

## **Prof. Nizamettin AYDIN**

### **Personal Information**

**Office Phone:** [+90 212 383 5748](tel:+902123835748)

**Fax Phone:** [+90 212 383 5732](tel:+902123835732)

**Web:** <http://www3.yildiz.edu.tr/~naydin>

**Address:** Yıldız Teknik Üniversitesi Elektrik-Elektronik Fakültesi Bilgisayar Mühendisliği Bölümü Davutpaşa Kampüsü 34220 Esenler - İstanbul

### **International Researcher IDs**

ORCID: 0000-0003-0022-2247

ScopusID: 7005593269

Yoksis Researcher ID: 3674

### **Education Information**

Doctorate, University of Leicester, School of medicine, Medical Physics, United Kingdom 1990 - 1994

Postgraduate, Yıldız Technical University, Graduate School Of Natural And Applied Sciences, Elektronik ve Haberleşme, Turkey 1985 - 1987

Undergraduate, Yıldız Technical University, Faculty Of Electrical & Electronics, Electronics And Communication Engineering, Turkey 1980 - 1984

### **Foreign Languages**

English, C1 Advanced

### **Dissertations**

Doctorate, Computerized Graft Monitoring, University of Leicester, School Of Medicine, Medical Physics, 1994

Postgraduate, Design and implementation of data-acquisition system for IBM-PC, Yıldız Teknik Üniversitesi, Graduate School of Natural and Applied Sciences, Elektronik Anabilim Dalı, 1987

### **Research Areas**

Information Systems, Communication and Control Engineering, Signal Processing, Computer Sciences, bioinformatics, Biomedical Engineering, Electrical and Electronics Engineering, Electronic, Engineering and Technology

### **Academic Titles / Tasks**

Professor, Yıldız Technical University, Faculty Of Electrical & Electronics, Computer Engineering, 2009 - Continues

Professor, Bahçeşehir University, Faculty Of Engineering, Bilgisayar Mühendisliği, 2006 - 2009

Associate Professor, Bahçeşehir University, Faculty Of Engineering, Bilgisayar Mühendisliği, 2004 - 2006

## Açıklama metinleri

- Aydın N., Dynamic programming-based multi-vehicle longitudinal trajectory optimization, Doctorate, CAVCI(Student), 2018
- Aydın N., A system implementation for analyzing and tracking motile objects in biomedical images, Doctorate, H.OSMAN(Student), 2017
- Aydın N., Bir kurumsal kaynak planlama yazılımı ve akıllı karar destek sistemi araçlarının geliştirilmesi, Doctorate, H.HAKAN(Student), 2017
- Aydın N., Sürekli dalgalı doppler etkili kan akışı izleme sistemi, Postgraduate, C.FIRAT(Student), 1996

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

- I. **Wavelet Scattering Transform based Doppler signal classification**  
Lone A. W., AYDIN N.  
Computers in Biology and Medicine, vol.167, 2023 (SCI-Expanded)
- II. **The Evaluation of Nature-Inspired Optimization Techniques for Contrast Enhancement in Images: A Novel Software Tool**  
İLHAN H. O., ELBİR A., SERBES G., AYDIN N.  
Traitement du Signal, vol.40, no.4, pp.1305-1318, 2023 (SCI-Expanded)
- III. **Detection of sperm cells by single-stage and two-stage deep object detectors**  
Yüzkat M., İlhan H. O., Aydin N.  
Biomedical Signal Processing and Control, vol.83, 2023 (SCI-Expanded)
- IV. **Surgical Phase Recognition: From Public Datasets to Real-World Data**  
Kirtac K., AYDIN N., Lavanchy J. L., Beldi G., Smit M., Woods M. S., Aspart F.  
APPLIED SCIENCES-BASEL, vol.12, no.17, 2022 (SCI-Expanded)
- V. **Decision and feature level fusion of deep features extracted from public COVID-19 data-sets**  
İlhan H. O., Serbes G., Aydin N.  
APPLIED INTELLIGENCE, vol.52, no.8, pp.8551-8571, 2022 (SCI-Expanded)
- VI. **Tuning hyperparameters of machine learning algorithms and deep neural networks using metaheuristics: A bioinformatics study on biomedical and biological cases**  
Nematzadeh S., Kiani F., Torkamanian-Afshar M., AYDIN N.  
COMPUTATIONAL BIOLOGY AND CHEMISTRY, vol.97, 2022 (SCI-Expanded)
- VII. **Emboli detection using a wrapper-based feature selection algorithm with multiple classifiers**  
Sakar B. E., SERBES G., AYDIN N.  
Biomedical Signal Processing and Control, vol.71, 2022 (SCI-Expanded)
- VIII. **Design and implementation of a low cost and portable tactile stimulator for**  
Kazma C., Levent V. E., ÇARDAK M., AYDIN N.  
TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.30, no.6, pp.2398-2417, 2022 (SCI-Expanded)
- IX. **Sperm Motility Analysis by using Recursive Kalman Filters with the smartphone based data acquisition and reporting approach**  
Ilhan H. O., Yüzkat M., Aydin N.  
EXPERT SYSTEMS WITH APPLICATIONS, vol.186, 2021 (SCI-Expanded)
- X. **Multi-model CNN fusion for sperm morphology analysis**  
YÜZKAT M., İLHAN H. O., AYDIN N.  
COMPUTERS IN BIOLOGY AND MEDICINE, vol.137, 2021 (SCI-Expanded)
- XI. **High-throughput analysis of the interactions between viral proteins and host cell RNAs**  
Lanjanian H., Nematzadeh S., Hosseini S., Torkamanian-Afshar M., Kiani F., Moazzam-Jazi M., AYDIN N., Masoudi-Nejad A.  
COMPUTERS IN BIOLOGY AND MEDICINE, vol.135, 2021 (SCI-Expanded)
- XII. **Automated sperm morphology analysis approach using a directional masking technique**  
İLHAN H. O., SERBES G., AYDIN N.

- Computers in Biology and Medicine, vol.122, 2020 (SCI-Expanded)
- XIII. **Music genre classification and music recommendation by using deep learning**  
ELBİR A., Aydin N.  
ELECTRONICS LETTERS, vol.56, no.12, pp.627-629, 2020 (SCI-Expanded)
- XIV. **A fully automated hybrid human sperm detection and classification system based on mobile-net and the performance comparison with conventional methods**  
İlhan H. O., Sigirci I., Serbes G., Aydin N.  
MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, vol.58, no.5, pp.1047-1068, 2020 (SCI-Expanded)
- XV. **Smartphone based sperm counting-an alternative way to the visual assessment technique in sperm concentration analysis**  
İLHAN H. O., AYDIN N.  
MULTIMEDIA TOOLS AND APPLICATIONS, vol.79, pp.6409-6435, 2020 (SCI-Expanded)
- XVI. **An Optimal Feature Parameter Set Based on Gated Recurrent Unit Recurrent Neural Networks for Speech Segment Detection**  
Batur Dinler O., AYDIN N.  
APPLIED SCIENCES-BASEL, vol.10, no.4, 2020 (SCI-Expanded)
- XVII. **Gene selection using hybrid binary black hole algorithm and modified binary particle swarm optimization**  
Pashaer E., Pashaei E., Aydin N.  
GENOMICS, vol.111, pp.669-686, 2019 (SCI-Expanded)
- XVIII. **Automatic directional masking technique for better sperm morphology segmentation and classification analysis**  
İlhan H. O., Serbes G., Aydin N.  
ELECTRONICS LETTERS, vol.55, no.5, pp.256-257, 2019 (SCI-Expanded)
- XIX. **The implementation of optimization methods for contrast enhancement**  
Elbir A., İlhan H. O., Aydin N.  
COMPUTER SYSTEMS SCIENCE AND ENGINEERING, vol.34, no.2, pp.101-107, 2019 (SCI-Expanded)
- XX. **Markovian encoding models in human splice site recognition using SVM**  
Pashaei E., Aydin N.  
Computational Biology and Chemistry, vol.73, pp.159-170, 2018 (SCI-Expanded)
- XXI. **A novel data acquisition and analyzing approach to spermiogram tests**  
İLHAN H. O., AYDIN N.  
BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.41, pp.129-139, 2018 (SCI-Expanded)
- XXII. **Dynamic programming-based multi-vehicle longitudinal trajectory optimization with simplified car following models**  
Wei Y., Avci C., Liu J., Belezamo B., AYDIN N., Li P., Zhou X.  
Transportation Research Part B: Methodological, vol.106, pp.102-129, 2017 (SCI-Expanded)
- XXIII. **Binary black hole algorithm for feature selection and classification on biological data**  
PASHAEI E., AYDIN N.  
APPLIED SOFT COMPUTING, vol.56, pp.94-106, 2017 (SCI-Expanded)
- XXIV. **Meta-analysis of miRNA expression profiles for prostate cancer recurrence following radical prostatectomy**  
Pashaei E., Pashaei E., Ahmady M., Özen M., AYDIN N.  
PLOS ONE, vol.12, no.6, 2017 (SCI-Expanded)
- XXV. **A Meta-Analysis: Identification of Common Mir-145 Target Genes that have Similar Behavior in Different GEO Datasets**  
PASHAEI E., Guzel E., Ozgurses M. E., Demirel G., AYDIN N., Ozen M.  
PLOS ONE, vol.11, no.9, 2016 (SCI-Expanded)
- XXVI. **Directional dual-tree complex wavelet packet transforms for processing quadrature signals**  
Serbes G., Gulcur H. O., AYDIN N.  
MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, vol.54, pp.295-313, 2016 (SCI-Expanded)

- XXVII. **Comprehensive review of association estimators for the inference of gene networks**  
 Kurt Z., Aydin N., Altay G.  
 TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.24, pp.695-750, 2016 (SCI-Expanded)
- XXVIII. **An emboli detection system based on Dual Tree Complex Wavelet Transform and ensemble learning**  
 SERBES G., Sakar B. E., Gulcur H. O., AYDIN N.  
 APPLIED SOFT COMPUTING, vol.37, pp.87-94, 2015 (SCI-Expanded)
- XXIX. **A comprehensive comparison of association estimators for gene network inference algorithms**  
 Kurt Z., Aydin N., Altay G.  
 BIOINFORMATICS, vol.30, pp.2142-2149, 2014 (SCI-Expanded)
- XXX. **Combining multiple views: Case studies on protein and arrhythmia features**  
 Sakar C. O., Kursun O., Seker H., Gurgen F., AYDIN N., FAVOROV O.  
 ENGINEERING APPLICATIONS OF ARTIFICIAL INTELLIGENCE, vol.28, pp.174-180, 2014 (SCI-Expanded)
- XXXI. **Denoising performance of modified dual-tree complex wavelet transform for processing quadrature embolic Doppler signals**  
 Serbes G., Aydin N.  
 MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, vol.52, no.1, pp.29-43, 2014 (SCI-Expanded)
- XXXII. **Pulmonary crackle detection using time-frequency and time-scale analysis**  
 Serbes G., Sakar C. O., Kahya Y. P., AYDIN N.  
 DIGITAL SIGNAL PROCESSING, vol.23, no.3, pp.1012-1021, 2013 (SCI-Expanded)
- XXXIII. **Modified dual tree complex wavelet transform for processing quadrature signals**  
 Serbes G., AYDIN N.  
 BIOMEDICAL SIGNAL PROCESSING AND CONTROL, vol.6, no.3, pp.301-306, 2011 (SCI-Expanded)
- XXXIV. **Using covariates for improving the minimum Redundancy Maximum Relevance feature selection method**  
 Kursun O., Sakar C. O., Favorov O., AYDIN N., Gurgen F.  
 TURKISH JOURNAL OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCES, vol.18, no.6, pp.975-987, 2010 (SCI-Expanded)
- XXXV. **Signed higher-radix full-adder algorithm and implementation with current-mode multi-valued logic circuits**  
 Temel T., Morgul A., Aydin N.  
 IEE Proceedings: Circuits, Devices and Systems, vol.153, no.5, pp.489-496, 2006 (SCI-Expanded)
- XXXVI. **A direct-sequence spread-spectrum communication system for integrated sensor microsystems**  
 Aydin N., ARSLAN T., CUMMING D.  
 IEEE TRANSACTIONS ON INFORMATION TECHNOLOGY IN BIOMEDICINE, vol.9, no.1, pp.4-12, 2005 (SCI-Expanded)
- XXXVII. **Embolic Doppler ultrasound signal detection using discrete wavelet transform**  
 Aydin N., MARVASTI F., MARKUS H.  
 IEEE TRANSACTIONS ON INFORMATION TECHNOLOGY IN BIOMEDICINE, vol.8, no.2, pp.182-190, 2004 (SCI-Expanded)
- XXXVIII. **Compensatory fuzzy neural networks-based intelligent detection of abnormal neonatal cerebral Doppler ultrasound waveforms**  
 SEKER H., EVANS D., Aydin N., YAZGAN E.  
 IEEE TRANSACTIONS ON INFORMATION TECHNOLOGY IN BIOMEDICINE, vol.5, no.3, pp.187-194, 2001 (SCI-Expanded)
- XXXIX. **Time-scale analysis of quadrature Doppler ultrasound signals**  
 Aydin N., MARKUS H.  
 IEE PROCEEDINGS-SCIENCE MEASUREMENT AND TECHNOLOGY, vol.148, no.1, pp.15-22, 2001 (SCI-Expanded)
- XL. **Directional wavelet transform in the context of complex quadrature Doppler signals**  
 Aydin N., MARKUS H.  
 IEEE SIGNAL PROCESSING LETTERS, vol.7, no.10, pp.278-280, 2000 (SCI-Expanded)
- XLI. **The use of the wavelet transform to describe embolic signals**

- Aydin N., PADAYACHEE S., MARKUS H.  
 ULTRASOUND IN MEDICINE AND BIOLOGY, vol.25, no.6, pp.953-958, 1999 (SCI-Expanded)
- XLII. IMPLEMENTATION OF DIRECTIONAL DOPPLER TECHNIQUES USING A DIGITAL SIGNAL PROCESSOR**  
 AYDIN N., EVANS D.  
 MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, vol.32, no.4, 1994 (SCI-Expanded)
- XLIII. QUADRATURE-TO-DIRECTIONAL FORMAT CONVERSION OF DOPPLER SIGNALS USING DIGITAL METHODS**  
 AYDIN N., FAN L., EVANS D.  
 PHYSIOLOGICAL MEASUREMENT, vol.15, no.2, pp.181-199, 1994 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Effects of Color Space Transformations on Classification Performance of Sperm Morphology**  
 Yüzkat M., İlhan H. O., Aydin N.  
 European Journal of Science and Technology, vol.29, pp.70-75, 2021 (Peer-Reviewed Journal)
- II. **EXTRACTION OF THE ACOUSTIC FEATURES OF SEMI-VOWELS IN THE KURDISH LANGUAGE**  
 BATUR Ö., AYDIN N.  
 The Online Journal of Science and Technology, vol.8, 2018 (Peer-Reviewed Journal)
- III. **Kurdish Recognition System Digit**  
 BATUR Ö., AYDIN N.  
 The Online Journal of Science and Technology, vol.8, pp.101-105, 2018 (Peer-Reviewed Journal)
- IV. **Splice site identification in human genome using random forest**  
 Pashaei E., Özgen M., AYDIN N.  
 Health and Technology, vol.7, no.1, pp.141-152, 2017 (Scopus)
- V. **Assessment of similarities between liver images to each other using scaling, rotation and translation geometrical operations**  
 TAPKIN T. P., OSMAN O., Ergin T., Teomete U., Dandin Ö., AYDIN N.  
 Istanbul University - Journal of Electrical and Electronics Engineering, vol.17, pp.3101-3106, 2017 (ESCI)
- VI. **Assessment of Similarity Rates of Liver Images Using Geometric Transformations**  
 Tapkin T., Osman , Ergin T., Teomete U., Dandin Ö., AYDIN N.  
 Istanbul University - Journal of Electrical & Electronics Engineering (IU - JEEE), vol.17, no.1, pp.3113--3119, 2017 (Peer-Reviewed Journal)
- VII. **Code generator for implementing dual tree complex wavelet transform on reconfigurable architectures for mobile applications**  
 CANBAY F., LEVENT V., Serbes G., UGURDAG H., GOREN S., AYDIN N.  
 Healthcare Technology Letters, vol.3, no.3, pp.184-188, 2016 (ESCI)
- VIII. **CONTROL OF AIR CONDITIONING WITH FUZZY LOGIC CONTROLLER DESIGN FOR SMART HOME SYSTEMS**  
 ELALMIŞ N., GÖRGÜN H., AYDIN N.  
 Sigma Journal of Engineering and Natural Sciences, vol.33, no.3, pp.439-463, 2015 (ESCI)
- IX. **CISAPS: Complex informational spectrum for the analysis of protein sequences**  
 Chrysostomou C., Seker H., AYDIN N.  
 Advances in Bioinformatics, vol.2015, 2015 (Scopus)
- X. **Kaleidomaps a new technique for the visualization of multivariate time series**  
 BALE K., CHAPMAN P., BARRACLOUGH N., PURDY J., AYDIN N., DARK P.  
 Information Visualization, pp.155-167, 2007 (Scopus)
- XI. **Wavelet analysis of quadrature Doppler ultrasound signals**  
 Aydin N., Markus H.  
 IEE Conference Publication, no.476, pp.251-256, 2000 (Scopus)
- XII. **Optimisation of processing parameters for the analysis and detection of embolic signals**

- AYDIN N., MARKUS H.  
European Journal of Ultrasound, pp.69-79, 2000 (Scopus)
- XIII. A computerised arterial graft monitoring system **Journal of Vascular Investigation**  
AYDIN N., EVANS D.  
Journal of Vascular Investigation, pp.68-74, 1995 (Peer-Reviewed Journal)
- XIV. The performance of three maximum frequency envelope detection algorithms for Doppler signals  
MORAES R., AYDIN N., EVANS D. H.  
Journal of Vascular Investigation, pp.126-134, 1995 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Hybrid Krill Herd Algorithm with Particle Swarm Optimization for Image Enhancement**  
Pashaei E., Pashaei E., Aydin N.  
in: Intelligent and Fuzzy Techniques: Smart and Innovative Solutions. INFUS 2020. Advances in Intelligent Systems and Computing, vol 1197, Kahraman C.,Cevik Onar S.,Oztaysi B.,Sari I.,Cebi S.,Tolga A., Editor, Springer, London/Berlin , Berlin, pp.1431-1439, 2020
- II. **Investigation into the Effects of an Individual Amino Acid on Protein Function by Means of a Resonant Recognition Model**  
Chrysostomou C., Şeker H., Aydin N.  
in: Lecture Notes in Computer Science, Volume 6935, Convergence and Hybrid Information Technology, Lee Geuk,Howard Daniel,Ślęzak Dominik, Editor, Springer, London/Berlin , Berlin, pp.229-236, 2011
- III. **Effect of Different Window and Wavelet Types on the Performance of a Novel Crackle Detection Algorithm**  
Serbes G., Şakar C. O., Aydin N., Kahya Z. Y.  
in: Lecture Notes in Computer Science, Volume 6935, Convergence and Hybrid Information Technology, Lee Geuk,Howard Daniel,Ślęzak Dominik, Editor, Springer, London/Berlin , Berlin, pp.575-581, 2011
- IV. **Benchmarking the Data Mining Algorithms with Adaptive Neuro-Fuzzy Inference System in GSM Churn Management**  
KARAHOCA A., KARAHOCA D., AYDIN N.  
in: Data Mining and Knowledge Discovery in Real Life Applications, Ponce Julio and Karahoca Adem, Editor, InTech Education and Publishing, Rijeka, pp.230-242, 2009
- V. **2007 2nd NASA/ESA Conference on Adaptive Hardware and Systems**  
STOICA A., ARSLAN T., SUÈSS M., YALÇIN Ş., KEYMEULEN D., HIGHUCHI T., ZEBULUM R., AYDIN N.  
IEEE Computer Soc., 2007
- VI. **Proceedings of the 4th International Conference on e-Learning**  
GÜNGÖR A., AYDIN N., KARAHOCA A., TOKLU Ç.  
Bahçeşehir University Publications, İstanbul, 2007
- VII. **First NASA/ESA Conference on Adaptive Hardware and Systems**  
STOICA A., ARSLAN T., SUÈSS M., YALÇIN Ş., KEYMEULEN D., HIGHUCHI T., ZEBULUM R., AYDIN N.  
IEEE Computer Soc., 2006
- VIII. **Time-frequency and time-scale analysis of embolic signals**  
Aydin N.  
in: Mathematics in signal processing V, McWhirter J.G. and Proudler I.K., Editor, Clarendon Press, Gloucestershire, UK , Oxford, pp.241-254, 2002

## Refereed Congress / Symposium Publications in Proceedings

- I. **Texture and CNN Based Doppler Signal Classification**  
Lone A. W., AYDIN N.

8th International Conference on Computer Science and Engineering, UBMK 2023, Burdur, Turkey, 13 - 15 September 2023, pp.201-205

- II. **Hybrid Krill Herd Algorithm with Particle Swarm Optimization for Image Enhancement**  
Pashaei E., Pashaei E., AYDIN N.  
International Conference on Intelligent and Fuzzy Systems, INFUS 2020, İstanbul, Turkey, 21 - 23 July 2020, pp.1431-1439
- III. **Morphological Classification of Low Quality Sperm Images Using Deep Learning Networks**  
YÜZKAT M., İLHAN H. O., AYDIN N.  
2020 Medical Technologies Congress (TIPTEKNO), Turkey, 19 November 2020
- IV. **Kurdish digit recognition with Artificial Neural Network**  
BATUR Ö., AYDIN N.  
International Engineering and Science Symposium, 20 - 22 June 2019
- V. **Parametric Trigger Signal Generation with Microcontroller and FPGA Based Architectures**  
**Mikrodenetleyici ve FPGA Tabanlı Mimariler ile Parametrik Tetik Sinyali Üretimi**  
Kazma C., Levent V. E., AYDIN N.  
4th International Conference on Computer Science and Engineering, UBMK 2019, Samsun, Turkey, 11 - 15 September 2019, pp.140-144
- VI. **Duyusal Tepkilerin Merkezi Sinir Sistemi Üzerindeki Ölçümü İçin Yeni Bir Sistem**  
KAZMA C., LEVENT V. E., AYDIN N.  
UMBK, 18 - 21 August 2019
- VII. **Design and development of a new tactile stimulator**  
Kazma C., Levent V. E., AYDIN N.  
2019 NASA/ESA Conference on Adaptive Hardware and Systems, AHS 2019, Colchester, United Kingdom, 22 - 24 July 2019, pp.55-60
- VIII. **An Engineering Perspective on Complex Analysis and Transform Domain Processing of Quadrature Signals**  
AYDIN N.  
MODERN PROBLEMS OF INNOVATIVE TECHNOLOGIES IN OIL AND GAS PRODUCTION AND APPLIED MATHEMATICS", 13 - 14 December 2018
- IX. **Processing of Quadrature Doppler Ultrasound Signals-An Engineering Perspective of Complex Analysis-**  
AYDIN N.  
International Conference on Mathematical Advances and Applications (ICOMAA2018), 11 - 13 May 2018
- X. **The Effect of Nonlinear Wavelet Transform Based De-noising in Sperm Abnormality Classification**  
İLHAN H. O., SIĞIRCI İ. O., SERBES G., AYDIN N.  
2018 3rd International Conference on Computer Science and Engineering (UBMK), Sarajevo, Bosnia and Herzegovina, 20 - 23 September 2018
- XI. **Music Genre Classification and Recommendation by Using Machine Learning and Deep Learning**  
ELBİR A., AYDIN N.  
Akıllı Sistemlerde Yenilikler Ve Uygulamaları Konferansı 2018, Adana, Turkey, 04 October 2018, pp.1-5
- XII. **Dual Tree Complex Wavelet Transform Based Sperm Abnormality Classification**  
İLHAN H. O., SERBES G., AYDIN N.  
2018 41st International Conference on Telecommunications and Signal Processing (TSP), Athens, Greece, 4 - 06 July 2018
- XIII. **The Effects of the Modified Overlapping Group Shrinkage Technique on the Sperm Segmentation in the Stained Images**  
İLHAN H. O., SERBES G., AYDIN N.  
2018 41st International Conference on Telecommunications and Signal Processing (TSP), Athens, Greece, 4 - 06 July 2018
- XIV. **The performance evaluation of the Cat and Particle Swarm Optimization Techniques in the image enhancement**

- Çam H. B., Akçakoca S., ELBİR A., İLHAN H. O., AYDIN N.  
2018 Electric Electronics, Computer Science, Biomedical Engineering'sxx Meeting (EBBT), İstanbul, Turkey, 18 - 19 April 2018
- XV. **Short Time Fourier Transform based music genre classification**  
ELBİR A., İLHAN H. O., SERBES G., AYDIN N.  
2018 Electric Electronics, Computer Science, Biomedical Engineering'sxx Meeting (EBBT), İstanbul, Turkey, 18 - 19 April 2018
- XVI. **Computer aided motile sperm counting Bilgisayar Destekli Hareketli Sperm Sayımı**  
İLHAN H. O., AYDIN N.  
2017 Medical Technologies National Conference, TIPTEKNO 2017, Trabzon, Turkey, 12 - 14 October 2017, pp.1-5
- XVII. **The Contribution of DSP Integration to ARM Cores in SBCs for the Video Decoding Process**  
İLHAN H. O., AYDIN N.  
International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI-2017), India, 21 - 22 September 2017
- XVIII. **Object Detection on Deformable Surfaces using Local Feature Sets**  
KALELİ F., AYDIN N.  
International Conference on Power, Control, Signals and Instrumentation, Chennai, India, 21 - 22 September 2017
- XIX. **Biomedical signal processing - An overview and recent advances**  
AYDIN N.  
ICPCI 2017, Chennai, India, 21 - 22 September 2017
- XX. **A Microcontroller Based System for Measuring the Central Neural System Response**  
KAZMA C., AYDIN N.  
International Conference on Power, Control, Signals and Instrumentation, Chennai, India, 21 - 22 September 2017
- XXI. **Resonance Based Pre-processing Method for Eliminating Artifacts in Doppler Ultrasound Signals**  
SERBES G., AYDIN N.  
2017 25TH SIGNAL PROCESSING AND COMMUNICATIONS APPLICATIONS CONFERENCE (SIU), Antalya, Turkey, 15 - 18 May 2017
- XXII. **Assessment of similarity rates of liver images using geometric transformations Karaciğer görüntülerinin geometrik dönüşüm yöntemleri kullanılarak benzerliklerinin değerlendirilmesi**  
Palabas T., Osman O., Ergin T., Teomete U., Dandin O., AYDIN N.  
2016 Medical Technologies National Conference, TIPTEKNO 2016, Antalya, Turkey, 27 - 29 October 2016
- XXIII. **Copying Case Detection with Data Mining**  
TARHAN H. H., AYDIN N.  
2017 International Conference on Computer Science and Engineering (UBMK), Antalya, Turkey, 5 - 08 October 2017, pp.430-434
- XXIV. **Frequency Difference based DNA Encoding Methods in Human Splice Site Recognition**  
Pashaei E., AYDIN N.  
2017 International Conference on Computer Science and Engineering (UBMK), Antalya, Turkey, 5 - 08 October 2017, pp.586-591
- XXV. **Prediction of splice site using AdaBoost with a new sequence encoding approach**  
Pashaei E., YILMAZ A., ÖZEN M., AYDIN N.  
2016 IEEE International Conference on Systems, Man, and Cybernetics, 9 - 12 October 2016
- XXVI. **Determining the right abdomen region border for the injured liver segmentation Yaralanmış Karaciğer Bölütlemesi için Sağ Batin Bolge Sinirinin Belirlenmesi**  
Palabas T., Osman O., Ergin T., Teomete U., Dandin O., AYDIN N.  
Electric Electronics, Computer Science, Biomedical Engineerings Meeting, EBBT 2016, İstanbul, Turkey, 26 - 27 April 2016
- XXVII. **A Novel Method for Splice Sites Prediction Using Sequence Component and Hidden Markov Model**  
Pashaei E., YILMAZ A., Ozen M., AYDIN N.  
38th Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society (EMBC), Florida, United States Of America, 16 - 20 August 2016, pp.3076-3079

- XXVIII. A Multi-channel Real Time Implementation of Dual Tree Complex Wavelet Transform in Field Programmable Gate Arrays**  
CANBAY F., Levent V. E., SERBES G., Ugurdag H. F., Goren S., AYDIN N.  
14th Mediterranean Conference on Medical and Biological Engineering and Computing (MEDICON), Paphos, CYPRUS, 31 March - 02 April 2016, vol.57, pp.114-118
- XXIX. Gene Selection and Classification Approach for Microarray Data based on Random Forest Ranking and BBHA**  
PASHAEI E., Ozen M., AYDIN N.  
3rd IEEE EMBS International Conference on Biomedical and Health Informatics (IEEE BHI), Nevada, United States Of America, 24 - 27 February 2016, pp.308-311
- XXX. Biomarker Discovery based on BBHA and AdaboostM1 on Microarray Data for Cancer Classification**  
PASHAEI E., Ozen M., AYDIN N.  
38th Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society (EMBC), Florida, United States Of America, 16 - 20 August 2016, pp.3080-3083
- XXXI. Analysis of Embolic Signals with Directional Dual Tree Rational Dilation Wavelet Transform**  
SERBES G., AYDIN N.  
38th Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society (EMBC), Florida, United States Of America, 16 - 20 August 2016, pp.3821-3824
- XXXII. A Combined SVM and Markov Model approach for Splice Site Identification**  
Pashaei E., YILMAZ A., Aydini N.  
6th International Conference on Computer and Knowledge Engineering (ICCKE), Mashhad, Iran, 20 - 21 October 2016, pp.200-204
- XXXIII. Random forest in Splice site prediction of human genome**  
Pashaei E., Ozen M., AYDIN N.  
14th Mediterranean Conference on Medical and Biological Engineering and Computing, MEDICON 2016, Paphos, Cyprus (Gkry), 31 March - 02 April 2016, vol.57, pp.512-517
- XXXIV. Splice sites prediction of Human genome using AdaBoost**  
Pashaei E., Özen M., Aydin N.  
3rd IEEE EMBS International Conference on Biomedical and Health Informatics (IEEE BHI), Nevada, United States Of America, 24 - 27 February 2016, pp.300-303
- XXXV. A micro emboli vs non-emboli classification system based on the directional dual tree rational dilation wavelet transform**  
SERBES G., Sakar B. E., AYDIN N.  
15th IEEE International Conference on Bioinformatics and Bioengineering, BIBE 2015, Belgrade, Serbia And Montenegro, 2 - 04 November 2015
- XXXVI. An application of black hole algorithm and decision tree for medical problem**  
Pashaei E., ÖZEN M., AYDIN N.  
15th IEEE International Conference on Bioinformatics and Bioengineering, BIBE 2015, Belgrade, Serbia And Montenegro, 2 - 04 November 2015
- XXXVII. An area efficient real time implementation of dual tree complex wavelet transform in field programmable gate arrays**  
CANBAY F., Levent V. E., SERBES G., Ugurdag H. F., Goren S., AYDIN N.  
15th IEEE International Conference on Bioinformatics and Bioengineering, BIBE 2015, Belgrade, Serbia And Montenegro, 2 - 04 November 2015
- XXXVIII. A novel gene selection algorithm for cancer identification based on random forest and particle swarm optimization**  
Pashaei E., Ozen M., AYDIN N.  
IEEE Conference on Computational Intelligence in Bioinformatics and Computational Biology, CIBCB 2015, Niagara Falls, Canada, 12 - 15 August 2015
- XXXIX. Field Programmable Gate Arrays Implementation of Dual Tree Complex Wavelet Transform**  
CANBAY F., Levent V. E., SERBES G., Goren S., AYDIN N.

- 37th Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society (EMBC), Milan, Italy, 25 - 29 August 2015, pp.6026-6029
- XL.** **Improving Medical Diagnosis Reliability Using Boosted C5.0 Decision Tree empowered by Particle Swarm Optimization**  
 Pashaei E., Ozen M., AYDIN N.  
 37th Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society (EMBC), Milan, Italy, 25 - 29 August 2015, pp.7230-7233
- XLI.** **Directional Dual-Tree Rational-Dilation Complex Wavelet Transform**  
 Serbes G., Gulcur H. O., AYDIN N.  
 36th Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society (EMBC), Illinois, United States Of America, 26 - 30 August 2014, pp.1465-1468
- XLII.** **Directional dual-tree complex wavelet packet transform implementation using band-limited synthetic signals**  
 Serbes G., AYDIN N., Gulcur H.  
 International Conference on Health Informatics, ICHI 2013, Vilamoura, Portugal, 7 - 09 November 2013, vol.42, pp.9-12
- XLIII.** **Symmetrical Directional Dual-Tree Complex Wavelet Packet Transform**  
 Serbes G., Gulcur H. O., AYDIN N.  
 36th Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society (EMBC), Illinois, United States Of America, 26 - 30 August 2014, pp.820-823
- XLIV.** **An Emboli Detection System Based on Dual Tree Complex Wavelet Transform**  
 Serbes G., Sakar B. E., AYDIN N., Gulcur H.  
 13th Mediterranean Conference on Medical and Biological Engineering and Computing 2013, MEDICON 2013, Sevilla, Spain, 25 - 28 September 2013, vol.41, pp.819-822
- XLV.** **Impacts of the Different Spline Orders on the B-spline Association Estimator**  
 KURT Z., AYDIN N., ALTAY G.  
 13th IEEE International Conference on BioInformatics and BioEngineering (BIBE), 01 November 2013
- XLVI.** **Influence of the Copula Transform on the Association Estimators for Gene Network Inference**  
 KURT Z., AYDIN N., ALTAY G.  
 International Conference on Applied Informatics for Health and Life Sciences (AIHLS), 01 September 2013
- XLVII.** **Directional Dual-Tree Complex Wavelet Packet Transform**  
 Serbes G., AYDIN N., Gulcur H. O.  
 35th Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society (EMBC), Osaka, Japan, 3 - 07 July 2013, pp.3046-3049
- XLVIII.** **Embolic Doppler Ultrasound Signal Detection via Fractional Fourier Transform**  
 Gencer M., BİLGİN G., AYDIN N.  
 35th Annual International Conference of the IEEE-Engineering-in-Medicine-and-Biology-Society (EMBC), Osaka, Japan, 3 - 07 July 2013, pp.3050-3053
- XLIX.** **Embolic Doppler ultrasound signal detection using modified dual tree complex wavelet transform**  
 Serbes G., AYDIN N.  
 IEEE-EMBS International Conference on Biomedical and Health Informatics, BHI 2012. In Conj. with the 8th Int. Symp.on Medical Devices and Biosensors and the 7th Int. Symp. on Biomedical and Health Engineering, Hong Kong and Shenzhen, China, 2 - 07 January 2012, pp.945-947
- L.** **Extracellular spike detection with resonance based signal decomposition Rezonans esaslı işaret ayırtılması kullanılarak hücre dışı sinirsel işaretin tespiti**  
 Serbes G., Kocatürk M., Gülcür H. Ö., AYDIN N.  
 2012 20th Signal Processing and Communications Applications Conference, SIU 2012, Fethiye, Mugla, Turkey, 18 - 20 April 2012
- LI.** **Pulmonary crackle detection using time-frequency analysis Zaman-frekans analizi kullanarak pulmoner çitirtisi tespiti**  
 Serbes G., Şakar C. O., Kahya Y., AYDIN N.

- 2012 20th Signal Processing and Communications Applications Conference, SIU 2012, Fethiye, Mugla, Turkey, 18 - 20 April 2012
- LII. **Statistical bias and variance of gene selection and cross validation methods: A case study on hypertension prediction**  
Kursun O., Sertbas A., AYDIN N., Seker H.  
2012 IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI2012), 01 January 2012
- LIII. **Investigation into the effects of an individual amino acid on protein function by means of a resonant recognition model**  
Chrysostomou C., Seker H., AYDIN N.  
5th International Conference on Convergence and Hybrid Information Technology, ICHIT 2011, Daejeon, South Korea, 22 - 24 September 2011, pp.229-236
- LIV. **Effect of different window and wavelet types on the performance of a novel crackle detection algorithm**  
Serbes G., Sakar C. O., Kahya Y. P., AYDIN N.  
5th International Conference on Convergence and Hybrid Information Technology, ICHIT 2011, Daejeon, South Korea, 22 - 24 September 2011, pp.575-581
- LV. **Effects of windowing and zero-padding on Complex Resonant Recognition Model for protein sequence analysis**  
AYDIN N.  
2011 Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), 01 September 2011
- LVI. **Denoising embolic doppler signals using modified complex discrete wavelet transform Embolik doppler işaretlerinin modifiye edilmiş karmaşık ayrik dalgacık dönüşümü ile gürültüden arındırılması**  
Serbes G., AYDIN N.  
2011 IEEE 19th Signal Processing and Communications Applications Conference, SIU 2011, Antalya, Turkey, 20 - 22 April 2011, pp.566-569
- LVII. **Denoising embolic doppler signals using modified complex discrete wavelet transform**  
SERBES G., AYDIN N.  
2011 IEEE 19th Signal Processing and Communications Applications Conference (SIU), Antalya, Turkey, 20 - 22 April 2011
- LVIII. **Feature Extraction using Time-Frequency/Scale Analysis and Ensemble of Feature Sets for Cracke Detection**  
Serbes G., Sakar C. O., Kahya Y. P., AYDIN N.  
33rd Annual International Conference of the IEEE Engineering-in-Medicine-and-Biology-Society (EMBS), Massachusetts, United States Of America, 30 August - 03 September 2011, pp.3314-3317
- LIX. **Symmetrical Modified Dual Tree Complex Wavelet Transform for Processing Quadrature Doppler Ultrasound Signals**  
Serbes G., AYDIN N.  
33rd Annual International Conference of the IEEE Engineering-in-Medicine-and-Biology-Society (EMBS), Massachusetts, United States Of America, 30 August - 03 September 2011, pp.4816-4819
- LX. **Denoising performance of modified dual tree complex wavelet transform**  
Serbes G., AYDIN N.  
10th International Conference on Information Technology and Applications in Biomedicine: Emerging Technologies for Patient Specific Healthcare, ITAB 2010, Corfu, Greece, 2 - 05 November 2010
- LXI. **Complex resonant recognition model in analysing Influenza A virus subtype protein sequences**  
Chrysostomou C., Seker H., AYDIN N., Haris P. I.  
10th International Conference on Information Technology and Applications in Biomedicine: Emerging Technologies for Patient Specific Healthcare, ITAB 2010, Corfu, Greece, 2 - 05 November 2010
- LXII. **Denoising Embolic Doppler Ultrasound Signals Using Dual Tree Complex Discrete Wavelet Transform**  
Serbes G., AYDIN N.

- 32nd Annual International Conference of the IEEE Engineering-in-Medicine-and-Biology-Society (EMBC 10),  
Buenos Aires, Argentina, 30 August - 04 September 2010, pp.1840-1843
- LXIII. Variable optimisation of medical image data by the learning Bayesian Network reasoning**  
Orun A. B., Aydin N.  
32nd Annual International Conference of the IEEE Engineering-in-Medicine-and-Biology-Society (EMBC 10),  
Buenos Aires, Argentina, 30 August - 04 September 2010, pp.4554-4557
- LXIV. Parallel interacting multiview learning: An application to prediction of protein sub-nuclear location**  
Sakar C. O., Kursun O., SEKER H., Gürgen F., AYDIN N., Favorov O. V.  
9th International Conference on Information Technology and Applications in Biomedicine, ITAB 2009, Larnaka, Cyprus (Gkry), 4 - 07 November 2009
- LXV. Review of communication systems for ingestible miniaturized integrated sensor microsystems**  
Aydin N., Arslan T.  
2009 Advanced Technologies for Enhanced Quality of Life, AT-EQUAL 2009, Iasi, Romania, 22 - 26 July 2009, pp.91-95
- LXVI. A New Wavelet Transform Method for Processing Doppler Signals**  
Serbes G., Aydin N.  
14th National Biomedical Engineering Meeting, Izmir, Turkey, 20 - 22 May 2009, pp.120-121
- LXVII. A Complex Discrete Wavelet Transform for Processing Quadrature Doppler Ultrasound Signals**  
Serbes G., Aydin N.  
9th International Conference on Information Technology and Applications in Biomedicine, Larnaka, Cyprus (Gkry), 4 - 07 November 2009, pp.258-259
- LXVIII. Network intrusion detection by using cellular neural network with Tabu Search**  
Yang Z., Karahoca A., Yang N., Aydin N.  
2008 ECSIS Symposium on Bioinspired, Learning, and Intelligent Systems for Security, BLISS-2008, Edinburgh, United Kingdom, 4 - 06 August 2008, pp.64-68
- LXIX. Data mining usage in emboli detection**  
Karahoca A., Kucur T., Aydin N.  
2007 ECSIS Symposium on Bio-inspired, Learning, and Intelligent Systems for Security, BLISS 2007, Edinburgh, United Kingdom, 9 - 10 August 2007, pp.159-162
- LXX. A novel information-theoretic clustering algorithm for robust, unsupervised classification**  
Temel T., Aydin N.  
2007 9th International Symposium on Signal Processing and its Applications, ISSPA 2007, Sharjah, United Arab Emirates, 12 - 15 February 2007
- LXXI. DWT based adaptive threshold determination in embolic signal detection**  
Aydin N.  
2007 2nd NASA/ESA Conference on Adaptive Hardware and Systems, AHS-2007, Edinburgh, United Kingdom, 5 - 08 August 2007, pp.214-219
- LXXII. Analysis and optimization of a wireless communication system for an ingestable sensor microsystem**  
Aydin N., Arslan T.  
Frontiers in the Convergence of Bioscience and Information Technologies, FBIT 2007, Jeju Island, South Korea, 11 - 13 October 2007, pp.578-581
- LXXIII. A threshold free clustering algorithm for robust unsupervised classification**  
Temei T., Aydin N.  
2007 ECSIS Symposium on Bio-inspired, Learning, and Intelligent Systems for Security, BLISS 2007, Edinburgh, United Kingdom, 9 - 10 August 2007, pp.119-122
- LXXIV. An adaptive approach to the segmentation of dce-mr images of the breast: Comparison with classical thresholding algorithms**  
Kaleli F., Aydin N., Ertas G., Ozcan Gulcur H.  
2007 IEEE Symposium on Computational Intelligence in Image and Signal Processing, CIISP 2007, Honolulu, HI, United States Of America, 1 - 05 April 2007, pp.375-379
- LXXV. GSM churn management using an adaptive neuro-fuzzy inference system**

- Karahoca A., Karahoca D., Aydm N.  
 International Conference on Intelligent Pervasive Computing (IPC 2007), Cheju Isl, South Korea, 11 - 13 October 2007, pp.323-326
- LXXVI. **Power driven reconfigurable complex continuous wavelet transform processor**  
 Aydin N., Arslan T.  
 1st NASA/ESA Conference on Adaptive Hardware and Systems, AHS 2006, İstanbul, Turkey, 15 - 18 June 2006, vol.2006, pp.109-113
- LXXVII. **A sensor system on chip for wireless microsystems**  
 Wang L., Aydin N., Astaras A., Ahmadian M., Hammond P., Tang T., Johannessen E., Arslan T., Beaumont S., Flynn B., et al.  
 ISCAS 2006: 2006 IEEE International Symposium on Circuits and Systems, Kos, Greece, 21 - 24 May 2006, pp.855-858
- LXXVIII. **Kaleidomap visualizations of cardiovascular function in critical care medicine**  
 Bale K., Chapman P., Purdy J., Aydin N., Dark P.  
 International Conference on Medical Information Visualisation - BioMedical Visualisation, MediVis 2006, London, United Kingdom, 5 - 07 July 2006, pp.51-56
- LXXIX. **A novel signed higher-radix full-adder algorithm and implementation with current-mode multi-valued logic circuits**  
 TEMEL T., Morgul A., Aydin N.  
 Proceedings of the EUROMICRO Systems on Digital System Design, DSD 2004, Rennes, France, 31 August - 03 September 2004, pp.80-87
- LXXX. **Efficient implementations of mobile video computations on domain-specific reconfigurable arrays**  
 Khawam S., Baloch S., Pai A., Ahmed I., Aydin N., Arslan T., Westall F.  
 Proceedings - Design, Automation and Test in Europe Conference and Exhibition, DATE 04, Paris, France, 16 - 20 February 2004, vol.2, pp.1230-1235
- LXXXI. **Design and Implementation Considerations for an Advanced Wireless Interface in Miniaturized Integrated Sensor Microsystems**  
 Aydin N., Astaras A., Wang L., Arslan T., Murray A., Beaumont S., Cumming D.  
 A New Beginning for Human Health: Proceedings of the 25th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Cancun, Mexico, 17 - 21 September 2003, vol.4, pp.3400-3402
- LXXXII. **Direct sequence CDMA based wireless interface for an integrated sensor microsystem**  
 Aydin N., Arslan T., Cumming D.  
 4th International IEEE EMBS Special Topic Conference on Information Technology Applications in Biomedicine 2003, ITAB 2003, Birmingham, United Kingdom, 24 - 26 April 2003, pp.370-373
- LXXXIII. **Power/area analysis and optimization of a DS-SS receiver for an integrated sensor microsystem**  
 Aydin N., Arslan T., Cumming D.  
 Euromicro Symposium on Digital System Design, DSD 2003, Belek-Antalya, Turkey, 1 - 06 September 2003, pp.402-406
- LXXXIV. **The design of optimized programmable transmitter and receiver architectures for an integrated sensor microsystem**  
 Aydin N., Arslan T., Cumming D.  
 IEEE International SOC Conference, SOCC 2003, Oregon, United States Of America, 17 - 20 September 2003, pp.71-74
- LXXXV. **Localizing systolic ejection within a trans-esophageal CW Doppler ultrasound aortovelographic waveform**  
 Aydin N., Purdy J., Dark P.  
 Proceedings of the 2002 IEEE Engineering in Medicine and Biology 24th Annual Conference and the 2002 Fall Meeting of the Biomedical Engineering Society (BMES / EMBS), Houston, TX, United States Of America, 23 - 26 October 2002, vol.2, pp.1315-1316
- LXXXVI. **Effect of wavelet denoizing on time-frequency and time-scale analysis of quadrature embolic Doppler signals**

Aydin N., Marvasti F., Markus H.

Proceedings of the 2002 IEEE Engineering in Medicine and Biology 24th Annual Conference and the 2002 Fall Meeting of the Biomedical Engineering Society (BMES / EMBS), Houston, TX, United States Of America, 23 - 26 October 2002, vol.1, pp.80-81

LXXXVII. **Design and implementation of a spread spectrum based communication system for an ingestible capsule**

Aydin N., ARSLAN T., CUMMING D.

24th Annual International Conference of the Engineering-in-Medicine-and-Biology-Society/Annual Fall Meeting of the Biomedical-Engineering-Society (EMBS 2002 BMES), Texas, United States Of America, 23 - 26 October 2002, pp.1773-1774

LXXXVIII. **A spread spectrum based communication system for an integrated sensor microsystem**

Aydin N., Arslan T., Cumming D.

15th Annual IEEE International ASIC/SOC Conference, ASIC/SOC 2002, New-York, United States Of America, 25 - 28 September 2002, pp.336-340

## Episodes in the Encyclopedia

I. **Wiley Encyclopedia of Biomedical Engineering**

AYDIN N.

John Wiley Sons, pp.1-16, 2006

## Other Publications

I. **DepEst: an R package of important dependency estimators for gene network inference algorithms**

Altay G., Kurt Z., Altay N., AYDIN N.

Other, pp.1-22, 2017

## Supported Projects

Aydin N., TUBITAK Project, AKUSTİK ÖZELLİKLER KULLANAN MÜZİK ÖNERİ SİSTEMİ, 2019 - 2021

Karan M. A., Aydin N., Satman İ., Öztürk Ş., Aydin M. A., Kahraman M., Kurt S., TUBITAK Project, Senkronize Diyabet Takibi Sistemi, 2018 - 2021

AYDIN N., Project Supported by Higher Education Institutions, DUYUSAL UYARIM SİSTEMİNİN TASARIMI VE UYGULAMASI, 2014 - 2020

AYDIN N., İLHAN H. O., Project Supported by Higher Education Institutions, Biyomedikal Görüntülerde Hareketli Nesnelerin Analizi ve Takibi İçin Donanımsal Bir Sistem Gerçeklemesi, 2016 - 2018

AYDIN N., Project Supported by Higher Education Institutions, Kompleks Dalgacık Dönüşümü Kullanılarak Düşük Güç Tüketimli Yeniden Yapılandırılabilir Kapı Dizileri ile Çok Kanallı Doppler Ultrason Sinyallerinin Gerçek Zamanda Paralel Olarak İşlenmesi, 2014 - 2016

AYDIN N., Industrial Thesis Project, Bilgisayarla Görme Destekli Robot Sistemi için Nesnelerin Poz Tahmini, 2013 - 2014

## Scientific Refereeing

IEEE Transactions on Biomedical Engineering, SCI Journal, October 2012

International Journal for Numerical Methods in Biomedical Engineering, SCI Journal, October 2012

Biomedical Signal Processing and Control, SCI Journal, October 2012

Digital Signal Processing, SCI Journal, September 2012

Digital Signal Processing, SCI Journal, August 2012

Biomedical Signal Processing and Control, SCI Journal, August 2012  
IEEE Transactions on Biomedical Engineering, SCI Journal, August 2012  
IEEE Transactions on Computers, SCI Journal, August 2012  
International Journal for Numerical Methods in Biomedical Engineering, SCI Journal, July 2012  
IEEE Transactions on Information Technology in BioMedicine, SCI Journal, July 2012  
Digital Signal Processing, SCI Journal, May 2012  
Digital Signal Processing, SCI Journal, April 2012  
Biomedical Signal Processing and Control, SCI Journal, March 2012  
International Journal for Numerical Methods in Biomedical Engineering, SCI Journal, February 2012  
Digital Signal Processing, SCI Journal, January 2012  
International Journal of Electronics, SCI Journal, December 2011  
Biomedical Signal Processing and Control, SCI Journal, November 2011  
Bioinformatics, SCI Journal, November 2011  
Biomedical Signal Processing and Control, SCI Journal, September 2011  
IEEE Transactions on Information Technology in BioMedicine, SCI Journal, August 2011  
Microelectronics Reliability, SCI Journal, July 2011  
International Journal of Electronics, SCI Journal, February 2011

## Metrics

Publication: 156  
Citation (WoS): 784  
Citation (Scopus): 1467  
H-Index (WoS): 14  
H-Index (Scopus): 20

## Congress and Symposium Activities

INTERNATIONAL CONFERENCE ON MATHEMATICAL ADVANCES AND APPLICATION (ICOMAA-2018), Invited Speaker, İstanbul, Turkey, 2018  
International Conference on Power, Control, Signals and Instrumentation Engineering (ICPCSI-2017), Invited Speaker, Chennai, India, 2017  
GENETİK HASTALIKLARIN TEŞHİS VE TEDAVİSİNDE MOLEKÜLER YÖNTEMLER VE MÜHENDİSLİK UYGULAMALARI ÇALIŞTAYI, Invited Speaker, Isparta, Turkey, 2015