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Education Information

Doctorate, Boğaziçi Üniversitesi, Biyomedikal Mühendisliği Enstitüsü, Biyomedikal Mühendisliği, Turkey 2009 - 2014

Post Graduate, Bahçeşehir Üniversitesi, Fen Bilimleri Enstitüsü, Elektrik-Elektronik Mühendisliği, Turkey 2006 - 2009

Under Graduate, Bahçeşehir Üniversitesi, Mühendislik Fakültesi, Elektrik-Elektronik Mühendisliği, Turkey 2002 - 2006

Research Areas

Biomedical Engineering, Biosignal Processing, Biosignal Processing, Engineering and Technology

Academic Titles / Tasks

Assistant Professor, Yıldız Technical University, Faculty of Electrical & Electronics, Biomedical Engineering, 2015 -
Continues

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- **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., Aydın N.
MEDICAL & BIOLOGICAL ENGINEERING & COMPUTING, vol.58, pp.1047-1068, 2020 (Journal Indexed in SCI)
- **Automatic directional masking technique for better sperm morphology segmentation and classification analysis**
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ELECTRONICS LETTERS, vol.55, pp.256-257, 2019 (Journal Indexed in SCI)
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Ulukaya S., SERBES G., Kahya Y. P.
COMPUTERS IN BIOLOGY AND MEDICINE, vol.104, pp.175-182, 2019 (Journal Indexed in SCI)
- **A comparative analysis of speech signal processing algorithms for Parkinson's disease classification and the use of the tunable Q-factor wavelet transform**
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- **Directional dual-tree complex wavelet packet transforms for processing quadrature signals**
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- **An emboli detection system based on Dual Tree Complex Wavelet Transform and ensemble learning**
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- **Denosing performance of modified dual-tree complex wavelet transform for processing quadrature embolic Doppler signals**
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- **Pulmonary crackle detection using time-frequency and time-scale analysis**
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- **Modified dual tree complex wavelet transform for processing quadrature signals**
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Articles Published in Other Journals

- **Akciğer Solunum Seslerinin Spektral Öznitelikler ile Sınıflandırılması**
ULUKAYA S., SERBES G., SEN I., KAHYA Y. P.
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- **Code generator for implementing dual tree complex wavelet transform on reconfigurable architectures for mobile applications**
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Book & Book Chapters

- **in: Convergence and Hybrid Information Technology**
SERBES G., SAKAR C. O. , KAHYA Y. P. , AYDIN N.
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Refereed Congress / Symposium Publications in Proceedings

- **The Effect of Nonlinear Wavelet Transform Based De-noising in Sperm Abnormality Classification**
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3rd International Conference on Computer Sciences and Engineering, Saray Bosna, Bosnia And Herzegovina, 20 Eylül 2018, pp.1-5
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- **The Effects of the Modified Overlapping Group Shrinkage Technique on the Sperm Segmentation in the Stained Images**
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Ulukaya S., SERBES G., Kahya Y. P.
39th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, EMBC 2017, Jeju Island, South Korea, 11 - 15 Temmuz 2017, pp.2928-2931
- **Resonance based pre-processing method for eliminating artifacts in Doppler ultrasound signals Doppler Ultrason İşaretlerinde Artifaktların Giderilmesi İçin Rezonans Temelli Ön-İşleme Yöntemi**
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- **An Adaptive and Automatic Parameter Selection Method based on Rational Dilation Wavelet Transform for Wheeze Type Classification**
ULUKAYA S., SERBES G., KAHYA Y. P.
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- **A Multi-channel Real Time Implementation of Dual Tree Complex Wavelet Transform in Field Programmable Gate Arrays**
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14th Mediterranean Conference on Medical and Biological Engineering and Computing (MEDICON), Paphos, CYPRUS, 31 Mart - 02 Nisan 2016, vol.57, pp.114-118
- **Impact of Car Arrival/Departure Patterns on EV Parking Lot Energy Storage Capacity**
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- **Resonance based Respiratory Sound Decomposition Aiming at Localization of Crackles in Noisy Measurements**
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- **Analysis of Embolic Signals with Directional Dual Tree Rational Dilation Wavelet Transform**
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- **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.
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- **Directional dual-tree complex wavelet packet transform implementation using band-limited synthetic signals**
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- **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 Ağustos 2014, pp.820-823
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 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 Ağustos 2014, pp.1465-1468
- **An Emboli Detection System Based on Dual Tree Complex Wavelet Transform**
 Serbes G., Sakar B. E. , AYDIN N., Gulcur H.
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- **Directional Dual-Tree Complex Wavelet Packet Transform**
 Serbes G., AYDIN N., Gulcur H. O.
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 Serbes G., AYDIN N.
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- **Extracellular spike detection with resonance based signal decomposition Rezonans esasli işaret ayrıştırması kullanılarak hücre dışı sinirsel iğnecik tespiti**
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- **Denoising embolic doppler signals using modified complex discrete wavelet transform Embolik doppler işaretlerinin modifiye edilmiş karmaşık ayrik dalgacık dönüş ümü ile gürültüden arındırılması**
 Serbes G., AYDIN N.
 2011 IEEE 19th Signal Processing and Communications Applications Conference, SIU 2011, Antalya, Turkey, 20 - 22 Nisan 2011, pp.566-569

- **Symmetrical Modified Dual Tree Complex Wavelet Transform for Processing Quadrature Doppler Ultrasound Signals**
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- **Feature Extraction using Time-Frequency/Scale Analysis and Ensemble of Feature Sets for Crackle Detection**
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- **Denoising performance of modified dual tree complex wavelet transform**
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- **A New Wavelet Transform Method for Processing Doppler Signals**
Serbes G., Aydin N.
14th National Biomedical Engineering Meeting, İzmir, Turkey, 20 - 22 Mayıs 2009, pp.120-121
- **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, Lamaka, Cyprus (Gkry), 4 - 07 Kasım 2009, pp.258-259

Supported Projects

SERBES G., TUBITAK Project, Parkinson Hastalığı Tetkiklerinde Kortikal Motor Ve Algı Sistemi Ölçümlerinin Makine Öğrenmesi Yöntemleri İle Birleştirilmesi, 2016 - 2019

Citations

Total Citations (WOS):123

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