



8TH
INTERNATIONAL
ADVANCED TECHNOLOGIES
SYMPOSIUM

ELECTRICAL AND ELECTRONICS

19.10.2017 THURSDAY/PERŞEMBE

ELECTRICAL AND ELECTRONICS

HALL-C		HALL-G		
ID No	ARTICLE TITLE		ARTICLE TITLE	
CHAIR	Prof. Dr. Z. Hakan AKPOLAT	CHAIR	Prof. Dr. Hanifi GÜLDEMİR	
13.30-13.45	Invited Speaker Prof. Dr. Galip Cansever	697	Classification of Short Circuit Faults in Transmission Lines Using Different Machine Learning Algorithms and Transient Regime Current Signals Düzgün Akmaz*	
13.45-14.00		717	2.45GHz LNA Design with Arduino Biasing Control Unit Bilge Şenel*, Mesud Kahrıman, Fatih Ahmet Şenel	
14.00-14.15	85	PV Güç Sistemlerinin Şebekeye Bağlanması Karşılaşılan Sorunlar ve Çözüm Yöntemleri Şafak Sağlam, Ali Samet Sarkın*	722	Optimum Control of a Ball and Beam System Using Genetic Algorithm and Simulated Annealing Hüseyin Oktay Erkol*
14.15-14.30	95	Smart Headlight System Design Using LED İsmail Kıyak*	1099	Frequency and Voltage Dependence of Electrical and Dielectric Properties of Ag/Go-PVA/p-Si Structure at Room Temperature Şükrü KARATAŞ*
14.30-14.45	98	Advanced Metering Infrastructure (AMI): Smart Meters and New Technologies Erkan Dursun, Alper Nabi*	117	Evaluation of Electromagnetic Pollution Near TV and Radio Broadcast Transmitters İbrahim Şeflek*
14.45-15.00	746	Possible Physical and Cyber Attacks on Smart Grids Erkan Dursun*, Ahmet Hacınecipoğlu	1093	MPPT Controlled Converter Design and Simulation For Solar Charger Application Bassam Yahya Al-Hanahi*, Burak Akin
15.00-15.20	COFEE BREAK		COFEE BREAK	
CHAIR	Prof. Dr. Abdulkadir ŞENGÜR	CHAIR	Prof. Dr. Sami EKİCİ	
15.20-15.35	718	A 10dB 2.4GHz Directional Coupler Design and Implementation Bilge Şenel*	752	A Study of Occupational Safety Risk Assessment on Natural Gas Combined Cycle Power Plant Bülent Oral*
15.35-15.50	126	A Fully Integrated Low Power LNA in 65nm CMOS Technology Suitable for ZigBee, Low-Power Wifi and Bluetooth Low Energy	754	Akıllı Şehirler için Akıllı Bisiklet Tasarımı Yasin Aygör*, Ayhan İstanbullu



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15.50-16.05	142	Hakan Doğan* Using Full-order Observer in the Form of Generalized Observer Scheme to Detect and Isolate Aircraft Sensor Faults in Automatic Flight Control Systems Ugur Kilic*, Gulay Unal, Emre Kiyak, Kubilay Ayturan	756	Modelling and Control Study of Surface Mounted Permanent Magnet Motor Murat Caner*
16.05-16.20	43	Comparison the Operational Costs of Lithium-ion and Lead-acid Batteries for Small Scale Microgrids Abdulkerim Karabiber*	247	Temperature and Photometric Analysis of Multichip Power LED and Retrofit Lamp İsmail Kiyak*Gökhan Gökmen
16.20-16.35	156	Electromyogram Signal Filtering Using Discrete Wavelet Transform Gökhan Gökmen*, Osman Ülkir	753	The Integrated PV Power Plants on the Roof of Stadiums: Sustainability and Energy Economy Bülent Oral*
16.35-16.50	157	Fault Detection and Prevention with Thermal Cameras on Electrical Transmission Lines and Components Ali Samet Sarkın*, Taner Dindar, Necmi Cemal Özdemir	375	Third Closed-Loop Control of Four-Quadrant Chopper Fed a Separately Excited DC Motor Emre Dursun*
16.50-17.05	1130	Flywheel Energy Storage System Design and 3d Magnetic Analysis for Electromagnetic Coil Launcher Engin Hüner*, Mürşide Sever	786	Ferroelectric Based Bulk Acoustic Resonators and Filters Seyit Ahmet Sis*
20.10.2017 FRIDAY/CUMA				
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CHAIR	Prof. Dr. Hüseyin ALTUN		CHAIR	Prof. Dr. Muammer GÖKBULUT
08.30-08.45	197	Occupational Health and Safety in Electrical Work Nursel Akçam*, Burak Dökmetaş	762	Measurement of Sensitivity of Shielding Properties of Electromagnetic Materials Serdar Ethem Hamamcı, Sena Coşkun, Teoman Karadag*
08.45-09.00	223	Automatic Segmentation of Drusen (Macular Edema) from Color Retina Images Turab Selçuk*, Seda Arslan Tuncer, Ahmet Alkan	765	Optimal Channel Switching in the Presence of Multiple Additive Noise Channels Emin Tutay*
09.00-09.15	728	Performance Comparison with Synchronous Reluctance Motor and Permanent Magnet Assisted Synchronous Reluctance Motor Gullu Boztas*, Omur Aydogmus, Hanifi Güldemir	215	A Virtual Instrumentation Application Yavuz Ege*
09.15-09.30	208	Arduino Kontrollü Egzersizmatik	782	Comparison of Random Forest and C4.5 algorithms for PQ



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		Abdülkadir ÇAKIR*		disturbances classification using DWT Mehmet Ismail Gursoy*, Ahmet Serdar Yilmaz, Seydi Vakkas Ustun
09.30-09.45	216	Circuit Simulation with Virtual Serial Port Yavuz Ege*	788	Microwave Power Amplifier Design Using Double Stub Tuners Seyit Ahmet Sis*
09.45-10.00	121	A FPGA-Based Position Calculation for Shaft Resolvers Resat CELIKEL*, Omur Aydogmus	749	Design and Analysis of Multi-Phase Permanent Magnet Synchronous Motor Gullu Boztas*, Omur Aydogmus
10.00-10.20	COFEE BREAK			COFEE BREAK
CHAIR	Assoc. Prof. Dr. Ömür AYDOĞMUŞ		CHAIR	Assoc. Prof. Dr. Resul ÇÖTELİ
10.20-10.35	217	LabVIEW Based Motor Control and Monitoring System Mustafa Çoramık*	793	Real-time PID Control of Triglide Robot Muhammet Aydın*, Oğuz Yakut
10.35-10.50	1034	CFAR Detector Based Morphological Filter Design To Remove Clutter From GB-SAR Images Hüseyin Duysak*, Enes Yiğit, Abdurrahim Toktaş, Kadir Sabancı, Ahmet Kayabaşı, Mehmet Yerlikaya	795	New Modulation Technic in Satellite Based Navigation Systems: Binary Offset Carrier (BOC) Ahmet Süzer*, Hakan Oktal
10.50-11.05	219	Creating and Testing Virtual Hardware (Port) Hakan Çıtak*	218	A FPGA Project with MYRIO Mustafa Çoramık*
11.05-11.20	916	A Sample Pharma Control System for Hospitals Zeynep Bala Duranay*, Cengiz Taplamacioglu	804	Development of Wireless Combi Boiler Control Unit Osman Parlaktuna*
11.20-11.35	46	A Real Time DSP Implementation of Removing Cross-talk in sEMG Measurements with JADE Algorithm Ulvi Baspınar*	807	Segmentation of Vocal Fold With Gradient Based Image Processing Techniques Turab Selçuk*, Nagihan Bilal, Selahaddin Akben, Selman Sarıca, Ahmet Alkan
11.35-11.50	817	3-phase Inverter Design and Simulation for Microgrid Structure Mustafa Baysal*, Cihat Aktaş, Evren İşen, Yusuf Yaşa	200	The Modernization of the Electrical Systems in the Existing Buildings and Sample Building Application Nursel Akçam*, Burak Dökmetaş
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CHAIR	Prof. Dr. Servet TUNCER		CHAIR	Prof. Dr. Beşir DANDIL
13.30-13.45	271	Robot Design for Distinguishing Objects Using Color and Physical Dimension Abdulkadir Şener*	823	Investigation and Improvement of In-Wheel Asynchronous Motor for an Electrical Vehicle Considering Geometric Dimensioning Uğur Demir*, M.Caner Aküner



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13.45-14.00	274	Analysis of Dispersion Compensation Techniques for Very Long Distance Fiber Optic Communication Systems Haydar Geçe*	847	Investigating The Effect of Core Materials In Heat Transfer of Dry Type Transformers Murat Toren*, Mehmet Çelebi
14.00-14.15	220	Reading Data at High Resolution with PIC Microprocessor Hakan Çıtak*	855	Comparison of Experimental and Simulation Results of Photovoltaic Module/Array Under Varying Environmental Factors Ramazan Menak*, Saadettin Aksoy, Hakan Kızmaz,
14.15-14.30	305	Self Tuning Position And Speed Regulators For Permanent Magnet Synchronous Motor With Adaptive Load Estimator Onur Gürleyen*, Yusuf Ulu, Fırat Parlak	859	Porous Silicon Waveguides for Hybrid Silicon/III-V Lasers Özlem Akbulut*, Çağlar Duman, Bülent Çakmak
14.30-14.45	336	A Demodulator Circuit Design Using Current Conveyors for MEMS Capacitive Accelerometers Mehmet Demirtaş*	865	Dependence of Modulation Response on Laser Parameters in Hybrid Lasers Mustafa Çodur*, Çağlar Duman, Bülent Çakmak
14.45-15.00	345	A Survey of Direct Torque Technic and Its Applications Mehmet Polat*, Ebru Genç	866	Analysis of The Heat Effect of Winding Types on The Dry Type Transformers Murat Toren*, Mehmet Çelebi, Ersin Haydaraslan
15.00-15.20	COFFEE BREAK		COFFEE BREAK	
CHAIR	Assoc. Prof. Dr. Arif GÜLTEN		CHAIR	Assoc. Prof. Dr. Oğuz YAKUT
15.20-15.35	368	Sensorless Speed Control of Three Phase Squirrel Cage Induction Motor İrfan Erdem*, Zeki Omaç	870	Analyzing and Modelling of Inter-Satellite Optical Wireless Communication (IsOWC) Channel Habil Akyol*, Aktül Kavas, Elif Alpago
15.35-15.50	1077	The Effects of Thermoelectric Modules in Electricity Generation and Thermoelectric Cooling H. Yusuf Hasırcı, İbrahim Celik, İpek Atik, Necati Aksoy, O. Faruk Farsakoğlu	872	Chaotic Communication Systems Using Semiconductor Lasers Fatmanur Kocaman*, Çağlar Duman, Bülent Çakmak
15.50-16.05	898	An Analysis Of A Kurdish Digit Recognition System Özlem Batur Dinler*, Nizamettin Aydın	1120	PAPR Reduction Using Particle Swarm Optimization For LBWPM Systems Yuksel Tokur Bozkurt*; Necmi Taspınar
16.05-16.20	380	Theoretical Assessment of Resistive Losses of Electric Motors: Evaluation Method and Analysis Tural Mehmetoglu*	899	Modeling And Simulation Of Split Shaft Micro Turbine Generation Systems Based On Fuel Consumption Şehriban Çelik*



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16.20-16.35	402	The Influence of Layout Shape on the Performance of a Light Sources Arrangement in an Indoor visible Light Communication Mahmud Mustapha* , Ibrahim Develi	902	Circuit implementations of a nonlinear system for integer and fractional orders Akif Akgül , Burak Aricioglu* , Sezgin Kacar , İhsan Pehlivan
16.35-16.50	553	Embedded Wifi Web Server for LAN Telemetry System Aziz Kaba* , Ahmet Esat Süzer , Zafer Demir	903	Transfer Function Estimation of Continuous and Discrete time Systems based on MATLAB Sezgin Kacar , Burak Aricioglu* , Akif Akgül , Faruk Yalcin
21.10.2017 SATURDAY/CUMARTESİ				
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CHAIR	Asst. Prof. Dr. Çetin GENCER		CHAIR	Assoc. Prof. Dr. Ayşegül UÇAR
08.30-08.45	425	Fabrication and Characterization of Reduced Graphene Oxide(r-GO) Doped CdO Nanostructured Films by Ultrasonically Sprayed Pyrolysis and Its Schottky Diode Applications Mehmet Gülcan* , Arife Gencer İmer , Metin Çelebi , Yusuf Selim Ocak , Ahmet Tombak	909	The Comparison of OCC and PI Control Method for DC-DC Boost Converter Ahmet Karaarslan* , M. Zahid Erel , Murat Özev
08.45-09.00	434	Artificial lightening control via MQTT based IoT server by a smart phone application Murat Köseoğlu* , Orkan Murat Çelik , Ömer Pektaş	1038	Microcontroller Based Circuit and Software Design to Automate Czerny-Turner Type Monochromator in a Computer Aided Photoluminescence Measurement System Fatih Gül* , Hasan Efeoğlu
09.00-09.15	472	DC Motorun Gerçek Zamanlı Pıd Ve Bulanık Mantık İle Kontrolü Kenan Erin*	928	PIC Tabanlı Reaktif Güç Kontrol Rölesi Tasarımı ve Gerçekleştirilmesi Abdülkadir Çakır* , Abdulkadir Seyhan , Güngör Yanık , Seyit Akpancar
09.15-09.30	504	Magnetic Liquid Sensor Design for High Electrical Current Measurements Teymuraz Abbasov , Kübra Kartaca* , Teoman Karadag	935	Analysis Of Single Phase Matrix Converter By Using Different Sinusoidal Modulation Algorithms Neslihan Pirinççi* , Ahmet Orhan
09.30-09.45	505	Continuous Measurement and Evaluation of Very High Frequency Electromagnetic Fields in Urban Areas İsmail Can Dikmen , Teoman Karadag* , Teymuraz Abbasov	941	Influence of Load Harmonics on Transformer Temperature Erdi Doğan* , Nuran Yörükeren
09.45-10.00	546	Analog Modülasyon Simülatörü Tasarımı	949	PID Controller Design Using Improved FireFly Algorithm



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10.00-10.20	COFEE BREAK				COFEE BREAK
CHAIR	Prof. Dr. Hasan KÜRÜM			CHAIR	Asst. Prof. Dr. Mehmet ÜSTÜNDAĞ
10.20-10.35	547	AA Motorların Euler-Lagrange Modellemesi ve Pasif Olma Temelli Denetimi Nedim Aktan Yalçın, Fahri Vatansever*	950	An Interface Design for Controlling Dead Time Systems Using PSO, CS and FA Algorithms Ali Boz, Murat Erhan Çimen*	
10.35-10.50	955	Comparison of Various Filters for Noise Removal in Hand Vein Images Ömer Faruk Boyraz*, Smurat Erhan Çimen, Mustafa Zahid Yıldız	580	Control of Permanent Magnet Synchronous Motors in Centrifugal Pump Systems Using Scalar Control Method with Minimum Energy Erkan Karakas*	
10.50-11.05	554	Linear Quadratic Regulator Design for Boeing 767 Aircraft Longitudinal Dynamics Aziz Kaba*, Emre Kiyak	957	A New Window Function for Memristor Modeling Yasin Oğuz*, Fatih Gül, Hasan Eroğlu	
11.05-11.20	578	A Novel Gravitational Search Algorithm using FPGA-Based Chaotic Random Number Generator İsmail Koyuncu*	959	Increasing the Electrical Vehicle Efficiency with Genetic Algorithm Hasan Eroğlu, Yasin Oğuz*, Emrah Kaplan, Fatih Gül, Cemaleddin Şimşek	
11.20-11.35	579	Gel Electrophoresis Analysis with 2-D Hermite Transform and Line Segment Detector Abdulkadir Şengür, İrfan Emre*, Hasan Genç, Ahmet Şahin	583	Performance Analysis of FPGA and Matlab-Based the Similarity Image Functions for Color Images İsmail Koyuncu*	
11.35-11.50	968	A New Speed Control Technique of a Serial Direct Current Motor by PID Controller Onur Akar*, Umit Terzi, Okan Ozgonenel	960	Feature Extraction From Hand-Vein Patterns Using Fractal Dimension Box Counting Method Ömer Faruk Boyraz*, Mustafa Zahid Yıldız, İhsan Pehlivan	
11.50-13.30	LUNCH BREAK				LUNCH BREAK
CHAIR	Prof. Dr. Yetkin TATAR			CHAIR	Prof. Dr. Hanifi GÜLDEMİR
13.30-13.45	581	Highly Efficient Adjustable V/F Controlled AC Drive Design for Elevators using Permanent Magnet Synchronous Motor Selami Kesler*, Mustafa Tümbek, Yusuf Oner, Onur Büyükgümüş	974	Design and Simulation of a Three-Phase Static Smart Switch for Microgrids Tolga Özer, Mustafa Baysal*	
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		Distribution Network Murat Sönmez, Cem Şen, İsmet Kandilli, Melih Kuncan *		Power Plant Working with Low Calorie Lignite to Short-term and Long-term Stability. İbrahim Halil Teke*, Mehmet Salih Mamiş, Asım Kaygusuz
14.00-14.15	596	Distributed Equivalents of Lumped Element Networks İsmet Kandilli, Melih Kuncan *	981	Experimental Examination Of Step Rate For Microstepping Driven Stepper Motor Ozan Çakmak*, Ahmet Top, Melih Cevdet İnce
14.15-14.30	1093	MPPT Controlled Converter Design and Simulation For Solar Charger Application Bassam Yahya Al-Hanahi*; Burak Akin	996	Feature Selection for EEG Response to Pleasant- Unpleasant Odor Classification Using WEKA Data Mining Software Mesut Şeker*, Mehmet Sıraç Özerdem
14.30-14.45	620	Derivation of Mathematical Equations of a Short Circuit Model of Permanent Magnet Synchronous Motor and Vector Controlled Simulation Ferhat Çıra*	1004	Power Quality Monitoring in Smart Grid Using Cloud Computing Technique Baris Cavus*, Okan Ozgonenel, Umit Terzi
14.45-15.00	673	Position Control Of Prosthetic Finger Via Sliding Mode Controller Beyda Tasar*, Arif Gülten, Oğuz Yakut	1005	Investigation of LV Networks with EVs Under High Penetration of PV Generation Derya Betül Unsal*, Afşin Kulaksız, Ahmet Onen
15.00-15.20	COFEE BREAK		COFEE BREAK	
CHAIR	Assoc. Prof. Dr. Resul ÇÖTELİ		CHAIR	Asst. Prof. Dr. Mehmet ÜSTÜNDAĞ
15.20-15.35	659	A Torque Ripple Reduction Method of Stepper Motor for Low-Speed Applications Resat Celikel*, Omur Aydogmus	1024	Improvement of Incorrect Velocity Vectors in Particle Image Velocimetry using Order Statistical Method Kali Gürkahraman*, Rukiye Karakiş, Ümit Nazlı Temel
15.35-15.50	1047	Investigation of System Stability in Power Systems Containing Renewable Energy Sources Özge Tuttokmağı*, Asım Kaygusuz	1030	The Analysis of One Cycle Control Method Using DC-DC Isolated Forward Converter Ahmet Karaarslan*, Mehmet Emrah Şeker, Murat Benli
15.50-16.05	679	Experimental Investigation of Factors Affecting Efficiency in IE2 and IE3 Class Squirrel Cage Induction Motors Fadıl Kuyucuoğlu*, Nevzat Onat, Sezai Taşkın	1033	Ann And Elm Based Notch Antenna Operating Frequency Determination Muhammet Fatih Aslan*, Kadir Sabancı, Enes Yiğit, Ahmet Kayabaşı, Abdurrahim Toktaş, Mehmet Yerlikaya
16.05-16.20	680	Auxiliary Symbols aided and Coding Channel Estimation for FBMC Bircan Kamışlıoğlu*	1034	CFAR Detector Based Morphological Filter Design To Remove Clutter From GB-SAR Images Hüseyin Duysak*, Enes Yiğit, Abdurrahim Toktaş, Kadir Sabancı,



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16.20-16.35	1120	PAPR Reduction Using Particle Swarm Optimization For LBWPM Systems Yüksel Tokur Bozkurt* ; Necmi Taspinar	1123	Ahmet Kayabaşı, Mehmet Yerlikaya Sürekli Mıknatıslı Senkron Motorun Stator Kısa Devre Arıza Tespitinin Harmonik Analizi ile Yapılması Ferhat ÇIRA*
16.35-16.50	694	Analysis of Output Voltage Harmonics of Voltage Source Inverter used PI and PID Controllers Optimized with Integral Error Performance Criteria Ozan Gül* , Nusret Tan	1047	Investigation of System Stability in Power Systems Containing Renewable Energy Sources Özge Tuttokmağrı* , Asım Kaygusuz
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CHAIR	Assoc. Prof. Dr. Resul ÇÖTELİ			
09.00-09.15	682	Hardware Implementation of Wavelet Transform for Denoising of Biomedical Signal with Chaotic Noise Mehmet Üstündağ*		
09.15-09.30	701	İletim Hatlarında Sabit Kondansatörlü Seri Kompanzasyon Düzgün Akmaz*		
09.30-09.45	674	SEMG Based Hand Pattern Recognition Via K-NN Beyda Tasar* , Arif Gülten , Oğuz Yakut		
09.45-10.00	1121	Pilot Tones Design Using Genetic Algorithm for OFDM-IDMA System Şakir Şimşir* ; Necmi Taspinar		
10.00-10.20	694	Analysis of Output Voltage Harmonics of Voltage Source Inverter used PI and PID Controllers Optimized with Integral Error Performance Criteria Ozan Gül* , Nusret Tan		
10.20-10.35	1078	Yakıt Hücresi Sistemi İçin DC-DC Yükseltici Dönüştürücüde PI ve Bulanık Mantık Denetleyicisinin Performans Değerlendirmesi İbrahim Celik , Ceyhun Yıldız , H. Yusuf Hasırcı* , Mustafa Sekkeli		
10.35-10.55	COFFEE BREAK			
CHAIR	Assoc. Prof. Dr. Resul ÇÖTELİ			
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11.10-11.25	797	Design of Fractional Order PI Controller for DC Motor Speed Control Gürkan Kavuran*		
11.25-11.40	980	Finding The Dc Motor Speed By Measuring The Encoder Period And Performing Speed Control With Pid		



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		Ahmet Top* , Ozan Çakmak
11.40-11.55	1099	Frequency and Voltage Dependence of Electrical and Dielectric Properties of Ag/Go-PVA/p-Si Structure at Room Temperature Şükrü Karataş*
11.55-12.10	767	Space Vector Pulse Width Modulated Single-Phase Induction Motor Drive System Zeynep Bala Duranay* , Hanifi Güldemir
12.10-12.25	1121	Pilot Tones Design Using Genetic Algorithm for OFDM-IDMA System Şakir Şimşir* ; Necmi Taspinar