



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. M. Cengiz TAPLAMACIOĞLU
13.30-14.00	Future of Digitalization in the Industry Prof. Dr. Şahin ALBAYRAK	697	Classification of Short Circuit Faults in Transmission Lines Using Different Machine Learning Algorithms and Transient Regime Current Signals D. Akmaz*, M. S. Mamiş
		717	2.45GHz LNA Design with Arduino Biasing Control Unit Bilge Şenel*, Mesud Kahriman, Fatih Ahmet Şenel
14.00-14.15	95 Smart Headlight System Design Using LED İ. Kıyak*, M.A. Gunaltay	722	Optimum Control of a Ball and Beam System Using Genetic Algorithm and Simulated Annealing Hüseyin Oktay Erkol*
14.15-14.30	98 Advanced Metering Infrastructure (AMI): Smart Meters and New Technologies E. Dursun, A. N. Akpolat*	85	PV Güç Sistemlerinin Şebekeye Bağlanmasında Karşılaşılan Sorunlar ve Çözüm Yöntemleri Şafak Sağlam*, Ali Samet Sarkın
14.30-14.45	746 Possible Physical and Cyber Attacks on Smart Grids Erkan Dursun*, Ahmet Hacineciipoğlu	117	Evaluation of Electromagnetic Pollution Near TV and Radio Broadcast Transmitters İ. Şeflek*, E. Yıldız
14.45-15.00	718 A 10dB 2.4GHz Directional Coupler Desing and Implementation Bilge Şenel*	752	A Study of Occupational Safety Risk Assessment on Natural Gas Combined Cycle Power Plant B. Oral*, C. Kılıç
15.00-15.20	COFFEE BREAK		COFFEE BREAK
CHAIR	Prof. Dr. Abdulkadir ŞENGÜR	CHAIR	Prof. Dr. Sami EKİCİ
15.20-15.35	126 A Fully Integrated Low Power LNA in 65nm CMOS Technology Suitable for ZigBee, Low-Power Wifi and Bluetooth Low Energy Hakan Doğan*	786	Ferroelectric Based Bulk Acoustic Resonators and Filters Seyit Ahmet Sis*
15.35-15.50	1130 Flywheel Energy Storage System Design and 3d Magnetic Analysis for Electromagnetic Coil Launcher	754	Akıllı Şehirler için Akıllı Bisiklet Tasarımı Yasin Aygör*, Ayhan İstanbullu



8TH
INTERNATIONAL
ADVANCED TECHNOLOGIES
SYMPOSIUM

ELECTRICAL AND ELECTRONICS

		Engin Hüner*, Mürşide Sever		
15.50-16.05	157	Fault Detection and Prevention with Thermal Cameras on Electrical Transmission Lines and Components Ali Samet Sarkın*, Taner Dindar, Necmi Cemal Özdemir	756	Modelling and Control Study of Surface Mounted Permanent Magnet Motor M. Caner*, S. Yalvaç
16.05-16.20	142	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	247	Temperature and Photometric Analysis of Multichip Power LED and Retrofit Lamp İsmail Kıyak*Gökhan Gökmen
16.20-16.35	43	Comparison the Operational Costs of Lithium-ion and Lead-acid Batteries for Small Scale Microgrids Abdulkerim Karabiber*	753	The Integrated PV Power Plants on the Roof of Stadiums: Sustainability and Energy Economy B. Oral*, E. Arslan Tuncar
16.35-16.50	156	Electromyogram Signal Filtering Using Discrete Wavelet Transform Gökhan Gökmen*, Osman Ülkr	375	Three-Closed-Loop Control of Four-Quadrant Chopper Feeding a Separately Excited DC Motor E. H. Dursun*, A. A. Kulaksız
20.10.2017 FRIDAY/CUMA				
		HALL-C		HALL-G
CHAIR		Prof. Dr. Hüseyin ALTUN	CHAIR	Assoc. Prof. Dr. Resul ÇÖTELİ
08.30-08.45	197	Occupational Health and Safety in Electrical Work N. Akçam*, B. Dökmetaş, O. Akarçay, M. K. Uyan	980	Finding The Dc Motor Speed By Measuring The Encoder Period And Performing Speed Control With Pid A. Top*, O. Çakmak, M. Gökbulut
08.45-09.00	223	Automatic Segmentation of Drusen (Macular Edema) from Color Retina Images Turab Selçuk*, Seda Arslan Tuncer, Ahmet Alkan	981	Experimental Examination Of Step Rate For Microstepping Driven Stepper Motor Ozan Çakmak*, Ahmet Top, Melih Cevdet İnce
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 Y. Ege*, H. Çıtak, M. Çoramık
09.15-09.30	216	Circuit Simulation with Virtual Serial Port Y. Ege*, M. Çoramık, H. Çıtak	793	Real-time PID Control of Triglode Robot Muhammet Aydın*, Oğuz Yakut
09.30-09.45	788	Microwave Power Amplifier Design Using Double Stub Tuners	795	New Modulation Technic in Satellite Based Navigation Systems: Binary Offset Carrier (BOC)



8TH
INTERNATIONAL
ADVANCED TECHNOLOGIES
SYMPOSIUM

ELECTRICAL AND ELECTRONICS

		Seyit Ahmet Sis*		Ahmet Süzer*, Hakan Oktal
09.45-10.00	782	Comparison of Random Forest and C4.5 algorithms for PQ disturbances classification using DWT Mehmet Ismail Gursoy*, Ahmet Serdar Yilmaz, Seydi Vakkas Ustun	218	A FPGA Project with MYRIO M. Çoramık*, Y. Ege, H. Çıtak
10.00-10.20	COFFEE BREAK			COFFEE 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 M. Çoramık*, Y. Ege, H. Çıtak	807	Segmentation of Vocal Fold With Gradient Based Image Processing Techniques Turab Selçuk*, Nagihan Bilal, Selahaddin Akben, Selman Sarıca, Ahmet Alkan
10.35-10.50	797	Design of Fractional Order PI Controller for DC Motor Speed Control Gürkan Kavuran*	823	Investigation and Improvement of In-Wheel Asynchronous Motor for an Electrical Vehicle Considering Geometric Dimensioning Uğur Demir*, M.Caner Aküner
10.50-11.05	219	Creating and Testing Virtual Hardware (Port) H. Çıtak*, M. Çoramık, Y. Ege	847	Investigating The Effect of Core Materials In Heat Transfer of Dry Type Transformers Murat Toren*, Mehmet Çelebi
11.05-11.20	916	A Sample Pharma Control System for Hospitals Zeynep Bala Duranay*, Cengiz Taplamacioglu	855	Comparison of Experimental and Simulation Results of Photovoltaic Module/Array Under Varying Environmental Factors Ramazan Menak*, Saadettin Aksoy, Hakan Kızmaz,
11.20-11.35	1196	A Real Time DSP Implementation of Removing Cross-talk in sEMG Measurements with JADE Algorithm Ulvi Baspınar*	859	Porous Silicon Waveguides for Hybrid Silicon/III-V Lasers Özlem Akbulut*, Çağlar Duman, Bülent Çakmak
11.35-11.50	200	The Modernization of the Electrical Systems in the Existing Buildings and Sample Building Application N. Akçam*, B. Dökmetaş, O. Aslan, E. E. Güloğlu	865	Dependence of Modulation Response on Laser Parameters in Hybrid Lasers Mustafa Çodur*, Çağlar Duman, Bülent Çakmak
11.50-13.30	LUNCH BREAK			LUNCH BREAK
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 Oruç Şener*, Erhan Yücel, Nusret Tan	866	Analysis of The Heat Effect of Winding Types on The Dry Type Transformers Murat Toren*, Mehmet Çelebi, Ersin Haydaraslan



8TH
INTERNATIONAL
ADVANCED TECHNOLOGIES
SYMPOSIUM

ELECTRICAL AND ELECTRONICS

13.45-14.00	274	Analysis of Dispersion Compensation Techniques for Very Long Distance Fiber Optic Communication Systems H. Geçe*, M. Yücel	870	Analyzing and Modelling of Inter-Satellite Optical Wireless Communication (IsOWC) Channel Habil Akyol*, Aktül Kavas, Elif Alpıgu
14.00-14.15	220	Reading Data at High Resolution with PIC Microprocessor Y. Ege, M. Çoramık, H. Çıtak*	872	Chaotic Communication Systems Using Semiconductor Lasers Fatmanur Kocaman*, Çağlar Duman, Bülent Çakmak
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	1120	PAPR Reduction Using Particle Swarm Optimization For LBWPM Systems Yüksel Tokur Bozkurt*; Necmi Taspınar
14.30-14.45	336	A Demodulator Circuit Design Using Current Conveyors for MEMS Capacitive Accelerometers M. Demirtaş*, M. A. Erişmiş, S. Güneş	902	Circuit implementations of a nonlinear system for integer and fractional orders Akif Akgül, Burak Arıcıoğlu*, Sezgin Kacar, İhsan Pehlivan
14.45-15.00	345	A Survey of Direct Torque Technic and Its Applications Mehmet Polat*, Ebru Genç	903	Transfer Function Estimation of Continuous and Discrete time Systems based on MATLAB Sezgin Kacar, Burak Arıcıoğlu*, Akif Akgül, Faruk Yalcın
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	899	Modeling And Simulation Of Split Shaft Micro Turbine Generation Systems Based On Fuel Consumption Şehriban Çelik*, Bedri Kekezoğlu, Mustafa Baysal
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	767	Space Vector Pulse Width Modulated Single-Phase Induction Motor Drive System Zeynep Bala Duranay*, Hanifi Güldemir
15.50-16.05	701	İletim Hatlarında Sabit Kondansatörlü Seri Kompanzasyon D. Akmaz*, M. S. Mamış, M. Arkan, M. E. Tağluk	674	SEMG Based Hand Pattern Recognition Via K-NN Beyda Tasar*, Arif Gülten, Oğuz Yakut
16.05-16.20	749	Design and Analysis of Multi-Phase Permanent Magnet Synchronous Motor Gullu Boztas*, Omur Aydogmus	121	A FPGA-Based Position Calculation for Shaft Resolvers Resat Celikel*, Omur Aydogmus
16.20-16.35	402	The Influence of Layout Shape on the Performance of a Light Sources Arrangement in an Indoor visible Light	659	A Torque Ripple Reduction Method of Stepper Motor for Low-Speed Applications



8TH
INTERNATIONAL
ADVANCED TECHNOLOGIES
SYMPOSIUM

ELECTRICAL AND ELECTRONICS

		Communication Mahmud Mustapha*, Ibrahim Develi		Resat Celikel*, Omur Aydogmus
16.35-16.50	553	Embedded Wifi Web Server for LAN Telemetry System Aziz Kaba*, Ahmet Esat Süzer, Zafer Demir	579	Gel Electrophoresis Analysis with 2-D Hermite Transform and Line Segment Detector Abdulkadir Şengür, İrfan Emre*, Hasan Genç, Ahmet Şahin, Dilek Turgut Balık
21.10.2017 SATURDAY/CUMARTESİ				
	HALL-C			HALL-G
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 lightning 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	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
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 Simülâtörü Tasarımı	949	PID Controller Design Using Improved FireFly Algorithm



8TH
INTERNATIONAL
ADVANCED TECHNOLOGIES
SYMPOSIUM

ELECTRICAL AND ELECTRONICS

		Fahri Vatansver*, Nedim Aktan Yalçın, Maha Salama			Murat Erhan Çimen, Ali Fuat Boz*
10.00-10.20	COFFEE BREAK			COFFEE 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 Vatansver*	950	An Interface Design for Controlling Dead Time Systems Using PSO, CS and FA Algorithms Ali Fuat Boz*, Murat Erhan Çimen	
10.35-10.50	955	Comparison of Various Filters for Noise Removal in Hand Vein Images Ömer Faruk Boyraz*, Murat Erhan Çimen, Mustafa Zahid Yıldız	1078	Yakıt Hücresi Sistemi İçin DC-DC Yükseltici Dönüştürücüde PI ve Bulanık Mantık Denetleyicisinin Performans Değerlendirmesi İbrahim Celik, Ceyhan Yıldız, H. Yusuf Hasırcı*, Mustafa Sekkeli	
10.50-11.05	554	Linear Quadratic Regulator Design for Boeing 767 Aircraft Longitudinal Dynamics Aziz Kaba*, Emre Kiyak	583	Performance Analysis of FPGA and Matlab-Based the Similarity Image Functions for Color Images İ. Koyuncu*, F. Katırcioğlu	
11.05-11.20	578	A Novel Gravitational Search Algorithm using FPGA-Based Chaotic Random Number Generator İ. Koyuncu*, F. Katırcioğlu, M. Alçın	960	Feature Extraction From Hand-Vein Patterns Using Fractal Dimension Box Counting Method Ömer Faruk Boyraz*, Mustafa Zahid Yıldız, İhsan Pehlivan	
11.20-11.35	208	Arduino Kontrollü Egzersizmatik A. Çakır*, Ç. Karakaş	1033	Ann And Elm Based Notch Antenna Operating Frequency Determination Muhammet Fatih Aslan*, Kadir Sabancı, Enes Yiğit, Ahmet Kayabaşı, Abdurrahim Toktaş, Mehmet Yerlikaya	
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	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	
11.50-13.30	LUNCH BREAK			LUNCH BREAK	
CHAIR	Prof. Dr. Yetkin TATAR			CHAIR	Prof. Dr. Hanifi GÜLDEMİR
13.30-13.45	1123	Sürekli Miknatıslı Senkron Motorun Stator Kısa Devre Arıza Tespitinin Harmonik Analizi ile Yapılması Ferhat ÇIRA*	974	Design and Simulation of a Three-Phase Static Smart Switch for Microgrids Tolga Özer, Mustafa Baysal*	
13.45-14.00	595	Measuring and Controlling Water Quality in Real Time in Distribution Network	1052	The Effects of Improvements on Coal for Afşin Elbistan B Thermal Power Plant Working with Low Calorie Lignite to Short-term and	



8TH
INTERNATIONAL
ADVANCED TECHNOLOGIES
SYMPOSIUM

ELECTRICAL AND ELECTRONICS

		Murat Sönmez, Cem Şen, İsmet Kandilli, Melih Kuncan *		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 *	765	Optimal Channel Switching in the Presence of Multiple Additive Noise Channels M. Emin Tutay*
14.15-14.30	1093	MPPT Controlled Converter Design and Simulation For Solar Charger Application Bassam Yahya Al-Hanahi*; Burak Akin	957	A New Window Function for Memristor Modeling Yasin Oğuz*, Fatih Gül, Hasan Eroğlu
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 Kemalettin 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	COFFEE BREAK		COFFEE BREAK	
CHAIR	Assoc. Prof. Dr. Resul ÇÖTELİ		CHAIR	Asst. Prof. Dr. Mehmet ÜSTÜNDAĞ
15.20-15.35	679	Experimental Investigation of Factors Affecting Efficiency in IE2 and IE3 Class Squirrel Cage Induction Motors Fadıl Kuyucuoğlu*, Nevzat Onat, Sezai Taşkın	1099	Frequency and Voltage Dependence of Electrical and Dielectric Properties of Ag/Go-PVA/p-Si Structure at Room Temperature H. Özerli, M. Gül Aydın, M. A. Taştan, Ş. Karataş*
15.35-15.50	290	Grid Code Fault Ride Through Requirements for the Integration of Photovoltaic Power Plant E. Bülbül Sönmez*, İ. Koşalay	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	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
16.05-16.20			959	Increasing the Electrical Vehicle Efficiency with Genetic Algorithm Hasan Eroğlu, Yasin Oğuz*, Emrah Kaplan, Fatih Gül, Cemaleddin Şimşek