

# **2024 IEEE International Magnetic Conference - Short papers (INTERMAG Short papers 2024)**

**Rio de Janeiro, Brazil  
5-10 May 2024**



**IEEE Catalog Number: CFP24EZ8-POD  
ISBN: 979-8-3503-6222-0**

**Copyright © 2024 by the Institute of Electrical and Electronics Engineers, Inc.  
All Rights Reserved**

*Copyright and Reprint Permissions:* Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limit of U.S. copyright law for private use of patrons those articles in this volume that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923.

For other copying, reprint or republication permission, write to IEEE Copyrights Manager, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08854. All rights reserved.

***\*\*\* This is a print representation of what appears in the IEEE Digital Library. Some format issues inherent in the e-media version may also appear in this print version.***

IEEE Catalog Number:	CFP24EZ8-POD
ISBN (Print-On-Demand):	979-8-3503-6222-0
ISBN (Online):	979-8-3503-6221-3

**Additional Copies of This Publication Are Available From:**

Curran Associates, Inc  
57 Morehouse Lane  
Red Hook, NY 12571 USA  
Phone: (845) 758-0400  
Fax: (845) 758-2633  
E-mail: [curran@proceedings.com](mailto:curran@proceedings.com)  
Web: [www.proceedings.com](http://www.proceedings.com)

CURRAN ASSOCIATES INC.  
**proceedings**  
.com

## TABLE OF CONTENTS

2-Axis Planar Hall Magnetic Field Sensors with Sub Nano Tesla Resolution .....	1
<i>P. T. Das, H. Nhalil, V. Mor, M. Schultz, N. Hasidim, A. Grosz, L. Klein</i>	
A Blinking Detection System Based on Magnetic Sensor and Magnetic Hair Array .....	3
<i>Jiandong Man, Zhenhu Jin, Jiamin Chen</i>	
A Comparative Performance Study of High-Speed SynRM and PMA-SynRM Rare-Earth and Rare-Earth-Less Permanent Magnets for Automotive Traction .....	5
<i>Gabriel B. Da Silveira, Igor P. Wiltuschnig, Roberto P. Homrich, Ály F. Flores Filho, Aurelio T. Salton, Leticia G. Tobias Dos Santos, Cristiano De A. Soares, Paulo R. Eckert</i>	
A Comparative Study Between Permanent-Magnet-Free Reluctance Machines for Heavy-Duty Electric Vehicles .....	7
<i>Doga Ceylan, Konstantin O. Boynov</i>	
A Control Strategy Minimizing PM Loss of Phase-Shifted Dual-Winding PMSM for Aviation Electric Propulsion Application.....	9
<i>Ye Zhu, Zhuoran Zhang, Jiawei Lu, Han Xue</i>	
A Data-Driven Extended Landau Theory Method for the Coercivity Analysis of Magnetic Materials.....	11
<i>Chiharu Mitsumata, Alexandre Lira Foggiatto, Masato Kotsugi</i>	
A Matlab Toolbox for Anhysteretic Magnetization Analysis.....	13
<i>Josefina M. Silveyra, Matias I. González, Tomás F. González, Juan M. Conde Garrido</i>	
A New Radial Hybrid Consequent-Pole Permanent Magnet Vernier Machine .....	15
<i>Rui Yao, Haitao Wang, Yumeng Sha, Yuanying Xu, Chunmei Feng</i>	
A Novel Axial-Field Juxtaposed Magnetic Circuit Variable Flux Memory Machine.....	17
<i>Yuan Gao, Yaojing Feng, Chenxi Xia, Bo Long, Shoudao Huang</i>	
A Novel Characterization Method for Transformer Interturn Short-Circuit Faults Based on Arc-Induced Transients.....	19
<i>Hao Liu, Chenguang Yan, Hongxi Yang, Xiao Yang, Peng Zhang, Baohui Zhang</i>	
A Novel Continuously Variable Magnetic Geared Dual Stator Hub-Motor for an E-Bike.....	21
<i>Shaqib Khan Warsi, S. Sashidhar</i>	
A Novel Counter-Rotating Axial-Flux Permanent Magnet Memory Machine with Dual-Rotor.....	23
<i>Chenxi Xia, Yaojing Feng, Yuan Gao, Shoudao Huang</i>	
A Novel Electromagnetic Force Calculation Method for Homopolar Hybrid Magnetic Bearing .....	25
<i>Guang-Zhong Cao, Hong-Li Li, Hong-Jin Hu, Su-Dan Huang, Hao-Tian Wang, Kun Liu, Jing-Bo Wei</i>	
A Novel Speed Estimation Algorithm for a Permanent Magnet Linear Synchronous Motor Using Extended Kalman Filter with Multiple Fading Factors .....	27
<i>Liu Xiao, Jingli Zhang, Haoran Xie, Chunfu Hu</i>	
A Novel Winding Design for EV Traction Electric Motors: Hybrid Hairpin Winding Layout Containing Both Copper and Aluminum Windings.....	29
<i>Buddhika De Silva Guruwatta Vidanalage, Ze Li, Anthony Lombardi, Narayan C. Kar</i>	

A Quasi-3-D Finite Element Modeling of an Axial Flux Magnetic Resonant Motor .....	31
<i>Besong John Ebot, Yasutaka Fujimoto</i>	
A Simple PM Eddy Current Loss Model for Axial Flux Permanent Magnet Machine .....	33
<i>Liu Yunpeng, Wang Chen, Chen Dong, Li Guoyao</i>	
A Study of Iterative Signal Processing Schemes for Double-Layered Bit-Patterned Recording.....	35
<i>Anawin Khametong, Chanon Warisam</i>	
A Tubular Flux-Reversal Transverse Flux Permanent Magnet Linear Generator Used in Direct Drive Wave Energy Converter.....	37
<i>Minshuo Chen, Lei Huang, Yuan Li, Gaojun Meng, Tao Xia</i>	
Above Room Temperature Ferromagnetism in All-Epitaxial Fe <sub>5-x</sub> GeTe <sub>2</sub> /Graphene and Fe <sub>5-x</sub> GeTe <sub>2</sub> /WSe <sub>2</sub> Van Der Waals Heterostructures .....	39
<i>Joao Marcelo J. Lopes, Hua Lv, Jens Herfort, Michael Hanke, Chen Chen, Joan M. Redwing, Achim Trampert, Roman Engel-Herbert, Manfred Ramsteiner</i>	
Advanced Lumped Parameter Thermal Network for Modeling of Cooling Solutions in Electric Vehicle Motor Applications.....	41
<i>Alexandre Bourgault, Omolbanin Taqavi, Ze Li, Glenn Byczynski, Narayan C. Kar</i>	
Advancing Kerr-Microscopy Imaging of Three-Dimensional Magnetic Structures.....	43
<i>Christian Janzen, Bhavadip B. Rakholiya, Florian Ott, Rico Huhnstock, Arno Ehresmann</i>	
Air-Cored Linear Motor: Design and Operating Behavior.....	45
<i>Tim Hofmann, Domenik Radeck, Agnes Jocher</i>	
All-Optical Control and Ultrafast Spin Dynamics in Van Der Waals Magnets .....	47
<i>Maciej Dabrowski</i>	
An Accurate Multi-Objective Optimization Strategy for Surface-Mounted Permanent-Magnet Machines Based on Nonlinear Finite-Permeability Subdomain Model.....	49
<i>Che Sun, Youtong Fang, Pierre-Daniel Pfister</i>	
An Alternative Heat Treatment Recovery of the Magnetic Properties of a Non-Grain Oriented Fe-Si Steel After Cutting.....	51
<i>Ailson Cardoso, Jandir Caetano Ferreira, Daniel Leandro Rocco, Leonel Muniz Meireles</i>	
An Improved Analytical Model for the Novel Counter-Rotating Axial-Flux Hybrid-Excitation Permanent Magnet Machine.....	53
<i>Kun Huang, Yaojing Feng, Chenxi Xia, Bo Long, Yuan Gao, Shoudao Huang</i>	
An Output-Fusion Fuzzy Logic Controller for Tumor Thermal Ablation Therapy System with Wireless Power Transfer.....	55
<i>Yen-Cheng Huang, Chia-Ming Hung, Cheng-Chi Tai</i>	
An Ultra-Broadband Magnetic Susceptivity Evaluation of Magnetic Nanoparticle and Protein .....	57
<i>Shin Yabukami, Junichi Honda, Toru Murayama, Loi Tonthat, Kazuhiko Okita</i>	
An Ultrathin, Rapidly Fabricated, Flexible Giant Magnetoresistive Electronic Skin.....	59
<i>Junjie Zhang, Zhenhu Jin, Guangyuan Chen, Jiamin Chen</i>	
Analysis of Air-Gap Field Modulation Effect on Torque for 6-Slot 4-Pole High-Speed Permanent Magnet Machine.....	61
<i>Kai Li, Chen Wang, Ya Li, Zhuoran Zhang</i>	

Analysis of Air-Gap Field Modulation in Asymmetric Stator Tooth Bilateral-Excitation Flux Modulation Machine .....	63
<i>Fei Zhao, Kuang Yang, Ruixiang Liu, Jincheng Yu, S. M. Sajjad Hossain Rafin, Qasim Ali</i>	
Analysis of Dual-Airgap Yokeless-Stator Permanent Magnet Motor with Non-Oriented Or Grain-Oriented Steels for Aircraft Propulsion .....	65
<i>Han Xue, Zhuoran Zhang, Ye Liu, Huamin Gao, Qiuyu Lin</i>	
Analysis of the High-Frequency Magnetization Process Through Machine Learning and Topological Data Techniques .....	67
<i>Alexandre Lira Foggiatto, Ryunosuke Nagaoka, Michiki Taniwaki, Takahiro Yamazaki, Takeshi Ogasawara, Ippei Obayashi, Yasuaki Hiraoka, Chiharu Mitsumata, Masato Kotsugi</i>	
Analytical Calculation Model for Inductance of Brushless DC Motor Under Bearing Fault.....	69
<i>Guangan Chen, Bo Zhang, Ting Dong, Sheng Ma, Haoran Huang</i>	
Analytical Calculation of Series Impedance for Deeply Buried Coaxial Cables.....	71
<i>Gabriel De Castro Biage, Rooney R. A. Coelho, José Roberto Cardoso</i>	
Analytical Calculations of Electron's Phase Shift Due to Interactions with Magnetized Materials. ....	73
<i>Guilherme Kuhl Soares, Diego Muraca</i>	
Angle-Dependent In-Plane Magnetic Field Detection by MEMS Resonant Sensor .....	75
<i>Yuxi Wang, Mingye Du, Jiawei Li, Daozheng Luo, Tao Wu</i>	
Anisotropic Magnetoresistance of Epitaxial Grown CoFe Thin Films on Flexible Mica and Rigid MgO Substrates .....	77
<i>Jen-Chieh Cheng, Min-Chang You, Aswin Kumar Anbalagan, Guang-Yang Su, Kai-Wei Chuang, Cheng-Hsun Hsieh, Chao-Yao Yang, Chih-Hao Lee</i>	
Anisotropic Models of Nonlinear Magnetic Behavior Laws for Finite Element Modeling of Iron Losses in a Toroidal Core .....	79
<i>J. Drappier, F. Guyomarch, R. Cherif, Y. Le Menach, O. Messal, L. Chevallier, A. Benabou</i>	
Anisotropy Dependent Spin Orbit Torque Switching in Crystalline Ferromagnetic Semiconductor .....	81
<i>Apu Kumar Jana, Sanghoon Lee</i>	
Availing Highly-Saturable Advanced Soft Magnetic Materials for Rotating Machines.....	83
<i>Parag Upadhyay</i>	
Biomimetic Magnetic Nanocarriers for Cancer Therapy.....	85
<i>João V. R. Rocha, Rafael Krause, Carlos E. R. Cardoso, Nathália C. A. Oliveira, Lucas R. Sousa, Eliana M. Lima, Marize C. Valadares, Mauro C. Xavier, Sebastião Mendanha, Andris F. Bakuzis</i>	
Bright Envelope Solitons in a Double Negative Medium Based on Nonlinear Ferromagnetic Metamaterial Layer .....	87
<i>Mariya D. Amelchenko, Sergei V. Grishin, Feodor Yu. Ogrin</i>	
Bright Envelope Solitons in the Double Negative Media Based on Thin Films of Nonlinear Ferromagnetic Semiconductor.....	89
<i>Sergei V. Grishin, Alexandra V. Bogomolova, Sergei A. Nikitov</i>	
Calculation of Mutual Inductance Between Trapezoidal and Rectangular Coils with Angular Misalignment.....	91
<i>Dong-Min Kim, Sungjin Lee, Dongwook Kim</i>	

Characterisation of Magnetic Sensors for Space Applications - An NMI Perspective .....	93
<i>Stuart Harmon, Graeme Finch, Adam Wilson</i>	
Characteristics of Losses in Composite Material Transformer Cores.....	95
<i>Taiyi Chen, Bo Zhang, Ting Dong, Sheng Ma, Miao Zhang</i>	
Characteristics of Normal Magnetic Flux in Composite Materials Transformer Core .....	97
<i>Bin Jiang, Bo Zhang, Ting Dong, Sheng Ma, Miao Zhang</i>	
Cobalt-Iron Nitride Nano-Flake Powders: Synthesis, Analysis Morphological, Structural, Magnetic and Catalytic Activity .....	99
<i>Greici Gubert, Roger Gonçalves, Ronei Cardoso De Oliveira, Flávio Antiqueira, Guilherme Zepon, Adilson Jesus Aparecido De Oliveira, Ernesto Chaves Pereira</i>	
Coercive Force as an Indicator of Structural Changes in the Heat Treatment of Amorphous and Nanocrystalline Alloys on the Example of Fast-Quenched Fe-Cu-Nb-Si-B Tapes .....	101
<i>Igor Mikhailovich Sapovskii, Nikita Valeryevich Ilyin, Kraynova Galina Serovbovna, Rakhmatullaev Temur Rustamovich, Vladimir Sergeevich Plotnikov</i>	
Comparative Analysis Between Split Stator Permanent Magnet Machine and Flux Reverse Machine .....	103
<i>Chenchu Zhang, Haitao Wang, Chao He</i>	
Comparative Analysis of a Novel Flux-Switching Arc Permanent Magnet Machine with Flux-Reversal Effect .....	105
<i>Xiangru Lin, Shuhua Fang</i>	
Comparative Analysis of Dual-Stator Permanent Magnet Machines with Inner Stator Teeth Designed in Hypotenuse for Electric Vehicle .....	107
<i>Yuanying Xu, Haitao Wang, Yumeng Sha, Rui Yao</i>	
Comparison of Techniques for the Quantitative Determination of the Interfacial Dzyaloshinskii-Moriya Interaction in Ultrathin Magnetic Films.....	109
<i>M. Kuepferling, C. H. Back, A. Casiraghi, L. Chen, A. Di Pietro, G. Durin, F. Garcia Sanchez, B. J. Hickey, C. Y. Hwang, G. Jakob, M. Kläui, M. Madami, A. Magni, C. H. Marrows, H. T. Nembach, V. Puliafito, J. M. Shaw, G. Soares, S. Tacchi, G. Carlotti</i>	
Comparison of Torque Generated by In-Plane and Out-Of-Plane Anisotropic Magnetorheological Elastomers .....	111
<i>Htoo Wai Htet, Ludovico Cestarollo, Amal El-Ghazaly</i>	
Complex Permeability of Noise Suppression Sheets Up to 40 GHz Evaluated with the Improved Shielded Loop Coil Type Permeameter .....	113
<i>Takashi Nakamura, Yuma Sato, Atsushi Itagaki, Yasunori Miyazawa, Shin Yabukamiel, Masahiro Yamaguchi</i>	
Computational Speed Improvement of Reluctance Network Analysis Combined with Play Model.....	115
<i>Yoshiki Hane, Kengo Sugahara</i>	
Conference Proceedings of the IEEE Magnetics Society Skyrmionic Synapse Implementation for Pattern Recognition Using Convolutional Neural Network .....	117
<i>Saumya Gupta, Venkatesh Vadde, Bhaskaran Muralidharan, Abhishek Sharma</i>	
Controlling Spin-Waves by Spin-Polarized Current for Logic and Neuromorphic Computing .....	120
<i>Rai M. Menezes, Jeroen Mulkers, Clécio C. De Souza Silva, Bartel Van Waeyenberge, Milorad V. Milošević</i>	

Correlation Between Strains, Oxygen Vacancies and Magnetotransport Properties of CaMnO <sub>3</sub> Thin Films.....	122
<i>Agustin Lopez Pedroso, Joaquin Gajst, Santiago Carreira, Jose Santiso, Myriam Aguirre, Javier Briatico, Federico J. Williams, Laura B. Steren</i>	
Critical Transitions in Rare-Earths Magnets of (R,R') <sub>2</sub> Fe <sub>14</sub> B Type .....	124
<i>N. V. Kostyuchenko, D. I. Plokhov, Yu. B. Kudasov, I. S. Tereshina, O. M. Surdin, A. K. Zvezdin</i>	
Decision-Feedback Single-Layer Read Reconstruction and Separation for Three-Dimensional Magnetic Recording .....	126
<i>Yanzhe Liao, Kezheng Zhang, Yugen Jian, Shaobing Wang, Jincal Chen, Ping Lu, Ke Luo</i>	
Deconvolution of Magnetic Field by Coupling Efficiency Tensor of TMR Sensor Array .....	128
<i>Jim Rice</i>	
Defect Evaluation in Mild Steel Plate Using Harmonic Ratio Induced by Square Wave Excitation Field and Nonlinear Magnetization .....	130
<i>Mohd Mawardi Saari, Mohd Aufa Hadi Putera Zaini, Mohd Herwan Sulaiman, Ahmad Salihin Samsudin, Toshihiko Kiwa</i>	
Deflection Patterns on Strontium Ferrite/Iron Oxide/Ecoflex 00-30 Flexible Composites .....	132
<i>Vinicius V. C. Xavier, Mariam Elabbasi, Ahmed A. El-Gendy, Amanda De Oliveira Barros</i>	
Dependence of the Cut Region on the Magnetic Losses of a Non-Grain-Oriented Fe-Si Steel .....	134
<i>Jandir Caetano Ferreira, Lucas Carlos Soares De Matos, Ludmilla Ferreira Costa, Thays Pereira De Abreu, Edivânia Maria Martins Alves, Gabriel Alves Mendonça, Leonel Muniz Meireles, Almir Silva Neto, Daniel Leandro Rocco</i>	
Design and Analysis of a High-Speed Slotless Permanent Magnet Synchronous Motor Considering Air-Gap Airflow .....	136
<i>Ming-Hong Guo, Guang-Zhong Cao, Hong-Jin Hu, Su-Dan Huang, Hao-Tian Wang, Jiang-Biao He</i>	
Design and Analysis of a New Consequent-Pole Hybrid Excited Permanent Magnet Machine with DC-Biased Current .....	138
<i>Guangyu Qu, Jinyi Yu, Yingcan Liu, Wei Liu</i>	
Design and Analysis of a Partitioned-Stator Hybrid Excited Permanent Magnet Arc Motor.....	140
<i>Zhenbao Pan, Jiwen Zhao, Shuhua Fang, Zixiang Yu, Pingjian Xu</i>	
Design and Analysis of New Beveling Consequent Pole Hybrid Magnet Dual Stator Machines .....	142
<i>Yumeng Sha, Haitao Wang, Rui Yao, Yuanying Xu, Jianfei Yang</i>	
Design and Quantitative Analysis of Asymmetric Flux Reversal Permanent Magnet Linear Machine with Reduced Leakage Flux .....	144
<i>Zhuo Chen, Zhaokai Li, Yiming Shen</i>	
Design of a Linear Motor: An Optimization Approach Considering Motor and Inverter Losses with Different Voltage Waveforms .....	146
<i>Aleandro A. De Espindola, Moises L. Neto, Nelson J. Batistela, Nelson Sadowski</i>	
Design of a New Consequent-Pole Hybrid Excited Machine with Segmented Stator.....	148
<i>Guangyu Qu, Yingcan Liu, Jinyi Yu, Wei Liu</i>	
Design of LS-SynRM Rotor for Efficiency Improvement and Torque Ripple Reduction.....	150
<i>Choung-Seo Kim, Hyung-Woo Lee, Jae-Bum Lee, Seong-Hwi Kim, Chan-Bae Park</i>	

Design of Magnetic Circuits for Magnetocaloric Refrigeration Via Topology Optimization.....	152
<i>Luis F. Cattelan, Guilherme F. Peixer, Mauricio V. F. Da Luz, Jader R. Barbosa, Jaime A. Lozano</i>	
Determination Method of Nonlinear Reluctance Matrix Considering Saturation Differences for Three-Phase Transformers.....	154
<i>Yingying Wang, Zuhuo Liang, Bolin Jin</i>	
Development of a Combined Maxwell's Equations and Magnetic Equivalent Circuit Solution for Induction Machines in Electric Vehicle Applications.....	156
<i>Omolbanin Taqavi, Pengzhao Song, Ze Li, Narayan C. Kar</i>	
Development of a TR-MOKE Setup for the Investigation of Ultrafast Magnetization Dynamics in Magnetic Thin Films .....	158
<i>Chitra Dolai, Debkanta Ghosh, Shailab Singh Bodra, Biswajeet Nayak, Prasana Kumar Sahoo, Prasanta Kumar Datta</i>	
Development of Bonded $\alpha'$ -Fe <sub>16</sub> N <sub>2</sub> Permanent Magnet.....	160
<i>Marian Grigoras, Mihaela Lostun, Gabriel Ababei, George Stoian, Nicoleta Lupu</i>	
Development of Interdigitated Devices for Surface Acoustic Waves (SAW) Applied to Magnonics.....	162
<i>M. S. Lacerda, L. C. Sampaio, J. P. Sinnecker</i>	
Development of Open-Structure Rotary Magnetic Encoder for Underwater Applications .....	164
<i>Hsin-Lei Lin, Kai-Yang Peng, Jen-Yuan Chang</i>	
Differential Model Based Parameter Estimation of IPMSMs from Multi-State Measurements.....	166
<i>Hongfu Cheng, Uday Deshpande, Narayan C. Kar</i>	
Dimension-Dependent Critical Scaling Analysis and Emergent Competing Interaction Scales in a 2D Van Der Waals Magnet Cr <sub>2</sub> Ge <sub>2</sub> Te <sub>6</sub> .....	168
<i>P. C. Mahato, Suprotim Saha, Bikash Das, Subhadeep Datta, Rajib Mondal, Sourav Mal, Ashish Garg, Prasenjit Sen, S. S. Baneijee</i>	
Disproportionation and Recombination Reactions - A Promising Technique for Producing Sintered Nanostructured Anisotropic SmCo <sub>5</sub> Magnets.....	170
<i>Ihor I. Bulyk, Bin Yang, Munan Yang, Ihor V. Borukh</i>	
Drag Force Analysis of Superconducting EDS Type Hyperloop System According to Changes in Tube Material Properties .....	172
<i>Seong-Hwi Kim, Ju Lee, Chung-Seo Kim, Hyung-Woo Lee</i>	
Dual Band Analysis of a Novel Rectenna for Wireless Power Transmission and Energy Harvesting Applications.....	174
<i>Adriana M. S. Viana, Sandro T. M. Gonçalves, Ursula C. Resende, Thiago H. G. Mello</i>	
Dynamics of the Shape of Magnetic Fluid Droplets Under the Influence of a Magnetic Field: Experiment and Lattice Boltzmann Simulation.....	176
<i>Evgeniy Sokolov, Darya Kalyuzhnaya, Alexander Pribylov, Grigory Zhukov, Roman Politov, Petr Ryapolov</i>	
Effect of Binder Content on Structure and Magnetic Properties of Fe-Si Powder Cores.....	178
<i>Mai Phuong Nguyen, Shigeyoshi Yoshida, Satoshi Okamoto, Takamichi Miyazaki, Yasushi Endo</i>	



Effect of Curie Temperature Distributions on the Areal Density Capability of Heat-Assisted Magnetic Recording .....	180
<i>Simon John Greaves, Hirofumi Suto, Yasuaki Nakamura, Yasushi Kanai</i>	
Effect of Different Grain Boundary Diffusion Alloys on Magnetic Properties of Dy-Free Sintered NdFeB Magnet .....	182
<i>Wei Tang, Jing Wang, Chaochao Pan, Min-Chul Kang, Lin Zhou, Matthew J. Kramer, Jun Cui, Iver E. Anderson</i>	
Effect of Ge Doping on the Martensitic Transformation and Magnetoelectric Behavior of Ni <sub>42</sub> Co <sub>8</sub> Mn <sub>39</sub> Sn <sub>11-x</sub> Ge <sub>x</sub> Melt-Spun Ribbons.....	184
<i>Andrés Rosales-Rivera, Diana Catalina Jaimés-Gómez, Nicolás A. Salazar-Henao, Harold Gómez-Córdoba, Daniel Salazar</i>	
Effect of Magnetostatic Interaction on the Single Domain Wall Propagation in Magnetic Microwires.....	186
<i>Paula Corte-Leon, Alvaro Gonzalez, Juan Maria Blanco, Valentina Zhukova, Mihail Ipatov, Arcady Zhukov</i>	
Effect of Magnetostriction on the Vibrations of Permanent Magnet Linear Synchronous Motors.....	188
<i>Renjie Fu, Bo Zhang, Ting Dong, Wei Feng, Bowen Ji</i>	
Effect of Sheet Thickness on the Excess Loss of Non-Oriented Electrical Steel .....	190
<i>Nilcilene A. L. Rodrigues, Fernando J. G. Landgraf</i>	
Effect of Synthesis Method and Calcination Temperature on the Physical Properties of Ni-NiO Nanocomposites .....	192
<i>Rômulo Augusto De Oliveira Pinto, João Maria Soares, Rodolfo Bezerra Da Silva, Marcio Assolin Correa, Felipe Bohn</i>	
Effect of Tension and Compression Stress on the Magnetic Losses in a Low-Carbon Steel.....	194
<i>Abderraouf Ouazib, Mathieu Domenjoud, Laurent Daniel</i>	
Effective Magnetic Anisotropy of Ni <sub>x</sub> Co <sub>1-x</sub> Fe <sub>2</sub> O <sub>4</sub> Nanoparticles .....	196
<i>Leonardo J. Dalla Costa, Marcio R. Freitas, Guilherme L. Gouveia, Ruth H. G. A. Kiminami, Adilson J. A. Oliveira, Alexandre J. Gualdi</i>	
Efficiency of Spin-Transfer Torque Assist Spin-Orbit Torque Magnetization Switching Under In-Plane External Field Application.....	198
<i>Da Pan, Daiki Oshima, Takeshi Kato</i>	
Efficient Grain Boundary Diffusion Technology in Sintered Nd-Fe-B Magnets: Nano-TbF <sub>3</sub> Powders Electrophoretic Suspension Preparation Via Sand-Milling.....	200
<i>Ming Ji, Weiqiang Liu, Zhanjia Wang, Haihui Wu, Yuqing Li, Dongtao Zhang, Ming Yue</i>	
Efficient Spin-Orbit Torque Magnetization Switching with Low Current Density in Crystalline Ferromagnetic Semiconductor.....	202
<i>Kyung Jae Lee, Sanghoon Lee, Xinyu Liu, M. Dobrowolska, Jacek K. Furdyna</i>	
Efficient Synthesis and Magneto-Optical Enhancement of Au-Fe <sub>3</sub> O <sub>4</sub> Hetero-Dimer Nanoparticles with Triiron Dodecacarbonyl.....	204
<i>Loi Tonthat, Tomoyuki Ogawa, Shin Yabukami</i>	
Electrical Manipulation of Noncollinear Antiferromagnetic State Via Orbital Hall Effect .....	206
<i>Hang Xie, Nan Zhang, Yuteng Ma, Xin Chen, Lin Ke, Yihong Wu</i>	

Electronic Structure and Magnetic Properties of the Full Heusler Alloys $Mn_2YAl$ ( $Y = Fe, Co, Ni$ ).....	208
<i>Evgeniy D. Chernov, Alexey V. Lukoyanov</i>	
Energy of a Fully Spin-Polarized Two-Dimensional Electron Gas Separated from Its Jellium Neutralizing Background.....	211
<i>Orion Ciftja</i>	
Enhanced Electrical Modelling of Spin Transfer Torque Magnetic Tunnel Junctions with Temperature Dependent Magnetic Parameters .....	213
<i>Aswin C. Venu, Nikhil Kumar</i>	
Enhanced SOT Efficiency in Pt/Co Systems with a NiO Interlayer for SOT-MRAM .....	215
<i>Michelle Wijshoff, Robert Carpenter, Giacomo Talmelli, Sebastien Couet, Claudia Fleischmann, Kristiaan Temst</i>	
Enhancement of Voltage-Controlled Magnetic Anisotropy in Orthogonally-Magnetized CoFeB/MgO/CoFeB.....	217
<i>Puyang Huang, Aitian Chen, Xinyu Cai, Di Wu, Xi-Xiang Zhang, Xufeng Kou</i>	
Enhancing Noise and Vibration Performance for a Traction Squirrel Cage Induction Machine Through Rotor Design Optimization .....	219
<i>Pengzhao Song, Omolbanin Taqavi, Ze Li, Glenn Byczynski, Narayan C. Kar</i>	
Estimation of Core Loss in Fe-Ni Powder Cores .....	221
<i>Mai Phuong Nguyen, Shigeyoshi Yoshida, Satoshi Okamoto, Takamichi Miyazaki, Yasushi Endo</i>	
Evaluating the Magnetic Hardening of Nd-Fe-B Magnets After Grain Boundary Diffusion: A Layer by Layer Approach .....	223
<i>Leonardo F. Antunes, Luis T. Quispe, Wagner C. Macedo, Mateus B. S. Dias, Leonardo U. Lopes, Sérgio M. Souza, Paulo A. P. Wendhausen</i>	
Evaluation of Hydrogen-Induced Degradation of Steel Through Multispectral Analysis of Magnetic Barkhausen Noise.....	225
<i>Grzegorz Psuj, Cesar G. Camerini, Michal Maciusowicz, Gabriela R. Pereira</i>	
Evidence of Spin-Polarized Current in Fe-Rich $NbFe_2$ Compound .....	227
<i>Mateus Bigolin Lorenzon, Antonio Marcos Helgueira De Andrade, Julio Schoffen, Milton Andre Tumelero, Paulo Pureur, Oliver Isnard, Fabiano Mesquita Da Rosa</i>	
Exchange Bias Effects in Bismuth Ferrite Nanostructures Produced by Pulsed Laser Deposition .....	229
<i>Diana M. A. Garcia, Rodrigo D. Santos, Angelo M. S. Gomes, Wallace C. Nunes</i>	
Experimental Verification of Orthogonal-Core-Type Variable Inductor with Permanent Magnets .....	231
<i>Hayato Hatakeyama, Shota Aizu, Kenji Nakamura, Takashi Ohinata, Kenji Arimatsu</i>	
Exploring Magnon-Magnon Coupling, Spin Hall Magnetoresistance, and Laser-Driven Spin Textures in 2D Van Der Waals Magnets .....	233
<i>C. W. F. Freeman, M. Dabrowski, P. S. Keatley, Z. Xue, A. K. Budniak, O. Kazakova, G. Eda, R. J. Hicken, H. Kurebayashi, M. Cubukcu</i>	
Extremophilic Microorganisms: An Alternative as Synthesizers of Ferromagnetic Nanoparticles.....	235
<i>Valentina Antúnez-Ossio, Jenny M. Blamey</i>	
Fast Calculation of High Frequency Air Gap Flux Density Harmonics by Frozen Permeability Method in Electrical Machines.....	237
<i>Sijie Ni, Jean Le Besnerais, Grégory Bauw, Raphaël Romary, Bertrand Cassoret</i>	

Fe <sub>2</sub> MnSn Heusler Alloy Based Rare-Earth-Free Permanent Magnets.....	239
<i>Junaid Jami, Rohit Pathak, Amrita Bhattacharya</i>	
Fe-Cr-Nb-B Magnetic Particles for Cancer Cell Destruction.....	241
<i>Horia Chiriac, Anca Emanuela Minuti, Cristina Stavila, Nicoleta Lupu</i>	
Ferris-Wheel Magneto-Optic Kerr Effect and Optical Hall Effect Technique.....	243
<i>Nadav Am-Shalom, Amit Rothschild, Maayan Korcia, Nirel Bernstein, Daniel Kaplan, Tobias Holder, Binghai Yan, Igor Rozhansky, Amir Capua</i>	
Ferromagnetic Behavior Induced by Structural Distortion in Pristine g-C <sub>3</sub> N <sub>4</sub> Pellets Prepared Via Isostatic Pressure .....	245
<i>J. C. R. Dos Santos, T. M. Lima, M. W. Paixão, A. A. Correa, E. C. Pereira, A. J. A. De Oliveira</i>	
First-Order Reversal Curve (FORC) Features of Ferrimagnetic and Antiferromagnetic Coupled Skyrmions.....	247
<i>Lucas S. Paralhães, Jeovani Brandão, Fanny Béron</i>	
First-Principles Study of Saturation Magnetization Flux Density in Nitrogen Defective $\alpha'$ -Fe <sub>8</sub> N <sub>x</sub> .....	249
<i>Yusuke Asari, Tomohiro Tabata, Masafumi Noujima, Shohei Terada</i>	
Flux-Driven Nonlinear Transient Model for Single Phase Transformers .....	251
<i>Yingying Wang, Jinhua Yu, Bolin Jin, Zuhuo Liang</i>	
Frequency Sensitivity Analysis of Magnetoquasistatic System with Voltage Or Current Excitation.....	253
<i>Seung Eun Rho, Il Han Park</i>	
Frequency Spectrum Analysis of Magnetic Field Strength for Effective Condition Monitoring of Magnetic Cores.....	255
<i>Hamed Hamzehbahmani</i>	
Frequency-Domain Propagation in Multiconductor Submarine Power Cables .....	257
<i>Rooney R. A. Coelho, Gabriel De Castro Biage, Mario Leite P. Filho, José Roberto Cardoso</i>	
Graphical Root Cause Analysis of Magnetically Induced Vibrations in Synchronous Machines .....	259
<i>Allan De Barros, Amir Ebrahimi, Babette Schwarz, Bernd Ponick</i>	
Halbach Array Collaborative Robot End Effector for Advanced Handling of Magnetic Materials .....	261
<i>Logan Schorr, Ian Scaparo, Ishaan Thakur, John Peter Nunez, Fady Hanna, Ravi L. Hadimani</i>	
Harnessing Magnetic-Field Driven Actuation for Microscale Motion in MEMS-Inspired Device.....	263
<i>Ludovico Cestarollo, Amal El-Ghazaly</i>	
High Frequency Response of Magnetically Coupled Co/Cu/CoFeB Trilayers .....	265
<i>Zengxin Wei, David Navas, Sergey A. Bunyaev, Marian Abellan, Carlos Garcia, Gleb N. Kakazei, Manuel Vazquez</i>	
Highly Efficient Experimental System for Thermomagnetic Coefficient Calculations.....	267
<i>C. M. R. Valença, J. P. M. Oliveira, A. De Moraes, A. Ferreira, F. Vaz, F. Bohn, M. A. Correa</i>	
High-Resolution Flaw Detection Using Eddy-Current Probe Array Based on Giant Magnetoresistance Sensors.....	269
<i>Long-Vu Bui, Jen-Tzong Jeng, Hua-Chih Huang, Huu-Thang Nguyen, Van-Dong Doan, Truong-Han Nguyen</i>	

How Accurate Are Magnetic Loss Measurements? .....	271
<i>Massimo Pasquale, Enzo Ferrara, Nicoleta Banu, Fausto Fiorillo, Luciano Rocchino, Michal Ulvr, Franziska Weickert, Korbinian Pfnuer, Joachim Luedke, Katja Hoffmann, Stuart Harmon, Daniel Brunt, Adam Wilson</i>	
Hybrid Three-Layer Sub-Harmonic Synchronous Machine Using Consequent Pole Permanent Magnets .....	273
<i>S. M. Sajjad Hossain Rafin, Qasim Ali, Fei Zhao, Osama A. Mohammed</i>	
Hysteresis and Kinetics of the First-Order Phase Transition: Losses in Magnetocaloric Effect Illustrated on the Ni-Mn-Ga-Cu .....	275
<i>Elvina Dilmieva, Yuri S. Koshkid'Ko, Alexander P. Kamantsev, Dewei Zhao, Jian Liu, Steffen Krämer</i>	
IMU-Based Robotic Finger Force Sensing with Modular Soft Actuators .....	277
<i>Sheng-Guan Lin, Hsien-Ting Chang, Jen-Yuan Chang</i>	
Influence of Electromagnetic Stirring During the Solidification on the Structure and Magnetic Properties of 2% Si Electrical Steel.....	279
<i>Francisco G. Toledo, Sebastião Da C. Paolinelli, José R. De Oliveira, Daniel L. Rocco</i>	
Influence of Friction on High Speed Permanent Magnet Bearing Rings .....	281
<i>Tan Tan, Daniel F. Förster, Ulrich Pabst, Ulrich Giesen, Michael Butzek, Ghaleb Natour</i>	
Influence of Leakage Inductance of a Transformer Operating in a DC Resistance Welding Machine on Welding Conditions .....	283
<i>Zygmunt Mikno, Mariusz Stepień</i>	
Influence of Stator Core Manufacturing Displacement on the Electromagnetic Performance of Modular Permanent Magnet Machine .....	285
<i>Hongjun Liu, Jiangtao Yang, Jianzong Yu, Shoudao Huang</i>	
Innovative SynRM Rotor Design for Simplified Construction and Enhanced Mechanical Reliability in High-Speed Applications.....	287
<i>Gabriel B. Da Silveira, Roberto P. Homrich, Igor P. Wiltuschnig, Aly F. Flores Filho, Aurelio T. Salton, Paulo R. Eckert</i>	
Interface Phenomena and Magnetic Hyperthermia of Fe <sub>3</sub> O <sub>4</sub> Nanoparticles .....	289
<i>Mirela B. Alves, Adriele A. Almeida, Pablo Tancredi, Diego Muraca</i>	
Interlaminar Faults in a GOFesi Laminated Magnetic Core: Measurements and Simulations .....	291
<i>Benjamin Ducharne, Hamed Hamzehbahmani, Yanhui Gao</i>	
Investigating Unusual Dynamics: Time and Frequency-Dependent Variations in Specific Power Absorption of Magnetite Nanoparticles in Magnetic Hyperthermia .....	293
<i>Gustavo Soares Da Silva, Adriele Aparecida De Almeida, Fernando Fabris, Diego Muraca</i>	
Investigation of High Torque Density Yokeless-Rotor PMSM with Large Diameter to Axial Length Ratio for Aircraft Propulsion .....	295
<i>Qiuyu Lin, Zhuoran Zhang, Han Xue, Huamin Gao</i>	
Investigation of Partially Oxidized Cu Capping Effect on CoFeB/Pt/CuO <sub>x</sub> Multilayers by Electrical and Optical Methods.....	297
<i>Yuteng Ma, Nan Zhang, Hang Xie, Lin Ke, Yihong Wu</i>	
Investigation of the Dynamic Magnetic Properties in RuO <sub>2</sub> /Co-Fe-B Stack Film .....	299
<i>T. V. A. Nguyen, Y. Saito, H. Naganuma, S. Ikeda, T. Endoh</i>	

Itinerant SDW Phases, Contributions from the CrNb Dilute Alloys .....	301
<i>P. E. N. De Souza, L. M. Oliveira, F. Yokaichiya, P. C. De Camargo, A. J. A. De Oliveira</i>	
Laser-Enhanced Domain Wall Motion in GdFeCo and GdFe Nanowires for Racetrack Memory Applications.....	303
<i>Mojtaba Mohammadi, Satoshi Sumi, Kenji Tanabe, Yoshinobu Nakatani, Hiroyuki Awano</i>	
Leveraging Spintronic Nonlinear Random Projections for Handwritten Digit Recognition .....	305
<i>Anatole Moureaux, Simon De Wergifosse, Chloé Chopin, Flavio Abreu Araujo</i>	
Load Operations Analysis of a Hybrid Excited Flux Switching Vernier Alternator for Renewable Energy Conversion .....	307
<i>H. Nasser, V. Dyck, E. Lemains, Y Amara, F. Chabour, J. J. H. Paulides</i>	
Local Magnetization Processes at Constricted Regions in Amorphous Fe <sub>80</sub> B <sub>20</sub> Stripes with Nanometric Thicknesses.....	309
<i>U. Urdiroz, M. Alonso, F. J. Palomares, R. Fernandez-Jimenez, J. Soler-Morala, F. Cebollada, M. Sánchez Agudo, A. Gómez, M. T. Magaz, I. V. Soldatov, R. Schäfer, J. M. González</i>	
Local Temperature Control of Magnon Frequency and Direction of Supercurrents in a Magnon Bose–Einstein Condensate .....	311
<i>Alexander A. Serga, Matthias R. Schweizer, Franziska Kühn, Victor S. L'Vov, Anna Pomyalov, Georg Von Freymann, Burkard Hillebrands</i>	
Localization of a Crack in Moving Cylindrical Ferromagnetic Rods by Measuring the Fourier Coefficients of the Leakage Magnetic Flux.....	313
<i>Kanta Shiku, Masafumi Kuromizu, Yuji Gotoh, Takaaki Nara</i>	
Loss Analysis in Spoke Dual-Stator Permanent Magnet Vernier Machine Considering Stator Mutual Effect .....	315
<i>Wenyuan Mi, Jincheng Yu, Fei Zhao, Zheng Cai, Hang Zhao</i>	
Magnetic Ageing of Electrical Steel: Precipitates Impact on Magnetic Losses.....	317
<i>Mário Lúcio Ferreira Da Mota, Wylton Leone França, Ludmilla Ferreira Costa, Johnatan Fernando Dias, Luciana Nascimento Oliveira Favarato, Thales Harvey Crisóstomo Barros, José Rogério De Oliveira, Leonel Muniz Meireles, Daniel Leandro Rocco</i>	
Magnetic and Calorimetric Properties in EuSe and EuSe <sub>0.93</sub> S <sub>0.07</sub> Compounds .....	319
<i>Julieth Caro Patiño, Denis Paulo Neto, Angelo M. S. Gomes</i>	
Magnetic and Elasto Optic Dynamic on Co/Pt Multilayers.....	321
<i>Tiago Fernandes, Leandro H. F. De Andrade, Maximiliano D. Martins, Juliana Zarpellon, Dante H. Mosca, Franklin M. Matinaga</i>	
Magnetic and Thermal Modelling of Hollow Conductors for Improved Cooling and Force Density of Coreless Linear Motors.....	323
<i>S. G. J. Geelen, M. Curti, E. A. Lomonova</i>	
Magnetic and Transport Properties in Ion-Irradiated Cr <sub>2</sub> AlC.....	325
<i>Joao S. Cabaco, Ulrich Kentsch, Fangchao Long, Fabian Ganss, Jürgen Lindner, Jürgen Faßbender, Christoph Leyens, Rantej Bali, Richard Boucher</i>	
Magnetic Anisotropy Control Through Mechanical Deformations: Study of Magnetoelastic Coupling .....	327
<i>Diego J. Pérez, Joaquín A. E. Espina, Juan Francisco Fuentealba, Rafael M. Freire</i>	

Magnetic Behavior of Nanoporous FeCo, Fully and Partially Dealloyed by Liquid Metal .....	329
<i>Benjamin Ducharne, Soo-Hyun Joo, Pierre-Antoine Geslin, Eric Wasniewski, Hidemi Kato</i>	
Magnetic Coupling on Multilayer of NdFeB/Dy Films Grown by Magnetron Sputtering.....	331
<i>Alisson Carlos Krohling, Luis Eugenio Fernandez-Outon, José Domingos Ardisson</i>	
Magnetic Domain Walls in Rapidly Solidified Magnetostrictive and Non-Magnetostrictive Submicron Amorphous Wires.....	333
<i>Tibor-Adrian Óvári, Gabriel Ababei, George Stoian, Sorin Corodeanu, Horia Chiriac, Nicoleta Lupu</i>	
Magnetic Hardness of Fe <sub>3</sub> C-Based Alloys: A First-Principles Study .....	335
<i>Justyna Snarski-Adamski, Justyna Rychly-Gruszecka, Mirosław Werwinski</i>	
Magnetic Hysteresis Models for 3D Printed Composite Materials .....	336
<i>Martin Ralchev, Valentin Mateev, Iliana Marinova</i>	
Magnetic Measurement System and Environmental Magnetic Field Compensation at CEM.....	338
<i>Sergio Moltó González, Yolanda Álvarez Sanmamed, Javier Diaz De Aguilar Rois</i>	
Magnetic Particle Spectroscopy (MPS)-Based Bioassays.....	340
<i>Kai Wu, Vinit Kumar Chugh, Venkatramana D. Krishna, Arturo Di Girolamo, Yongqiang Andrew Wang, Maxim C.-J. Cheeran, Jian-Ping Wang</i>	
Magnetic Properties and Applications of Glass-Coated Ferromagnetic Microwires.....	342
<i>Valentina Zhukova, Paula Corte-Leon, Mihail Ipatov, Alfonso García-Gomez, Juan Maria Blanco, Arcady Zhukov</i>	
Magnetic Properties Dependence on Geometrical Parameters of Electroless-Plated Ni-Based Rhomboidal Nanotubes .....	344
<i>Falk Muench, Sandra Schaefer, Miguel Méndez, Jose Angel Fernández-Roldán, Ana Silvia González-García, Víctor Vega, Ulrike Kunz, Wolfgang Ensinger, Javier García, Víctor M. Prida</i>	
Magnetic Properties Stability from 5 K to 800 K in Metastable $\gamma$ -Fe <sub>85</sub> Pd <sub>15</sub> Nanowires.....	346
<i>Paula G. Bercoff, Soledad Aprea, Eva Céspedes, José Luis Martínez, Silvia E. Urreta, Manuel Vázquez</i>	
Magnetic Skyrmions in Synthetic Ferri- And Antiferromagnets .....	348
<i>Axel Hoffmann</i>	
Magnetically Actuated Compliant Soft Robotic Gripper for Grasping Delicate Food Items .....	350
<i>Young T. Choi, Christine M. Hartzell, Norman M. Wereley</i>	
Magnetism and Spin-Orbit Coupling in Iron Chalcogenide Superconductors .....	352
<i>Juntao Yao, Genda Gu, Qiang Li</i>	
Magnetization Dynamics in La <sub>0.7</sub> Sr <sub>0.3</sub> MnO <sub>3</sub> /LaTiO <sub>3</sub> ( $\delta$ )/SrTiO <sub>3</sub> (001) Thin Films .....	354
<i>Kishori Lal, Pramod Ghising, B. Samantaray, Zakir Hossain</i>	
Magnetization Reversal and Direct Observation of Magnetic Domains on FePt Thin Films.....	356
<i>Augusto Román, Javier E. Gómez, Alejandro Butera, Paolo Vavassori, Laura B. Steren</i>	
Magnetocaloric Effect of Uniformly Packed Ferromagnetic Gd Nanoparticle Clusters .....	358
<i>A. S. Freitas, Ana L. Dantas, C. M. Souza, A. S. Carriço</i>	

Magnetoelastic Constraint on Sensor-Intrinsic Noise.....	360
<i>Elizaveta Spetzler, Benjamin Spetzler, Johan Arbustini, Dennis Seidler, Andreas Bahr, Jeffrey McCord</i>	
Magnetoelastic Resonators Functionalized with Metal Organic Frameworks for Wireless Humidity Detection .....	362
<i>Beatriz Sisniega, Roberto Fernández De Luis, Jon Gutiérrez, Alfredo García-Arribas</i>	
Magneto-Structural Properties of Co <sub>2</sub> FeIn Heusler Nanowires for Spintronics Applications.....	364
<i>Ana I. Jiménez, Javier García, Víctor Vega, Yolanda Álvarez, Ana S. Gonzalez, Enrique D. Barriga-Castro, Carlos Luna, Victor M. Prida</i>	
Magnetotransport Properties and Spin Textures in Gd <sub>5</sub> Ge <sub>4</sub> .....	366
<i>Fabiano Mesquita, Noelia Marcano, Luis F. Barquin, Sergio Magalhães, Milton Tumelero, David Möckli, Paulo Pureur</i>	
Maximizing Competing Spin Current of the W/Pt/Ferromagnet Devices with Spin-Torque Ferromagnetic Resonance Analysis.....	368
<i>Ju Hsu, Chih-Wei Cheng, Yu-Hsin Huang, Yu-Hui Wu, Yu-Lon Lin, Wen-Yueh Chang, Yuan-Chieh Tseng</i>	
Maximum-Torque-Per-Watt Control Framework for Variable Flux Reluctance Machines with Magnetic Saturation and Cross-Coupling.....	370
<i>Göksenin Hande Bayazit, Juan Escarate, Doga Ceylan, Esin Ilhan Caarls, Jan Schellekens, Konstantin O. Boynov, Elena A. Lomonova</i>	
Melanoma Cell Internalization of Spin-Vortex Nanodisks for Cancer Treatment .....	372
<i>Raquel Zurbano, Carolina Redondo, Izaro Solozabal, María Dolores Boyano, Rafael Morales</i>	
Microcoils for Magnetisation Reset in Stroboscopic Optical Pump-Probe Experiments. ....	374
<i>Connor R. J. Sait, Thomas H. J. Loughran, Maciej Dabrowski, Paul S. Keatley, Robert J. Hicken</i>	
Micromagnetic Aspects of the Magneto-Impedance Response of the FM-I-NM-I-FM Multilayer Film Driven by a High-Frequency Current .....	376
<i>Gleb D. Demin, Anastasiya D. Fedina, Nikolay A. Djuzhev</i>	
Micromagnetic Neural Stimulation and Spintronic Neural Sensing.....	378
<i>Renata Saha, Denis Tonini, Matthew S. Hopper, Abhinav Goyal, Jason Yuen, Yoonbae Oh, Zachary Sanger, Sadegh Faramarzi, Maple Shiao, Dusty Van Helden, Robert P. Bloom, Onri J. Benally, Kai Wu, Susan A. Keirstead, Theoden I. Netoff, Walter C. Low, John Osborn, Kevin E. Bennet, Kendall H. Lee, Hojin Shin, Jian-Ping Wang</i>	
MMF Harmonic Analysis of Multi-M-Phase Fractional-Slot Permanent-Magnet Machines with Partial Operating Winding Sets .....	380
<i>Wenting Wang, Lijian Wu</i>	
MnGaGe Nanomagnets Epitaxially Grown on GaAs.....	382
<i>Ravel M. T. Araujo, Carlos A. R. Costa, Itamar T. Neckel, Dante H. Mosca</i>	
MTJ Based NV-SRAM Macro with Enhanced Read Margin and Low Static Power in FDSOI Process.....	384
<i>Jiongzhe Su, Hao Cai</i>	
Multiplanar Imaging with a Single-Sided MPI Scanner.....	386
<i>Christopher McDonough, John Chrisekos, Alexey Tonyushkin</i>	

Nanoribbon of Zigzag Silicene for Spin Field Effect Transistor with Low Voltage Bias.....	388
<i>Ashutosh Shah, Arti Kashyap</i>	
Neuromorphic Computing with the Ferromagnetic/Antiferromagnetic SOT Systems: The Role of Emerging Antiferromagnetic Phase.....	390
<i>Durgesh Kumar Ojha, Yu-Hsin Huang, Yu-Lon Lin, Ratnamala Chatterjee, Wen-Yueh Chang, Yuan-Chieh Tseng</i>	
Nonlinear Inductance Matrix Modeling Method for Multi-Winding Transformers .....	392
<i>Yingying Wang, Bolin Jin, Zuhuo Liang, Jinhua Yu</i>	
Novel Self-Excited Brushless Topology for Wound Field Vernier Machine .....	394
<i>Syed Sabir Hussain Bukhari</i>	
Numerical Modeling of the Magnetoimpedance Effect from Micromagnetism.....	396
<i>Guillermo Gestoso, David De Cos, Eduardo Fernández, Alfredo Garcia-Arribas</i>	
On the Behavior of the Magnetocaloric Quantities $\Delta S_{iso}$ and $\Delta T_{ad}$ .....	398
<i>Julieth Caro Patiño, Nilson Antunes De Oliveira</i>	
Online Permanent Magnet Demagnetization Monitoring Using Model Reference Adaptive System Considering VSI Nonlinearity .....	400
<i>Shiva Garaei, Chunyan Lai, Lakshmi Varaha Iyer</i>	
Optimization Design of Tubular Permanent Magnet Synchronous Linear Motors Considering Machining and Assembly Errors .....	402
<i>Qingle Wu, Guolai Yang, Yuxin Yang, Wenlong Li</i>	
Optimization of Layer Thicknesses for Dual-Layer Bit-Patterned Media Recording (BPMR) Systems.....	404
<i>Natthakan Rueangnetr, Chanon Warisam, Simon John Greaves</i>	
Orbital Current Driven Magnetic Memory.....	406
<i>Yuxuan Yao, Daoqian Zhu, Shiyang Lu, Hongchao Zhang, Danrong Xiong, Hong-Xi Liu, Kaihua Cao, Weisheng Zhao</i>	
Overload Capabilities of Synchronous Motors.....	408
<i>Hussein Nasser, Salim Asfirane, Yacine Amara, Ferhat Chabour</i>	
Parallel Line Type Permeameter for Thick Magnetic Material to Reduce the Error of Demagnetizing Field .....	410
<i>Shin Yabukami, Asahi Mashiko, Kazuhiko Okita</i>	
Parametric Sensitivity Analysis and Efficiency Improvement of Electromagnetic Repulsion Mechanism Based on Orthogonal Experiment Design.....	412
<i>Wenying Yang, Fansong Meng, Daoyi Wu</i>	
Performance Analysis of Single-Phase Inverter-Fed Permanent Magnet Synchronous Motor with Ladder-Connected Winding.....	414
<i>Masayuki Kato, Kazuki Ito</i>	
Performance Evaluation of TRL-6 Magnetic Refrigeration Prototypes .....	416
<i>Guilherme F. Peixer, Alan T. D. Nakashima, Natália M. De Sá, Yan Azeredo, Anderson Lorenzoni, Glenda M. Da Luz, Rogério S. Sucaria, Allan M. Döring, Paulo V. De Faria, Bernardo P. Vieira, Cristiano S. Teixeira, Jaime A. Lozano, Jader R. Barbosa</i>	



Performance Improvement of Brushless Exciter for Aircraft Wound Rotor Synchronous Machine Based on Magnetic Slot Wedge.....	418
<i>Weixiao Bian, Zhuoran Zhang, Liqiang Li, Jincai Li, Yanhui Li</i>	
Piezomagnetism in Cr Doped Fe <sub>65</sub> Co <sub>35</sub> Alloy.....	420
<i>Iris Braga Silva, Fernando Froes, Higor Natan Alves Ferreira, Olivier Hubert, Cristina Bormio-Nunes</i>	
PM-Free Axial-Flux Motors for Transport Electrification.....	422
<i>Amin Mahmoudi, Zhi Cao, Solmaz Kahourzade, Wen Soong</i>	
Polarity Influence of Poles on Positional Accuracy in Absolute Encoders.....	424
<i>Kai-Yang Peng, Jen-Yuan Chang</i>	
Position Estimation Method of a Permanent Magnet Synchronous Motor Based on Moving Horizon Estimation EKF Algorithm.....	426
<i>Guang-Zhong Cao, Hao-Han Zhou, Su-Dan Huang, Hong-Jin Hu, Jiang-Biao He</i>	
Precision and Quantum Measurement Using Photons Phonons and Spins.....	428
<i>Michael E. Tobar</i>	
Predicting Magnetic Losses in HGO Steel Sheets Under Distorted Induction Waveform .....	432
<i>N. Banu, M. Pasquale, F. Fiorillo</i>	
Probabilistic Computing with p-Bits: Optimization, Machine Learning and Quantum Simulation .....	434
<i>Kerem Y. Camsari</i>	
Process Development for Synthesizing FeCoN-Based Magnetic Materials.....	436
<i>Tomohiro Tabata, Yusuke Asari, Masafumi Nojima, Shohei Terada</i>	
Producing High-Ratio Nanowires by Pressure-Induced Infiltration into Anodized Aluminum Oxide Nanoporous Template.....	438
<i>Leonardo Tomiatti, Alberto A. Mendonça, Fanny Béron</i>	
Progress in Nanofabrication of Superconducting Devices and Diverse Applications .....	440
<i>A. Rebello, N. Y. Klein, L. M. Ruela, E. Martins, F. Rouxinol, I. S. Oliveira, J. P. Sinnecker</i>	
Proposal of a Bearingless Consequent-Pole Motor Using Combined Winding with Functions of Three-Phase Radial Suspension and Single-Phase Motor Driven by Zero-Sequence Current .....	442
<i>Yusuke Fujii, Kaito Tanaka</i>	
Quantum Thermal Expectation Values from an Effective Atomistic Spin Dynamics Model Using Path Integrals.....	444
<i>Thomas Nussle, Stam Nicolis, Joseph Barker</i>	
Quaternary Neural Network Equalization for Three-Dimensional Magnetic Recording.....	446
<i>Ke Luo, Yufei Wu, Yanzhe Liao, Shaobing Wang, Yugen Jian, Jincai Chen, Ping Lu</i>	
Recent Advances in Modeling $\Delta E$ -Effect Magnetic Field Sensors .....	448
<i>Fatih Ilgaz, Elizaveta Spetzler, Patrick Wiegand, Franz Faupel, Robert Rieger, Jeffrey McCord, Benjamin Spetzler</i>	
Reconfigurable Magnon-Based Radio Frequency Filters.....	450
<i>Andrea Del Giacco, Felix Kohl, Alberto Toniato, Matthias Wagner, Federico Maspero, Andrea Cattoni, Philipp Pirro, Riccardo Bertacco</i>	

Recycling Nd-Fe-B End-Of-Life Magnets with Different Levels of Oxidation Using the Magnet-To-Magnet Approach.....	452
<i>Wagner C. Macedo, Leonardo F. Antunes, Bruno L. Fertig, Caio F. Sampietro, Douglas A. P. Silva, Nério V., Sérgio M. Souza, Paulo A. P. Wendhausen</i>	
Reducing Energy Waste by Tuning Martensite in Heusler Alloys.....	454
<i>Alberto Mendonça, Luis Ghivelder, Pablo Bernardo, Lesley Cohen, Angelo Gomes</i>	
Relating Structural Sensitivities and Helical Magnetic Order of MnSi.....	456
<i>S. Shanmukharao Samatham, Akhilesh Kumar Patel, Santhosh Kumar A., A. K. Sinha, M. N. Singh, S. Shravan Kumar Reddy, Nataraju Gandla, K. G. Suresh</i>	
Reluctance Network Model of V-Type IPMSM for Accurate and Practical Design.....	458
<i>Yoshiki Hane, Kenji Nakamura</i>	
Remote Sensing of Nanoscale Displacements Through Detection of Magnetic Field Gradients with Magnetic Tunnel Junction Sensors.....	460
<i>Artem Talantsev, Tim Boehnert, Andre Araujo, Elvira Paz, Luana Benetti, Ricardo Ferreira</i>	
Research on Air-Gap Field Modulation Effect of Torque Enhanced Hybrid Permanent Magnet Motor.....	462
<i>Yunyun Chen, Xin Zhou, Mingjie Lu, Yushan Xu</i>	
Research on High Performance TMR-Superconducting Composite Magnetic Sensor and Performance Optimization.....	464
<i>Siyuan Han, Yue Wu, Zhenhu Jin, Jiamin Chen</i>	
Research on the Performance of Bidirectional Field Modulation Machine with Separated Type PM Excitation with Different Slot-Pole Combinations.....	466
<i>Yu Zhang, Haitao Wang, Chao He, Heng Zhu</i>	
Restoration of Magnetic Order in Heavy Metal Doped Spin Glass.....	468
<i>S. Shanmukharao Samatham, Akhilesh Kumar Patel, Parul Khandelwal, S. Shravan Kumar Reddy, Gowrinaidu Babbadi, M. Chandra Sekhar, Muralikrishna Patwari, K. G. Suresh</i>	
RTD Fluxgate Sensors Based on Twisted Glass-Coated Microwires.....	470
<i>Sorin Corodeanu, Costică Hlenschi, Horia Chiriac, Tibor-Adrian Óvári, Nicoleta Lupu</i>	
Self-Generation of Spatiotemporal Parametric Patterns in Active Ring Resonators Based on Single- And Bicomponent Magnonic Quasicrystals.....	472
<i>Anastasia S. Bir, Sergei V. Grishin, Dmitrii V. Romanenko, Sergei A. Nikitov</i>	
Self-Induced Magnetic Anisotropy in 3D Printed Ferromagnetic Composites.....	474
<i>Arnaud Le Saos-Kauten, Alexis Chevalier, Azar Maalouf, Antoine Hoëz, Julien Ville, Jean-Luc Mattei, Vincent Laur</i>	
Sensorless Magnetization Current Control for Stable Connection and Separation of Electropermanent Magnet.....	476
<i>Masayuki Kato, Fumiya Kitayama</i>	
Shape Optimization of Electric Motors Using 2.5-D Continuum Sensitivity Analysis.....	478
<i>Eunchae Jung, Kyungsik Seo, Il Han Park</i>	
Short-Time Annealing Enhancing the Magnetic Properties and Microstructure Uniformity of Melt-Spun (Nd,Pr)-Fe-B Ribbons.....	480
<i>Lin Liu, Yuqing Li, Jinjin Wang, Lingqi Liu, Mengying Bian, Hongguo Zhang, Ming Yue</i>	

Simulations of Experimentally Detected Ambient Skyrmions in Symmetric Synthetic Antiferromagnetic Multilayers .....	482
<i>Lucas Scaranari Palhares, Thiago Moreno Batistel, Jeovani Brandão, Fanny Béron</i>	
Smart Predictions: Machine Learning in Constructing Sm-Fe-V Phase Diagram .....	484
<i>Pelin Tozman, Aaron Dextre Zamalloa, Alex Aubert, Konstantin Skokov, Oliver Gutfleisch</i>	
Sound as an Additional Tool for Spin-Wave Dynamics Analysis .....	486
<i>Santa Pile, Oleg Lesota, Silvan David Peter, Christina Humer, Martin Gasser</i>	
Spin and Orbital Moments of Magnetic Topological Insulator $\text{MnBi}_2\text{Te}_4$ Epitaxial Thin Films .....	488
<i>Jiabao Sun, Shanshan Liu, Faxian Xiu, Wenqing Liu</i>	
Spin-Orbit Torque in $\alpha$ -W-Based Magnetic Tunnel Junction .....	490
<i>Mariusz Cierpial, Krzysztof Grochot, Jakub Mojsiejuk, Jerzy Wrona, Mehran Vafae, Tianxiang Nan, Witold Skowronski</i>	
Spin-Orbit Torque Switching of $\text{Mn}_3\text{Sn}$ in Configuration II .....	492
<i>Zhengde Xu, Xue Zhang, Yixiao Qiao, Gengchiao Liang, Shuyuan Shi, Zhifeng Zhu</i>	
Spin-Triplet Supercurrent Optimization in Ferromagnetic Josephson Junctions .....	494
<i>Robert M. Klaes, Norman O. Birge</i>	
Static and Dynamic Magnetic Properties in Layered Synthetic Antiferromagnets .....	496
<i>Yaqi Rong, Lu Sun, Fengyu Liu, Tao Wu, Yumeng Yang</i>	
Strain-Induced Oxygen Vacancies and Ferromagnetic Order Near the Interface in $\text{CaMnO}_3$ Thin Films .....	498
<i>Joaquín Gajst, Juan Pablo Coronel, José Santiso, Federico J. Williams, Laura B. Steren</i>	
Stress-Induced Magnetization Process in Shifted Grain-Oriented Steel Ring Cores .....	500
<i>Samuel Dobák, Ján Fúzer, Ivan Petryshynets, František Onderko, Peter Kollár, František Kovác</i>	
Structural and Magnetic Characterization of a Ferrofluid Obtained Through an Economical Way of Chemical Synthesis .....	502
<i>Iván Cely Orjuela, Patricia C. Rivas Rojas, Pablo Tancredi, Oscar Moscoso Londoño, Leandro M. Socolovsky</i>	
Structural and Magnetic Properties of Ultrathin Films Calculated from First-Principles .....	504
<i>Justyna Rychly-Gruszecka, Joanna Marciniak, Justyn Snarski-Adamski, Jakub Meixner, Wojciech Marciniak, Ján Ruzs, Mirosław Werwinski</i>	
Structural Design and Thermal Management Efficiency Study of a High-Stability Doubly-Excited Synchronous Generator .....	506
<i>Dan Li, Yuhao Cao, Wenmao Liu</i>	
Structure and Magnetic Properties of $\text{Co}_2\text{FeGa}$ Heusler Alloy Films Grown by Sputtering Deposition .....	508
<i>Bruno L. D. Dos Santos, Alisson C. Krohling, Waldemar A. A. Macedo</i>	
Study and Development of a Sensor for Touchless Capacitive Computer Interface. ....	510
<i>Gabriel Bacon Carvalho, Gerardo A. I. Pizo</i>	
Study of Disorientation in Polycrystalline Hexaferrites and Application to the Design of a Ka-Band Planar Self-Biased Isolator .....	512
<i>Vincent Laur, Antoine Hoëz, Jean-Luc Mattei, Richard Lebourgeois</i>	

Study of the Magnetolectric Effect in PVDF/Ni Composites .....	514
<i>Federica Luciano, Arne De Coster, Erika Giorgione, Dominika Wysocka, Stefan De Gendt, Florin Ciubotaru, Christoph Adelman</i>	
Study on the Effect of Structural Scale of Hollow Particles and Core-Shell Particles on the Properties of Magnetorheological Fluids.....	516
<i>Shun Wang, Wenjiao Han, Bin He</i>	
Study on Using Magnetodielectric Ferrite for Impedance Matching to Improve the Transmission-Range of Implantable Antenna .....	518
<i>Yong-Wei Li, Quan-Yuan Feng</i>	
Super-Resolution in Computed Tomography Images: An Integrated Approach of Artificial Intelligence and LapSRN Techniques.....	520
<i>Artur M. C. Guimarães, Gerardo I. A. Pizo</i>	
Suppressing the Three-Phase Flux Linkage Asymmetry of Modular Flux-Switching Permanent-Magnet Linear Machine by Rearranging Windings.....	522
<i>Zhe Ke, Heyun Lin, Jin Xu</i>	
Surface Spin Wave Resonance in NiFe/Zr Multilayers .....	524
<i>M. Solino Pessoa, F. Pelegrini, A. Biondo, V. P. Nascimento, E. Baggio-Saitovitch</i>	
Synthesis and Characterization of CeO <sub>2</sub> /G-C <sub>3</sub> N <sub>4</sub> Nanocomposites: Structural, Morphological, Optical, and Magnetic Properties Investigation.....	526
<i>Ronei Cardoso De Oliveira, Ernesto Chaves Pereira, Adilson Jesus Aparecido De Oliveira</i>	
Synthetic Antiferromagnetic/Ferromagnetic Spin-Orbit Torque Devices with an Oxide Spacer .....	528
<i>Yu-Hsin Huang, Chih-Wei Cheng, Ju Hsu, Yu-Hui Wu, Yu-Lon Lin, Wen-Yueh Chang, Yuan-Chieh Tseng</i>	
Systematic Optimization of Electromagnet Hardware for Electromagnetic Suspension: A Fusion of Simulation and Multi-Objective Optimization Techniques .....	530
<i>Julian Demicoli, Oliver Kleikemper, Sebastian Steinhorst</i>	
Tailoring the Exchange Bias by AFM Interface Patterned Control .....	532
<i>G. O. G. Rebouças, Ana L. Dantas, A. S. Carriço</i>	
Tensile Stress Effect on Magnetic Barkhausen Noise of Silicon Steel Single Crystal (Measurements and Simulations).....	534
<i>Benjamin Ducharne, Eric Wasniewski, Laurent Daniel, Mathieu Domenjoud, Patrick Fagan</i>	
Test Bench for Characterization of HTS Tapes at Low Magnetic Fields Based on Additive Manufacturing .....	536
<i>Krzysztof Habelok, Kamil Gruszczyk, Pawel Lasek, Damian Koterla, Mariusz Stepień</i>	
The Critical Behavior of Magnetization Near the Curie Temperature in Highly Spin-Polarized Heusler Alloy Co <sub>2</sub> TiGa <sub>0.3</sub> Sn <sub>0.7</sub> .....	538
<i>Hideki Aoshima, Iduru Shigeta, Akiko Nomura, Kunio Yubuta, Touru Yamauchi, Rie Y. Umetsu, Takeshi Kanomata, Masahiko Hiroi</i>	
The Effect of CoFeB Electrodes Compositions on Bias Voltage Dependence of Sensitivity in Tunneling Magnetoresistance Sensors.....	540
<i>Piotr Wisniewski, Lukasz Fusnik, Susana Cardoso, Paulo P. Freitas, Jerzy Wrona</i>	

The Effect of Thermal Fields on Spin Hall Switching in Devices Stabilized by In-Plane Magnetocrystalline Anisotropy.....	542
<i>Shreyes Nallan, Jian-Gang Zhu</i>	
The Harmonic-Balanced Finite Element Method with Laplace Transform for Transient State Nonlinear Problems.....	544
<i>Shengze Gao, Xiaojun Zhao, Yanhui Gao, Kazuhiro Muramatsu, Takashi Todaka</i>	
The Impact of Fe <sup>2+</sup> and Fe <sup>3+</sup> Segregation on the Structural and Magnetic Properties of ZnO/Fe Multilayers Deposited Via Sputtering: A Study Using EELS and EDS.....	546
<i>N. R. Checca, D. Franceschini, E. Baggio Saitovitch, Y. T. Xing</i>	
The Influence of SiO <sub>2</sub> Layer on the Temperature Stability of SMC Based on Iron and Mn-Zn Ferrite.....	548
<i>Ján Füzér, Sviatoslav Vovk, Samuel Dobák, Peter Kollár, Radovan Bureš, Mária Fáberová, Vasiliki Tsakaloudi, Vassilios Zaspalis</i>	
The Potential of SmCo <sub>4</sub> B-Based Compounds as a Permanent Magnet.....	550
<i>P. Tozman, A. Aubert, K. Skokov, H. Sepehri-Amin, Y. Skourski, Y. Ishii, Y. H. Matsuda, O. Gutfleisch</i>	
The Scalable Analytical Model for Predicting the Performance of SPM Machine with Arbitrary Magnet Shape.....	552
<i>Zhaokai Li, Bin Liu, Peter Fransson, Luca Peretti</i>	
The Study the Characteristics the Magnetic Response of Microspirals Made of an Amorphous Magnetic Alloy.....	554
<i>Shendrikova Lidiia, Alekhina Yulia, Alexander Shalygin, Perov Nikolai</i>	
The Vibration Calculation Method for Gapped Cores Based on the Electric-Magnetic-Mechanical Coupling Model.....	556
<i>Haoda Li, Xiaojun Zhao, Jiawei Zhang, Yongqi Yu, Lanrong Liu, Zhenbin Du</i>	
Thermal Spin-Current Generation in Bi-Substituted YIG Films with Perpendicular Magnetic Anisotropy.....	558
<i>Lara M. Solis, Alberto Anadón, Miguel Rengifo, José Santiso, Juan Carlos Rojas-Sánchez, Sebastien Petit-Watelot, Myriam H. Aguirre, Laura Steren</i>	
Thickness Dependence of Unidirectional Magnetoresistance in Co <sub>2</sub> MnGa Films.....	560
<i>Bin Rong, Lizhu Ren, Hongsheng Zheng, Liang Liu, Yumeng Yang</i>	
Thin Films of Heusler Alloy – Ni <sub>2</sub> (MnCu)(GaAl): Estructural and Magnetic Properties, a Spin Glass Behavior-Like Appears.....	562
<i>Roger D. De Melo, Vitória M. T. Barthen, Angelo M. S. Gomes</i>	
Torque Ripple Reduction of New Dual-Stator Machines Using Squirrel Stator Teeth in Uneven Distribution.....	564
<i>Rui Yao, Haitao Wang, Yuanying Xu, Yumeng Sha, Chunmei Feng</i>	
Torque-To-Weight Ratio Improvement and Permanent Magnet Usage Reduction in Large-Scale Magnetic Gears for Wind Power Generation.....	566
<i>Takanori Sumi, Akihiro Okazaki, Kenji Nakamura, Tomokazu Shinji, Keiji Takeda</i>	
Towards on-Chip Spintronic-Photonic Integration.....	568
<i>Bert Koopmans, Pingzhi Li, Hamed Pezeshki, Ece Demirer, Gijs Simons, Yuqing Jiao, Jos Van Der Tol, Reinoud Lavrijsen</i>	

Towards the Development of Coercivity by Low Temperature Densification of Nd(Fe,Mo) <sub>12</sub> N Intermetallic Compounds .....	570
<i>Gabriel Gomez Eslava, Ryan Sedek, Patricia De Rango, Sorana Luca</i>	
Transport Model for Magnetic Particles in Aqueous Solutions .....	572
<i>Petra Andrei, Nicholas Carlstedt</i>	
Two-Dimensional Fractionally Magnetized Quantum Ferromagnet .....	574
<i>Shin Miyahara, Isao Maruyama</i>	
Understanding the Influence of Capping Layer on Spin Wave Modes: An In-Depth Investigation with a Custom Time-Resolved Magneto-Optical Kerr Effect (TR-MOKE) Setup.....	576
<i>Debkanta Ghosh, Chitra Dolai, Shailab Singh Bodra, Biswajeet Nayak, Prasana Kumar Sahoo, Prasanta Kumar Datta</i>	
Unsaturated Modes of Ferromagnetic Resonance in Maghemite Nanoparticles .....	578
<i>Marcio S. Pessoa, M. A. Sousa, I. L. C. Merino, P. C. Morais, Fernando Pelegrini, M. Parise, Leandro C. Figueiredo, E. Baggio-Saitovitch</i>	
Unveiling a Bulk Antiferromagnetic Order Via the Polarity of Spinorbit Torque Ratchet at Ferromagnet/Antiferromagnet Interface.....	580
<i>Hao Kai Chang, Chao-Yao Yang</i>	
Unveiling the Influence of Interactions in the Behavior of Magnetic Nanoparticle Agglomerates: Experiments and Simulations.....	583
<i>D. P. Valdés, T. E. Torres, A. C. Moreno Maldonado, G. Urretavizcaya, M. S. Nadal, M. Vasquez Mansilla, I. Rodrigo, I. Orue, R. D. Zysler, J.-á. García, F. Plazaola, G. F. Goya, E. De Biasi, E. Lima</i>	
Use of a Ferrofluid in a Magnetic Brake for a Wind Energy Generator .....	585
<i>Iván G. Cely Orjuela, Oscar Moscoso Londoño, Leandro M. Socolovsky</i>	
U-Shape Magnetostrictive Harvester: Design and Experimental Validation.....	587
<i>David Gandia, Eneko Garaio, Juan J. Beato-López, Isaac Royo-Silvestre, Cristina Gómez-Polo</i>	
Using Long Short-Term Memory to Estimate the Two-Dimensional Interference of Bit-Patterned Media Recording Systems.....	589
<i>Thien An Nguyen, Jaejin Lee</i>	
Using Nanocrystalline HDDR Powders in the Additive Manufacturing of Bonded Nd-Fe-B Magnets .....	592
<i>Bruno L. Fertig, Marcelo A. Rosa, Gabriel M. Vieira, Maximiliano D. Martins, Carlos H. Ahrens, Maurício V. F. Da Luz, Arthur A. Mascheroni, José M. Mascheroni, Paulo A. P. Wendhausen</i>	
Variable Cross-Section End-Transposed Rectangular Windings Based on Additive Manufacturing Technology for AC Loss Suppression in Electrical Machines.....	594
<i>Jian Zhang, Xinya Gui, Qianxun Deng, Jiayi He, Zijun Zhu, Zhuoran Zhang</i>	
Vibration Analysis of Permanent Magnet Linear Synchronous Motor Considering Force-Magnetic Coupling.....	596
<i>Bowen Ji, Bo Zhang, Ting Dong, Renjie Fu, Wei Feng</i>	
Voltage-Controlled Anisotropic Magnetoresistance in Ferromagnetic-Piezoelectric Heterostructures .....	598
<i>Yuxi Wang, Mingye Du, Jiawei Li, Daozheng Luo, Tao Wu</i>	

Vortex Chaotic Dynamics in a Cross-Tie Domain Wall ..... 600  
*Muftah Al-Mahdawi, Mikihiko Oogane*

Vortex-State in Iron Nanodisks: Formation and Response in Water Solutions..... 602  
*Izaro Solozabal, Raquel Zurbano, Carolina Redondo, Aitor Benedicto, Rafael Morales*

**Author Index**