

EPE'19 ECCE Europe: LIST OF KEYWORDS

AC machine AC-cable AC/AC converter Accelerators Acoustic noise Active damping Active filter Active Front-End Actuator Adaptive control Adjustable speed drive Adjustable speed generation system Aerospace Airplane Alternative energy Amplifiers **Artificial Intelligence** Asynchronous motor Automotive application Automotive component Automotive electronics Autotuning **Axial Machines Batteries** Battery charger Battery Management Systems (BMS) **Bipolar** device Bipolar Junction Transistor (BJT) Breakdown Brushless drive Bus bar Charge compensation device Charging Infrastructure for EV's Circuits **Component for measurements Communication for Power Electronics Conduction** losses **Contact Resistance Contactless Energy Transfer Contactless Power Supply** Control methods for electrical systems Control of drive Converter circuit



Converter control **Converter machine interactions** Cooling **Current** limiter Current sensor Current Source Inverter (CSI) Data analysis Data transmission DC collector network DC machine DC power supply DC-cable Design Device **Device** application Device characterisation Device modeling **Device simulation** Diagnostics Diamond **Dielectric losses Digital control** Diode Direct power control Direct torque and flux control Discrete power device Distributed power **Distribution FACTS (DFACTS)** Distribution of electrical energy Doubly fed induction motor Drive DSP Dynamic Voltage Restorer (DVR) Education methodology Education tool Efficiency Electric vehicle **Electrical drive Electrical machine Electroactive materials** Electronic ballast **Embarked networks** EMC/EMI **Emerging technology Emerging topology** Energy Control Unit (ECU)



Energy converters for HEV Energy storage Energy system management Environment Estimation technique **Excitation system** FACTS Fast recovery diode Fault handling strategy Fault ride-through Fault tolerance Faults Field Programmable Gate Array (FPGA) Fieldbus Flicker Flux model Flywheel Flywheel system Force Control (not only Torque Control) Free Wheel Diode (FWD) **Frequency-Domain Analysis** Fuel Cell Electric Vehicle (FCEV) Fuel cell system Fuzzy control Gallium Nitride (GaN) Generation of electrical energy Generator excitation system Hardware (not only Software) Harmonics High frequency power converter High power density systems High power discrete device High-speed drive High temperature electronics High voltage IC's High voltage power converters Highly dynamic drive HVDC Hybrid Electric Vehicle (HEV) Hybrid power integration IGBT IGCT Impedance measurement Induction heating Induction motor Industrial application



Industrial communications Industrial information systems Insulation Integrated Circuit (IC) Intelligent drive Intelligent Power Module (IPM) Interharmonics Interleaved converters IFET Life Cycle Analysis (LCA) Lighting Linear drive Load sharing control Locomotive Machine tool drive Magnetic bearings Magnetic device Maintenance Marine Matrix converter Measurement **Mechatronics** Microcontrollers (or controllers) Microgrid **Mission profile** Modelling Modulation strategy Monolithic power integration MOS device MOSFET Motion control Multi axle drives Multi-machine system Multilevel converters Multiphase drive **Multiterminal HVDC** Nanotechnology Neural network Neuronal control New switching devices Nine-switch converter Noise Non-linear control Non-standard electrical machine Nuclear fusion **Ohmic Losses**



On-board network **Optimal** control Packaging Parallel operation Particle accelerator Passive component Passive component integration Passive filter Permanent magnet motor Photovoltaic Physics research **Piezo actuators** Power conditioning Power converters for EV Power converters for FCEV Power converters for HEV Power cycling Power factor correction Power integrated circuit Power management Power plant performance Power quality Power semiconductor device Power supply Power transmission Prognosis Programming Protection device Pulse Width Modulation (PWM) Pulsed power Pulsed power converter Radio frequency (RF) Rail vehicle **Reactive power** Real time processing Real time simulation Regenerative power Regulation Regulators Reliability **Reluctance drive** Renewable energy systems Resonant converter **Reverse** recovery Road vehicle



Robotics Robust control Robustness Safety Schottky diode Self-sensing control Semiconductor device Sensor Sensorless control Servo-drive Ship Signal processing Silicon Carbide (SiC) Simulation Single phase system Sliding mode control Smart grids Smart microgrids Smart power Soft switching Software Software for measurements Solar cell system Space Standard Standardization Static Synchronous Compensator (STATCOM) Static Var Compensator (SVC) Statistics Sub-synchronous resonance (SSR) Super junction devices Supercapacitor Superconducting Magnetic Energy Storage (SMES) Superconductors Supply quality Sustainable system/technology Switched reluctance drive Switched-mode power supply Switching losses Synchronous motor System integration Systems engineering Teaching Test bench Thermal cycling



Thermal design Thermal stress Thermoelectric energy Three-phase system Thyristor **Time-Domain Analysis** Traction application Transducer Transformer Transistor Transmission of electrical energy Tranversal flux motor Ultra capacitors Uninterruptible Power Supply (UPS) Variable speed drive Vector control Virtual instrument Virtual prototyping Voltage Regulator Modules (VRM) Voltage sag compensators Voltage sensor Voltage Source Converter (VSC) Voltage Source Inverters (VSI) Water transport Wave energy Wide bandgap devices Wind energy Windgenerator systems Wireless Control Wireless power transmission Wireless sensors Z-source converter **ZCS** converters ZCZVS converters **ZVS** converters