN O., AVCI M.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.38, no.1, pp.949-956, 2011 (SCI-Expanded)
- XXVI. **Neural network modeling of voltage-dependent resistance of metallic carbon nanotube interconnects: An ab initio study**  
Yamacli S., AVCI M.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.37, no.12, pp.8014-8018, 2010 (SCI-Expanded)
- XXVII. **A method for the extraction of the voltage-dependent quantum capacitance of carbon nanotubes using ab initio simulations**  
Yamacli S., AVCI M.  
PHYSICA SCRIPTA, vol.82, no.4, 2010 (SCI-Expanded)
- XXVIII. **A hybrid classification method of k nearest neighbor, Bayesian methods and genetic algorithm**  
ACI M., Inan C., AVCI M.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.37, no.7, pp.5061-5067, 2010 (SCI-Expanded)
- XXIX. **Neural network reinforced point defect concentration estimation model for Czochralski-grown silicon crystals**  
AVCI M., YAMAÇLI S.  
MATHEMATICAL AND COMPUTER MODELLING, vol.51, pp.857-862, 2010 (SCI-Expanded)
- XXX. **An improved Elmore delay model for VLSI interconnects**  
AVCI M., Yamacli S.  
MATHEMATICAL AND COMPUTER MODELLING, vol.51, pp.908-914, 2010 (SCI-Expanded)
- XXXI. **ELECTRONIC PROPERTIES AND SELF CONSISTENT SIMULATIONS OF CARBON NANOTUBES IN T TRANSISTOR TECHNOLOGY**  
AVCI M., Yamacli S.  
TRANSISTORS: TYPES, MATERIALS AND APPLICATIONS, pp.35-72, 2010 (SCI-Expanded)
- XXXII. **Simple and accurate model for voltage-dependent resistance of metallic carbon nanotube interconnects: An ab initio study**  
Yamacli S., AVCI M.  
PHYSICS LETTERS A, vol.374, no.2, pp.297-304, 2009 (SCI-Expanded)
- XXXIII. **Neural network-based design approach for submicron MOS integrated circuits**  
Avci M.  
MATHEMATICS AND COMPUTERS IN SIMULATION, vol.79, no.4, pp.1126-1136, 2008 (SCI-Expanded)
- XXXIV. **Neural network based MOS transistor geometry decision for TSMC 0.18 mu process technology**  
Avci M., Yildirim T.  
COMPUTATIONAL SCIENCE - ICCS 2006, PT 4, PROCEEDINGS, vol.3994, pp.615-622, 2006 (SCI-Expanded)
- XXXV. **Neural network based MOSFET channel length and width decision method for analogue integrated circuits**  
Avci M., BABAÇ M. Y., YILDIRIM T.  
INTERNATIONAL JOURNAL OF ELECTRONICS, vol.92, no.5, pp.281-293, 2005 (SCI-Expanded)
- XXXVI. **General design method for complementary pass transistor logic circuits**

Avci M., Yidirim T.

ELECTRONICS LETTERS, vol.39, no.1, pp.46-48, 2003 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Evaluation of CNT/MOSFET Based Active Electrode with ECG, EMG, and EEG Signals**  
İstanbul M., Avci M.  
Çukurova Üniversitesi Mühendislik Mimarlık Fakültesi Dergisi, vol.35, no.3, pp.699-709, 2020 (Peer-Reviewed Journal)
- II. **Kamera Görüntüsü Tabanlı Kömür Tozu Patlayabilirlik Ölçme Sistemi**  
ÜRÜNVEREN A., ÖZYILDIRIM B. M., AVCI M., URAL S.  
ÇUKUROVA ÜNİVERSİTESİ MÜHENDİSLİK MİMARLIK FAKÜLTESİ DERGİSİ, vol.33, no.4, pp.123-132, 2018 (Peer-Reviewed Journal)
- III. **PERFORMANCE COMPARISON OF ANFIS, ANN, SVR, CART AND MLR TECHNIQUES FOR GEOMETRY OPTIMIZATION OF CARBON NANOTUBES USING CASTEP**  
ACI M., ACI Ç., AVCI M.  
Turkish Journal of Engineering, vol.2, no.3, pp.119-124, 2018 (Peer-Reviewed Journal)
- IV. **Performance comparison of different momentum techniques on deep reinforcement learning**  
SARIGÜL M., AVCI M.  
JOURNAL OF INFORMATION AND TELECOMMUNICATION, vol.2, no.2, pp.205-216, 2018 (Peer-Reviewed Journal)
- V. **Comparison of Different Deep Structures for Fish Classification**  
SARIGÜL M., AVCI M.  
International Journal of Computer Theory and Engineering, vol.9, no.5, pp.362-366, 2017 (Peer-Reviewed Journal)

## Books

- I. **Microelectronics Laboratory Experiments 1**  
İstanbul M., Avci M.  
Karahan Kitabevi Yayınları, Adana, 2021
- II. **Microelectronics Laboratory Experiments 2**  
İstanbul M., Avci M.  
Karahan Kitabevi Yayınları, Adana, 2020
- III. **Case Study: Deep Convolutional Networks in Healthcare**  
Avci M., Sarigül M., Özyıldırım B. M.  
in: Development and Analysis of Deep Learning Architectures, Pedrycz Witold, Chen Shyi-Ming, Editor, Springer, pp.61-89, 2020
- IV. **Multi Agent Systems for Deadlock Prevention: Operating Systems**  
GHAREGHCHOPOGH F. S., AVCI M.  
Lap Lambert Academic Publishing, Kg, 2013
- V. **İşletim sistemleri ve sistem Programlama**  
AVCI M., ÖZYILDIRIM B. M., ÜLGEN O.  
Karahan Kitabevi, Adana, 2012
- VI. **ELECTRONIC PROPERTIES AND SELF CONSISTENT SIMULATIONS OF CARBON NANOTUBES IN TRANSISTOR TECHNOLOGY**  
AVCI M., YAMAÇLI S.  
in: Transistors: Types, Materials, and Applications, Benjamin M. Fitzgerald, Editor, Nova Science Publishers, Hauppauge Ny, pp.35-72, 2011

## Papers Published in Refereed Scientific Meetings

- I. **Low Voltage Two Stage CMOS Operational Amplifier Design for Biomedical Applications**  
İstanbullu M., Avcı M.  
656th International Conference On Electrical and Electronics Engineering (ICEEE), Hamburg, Germany, 4 - 05 April 2020, pp.1-7
- II. **Image compression with deep autoencoders on bird images**  
SARIGÜL M., AVCI M.  
International Conference on Artificial Intelligence towards Industry 4.0, 15 - 17 November 2018
- III. **Microfabrication Process Design of Low Voltage Depletion Type N-MOSFET for Biopotential Sensing**  
İSTANBULLU M., AVCI M.  
5th International Conference on Materials Science and Nanotechnology For Next Generation (MSNG2018), Nevşehir, Turkey, 04 October 2018 - 06 October 2019, pp.117-121
- IV. **Handwritten Digits Classification with Generalized Classifier Neural Network**  
ÖZYILDIRIM B. M., AVCI M.  
Innovations in Intelligent Systems and Applications Conference (ASYU), Adana, Turkey, 4 - 06 October 2018, pp.187-189
- V. **Performance Analysis of Different Convolutional Neural Network Structures on Bird Classification**  
SARIGÜL M., AVCI M.  
2nd International Mediterranean Science and Engineering Congress (IMSEC 2017), 25 - 27 October 2017
- VI. **Effect of pre-trained deep neural network usage on performance of image classification**  
SARIGÜL M., AVCI M.  
2nd International Mediterranean Science and Engineering Congress (IMSEC 2017), 25 - 27 October 2017
- VII. **An ANFIS Model for Geometry Optimization of Single Wall Carbon Nanotubes**  
ACI M., ACI Ç., AVCI M.  
International Conference on Advances and Innovations in Engineering, Elazığ, Turkey, 10 - 12 May 2017, pp.1145-1150
- VIII. **Performance Comparison of Different Momentum Techniques on Deep Reinforcement Learning**  
SARIGÜL M., AVCI M.  
IEEE International Conference on INnovations in Intelligent SysTems and Applications (INISTA), Gdynia, Poland, 3 - 05 July 2017, pp.302-306
- IX. **Regresyon Ağacı Yöntemi Kullanılarak Karbon Nanotüp Koordinatlarının İstenen Kiraliteye Göre Belirlenmesi**  
ACI M., AVCI M., ACI Ç.  
1st International Mediterranean Science and Engineering Congress (IMSEC 2016), 26 - 28 October 2016
- X. **Antik Madeni Paraların Derin Konvolüsyon Yapay Sinir Ağları İle Sınıflandırılması**  
ÖZYILDIRIM B. M., AVCI M.  
ASYU 2016, Turkey, 29 September - 01 October 2016
- XI. **Regresyon ağacı yöntemi kullanılarak karbon nanotüp koordinatlarının istenen kiraliteye göre belirlenmesi**  
ACI M., AVCI M., ACI Ç.  
1st International Mediterranean Science and Engineering Congress, 26 - 28 August 2016
- XII. **Artificial Neural Network-based Solution of the Dining Philosophers Problem**  
ÜLGEN O., AVCI M.  
International Symposium on Innovations in Intelligent Systems and Applications, 21 - 24 June 2010
- XIII. **Artificial Neural Network-based Universal Solution of the Readers and Writers Problem**  
ÜLGEN O., AVCI M.  
International Symposium on Innovations in Intelligent Systems and Applications, 21 - 24 June 2010
- XIV. **Cellular Neural Networks Based Face Detection Utilizing Graphical Processor**  
ÖZYILDIRIM B. M., AVCI M.  
International Symposium on Innovations in Intelligent SysTems and Applications (INISTA 2010), 21 - 24 June 2010

- XV. **A hybrid classification method of K nearest neighbor, bayesian methods and genetic algorithm**  
ACI Ç., AVCI M.  
Proceedings of International Symposium on Innovations in Intelligent Systems and Applications, INISTA 2009,  
Trabzon, Turkey, 01 January 2009, pp.337-341
- XVI. **Yapay Sinir Ağı ile Kapasitif MEMS İvme Ölçerin Rezonans Frekansının Kestirimi**  
KESİLMİŞ Z., AVCI M., AKSOY M.  
Elektrik-Elektronik Bilgisayar Mühendisliği Sempozyumu ELECO'2008, Turkey, 26 - 29 November 2008, pp.87-90
- XVII. **Yapay sinir ağı ile MEMS İvme ölçerin rezonans frekansı kestirimi**  
KESİLMİŞ Z., AVCI M., AKSOY M.  
ELECO 2008, Turkey, 26 - 30 November 2008
- XVIII. **AMIS 0.5u teknolojisiyle digital ayarlı düşük frekanslı osilatör**  
KUMRU F., AVCI M.  
ELECO 2008, Turkey, 26 - 30 November 2008
- XIX. **Kazancı Sayısal Olarak Ayarlanabilir Akım Kuvvetlendiricisi Tasarımı ve Bandgeçiren Süzgeç Uygulaması**  
YAMAÇLI S., AVCI M., AKSOY M.  
Elektrik-Elektronik Bilgisayar Mühendisliği Sempozyumu ELECO'2008, Turkey, 26 - 29 November 2008, pp.38-42
- XX. **Sayısal Olarak Kazancı Ayarlanabilen Bir Akım Kuvvetlendiricisi Tasarımı**  
YAMAÇLI S., AVCI M., AKSOY M.  
Çukurova Üniversitesi Mühendislik-Mimarlık Fakültesi 30.Yıl Sempozyumu, Turkey, 16 - 18 October 2008, pp.264-268
- XXI. **Sayısal İşaret İşleme Mikrodenetleyicisi Tabanlı Ethernet Üzerinden Veri Aktarım İstasyonu Uygulaması**  
YAMAÇLI S., AVCI M., AKSOY M.  
Çukurova Üniversitesi Mühendislik-Mimarlık Fakültesi 30.Yıl Sempozyumu, Turkey, 16 - 18 October 2008, pp.254-258
- XXII. **Ethernet üzerinden veri aktaran sıcaklık/nem ölçüm istasyonu tasarımı ve uygulaması**  
YAMAÇLI S., AKSOY M., AVCI M.  
UZAL-CBS, Turkey, 13 - 15 October 2008
- XXIII. **Kestirim En İyileme Yöntemiyle Sınıflamada K En Yakın Komsu Algoritmasının Ön İşleme Metodu Olarak Kullanılması**  
AVCI M., ACI M., İNAN Ç.  
Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu, Turkey, 1 - 03 October 2008, pp.87
- XXIV. **Minix işletim sistemi üzerinde kullanıcı düzeyinde semafor gerçekleştirilmesi**  
ÖZYILDIRIM B. M., AVCI M.  
Çukurova Üniversitesi Mühendislik-Mimarlık Fakültesi 30.yıl sempozyumu, Turkey, 5 - 08 October 2008
- XXV. **Göğüs Kanseri Teşhisinde Gelişmiş Bir Kestirim En İyileme Yaklaşımı**  
ACI M., İNAN Ç., AVCI M.  
Çukurova Üniversitesi Mühendislik-Mimarlık Fakültesi 30.yıl sempozyumu, Turkey, 1 - 03 September 2008, pp.42
- XXVI. **Utilization of KNN algorithm for expectation maximization based classification method**  
ACI M., ACI Ç., AVCI M.  
IS2008, IEEE Conference on Intelligent Systems, 6 - 08 September 2008
- XXVII. **Göğüs kanseri teşhisinde gelişmiş bir kestirim en iyileme yaklaşımı**  
ACI Ç., AVCI M.  
Çukurova Üniversitesi Mühendislik-Mimarlık Fakültesi 30.yıl sempozyumu, Adana, Turkey, 01 April 2008, pp.42-44
- XXVIII. **Kestirim en iyileme yöntemiyle sınıflamada K-en yakın komşu algoritmasının ön işleme metodu olarak kullanılması**  
ACI Ç., AVCI M.  
Akıllı Sistemlerde Yenilikler ve Uygulamaları Sempozyumu, Isparta, Turkey, 01 March 2008, pp.87-90
- XXIX. **Utilization of KNN algorithm for expectation maximization based classification method**  
ACI Ç., AVCI M.

- IS'2008, IEEE Conference on Intelligent Systems, Varna, Bulgaria, 01 January 2008, vol.19, pp.14-16
- XXX. **An Operational Transconductance Amplifier with 45nm FINFET Technology**  
Kesilmiş Z., Avcı M., Aksoy M.  
International Symposium on Electrical and Electronics Engineering ELECO 2007, Bursa, Turkey, 5 - 09 December 2007
- XXXI. **Bir yerel alan ağı tasarımı ve simülasyonu**  
SARAÇ E., AVCI M.  
III. İletişim Teknolojileri Ulusal Sempozyumu, Turkey, 18 - 19 October 2007
- XXXII. **Windows İşletim Sisteminde Esnek Zaman Paylaşımli Proses Yönetimi Gerçekleşmesi**  
ÜLGEN O., AVCI M.  
III. İletişim Teknolojileri Ulusal Sempozyumu, Adana, Turkey, 18 - 19 October 2007
- XXXIII. **Windows İşletim Sistemi Üzerinde FIFO Proses Yönetimi İçin Yazılım Geliştirilmesi**  
ÜLGEN O., AVCI M.  
III. İletişim Teknolojileri Ulusal Sempozyumu, Adana, Turkey, 18 - 19 October 2007
- XXXIV. **Yüzen Geçit MOS Transistorlarda Parametrik Saçılma Analizi**  
KESİLMİŞ Z., AVCI M., AKSOY M.  
Elektrik-Elektronik Bilgisayar Mühendisliği Sempozyumu ELECO'2006, Turkey, 6 - 09 December 2006, pp.55-59
- XXXV. **Neural network based MOS transistor geometry decision for TSMC 0.18u process technology**  
AVCI M., YILDIRIM T.  
ICCS 2006, International Conference on Computational Science, 28 - 31 May 2006
- XXXVI. **An introduction to Avcı-Yildirim Neural Networks**  
AVCI M., YILDIRIM T.  
NEU-CEE 2004 2nd International Symposium on Electrical and Computer Engineering, 11 - 13 March 2004
- XXXVII. **Floating gate MOS transistor based low voltage neuron design and XOR problem implementation**  
KELEŞ F., AVCI M., YILDIRIM T.  
Third International Conference on Electrical and Electronics Engineering ELECO'2003, 3 - 07 December 2003
- XXXVIII. **Neural network based transistor modeling and aspect ratio estimation for Yital 1.5 micron process**  
AVCI M., BABAÇ M. Y., YILDIRIM T.  
International Conference on Electrical and Electronics Engineering ELECO 2003, 3 - 07 December 2003
- XXXIX. **Generation of tangent hyperbolic sigmoid function for microcontroller based digital implementations of neural networks**  
AVCI M., YILDIRIM T.  
XII. International TAINN Symposium, 2 - 04 July 2003
- XL. **Microcontroller based neural network realization and iris plant classifier application**  
AVCI M., YILDIRIM T.  
XII. International TAINN Symposium, 2 - 04 July 2003
- XLI. **A coding method for 123 decision diagram pass transistor logic circuit synthesis**  
AVCI M., YILDIRIM T.  
IEEE International Symposium on Circuits and Systems Proceedings (ISCAS 2003), 25 - 28 May 2003
- XLII. **Classification of Escherichia Coli Bacteria by Artificial Neural Networks**  
AVCI M., YILDIRIM T.  
IS 2002 IEEE International Symposium on Intelligent Systems, 10 - 12 September 2002
- XLIII. **Digital Hardware Implementation of Petri Net Based Specifications: Direct Translation from Safe Automation Petri Nets to Circuit Elements**  
UZAM M., AVCI M., YALÇIN M. K.  
the International Workshop on Discrete Event Systems Design, DESdes'01, 27 - 29 June 2001
- XLIV. **Mikrodenetleyici Tabanlı Başarımsal Yaklaşım Metodu Sekiz Kanal Analogtan Sayısala Dönüştürücü Tasarımı ve Gerçekleşmesi**  
AKSOY M., AVCI M.  
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## Supported Projects

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