

Session Title	[PC-A7] Material Modelling 2
Date and Time	June 21 (Wednesday) / 14:10-16:00
Place	Rm. 104 (1F)
Session Chair	Yanli Zhang (Shenyang Univ. of Tech., China)

PC-A7-1 **Digest ID: 218**

Dynamic magnetic scalar hysteresis lump model, based on Preisach model quasi-static contribution extended with dynamic fractional derivation contribution

Zhang, Bin (1); Gupta, Bhaawan (2,3); Ducharne, Benjamin (2); Sebald, Gael (2,3); Uchimoto, Tetsuya (3)
1: SHANDONG UNIVERSITY, CHINA; 2: LGEF, INSA LYON, FRANCE; 3: ELYTMAX, TOHOKU UNIVERSITY JAPAN

PC-A7-2 **Digest ID: 297**

Benchmark on the 3D Numerical Modeling of a Superconducting Bulk

Berger, Kevin (1); Escamez, Guillaume (2); Quéval, Loic (3); Kameni, Abelin (3); Alloui, Lofti (3,4); Ramdane, Brahim (2); Trillaud, Frédéric (5); Makong Hell, Ludovic (3,6); Meunier, Gérard (2); Masson, Philippe (6); Lévêque, Jean (1)
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PC-A7-3 **Digest ID: 425**

Demagnetization Scheme for Avoiding Magnetic Mines Under the Exposure of Earth Magnetic Field

Im, Sang Hyeon (1); Lee, Ho Yeong (1); Chung, Hyun Ju (2); Park, Gwan Soo (1)
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PC-A7-4 **Digest ID: 534**

Numerical Inversion of a 2-Scale Magneto-Elastic Behaviour Model

Bernard, Laurent (1); Mailhé, Benjamin Joseph (1); Sadowski, Nelson (1); Daniel, Laurent (2)
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PC-A7-5 **Digest ID: 675**

An Elemental Operator for Simulating Hysteresis of Soft Magnetic Composite Materials

Xu, Weijie (1); Duan, Nana (1); Li, Yongjian (2); Wang, Shuhong (1); Guo, Youguang (3); Zhu, Jianguo (3)
1: Xi'an Jiaotong University, China, People's Republic of; 2: Hebei University of Technology, People's Republic of; 3: University of Technology Sydney, Australia

PC-A7-6 **Digest ID: 702**

Investigation on the stability of the Vector Jiles-Atherton Model

Upadhaya, Brijesh (1); Perkkiö, Lauri (2); Singh, Deepak (1); Martin, Floran (1); Rasilo, Paavo (3); Belahcen, Anouar (1,4); Arkkio, Antero (1)

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PC-A7-7

Digest ID: 710

An Efficient Implementation of the Classical Preisach Model

Hussain, Sajid; Lowther, David
McGill University, Canada

PC-A7-8

Digest ID: 749

Dynamic Hysteresis Behavior Modeling of Ferromagnetic Material Based on Jiles-Atherton Theory

Zhang, Dianhai (1); Han, Yu (1); Ren, Ziyang (1); Zhang, Yanli (1); Koh, Chang-Seop (2)

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PC-A7-9

Digest ID: 402

Efficient Numerical Implementation of a Vector Preisach Hysteresis Model for 3-D Finite Element Applications

Tousignant, Maxime (1,2); Sirois, Frederic (1); Dufour, Steven (1); Meunier, Gerard (2)

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PC-A7-10

Digest ID: 779

Improvement on Estimation Model of Hysteresis Loss in Induction Motor Core Considering Rotational Magnetization

Ren, Yajun (1); Zhang, Yanli (1); Zhang, Dianhai (1); Zeng, Linsuo (1); Xie, Dexin (1); Koh, Chang-Seop (2)

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PC-A7-11

Digest ID: 782

A New Dynamic Hysteresis Model Based on Vector Play Model for Iron Loss Calculation Taking the Rotating Magnetic Fields into Account

Zhu, Lixun (1); Pham, Minh-Trien (2); Koh, Chang-Seop (1)

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PC-A7-12

Digest ID: 399

Transversal Electrical Resistivity Evaluation of Rod Unidirectional Carbon Fiber-Reinforced Composite Using Eddy Currents

SAFER, Omar Adib (1,2); BENSALIM, Samir (1); TRICHET, Didier (3); WASSÉLYNCK, Guillaume (3)

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PC-A7-13

Digest ID: 353

Input and Output Power Balance in Finite-Element Analysis of Electric Machines Taking Account of Hysteretic Property

Kitao, Junji (1,2); Takahashi, Yasuhito (1); Fujiwara, Koji (1); Ahagon, Akira (3); Matsuo, Tetsuji (4); Daikoku, Akihiro (2)

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