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<th>Session Title</th>
<th>[PA-A4] Optimization and Design 2</th>
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<td>Date and Time</td>
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<td>Session Chair</td>
<td>Dianhai Zhang (Shenyang Univ. of Tech., China)</td>
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**PA-A4-1**

**Digest ID:** 8

**Performance Analysis of Four Topologies of Ferrite Permanent Magnet Synchronous Generators for a Small Wind Energy Turbine**

Kölzer, José Fabio; Bazzo, Thiago de Paula; Carlson, Renato; Sadowski, Nelson
Universidade Federal de Santa Catarina, Brazil

**PA-A4-2**

**Digest ID:** 575

**Robust Tolerance Design Optimization of a Claw Pole PM Motor with Soft Magnetic Composite Cores**

MA, BO; Lei, Gang; Zhu, Jianguo; Guo, Youguang
University of Technology Sydney, Australia

**PA-A4-3**

**Digest ID:** 410

**Shape Design of a Rotor Bar for Improving Starting Torque And Running Efficiency in Squirrel Cage Induction Motor**

Lee, Ha Jeong; Im, Sang Hyeon; Park, Gwan Soo
Pusan National University, Korea, Republic of (South Korea)

**PA-A4-4**

**Digest ID:** 159

**A Real Coded Vector Population-Based Incremental Learning for Multi-objective Optimizations of Electromagnetic Devices**

Ho, S. L. (1); Yang, Shiyou (2)
1: The Hong Kong Polytechnic University, Hong Kong; 2: Zhejiang University, China, People's Republic of

**PA-A4-5**

**Digest ID:** 174

**Characteristics Investigation of a Variable Flux Magnetic-Geared Motor Using Mathematical and Numerical Methods**

Niguchi, Noboru; Hirata, Katsuhiro; Kohara, Akira; Takahara, Kazuaki
Osaka University, Japan

**PA-A4-6**

**Digest ID:** 192

**Stable and Efficient Magnetic Field Optimization of 18 MeV Sector Focused Cyclotron Magnet Using Bezier Curve Fitting**

Kim, Su-Hun (1); Kwak, Chang-Seob (2); Lee, Se-Hee (1)
1: Kyungpook National University, Daegu, Republic of Korea; 2: Korea Electrotechnology Research Institute, Changwon, Republic of Korea
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<td>Enhanced Meta-model Based Optimization under Constraints using Parallel Computations</td>
<td>El Bechari, Reda (1,2); Brisset, Stéphane (1); Clénet, Stéphane (1); Mipo, Jean-Claude (2) 1: Université Lille, Centrale Lille, Arts et Métiers ParisTech, HEI, EA 2697 - L2EP - Laboratoire d’Electrotechnique et d’Electronique de Puissance, F-59000 Lille, France; 2: Valeo Equipements Electriques Moteur, Créteil, France</td>
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<td>An Efficient Serial-Loop Strategy for Reliability-Based Robust Optimization of Electromagnetic Design Problems</td>
<td>Kim, Dong-Hun (1); Kang, Byungsu (1); Choi, K. K. (2) 1: Kyungpook National University, Korea, Republic of (South Korea); 2: Dept. of Mechanical and Industrial Eng., Univ. of Iowa, Iowa City, IA 52242-1527, USA</td>
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<td>Topological Optimization Using Basis Functions for Improvement of Rotating Machine Performances</td>
<td>Sasaki, Hidenori; Igarashi, Hajime Graduate School of Information Science and Technology, Hokkaido University, Japan</td>
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<td>236</td>
<td>Optimization of design parameters of a toroid HTS coil for large scale SMES</td>
<td>Lee, Ji-Young (1); Lee, Seyeon (2); Choi, Kyeongdal (2); Kim, Woo-Seok (2) 1: Institute for Basic Science, Korea, Republic of (South Korea); 2: Korea Polytechnic University, Korea, Republic of (South Korea)</td>
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<td>237</td>
<td>Topology Optimization Based on On/Off Method for Synchronous Motor</td>
<td>Watanabe, Kota; Suga, Takao; Kitabatake, Shinya Muroran Institute of Technology, Japan</td>
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Electromagnetic Actuation Scheme for Steering MNPs with Aggregations at Multi-Channel Vessels

Kafash Hoshiar, Ali (1,2); Le, Tuan-Anh (1); Yoon, JungWon (1)
1: Gyeongsang National University, Korea, Republic of (South Korea); 2: Islamic Azad University, Qazvin Branch, Qazvin (Iran)