

| <b>Date: 2 September 2021</b> |  |        |
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| 09:00-09:30                   | Opening ceremony (OC)<br>Prof. Marcian Cirstea, General Chair<br>Prof. Ioan Vasile Abrudan, Rector of Transilvania University of Brasov<br>Prof. H. Bülent Ertan, General Co-Chair<br>Prof. Ion Boldea, Conference Vice-Chair<br>Prof. Mihai Cernat, Program Chair<br>Session Chairs: Carmen Gerigan, Lia Aciu | Room 1 |
| 09:30-09:40                   | Break  |        |
| 09:40-10:10                   | <b>(KA1) Keynote 1</b><br>Prof. Ronghai Qu, Fellow, IEEE; IEEE IAS Distinguished Lecturer; Huazhong University of Science and Technology, Wuhan, China<br><b>“Highly-compact Electrical Machines with Dual-mechanical-port &amp; Dual-electrical-port”</b><br>Session Chairs: H. Bülent Ertan, Ion Boldea      | Room 1 |
| 10:10-10:20                   | Break  |        |
| 10:20-10:50                   | <b>(KA2) Keynote 2</b><br>Prof. Akira Chiba, Fellow, IEEE; Tokyo Institute of Technology, Japan<br><b>“Bearless and Reluctance motors”</b><br>Session Chairs: Marcian Cirstea, H. Bülent Ertan   | Room 1 |
| 10:50-11:00                   | Break  |        |
| 11:00-13:00                   | <b>(RE) Virtual Parallel Oral Session 1</b><br><b>TT04 Renewable Electric Energy Conversion, Processing and Storage</b><br>Session Chairs: Radu Iustin Bojoi, Ioan Serban  | Room 2 |
| 11:00-11:20                   | VD-000094 - <b>Effect of Phase Change Material on Performance of Hybrid Photovoltaic-Thermoelectric System under Low Concentration Rate</b><br><u>Daniel Tudor Cotfas</u> , Sajjad Mahmoudinezhad, Alireza Rezania, Petru Adrian Cotfas, Lasse Rosendahl   |        |
| 11:20-11:40                   | VD-000159 - <b>Design Optimization and Prototyping of a Double-Rotor Axial-Flux Spoke-Type Ferrite-Magnet Micro-Wind Generator</b><br><u>Mihai Chirca</u> , Mircea M. Radulescu, Calin Rusu  |        |
| 11:40-12:00                   | VD-000701 - <b>10MW, 10rpm, 30Hz spoke Ferrite and bonded NdFeB-rotor wind PMSG preliminary design with FEM validation for 6 rotor variants</b><br><u>Lucian Tutelea</u> , <u>Ileana Torac</u> , Andy-Sorin Isfanuti, Ana Popa, Ion Boldea   |        |
| 12:00-12:20                   | VD-001333 – <b>Reserved memory for Li-ion battery SOC estimation method in applications with EV</b><br><u>Luminita Barote</u> , Corneliu Marinescu   |        |
| 12:20-12:40                   | VD-001597 - <b>Renewable energy EV charging station</b><br><u>Dorin Petreus</u> , <u>Toma Patarau</u> , Radu Etz, Marcian Cirstea  |        |
| 12:40-13:00                   | VD-002542 - <b>Comparison of Three Small-Signal Stability Analysis Methods for Grid-Following Inverter</b><br><u>Liang Huang</u> , Chao Wu, Dao Zhou, Frede Blaabjerg  |        |
| 11:00-13:00                   | <b>(EM1) Virtual Parallel Oral Session 2</b><br><b>TT02 Electrical Machines, Industrial Drives and Control</b><br>Session chairs: Lucian Tutelea, Zhenrui Zhang  | Room 3 |
| 11:00-11:20                   | VD-000728 - <b>100kW, 2400-4800rpm spoke-PM-bonded NdFeB traction motor preliminary design with FEM imported parameter circuit controlled dynamics validation</b><br><u>Lucian Tutelea</u> , <u>Ileana Torac</u> , Ion Boldea  |        |
| 11:20-11:40                   | VD-000779 - <b>Model-Based Fault Detection Using Parameter Estimation in Automotive</b>  |        |

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|             | <b>EPGS Systems</b><br><u>Alia Salah</u> , Omar Abu Mohareb, Hans-Christian Reuss   |  |
| 11:40-12:00 | VD-000787 - <b>Magnetic equivalent circuit – based optimal design code of high torque density and efficiency small power claw pole stator PM motor</b><br><u>Lucian Tutelea</u> , Tiago Staudt, Ion Boldea  |  |
| 12:00-12:20 | VD-000817 - <b>Amplitude Model Predictive Current Control Strategy for Permanent Magnet Synchronous Motor Drives</b><br><u>Zhenrui Zhang</u> , Yancheng Liu, Haohao Guo, Xiaoling Liang, Pengming Yang  |  |
| 12:20-12:40 | VD-001317 - <b>Performance Comparison of Synchronous Reluctance Motor and Interior Permanent Magnet Synchronous Motor for Traction Application</b><br><u>Akhila Karanghat</u> , Selvajothi Kamakshy   |  |
| 12:40-13:00 | VD-001791 - <b>An Optimized Rotor Design of Synchronous Reluctance Motor for Improved Torque Characteristics</b><br><u>Atul Nagarkar</u> , Srirama Srinivas   |  |
| 11:00-13:00 | <b>(PE1) Virtual Parallel Oral Session 3</b> Room 4<br><b>TT03 Power Electronics and Power Conversion 1</b><br>Session Chairs: Mihaela Popescu, Remus Teodorescu  |  |
| 11:00-11:20 | VD-000035 - <b>Active Current Balancing for Paralleled SiC-Semiconductors in Time-Staggered Switching Mode</b><br><u>David Reiff</u> , <u>Simon Johannliemke</u> , Volker Staudt  |  |
| 11:20-11:40 | VD-000175 - <b>Operational Advantages and Challenges of New AC-AC Converter Solution with Modular Multilevel Structure Suitable for High-Power Medium-Voltage Electrical Machine Drives</b><br><u>Gustavo Gontijo</u> , Tamas Kerekes, Remus Teodorescu |  |
| 11:40-12:00 | VD-000884 - <b>Auxiliary Power Supply for a Semiconductor-based Marx Generator</b><br><u>Martin Sack</u> , Johannes Ruf, Dennis Herzog, Georg Mueller   |  |
| 12:00-12:20 | VD-001015 - <b>Simulation of Power Electronics Based High-Speed Switching Module for DC Traction Applications</b><br><u>Sohel Ahmad</u> , Ulrich Kahnt  |  |
| 12:20-12:40 | VD-001031 - <b>Theoretical and Experimental Evaluation of DC-Circuit Influence in Four-Wire Active Power Filter with Split Capacitor for Strongly Unbalanced Loads</b><br><u>Mihaela Popescu</u> , Alexandru Bitoleanu, Constantin Vlad Suru            |  |
| 12:40-13:00 | VD-001155 - <b>Optimal Control Implementation of Three Phase-Four Wire Active Power Filter on dSPACE 1103 DSP Board</b><br><u>Constantin Vlad Suru</u> , Mihaela Popescu, Mihaita Linca   |  |
| 13:00-14:00 | Lunch Break   |  |
| 14:00-16:00 | <b>(PS1) Virtual Parallel Oral Session</b> Room 2<br><b>TT01 Power Systems and Electromagnetics</b><br>Session Chairs: Elena Helerea, Jacques Pierre Curely   |  |
| 14:00-14:20 | VD-000876 - <b>Electric diagram with AFDD for monitoring and protection of critical consumers</b><br><u>Bogdan Hnatiuc</u> , Sorin Sinteaa, Mihaela Hnatiuc, Florin Nicolescu   |  |
| 14:20-14:40 | VD-001287 - <b>Propagation of voltage sags and under-voltages through Scott transformers</b><br><u>Catalin Iosif Ciontea</u> , Florin Iov   |  |
| 14:40-15:00 | VD-002526 - <b>PV System Testing under Lightning Conditions</b><br><u>Marius-Daniel Calin</u> , Elena Helerea, Lia-Elena Aciu   |  |
| 15:00-15:20 | VD-001775 - <b>On Detection of Magnetic Nanoparticles Using a Commercial GMR Sensor</b><br><u>Marius Volmer</u> , <u>Cristian Muşuroi</u> , Mihai Oproiu, Andrei Avram, Marioara Avram, Elena   |  |

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| 15:20-5:40  | VD-000043 - <b>Frustrated antiferromagnetic spin 1/2 double chains with Ising-like nearest-neighbor interactions</b><br><u>Jacques Curely</u> , Janis Kliava  |        |
| 15:40-16:00 |   |        |
| 14:00-16:00 | <b>(EM2) Virtual Parallel Oral Session 5</b><br><b>TT02 Electrical Machines, Industrial Drives and Control 2</b><br>Session Chairs: Claudia Martis, Lucian Tutelea  | Room 3 |
| 14:00-14:20 | VD-000809 - <b>Cost-Oriented Design Considerations on Direct-Drive Wind Turbine Generators with Superconducting Excitation Winding</b><br><u>Robin Köster</u> , Andreas Binder  |        |
| 14:20-14:40 | VD-000841 - <b>Hardware in the Loop Testing of an Urban Electric Vehicle Model Supplied with Supercapacitors</b><br>Raul Octavian Nemes, Sorina Maria Ciornei, Raluca Maria Raia, <u>Mircea Ruba</u> , Horia Hedesiu, Claudia Martis, Calin Husar, Mihail Grovu |        |
| 14:40-15:00 | VD-000868 - <b>Modelling and Virtual Testing of a Wound Rotor Synchronous Machine for Electrical Vehicles Propulsion System</b><br><u>Maria Raluca Raia</u> , Mircea Ruba, Razvan Alexandru Inte, Claudia Martis, Gabriel Mihai Sirbu, Calin Husar              |        |
| 15:00-15:20 | VD-000981 - <b>V/f with stabilizing loops fast response control of Induction Motor (IM) drives</b><br><u>Ana-Adela Popa</u> , Andy-Sorin Isfanuti, Lucian Tutelea, Ion Boldea   |        |
| 15:20-15:40 | VD-001066 - <b>Doubly Salient Ferrite rotor PM single phase SM motor: FEM based optimal design and analysis</b><br><u>Andy-Sorin Isfanuti</u> , Lucian Nicolae Tutelea, Ion Boldea  |        |
| 15:40-16:00 | VD-001139 - <b>Finite Element Procedure to Analyze Hybrid Excitation Synchronous Motors</b><br><u>Luca Cinti</u> , Daniele Michieletto, Nicola Bianchi, Manuele Bertoluzzo  |        |
| 14:00-16:00 | <b>(PE2) Virtual Parallel Oral Session 6</b><br><b>TT03 Power Electronics and Power Conversion 2</b><br>Session Chairs: Dorin Petreus, Dorin O. Neacsu  | Room 4 |
| 14:00-14:20 | VD-001457 - <b>A Family of Modified Converters with Limited Duty Cycle</b><br><u>Felix Himmelstoss</u> , Michael Jungmayer  |        |
| 14:20-14:40 | VD-001554 - <b>Enhancement of Regenerative Power Utilization for Electric Vehicle by Using Eddy Current Brake</b><br>Muhammet Tahir Güneşer, <u>Adel Ridha Othman</u>   |        |
| 14:40-15:00 | VD-001589 - <b>Comparison of Diode Rectifier and Active-Front-End for Synchronous Generators Suppling DC Loads for Maritime Applications</b><br><u>Shujun Zhang</u>   |        |
| 15:00-15:20 | VD-001686 - <b>A 3-D Single-Stage Differential Mode Filter Modeling with Mutual Couplings and Layout Optimizations</b><br><u>Hüseyin Kayihan Cömert</u> , Gamze Odabas, Serkan Dusmez   |        |
| 15:20-15:40 | VD-001694 - <b>Extended Describing Function Modeling and Closed-Loop Control of LLC Converter in Battery Charging Applications</b><br><u>Abdulsamed Lordoglu</u> , Mehmet Onur Gulbahce, Derya Ahmet Kocabas, Serkan Dusmez                                     |        |
| 15:40-16:00 | VD-000167 - <b>Performance Evaluation of Various State-Space based Control Methods for DC/DC Converters without Inductor Current Sensor</b><br><u>Dorin O. Neacsu</u>   |        |
| 16:10-18:10 | <b>(EM3) Virtual Parallel Oral Session 8</b><br><b>TT02 Electrical Machines, Industrial Drives and Control 3</b>  | Room 3 |

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|             | Session Chairs: Maarten Kamper, Andy-Sorin Isfanuti   |        |
| 16:10-16:30 | VD-001228 - <b>Referencing position versus speed active flux based encoderless control of IPMSM drives at ultra-low speeds without signal injection</b><br>Mihaela-Codruta Ancuti, <u>Andy-Sorin Isfanuti</u> , Gheorghe-Daniel Andreescu, Lucian-Tutelea, Ion Boldea |        |
| 16:30-16:50 | VD-001341 - <b>Transient Fault Parameters of DC-Excited Vernier Reluctance Synchronous Condenser</b><br><u>Mkhululi Mabhula</u> , Maarten Kamper  |        |
| 16:50-17:10 | VD-001422 - <b>Control of Variable Flux Reluctance Motor in Field Weakening Region</b><br>Mehmet Sergen Catal, <u>Hilmi Gurleyen</u> , Erkan Mese   |        |
| 17:10-17:30 | VD-001449 - <b>Supercapacitor City Minibus Propulsion System Simulations, Methodology, and Case Study</b><br>Danut Liviu Vitan, Adrian Daniel Martin, Lucian Tutelea, Ion Boldea  |        |
| 17:30-17:50 | VD-001619 - <b>HyperStudy Optimization of Induction Motors Finite Element Assisted Design</b><br>Alexandru-Ionel Constantin, Virgiliu Firețeanu   |        |
| 17:50-18:10 | VD-002224 - <b>Electromagnetic Analysis of Flux Barrier U-Shaped Permanent Magnet Vernier Motor</b><br><u>Nima Arish</u> , Maarten Kamper, Rong Wang  |        |
| 16:10-18:10 | (PE3) Virtual Parallel Oral Session 9<br><b>TT03 Power Electronics and Power Conversion 3</b><br>Session Chairs: Sevilay Cetin, Ioan Serban   | Room 4 |
| 16:10-16:30 | VD-001783 - <b>A High Gain Hybrid non-isolated Magnetically-Coupled Switched-Inductor Converter</b><br>Mihaita Gireada, Dan Hulea, Octavian Cornea, Nicolae Muntean   |        |
| 16:30-16:50 | VD-002003 - <b>Improved control method for single-phase inverters with a minimalist power decoupling circuit</b><br><u>Ioan Serban</u>  |        |
| 16:50-17:10 | VD-002011 - <b>A Study of Switching Frequency Impact on Reliability of DC-DC PoL Converters with Discrete Transistors</b><br>Dan Butnicu, Arcadie Cracan, <u>Dorin O. Neacsu</u>  |        |
| 17:10-17:30 | VD-002127 - <b>A Robust Nonlinear Controller for Multilevel DC/DC Boost Converter</b><br><u>Imane Ait Ayad</u> , Elmostafa Alwarraki, Mohamed Baghdadi  |        |
| 17:30-17:50 | VD-002461 - <b>Performance Evaluation of Constant Voltage Charging Mode of Secondary Side Controlled Inductive Power Transfer System</b><br><u>Veli Yenil</u> , Sevilay Cetin   |        |
| 17:50-18:10 |   |        |

| Date: 3 September 2021 |  |        |
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| 09:00-09:30            | <b>(KA3) Keynote 3</b><br>Prof. Frede Blaabjerg, IEEE Fellow, Aalborg University, Denmark<br><b>“Power Electronics Technology – Quo Vadis”</b><br>Session Chairs: Ion Boldea, Mihai Cernat   | Room 1 |
| 09:30-09:40            | Break  |        |
| 09:40-10:10            | <b>(KA4) Keynote 4</b><br>Dr. Otilia Boaghe, Engineer at ARM Ltd, Cambridge, UK:<br><b>“Verification of RISC processors – challenges with innovative solutions”.</b><br>Session Chairs: Silvia Cirstea, Jin Zhang                                    | Room1  |
| 10:10-10:20            | Break  |        |
| 10:20-10:50            | <b>(KA5) Keynote 5</b><br>Dr. Christian von Albrichsfeld, Head of Continental’s Automotive Eng. (Romania).<br><br>Session Chairs: Marcian Cirstea, Mihaela-Codruta Ancuti  | Room1  |
| 10:50-11:00            | Break  |        |
| 11:00-13:00            | <b>(Ed) Virtual Parallel Oral Session 10</b><br><b>TT06 Electrical Engineering Education and Emerging Technologies.</b><br>Session Chairs: Cristina Luca, Luis Gomes   | Room 2 |
| 11:00-11:20            | VD-000825 - <b>A New Pedagogical Approach of An Experimental Study Aimed to Calculate the Leakage Reactance of a Synchronous Machine</b><br><u>Gabriela Dana Petropol Serb, Ion Petropol Serb</u>  |        |
| 11:20-11:40            | VD-001392 - <b>Creating a Wiring Framework for Embedded GUI Programming Course</b><br>Csaba Zoltán Kertész   |        |
| 11:40-12:00            | VD-001651 - <b>Automated recognition of facial expressions and gender in humans implemented on mobile devices</b><br><u>Romulus-Cristian Moraru, Angel Cataron</u>   |        |
| 12:00-12:20            | VD-002259 – <b>Phishing as a Service Campaign using IDN Homograph Attack</b><br><u>Lucian Florin Ilca, Titus Balan</u>   |        |
| 12:20-12:40            | VD-001503 - <b>Finite Element Analysis of Cold Crucible Configurations for Efficient Induction Heating of a Large Range of Molten Glass Volumes with the Same Inductor and Electric Supply</b><br><u>Virgiliu Fireteanu</u>                          |        |
| 12:40-13:00            |  |        |
| 11:00-13:00            | <b>(EM4) Virtual Parallel Oral Session 11</b><br><b>TT02 Electrical Machines, Industrial Drives and Control 4</b><br>Session chairs: Andreas Binder, H. Bülent Ertan   | Room 3 |
| 11:00-11:20            | VD-001635 - <b>Measuring of electrical currents, voltage and resistance of an axial bearing</b><br><u>Omid Safdarzadeh, Martin Weicker, Andreas Binder</u>   |        |
| 11:20-11:40            | VD-001821 - <b>BEGA-biaxial excitation generator - operation for constant diode dc output voltage with 3,6,9 phases for increased redundancy</b><br><u>Adrian Daniel Martin, Danut Liviu Vitan, Ileana Torac, Lucian Nicolae Tutelea, Ion Boldea</u> |        |
| 11:40-12:00            | VD-001872 - <b>Induction Motors Prediction Maintenance and Lifetime Estimation</b><br><u>Mykhaylo Zagirnyak, Serhii Husach, Rostyslav Yatsiuk, Dmytro Mamchur</u>  |        |
| 12:00-12:20            | VD-001902 - <b>Static-FE Harmonic Analysis of PM Slip Couplers</b><br><u>Dillan Ockhuis, Maarten Kamper</u>  |        |
| 12:20-12:40            | VD-001929 - <b>Dual Three-phase Motor Fault Tolerance for Modern Transport</b><br><u>Daniele Michieletto, Nicola Bianchi, Massimo Brunetti</u>   |        |

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| 12:40-13:00 | VD-001937 - <b>Synchronous Motor Sensorless Drives based on Rotating Signal Injection and Direct Ellipse Estimation</b><br><u>Ludovico Ortombina</u> , Matteo Berto, Luigi Alberti                                    |        |
| 11:00-13:00 | (AE1) Virtual Parallel Oral Session 12<br><b>TT05 Applied Electronics, Mechatronics, Control and Automation</b><br>Session Chairs: Mihai Ivanovici, Jorge Dias  | Room 4 |
| 11:00-11:20 | VD-000736 - <b>Remote Monitoring System for a Three-phase Electric Power Grid</b><br><u>Adrian-Mihai Rujoi</u> , Adriana-Georgiana Nan, Csaba Zoltán Kertész  |        |
| 11:20-11:40 | VD-000795 - <b>Complexity of EEG Brain Signals Triggered by Fractal Visual Stimuli</b><br><u>Irina E. Nicolae</u> , Mihai Ivanovici   |        |
| 11:40-12:00 | VD-000892- <b>An efficient accelerated gradient method with memory applicable to composite problems</b><br><u>Mihai I. Florea</u>   |        |
| 12:00-12:20 | VD-001112 - <b>Vision Dynamics: Environment Modelling, Path Planning and Control Based on Semantic Segmentation</b><br><u>Cosmin Ginerica</u> , Vlad Isofache, Sorin Grigorescu                                       |        |
| 12:20-12:40 | VD-001147 - <b>The Image Saliency Problem and its Applications</b><br><u>Dana E. Ilea Ghita</u>   |        |
| 12:40-13:00 |   |        |
| 13:00-14:00 | Lunch Break   |        |
| 14:00-16:00 | (DA) Virtual Parallel Oral Session 13<br><b>Special Session: Diagnostic and applications of electrical discharges</b><br>Session Chairs: Bogdan Hnatiuc, Bogdan Uleyczik  | Room 2 |
| 14:00-14:20 | VD-001678 - <b>Characterization Of Cold Plasma Glidarc Reactors</b><br><u>Ioan Ciprian Felea</u> , Eugen Hnatiuc, Dragos Astanei  |        |
| 14:20-14:40 | VD-001724 - <b>Hydrogen production from ethanol in dielectric barrier discharge</b><br><u>Bogdan Uleyczyk</u> , Łukasz Nogal, Michał Młotek, Krzysztof Krawczyk   |        |
| 14:40-15:00 | VD-002534 - <b>Surface Treatment of Polyethylene Terephthalate Film Using a DBD Non-Thermal Plasma Reactor</b><br><u>Daniel-Eusebiu Cretu</u> , Radu Burlica, Oana Beniuga, Dragos Astanei, Catalin Rusu, Dorin Tesoi |        |
| 15:00-15:20 | VD-002062 - <b>Viability of phytopathogenic bacteria after low-temperature plasma treatment</b><br><u>Pavel Beran</u> , Božena Šerá, <u>Bogdan Gavril</u> , Vladislav Čurn, Pavel Kříž, Eugen Hnatiuc                 |        |
| 15:20-5:40  | VD-001481 - <b>Experimental determination of DBD type reactors capacity</b><br><u>Cristian-Victor Lungu</u> , Bogdan Hnatiuc  |        |
| 15:40-16:00 |   |        |
| 14:00-16:00 | (EM5) Virtual Parallel Oral Session 14<br><b>TT02 Electrical Machines, Industrial Drives and Control 5</b><br>Session Chairs: Bulent Sarlioglu, <u>Ludovico Ortombina</u>   | Room 3 |
| 14:00-14:20 | VD-001945 - <b>Experimental Evaluation of Flux-Weakening Capability of Dual Three-Phase Synchronous Reluctance Motor</b><br><u>Ludovico Ortombina</u> , Iqbal Husain, Luigi Alberti, Nicola Bianchi                   |        |
| 14:20-14:40 | VD-002046 - <b>Vernier Machine Analysis and Analytical Design for Traction Applications</b><br><u>Ken Chen</u> , Bulent Sarlioglu   |        |
| 14:40-15:00 | VD-001848 - <b>Design and Performance Evaluation of a High-Speed Switched-Reluctance Integrated Motor-Compressor</b><br><u>Ahmed Hembel</u> , Hao Ding, Leyue Zhang, Bulent Sarlioglu                                 |        |
| 15:00-15:20 | VD-002658 - <b>Standstill Estimation of Stator Resistance of Induction Motors with</b>  |        |

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|             | <b>Novel Innovation-Based Adaptive Extended Kalman Filter</b><br><u>Remzi Inan, M. Zeki Yirtar, H. Bülent Ertan</u>   |        |
| 15:20-15:40 | VD-002682 - <b>UltraZohm — An Open-Source Rapid Control Prototyping Platform for Power Electronic Systems</b><br><u>Eyke Liegmann, Tobias Schindler, Petros Karamanakos, Armin Dietz, Ralph Kennel</u>  |        |
| 15:40-16:00 | VD-002712 - <b>A Comparison of Three State-Space Models of an Induction Machine Derived from the Same Set of Conductor Distribution Harmonics</b><br><u>Julien Cordier, Stefan Klass, Ralph Kennel</u>  |        |
| 14:00-16:00 | (AE2) Virtual Parallel Oral Session 15<br><b>TT05 Applied Electronics, Mechatronics, Control and Automation 2</b><br>Session Chairs: Silvia Cirstea, Alin Tisan   | Room 4 |
| 14:00-14:20 | VD-001295 - <b>Near-Infrared Colorization using Neural Networks for In-Cabin Enhanced Video Conferencing</b><br><u>Madalina Chitu</u>   |        |
| 14:20-14:40 | VD-001856 - <b>IoT data acquisition system for soil evaluation</b><br>Petru Epure, Mihai-Petre Oproiu, Daniel T. Cotfas, <u>Petru A. Cotfas</u> , Ana-Maria Gurban, Petru P. Epure  |        |
| 14:40-15:00 | VD-001899 - <b>LoRa Wide-Area Network and Live Objects Used in Renewable Energy Monitoring</b><br><u>Mihai-Petre Oproiu</u> , Andrei Neagu, Petru Cotfas, Daniel Cotfas, Cristian Muşuroi, Marius Volmer  |        |
| 15:00-15:20 |   |        |
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| 15:40-16:00 |   |        |
| 16:00-16:10 | Break   |        |
| 16:10-16:40 | (KA6) Keynote 6<br>Prof. Babak Fahimi, Fellow, IEEE; University of Texas at Dallas, USA<br><b>“Motor Whisperer : On the Art of Dialogue with Electric Machinery”</b><br>Session Chairs: Dorin O. Neacsu, Ion Boldea   | Room 1 |
| 16:40-16:50 | Break   |        |
| 16:50-17:20 | (KA7) Keynote 7<br>Prof. Bulent Sarlioglu, Senior Member, IEEE; IEEE IAS Distinguished Lecturer, University of Wisconsin–Madison, USA<br><b>“Re-emergence of Current Source Inverters using Wide Bandgap Devices and Comparison with Voltage Source Inverters”</b><br>Session Chairs: Ralph Kennel, H. Bulent Ertan | Room 1 |
| 17:20-17:30 | Break   |        |
| 17:30-18:00 | Closing ceremony (CC)<br>Prof. Marcian Cirstea, General Chair<br>Prof. H. Bülent Ertan, General Co-Chair<br>Prof. Ion Boldea, Conference Vice-Chair<br>Prof. Mihai Cernat, Program Chair<br>Session Chairs: Carmen Gerigan, Lia Aciu  | Room 1 |