

Session H2 - Transformers, motors, actuators and other power applications II  
*Tuesday, September 8*

- H2-01** An engineering approach for the inversion and inclusion of the Preisach model in the finite-element analysis of magnetic problems  
*Emad Dlala*
- H2-02** Magnetic core model of a middle frequency resistance spot welding transformer  
*Vojko Podlogar, Beno Klopčič, Gorazd Štumberger, Drago Dolinar*
- H2-03** Practical and theoretical investigations on coil-less rotating actuator using inverse magnetostrictive effect  
*Olivier Geoffroy, Daniel O'Brien, Mohamed Trifa, Orphée Cugat, Jérôme Delamare*
- H2-04** New protection method against compression stress in magnetic cores for medium voltage instrument transformer  
*Robert Pytlech, Jarosław Chojnacki, Roman Rygał*
- H2-05** Computation of the losses in a laminated ferromagnetic material under bi-directional induction excitation  
*O. de la Barrière, H. Ben Ahmed, M. Gabsi, M. LoBue*
- H2-06** Experimental characterisation of interlamination shorts in transformer cores  
*Carl A. Schulz, Daniel Roger, Stéphane Duchesne, Jean-Noël Vincent*
- H2-07** Analysis of induced current and electromagnetic braking force in an XY-Actuator with soft magnetic composite in the armature core  
*Ály Ferreira Flores Filho, Nolvi Francisco Baggio Filho*
- H2-08** Influence of magnetic saturation on precise diagnosis of broken rotor bars in induction motors  
*Bashir Mahdi Ebrahimi, Jawad Faiz*
- H2-09** Commutation signal detection of a permanent-magnet brushless motor using search coils wound on auxiliary teeth  
*Liang-Yi Hsu, Te-Min Kuo, Mi-Ching Tsai*
- H2-10** Design of magnetic actuator with nonlinear ferromagnetic materials using level-set based topology optimization  
*Sang-in Park, Seungjae Min*

- H2-11** An inverse approach for magnetic material characterization of an EI core electromagnetic inductor  
*Ahmed Abou-Elyazied Abdallah, Peter Sergeant, Guillaume Crevecoeur, Luc Dupré*
- H2-12** Model and design of semi-active suspensions based on magnetorheological dampers  
*Domenico A. Lampasi, Giuseppe M. Veca*
- H2-13** An Efficient Approach for Evaluating Flux Distribution of a Newly Design Transverse Flux Motor  
*Yu-Sheng Hsu, Mi-Ching Tsai*
- H2-14** Balancing the Current Distribution in High-Current Furnace Transformer  
*Vahid Nabaei, Seyed Karim Miralikhani, Seyed Ali Mousavi, Mohsen Zandi*
- H2-15** Reactance effect of a line start permanent magnet motor  
*Po-Wei Huang, Shang-Hsun Mao, Mi-Ching Tsai*
- H2-16** Evaluation of stator and rotor iron loss in permanent magnet assisted synchronous reluctance motor during flux-weakening operation  
*Bojan Štumberger, Viktor Goričan, Gorazd Štumberger, Tine Marčič, Miralem Hadžiselimović, Mladen Trlep, Marko Jesenik, Anton Hamler, Peter Vrtič*
- H2-17** Hysteresis behaviors in single-domain actuator  
*Zung-Hang Wei, Yi-Ping Hsieh, Chia-Der Lin, Chiun-Peng Lee, Ying-Jiun Chen, Chun-Neng Liao*
- H2-18** Complete magnetically nonlinear dynamic model of an electromagnetic brake based on coenergy  
*Miralem Hadžiselimović, Peter Vrtič, Tine Marčič, Bojan Štumberger, Gorazd Štumberger, Ivan Zagradišnik*
- H2-19** Artificial neural network applied for detection of saturation level in the iron core of a welding transformer  
*Klemen Deželak, Jože Pihler, Gorazd Štumberger, Beno Klopčič, Drago Dolinar*
- H2-20** Effect of artificial burrs on the total power loss of a three phase transformer core  
*Rafal Mazurek, Philip Marketos, Anthony Moses, Jean-Noel Vincent*
- H2-21** Packet to packet variation of flux density in a 3 phase, 3 limb power transformer core  
*M. B. Balehosur, P. Marketos, A. J. Moses, J. N. Vincent*

- H2-22** Transient analysis of a single phase transformer using a 3D edge based formulation coupled to electric circuit  
*Peter Pišek, Peter Virtič, Tine Marčič, Miralem Hadžiselimović, Mladen Trlep, Bojan Štumberger*
- H2-23** Design and test of a stress-dependent controller for magnetostrictive transducers  
*D. Davino, A. Giustiniani, C. Visone*
- H2-25** Modeling of improvement in impedance transfer for inductive switching devices, using high permeability soft materials  
*A. E. Umenei, Y. Melikhov, D.C. Jiles*
- H2-26** Finite Element Analysis of Rotor Slotting Saliency in Induction Motors for Sensorless Control  
*Marcello Pucci, Calogero Serporta*