

# Program & Contents (Poster Session)

**Monday 27.08.2018**

**Poster Installation** 8:00-8:30 Room III (Tower Shadow Multi-function Hall/映塔多功能厅)

**Poster Presentation** 16:00-18:00 Room III (Tower Shadow Multi-function Hall/映塔多功能厅)

## Poster 1: RE-Fe-B processing & properties

*Chair: Tao Liu ( Division of Functional Materials, Central Iron and Steel Research Institute, Beijing, P. R. China)*

*Qiaobo Liu (Key Laboratory of Magnetic Materials and Devices, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, Ningbo, Zhejiang Province, China)*

P1-1	A0682	A comparative study of different Nd-Fe-B powders applied in additive manufacturing <i>Baldissera, A.B.<sup>(a)</sup>, Engeroff, J.B.A.<sup>(a)</sup>, Comelli, C.A.<sup>(a)</sup>, Wendhausen, P.A.P.<sup>(a)</sup>, Ahrens, C.H.<sup>(a)</sup></i> <i><sup>(a)</sup>Department of Mechanical Engineering, Federal University of, Santa Catarina, Florianopolis, Brazil)</i>
P1-2	A0679	Microstructure and Magnetic Properties of Hot-Deformed Nd-Fe-B Backward Extruded Rings <i>Zheng, Jing<sup>(a)</sup>, Junming Wang<sup>(a)</sup>, Zhaohui Guo<sup>(a)*</sup>, Mengyu Li<sup>(a)</sup>, Yuanhu Hu<sup>(b)</sup>, MingGang Zhu<sup>(a)</sup>, Wei Li<sup>(a)</sup></i> <i><sup>(a)</sup>Division of Functional Materials, Central Iron &amp; Steel Research Institute, Beijing 100081, China, <sup>(b)</sup> Ningbo Jinji Strong Magnetic Material CO.,LTD, Ningbo 315171, China)</i>
P1-3	A0665	Use of pH Control and Surfactants in Wet Ball Milling of Nd-Fe-B Compounds <i>Silva, M.R.M.<sup>(a)</sup>, Fim, R.G.T.<sup>(a)</sup>, Nunes, P.O.<sup>(a)</sup>, Maccari, F.<sup>(b)</sup>, Lopes, L.U.<sup>(a)</sup>, Wendhausen, P.A.P.<sup>(a)</sup></i> <i><sup>(a)</sup>Federal University of Santa Catarina, Mechanical Engineering Department, Campus Universitário João David Ferreira Lima, 88040-900, Florianópolis, Brazil., <sup>(b)</sup> Technische Universität Darmstadt, FG Funktionale Materialien, Alarich-Weiss-Str.16, 64287, Darmstadt, Germany.)</i>

P1-4	A0662	Impact of Backbone Polymer in the Feedstock Formulation for the Fabrication of Nd-Fe-B Sintered Magnets by MIM <i>L. U. LOPES<sup>(a)</sup>, P. A.P. WENDHAUSEN<sup>(b)</sup>, T. HARTWIG<sup>(c)</sup></i> <i>(<sup>(a)</sup>Engineering Dept. – Campus Blumenau, Federal University of Santa Catarina, Brazil,<sup>(b)</sup>Mechanical Engineering Dept. – Campus Florianopolis, Federal University of Santa Catarina, Brazil,<sup>(c)</sup> Fraunhofer IFAM – Bremen, Germany)</i>
P1-5	A0658	Preferential occupancy of Co atoms in R <sub>2</sub> (Fe,Co) <sub>14</sub> B intermetallic compounds (R=Nd, Y, Ce) <i>Gabriel Gomez<sup>(a)</sup>, Claire Colin<sup>(a,b)</sup>, Maasaki Ito<sup>(c)</sup>, E. Suard<sup>(b)</sup>, Nora M. Dempsey<sup>(a)</sup> and Dominique Givord<sup>(a)</sup></i> <i>(<sup>(a)</sup>Univ. Grenoble Alpes, Institut Néel, 38042 Grenoble, France, <sup>(b)</sup> Institut Laue Langevin, 71 Avenue des Martyrs, 38000 Grenoble, France, <sup>(c)</sup> Advanced Material Engineering Div., Toyota Motor Corporation, Susono 410-1193, Japan)</i>
P1-6	A0656	Intrinsic magnetic properties, phase constitute and microstructure of R-Fe-B strip-casting alloys based on misch metal <i>Y. L. Liu<sup>(a,b,c)</sup>, X. Wang<sup>(c)</sup>, J. Liang<sup>(c)</sup>, Y. Zhan<sup>(a,b)</sup>, X. F. Zhang<sup>(c)</sup>, T. Y. Zhao<sup>(a)</sup>, B. G. Shen<sup>(a)</sup></i> <i>(<sup>(a)</sup> Chinese Academic Science, Institute Physics, State Key Lab Magnetism, Beijing 100190, China, <sup>(b)</sup> University of Chinese Academic Science, Beijing,100049, China, <sup>(c)</sup>School of Science, Inner Mongolia University of Science &amp; Technology, Baotou,014010, China)</i>
P1-7	A0650	Surface nanocrystallization of bulk sintered Nd-Fe-B magnet by HDDR process <i>Jiling Zeng<sup>(a,b)</sup>, Shuai Guo<sup>(a)</sup>, Guangfei Ding<sup>(a)</sup>, Xiao Yang<sup>(a,b)</sup>, Aru Yan<sup>(a)</sup></i> <i>(<sup>(a)</sup>Zhejiang province Key Laboratory of Magnetic Materials and Application Technology; Key Laboratory of Magneticmaterials and Devices, Ningbo Institute of Materials Technology and Engineering, Chiense Academy of Sciences,Ningbo, Zhejiang, China.<sup>(b)</sup>University of Chinese Academy of Sciences, Beijing, China.)</i>
P1-8	A0649	Enhancement of coercivity and thermal stability of sintered Nd-Fe-B magnets by Dy <sub>80</sub> Fe <sub>12</sub> Co <sub>8</sub> intergranular addition <i>Li Jiajie<sup>(a)</sup>, Zhou Toujun<sup>(a)</sup>, Zeng Liangliang<sup>(a)</sup>, Huang Xiangyun<sup>(a)</sup>, Zhong Jie<sup>(b)</sup>, Zhong Zhenchen<sup>(a)</sup></i> <i>(<sup>(a)</sup> Jiangxi Key Laboratory for Rare Earth Magnetic Materials and Devices (IREMMD), Jiangxi University of Science and Technology, Ganzhou 341000, China, <sup>(b)</sup> School of Mechanical and Electrical Engineering, Jiangxi University of Science and Technology, Ganzhou 341000, China)</i>
P1-9	A0647	A novel method for preparing high performance sintered Nd-Fe-B magnets <i>Wei Zhao<sup>(a)</sup>, Ying Liu<sup>(a)</sup>, Jun Li<sup>(a)</sup>, Qi Shi<sup>(a)</sup></i> <i>(<sup>(a)</sup>College of Materials Science and Engineering, Sichuan University, Chengdu People's Republic of China)</i>
P1-10	A0627	Effect of the magnetism of grain boundary phase on thermal stability of coercivity in Nd-Fe-B magnet

		<i>Guangfei Ding<sup>(a)</sup>, Shuai Guo<sup>(a)</sup>, Jinghui Di<sup>(a)</sup>, Jie Song<sup>(a)</sup>, Renjie Chen<sup>(a)</sup>, Aru Yan<sup>(a)</sup> (<sup>(a)</sup> Ningbo Institute of Materials Technology &amp; Engineering, Chinese Academy of Sciences, Ningbo, China.)</i>
P1-11	A0585	Study on recycling technology for waste HDDR bonded Nd-Fe-B magnets <i>Yu Zhang, Min Liu, Jiangcheng Guo, Weiqiang Liu, Dongtao Zhang, Ming Yue</i> (College of Materials Science and Engineering, Beijing University of Technology, Beijing, China)
P1-12	A0571	Fabrication of Nd <sub>2</sub> Fe <sub>14</sub> B magnetic nanoparticles by a modified reduction-diffusion process <i>Junjie Xu<sup>(a)</sup>, Kai Zhu<sup>(a)</sup>, Xiaobai Wang<sup>(a)</sup>, Yanglong Hou<sup>(a)</sup></i> ( <sup>(a)</sup> Beijing Key Laboratory for Magnetoelectric Materials and Devices (BKLMMD), BIC-EAST, Department of Materials Science and Engineering, College of Engineering, Peking University, Beijing, China)
P1-13	A0490	Refining the microstructure of Fe-Nd-B by selective laser melting <i>David Vogelgsang, Ulrich Pflanz, Dominic Hohs, Julian Schurr, Gerhard Martinek, Harald Riegel, Dagmar Goll, Gerhard Schneider</i> (Aalen University, Materials Research Institute (IMFAA), Aalen, Germany)
P1-14	A0482	Preparation of Radially Oriented Integral Sintered Nd-Fe-B Magnetic Rings <i>Jianlong Fu<sup>(a,b)</sup>, Guozheng Liu<sup>(a,b)</sup>, Quan Li<sup>(a,b)</sup>, Mingjing Zhao<sup>(a,b)</sup>, Yan Gao<sup>(a,b)</sup>, Ke Lv<sup>(a,b)</sup></i> ( <sup>(a)</sup> State Key Laboratory of Baiyun Obo Rare Earth Resource Researches and Comprehensive Utilization, Baotou 014030, China, <sup>(b)</sup> Baotou Research Institute of Rare Earths, Baotou 014030, China)
P1-15	A0457	Effects of Initial Alloy on Hot-deformation Process of Nd-Fe-B HDDR Powder <i>Jung-Goo Lee<sup>(a,*)</sup>, Jae-Gyong Yoo<sup>(a,b)</sup>, Youn-Kyoung Baek<sup>(a)</sup>, Dongyun Lee<sup>(b)</sup>, Hae-Woong Kwon<sup>(c)</sup></i> ( <sup>(a)</sup> Powder&Ceramics Division, Korea Institute of Materials Science, Korea, <sup>(b)</sup> Department of Nano Fusion Technology, Pusan National University, Korea, <sup>(c)</sup> Department of Materials Science and Engineering, Pukyong National University, Korea)
P1-16	A0430	Interstitial Nitrogen Atomic Effect On the Magnetic Properties of Nd <sub>2</sub> Fe <sub>14</sub> B Compound <i>Liang Zha<sup>(a)</sup>, Zhou Liu<sup>(a)</sup>, Wenyun Yang<sup>(a)</sup>, Honglin Du<sup>(a)</sup>, Changsheng Wang<sup>(a)</sup>, Jingzhi Han<sup>(a)</sup>, Yingchang Yang<sup>(a)</sup>, Jinbo Yang<sup>(a),(b)</sup></i> ( <sup>(a)</sup> State Key Laboratory for Mesoscopic Physics, School of Physics, Peking University, Beijing 100871, P. R. China. <sup>(b)</sup> Collaborative Innovation Center of Quantum Matter, Beijing, P. R. China.)
P1-17	A0427	Reaching customized geometries for Nd-Fe-B bonded selective laser sintered magnets <i>Comelli, C.A.<sup>(a)</sup>, Baldissera, A.B.<sup>(a)</sup>, Engeroff, J.B.A.<sup>(a)</sup>, Wendhausen, P.A.P.<sup>(a)</sup>, Ahrens, C.H.<sup>(a)</sup></i>

		<i>(<sup>(a)</sup>Department of Mechanical Engineering, Federal University of Santa Catarina, Florianopolis, Brazil)</i>
P1-18	A0417	Influence of Al-Cu content on Dy grain boundary diffusion in Nd-Fe-B sintered magnet <i>Jian Li<sup>(a)</sup>, Xinghua Cheng<sup>(a)</sup>, Lei Zhou<sup>(a)</sup>, Tao Liu<sup>(a)</sup>, Xiaojun Yu<sup>(a)</sup></i> <i>(<sup>(a)</sup>Functional Material Devision, Advanced Technology and Materials Co., Ltd., Beijing, China)</i>
P1-19	A0382	Microstructure optimization and coercivity enhancement of Nd-Fe-B sintered magnet by grain boundary diffusion process with Pr-Tb-Cu and Pr-Tb-Cu-Al alloys <i>Kechao Lu<sup>(a)</sup>, Xiaoqian Bao<sup>(a)</sup>, Chunguo Wang<sup>(b)</sup>, Guixian Chen<sup>(a)</sup>, Xiangke Lv<sup>(b)</sup>, Yong Ding<sup>(b)</sup>, Min Zhang<sup>(b)</sup>, Xuexu Gao<sup>(a)</sup></i> <i>(<sup>(a)</sup>State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xue Yuan Road, Beijing 100083, People's Republic of China, <sup>(b)</sup>Ningbo Yunsheng Co., Ltd., 20 Longtanshan Road, Daqi street, Beilun, Ningbo city, Zhejiang Province, People's Republic of China)</i>
P1-20	A0370	Effect of Grain Boundary on the Magnetic Properties of Nd-Ce-Fe-B Magnets by Micromagnetic Calculation <i>Dan Liu<sup>(a),(b)</sup>, Tongyun Zhao<sup>(a),(b)</sup>, Fengxia Hu<sup>(a),(b)</sup>, Jirong Sun<sup>(a),(b)</sup>, Baogen Shen<sup>(a),(b),*</sup></i> <i>(<sup>(a)</sup> State Key Laboratory of Magnetism, Institute of Physics, Chinese Academy of Sciences, Beijing 100190, P. R. China, <sup>(b)</sup> School of Physical Sciences, University of Chinese Academy of Sciences, Beijing 100190, P. R. China)</i>
P1-21	A0325	Production of Green Nd-Pr-Fe-B Magnets by Different Consolidation Methods Using Non-Chinese REE <i>C. Müller<sup>(a)</sup>, T. Braun<sup>(a)</sup>, L. Schäfer<sup>(a)</sup>, S. Riegg<sup>(a)</sup>, Eva Brouwer<sup>(b)</sup>, Mario Schöfeldt<sup>(b)</sup>, Konrad Opelt<sup>(b)</sup>, K. P. Skokov<sup>(a)</sup>, O. Gutfleisch<sup>(a,b)</sup></i> <i>(<sup>(a)</sup>Functional Materials, Technische Universität Darmstadt, 64287 Darmstadt, Germany, <sup>(b)</sup>Fraunhofer Project Group IWKS, 63450 Hanau, Germany)</i>
P1-22	A0324	Tailoring bending strengths of various directions in NdFeB magnets by Pr-Cu grain boundary reconstruction <i>Minghui Tang, Xiaoqian Bao<sup>*</sup>, Kechao Lu, Xuejiao Zhang, Xing Mu, Jiheng Li, Xuexu Gao</i> <i>(State Key Laboratory for Advanced Metals and Materials, University of Science and Technology Beijing, 30 Xue Yuan Road, Beijing 100083, People's Republic of China)</i>
P1-23	A0296	Effect of slightly adding Pr-Co powder in the NdFeB material with high oxygen and carbon content <i>C. H. Chiu<sup>(a)*</sup>, M. Mo<sup>(b)</sup>, P. W. Chen<sup>(a)</sup>, W. C. Chang<sup>(c)</sup>, H. W. Chang<sup>(c)</sup></i> <i>(<sup>(a)</sup>New Materials Research &amp; Development Dept., China Steel Corp., Kaohsiung, 81233, Chinese Taipei, <sup>(b)</sup>New Venture &amp; Technical Dept., Himag</i>

		<i>Magnetic, Ping Tung, 91252, Chinese Taipei,<sup>(c)</sup>Department of Physics, National Chung Cheng University, Chia-Yi, 62102, Chinese Taipei)</i>
P1-24	A0286	The effect of sintered Nd-Fe-B with Dy infiltration to the plating crafts <i>X.T. Tang, A.Z. Sun, X.Chen, R.M. Wang</i> <i>(Institute for Advanced Materials and Technology, University of Science and Technology Beijing, Beijing)</i>
P1-25	A0285	A study of the Dy adhered to sintered NdFeB magnet surface by electrodeposition technique <i>R.M.Wang, A.Z.Sun, X.T.Tang</i> <i>(Institute for Advanced Materials and Technology, Beijing University of Science and Technology, Beijing)</i>
P1-26	A0263	EFFECT OF Tb <sub>3</sub> Co <sub>0.6</sub> Cu <sub>0.4</sub> ADDITION ON THE MICROSTRUCTURE AND PHASE COMPOSITION OF LOW-REM Nd-Fe-B SINTERED MAGNET <i>Katerina Skotnicova<sup>a</sup>, Gennady S. Burkhanov<sup>b</sup>, Tomas Cegan<sup>a</sup>, Natalia B. Kolchugina<sup>b</sup>, Alexander A. Lukin<sup>c</sup>, Ondrej Zivotsky<sup>a</sup>, Pavel A. Prokofev<sup>b</sup>, Miroslav Kursaa<sup>a</sup></i> <i>(<sup>(a)</sup>VSB-Technical University of Ostrava, Regional materials science and technology centre,<sup>(b)</sup>Baikov Institute of Metallurgy and Materials Science, Russian Academy of Sciences, Leninski pr. 49, Moscow, 119334,<sup>(c)</sup>JSC SPETSMAGNIT", Moscow, Russian Federation)</i>
P1-27	A0262	Coercivity enhancement of thick and bulky Nd-Fe-B sintered magnets by green-pressing agents permeation process with Pr-Tb-Cu-Al alloy <i>Shuai Cao, Xing Mu, Xiaoqian Bao, Jiheng Li, Pengcheng Liang, Xuexu Gao.</i> <i>(State Key Laboratory of Advanced Metals and Materials, University of Science and Technology Beijing, Beijing)</i>
P1-28	A0261	Waste sintered Nd-Fe-B magnet recycling by pressing the hundred-micron powders <i>(subrayyy@126.com)</i>
P1-29	A0260	Coercivity enhancement of LaCe-doping NdFeB sintered magnet with (PrNd)Hx as diffusants <i>Chen Kan<sup>(a),(b)</sup>, Fan Xiaodong<sup>(a),(c)</sup>, Guo Shuai<sup>(a),(b)</sup>, Ding Guangfei<sup>(a),(b)</sup>, Di Jinghui<sup>(a),(b)</sup>, Chen Renjie<sup>(a),(b)</sup> and Yan Aru<sup>(a),(b)</sup></i> <i>(<sup>(a)</sup>Key Lab of Magnetic Materials and Devices, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, Ningbo 315201, China,<sup>(b)</sup>University of Chinese Academy of Sciences, Beijing 100049, China,<sup>(c)</sup>Xi'an University of Technology, Xi'an 710048, China)</i>
P1-30	A0255	Effect of infiltration of diffusion agent on coercivity of bonded NdFeB magnet <i>Zhenya Tian, Aizhi Sun, Chencheng Li, Xun Zhang, Bin Ma</i> <i>(Institute for advanced Materials and Technology, University of Science and Technology Beijing, Beijing 100083, PR China)</i>

P1-31	A0227	Efficient Reuse of The Waste Sintered NdFeB Magnet with Dy <sub>2</sub> O <sub>3</sub> Addition <i>Chencheng Li, Aizhi Sun, Zhenya Tian, Xun Zhang, Bin Ma.</i> (Institute for Advanced Materials and Technology, University of Science and Technology Beijing, Beijing 100083, China)
P1-32	A0219	The influence of oxygen content on grain boundary control of sintered NdFeB magnet <i>Chunguo Wang, Yong Ding*, Xiangke Lv, Min Zhang, Xiaoxin An, Xiaodong Zhu, YingCai Mao</i> (Ningbo Yunsheng Co., Ltd., 20 Longtanshan Road, Daqi street, Beilun, Ningbo city, Zhejiang Province, China)
P1-33	A0212	Coercivity enhancement of NdFeB sintered magnets by diffusing controlled usage of RF <sub>3</sub> films with PMMA binder (R = Dy and Tb) <i>Y.Z. Yu<sup>(a)</sup>, Y.I. Lee<sup>(a)</sup>, C.W. Shih<sup>(a)</sup>, H.W. Chang<sup>(a)</sup>, W.C. Chang<sup>(a)</sup>, C.H. Chiu<sup>(b)</sup></i> ( <sup>(a)</sup> Department of Physics, National Chung Cheng University, Chia-Yi, 621 Chinese Taipei, <sup>(b)</sup> New Materials Research & Development Dept., China Steel Corp., Kaohsiung, Chinese Taipei)
P1-34	A0199	Suitability of hydrogenation techniques for recycling of sintered Nd-Fe-B magnets <i>Mateusz Szymański, Bartosz Michalski and Marcin Leonowicz</i> (Warsaw University of Technology, Faculty of Materials Science and Engineering, 141 Woloska Street, 02-507 Warsaw, Poland.)
P1-35	A0184	Magnetic properties of Nd <sub>2-x</sub> Pr <sub>x</sub> Fe <sub>14</sub> B: A Single Crystal Study <i>I.S. Tereshina<sup>(a)</sup>, G.A. Politova<sup>(b)</sup>, A.V. Andreev<sup>(c)</sup>, E.A. Tereshina-Chitrova<sup>(c)</sup></i> ( <sup>(a)</sup> Lomonosov Moscow State University, Faculty of Physics, Moscow, Russia <sup>(b)</sup> Baikov Institute of Metallurgy and Materials Science RAS, Moscow, Russia, <sup>(c)</sup> Institute of Physics CAS, Prague, Czech Republic)
P1-36	A0070	Analysis of the demagnetization behavior of TbF <sub>3</sub> -coated sintered Nd-Fe-B magnets by electrophoretic deposition <i>Xuejing Cao, Ling Chen, Shuai Guo, Jinghui Di, Guangfei Ding, Renjie Chen, Aru Yan</i> (Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, Ningbo, China)
P1-37	A0034	Improvement of the diffusion efficiency in sintered Nd-Fe-B magnets by stack diffusion <i>Xiao. Yang<sup>(a,b)</sup>, Shuai. Guo<sup>(b)</sup>, Jiling. Zeng<sup>(a,b)</sup>, Guangfei. Ding<sup>(b)</sup>, Jie. Song<sup>(b)</sup>, Aru. Yan<sup>(b)</sup></i> ( <sup>(a)</sup> University of Chinese Academy of Sciences, Beijing, China, <sup>(b)</sup> Key Laboratory of Magnetic Materials and Devices, Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, Ningbo, China)
P1-38	A0653	Graphene Nanoplatelets as Novel Approach to Enhance Coercivity of Hot-deformed Magnets by Tuning Microstructures <i>Renquan Wang<sup>(a)</sup>, Ying Liu<sup>(a),(b)*</sup>, Jun Li<sup>(a)</sup>, Tingchuan Zhou<sup>(a)</sup>,</i>

		<p><i>XiaoJiaoYang<sup>(a)</sup> and Wei Zhao<sup>(a)</sup></i>  <i>(<sup>(a)</sup>College of Materials Science and Engineering, Sichuan University, Chengdu 610065, The People's Republic of China,<sup>(b)</sup>Key Laboratory of Advanced Special Materials &amp; Technology, Ministry of Education, Chengdu 610065, The People's Republic of China)</i></p>
P1-39	A0621	<p>Chemical preparation of Nd<sub>2</sub>Fe<sub>14</sub>B-based nanomagnets  <i>Kai Zhu<sup>(a)</sup>, Xiaobai Wang<sup>(a)</sup>, Junjie Xu<sup>(a)</sup>, Yanglong Hou<sup>(a)*</sup></i>  <i>(<sup>(a)</sup> Key Laboratory for Magnetolectric Materials and Devices (BKLMMD), Department of Materials Science and Engineering, College of Engineering, Peking University, Beijing 100871, China)</i></p>
P1-40	A0595	<p>Coercivity enhancement of hot-pressed magnet prepared by HDDR Nd–Fe–B powders using Pr-Cu eutectic alloys diffusion  <i>Tingting Song<sup>(a,b)</sup>, Qiaobo Liu<sup>(a)</sup>, Yang Tang<sup>(a)</sup>, Renjie Chen<sup>(a)</sup></i>  <i>(<sup>(a)</sup>CAS Key Laboratory of Magnetic Materials and Devices, Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, Ningbo 315201, China,<sup>(b)</sup>University of Chinese Academy of Sciences, Beijing 100049, China)</i></p>
P1-41	A0534	<p>Local demagnetization behaviour study of sintered Nd-Fe-B magnet  <i>Da-Wei Shi, Hiroshi Nagata</i>  <i>(Institute of Rare Earth Magnetic Material, Xiamen Tungsten Co. Ltd., Xiamen 361010 China)</i></p>
P1-42	A0461	<p>Coercivity enhancement of hot-deformed Nd-Fe-B magnets by the Tb-Fe alloy diffusion  <i>Qiaobo Liu<sup>(a,b,c)</sup>, Xu Tang<sup>(a,b)</sup>, Wenzong Yin<sup>(a,b)</sup>, Renjie Chen<sup>(a,b)</sup>, Aru Yan<sup>(a,b)</sup></i>  <i>(<sup>(a)</sup>Key Laboratory of Magnetic Materials and Devices, Ningbo Institute of Material Technology and Engineering, CAS, Ningbo 315201, China,<sup>(b)</sup>Rare Earth Magnetic Materials Laboratory, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, Ningbo 315201, People's Republic of China,<sup>(c)</sup>School of Materials Science and Engineering, Shanghai University, Shanghai 200444, People's Republic of China)</i></p>
P1-43	A0401	<p>Magnetic properties and microstructure in sintered (Nd,Pr)-Fe-B/Tb-Fe-B composite magnets  <i>Dong-shan Wang<sup>(a,b)</sup>, Zhu-bai Li<sup>(a)*</sup>, Qiang Ma<sup>(a,b)</sup>, Yong-feng Li<sup>(a,b)</sup>, Qian Zhao<sup>(a,b)</sup>, Xue-feng Zhang<sup>(a,b)</sup></i>  <i>(<sup>(a)</sup>Key Laboratory of Integrated Exploitation of Bayan Obo Multi-Metal Resources, Inner Mongolia University of Science and Technology, Baotou 014010, China,<sup>(b)</sup>School of science, Inner Mongolia University of Science and Technology, Baotou 014010, China)</i></p>
P1-44	A0391	<p>Coercivity enhancement of thick and bulky Nd-Fe-B sintered magnets by green-pressing agents permeation process with Pr-Tb-Cu-Al alloy  <i>Shuai Cao, Xing Mu, Xiaoqian Bao, Jiheng Li, Pengcheng Liang, Xuexu Gao.</i>  <i>(State Key Laboratory of Advanced Metals and Materials, University of</i></p>

		<i>Science and Technology Beijing, Beijing)</i>
P1-45	A0386	Preparation of sintered NdFeB magnetic powder by microstructure regulation of NdFeB strip casting alloy using HDDR process <i>B. Ma, X.X. Gao, X.Q. Bao, J.H. Li</i> ( <i>State Key Laboratory of Advanced Metals and Materials, University of Science and Technology Beijing, Beijing)</i>
P1-46	A0379	Study on magnetic properties and microstructure of Fe <sub>69.5-x</sub> Nd <sub>7</sub> B <sub>21</sub> Nb <sub>2.5</sub> Ga <sub>x</sub> (x=0-1) alloys <i>Y. Gu<sup>a,b</sup>, Z. Li<sup>a</sup>, M.X. Pan<sup>a</sup>, L.Y. Yu<sup>a</sup>, H. Xu<sup>a,*</sup></i> ( <sup>a</sup> <i>Institute of Materials Science, Shanghai University, Shanghai, 200072, P. R. China,</i> <sup>b</sup> <i>Qianjiang College, Hangzhou Normal University, Hangzhou, 310036, P. R. China)</i>
P1-47	A0208	STUDY ON THE MAGNETIC PROPERTIES AND MICROSTRUCTURE OF DOUBLE MAIN PHASE ND-Y-FE-B MAGNETS <i>YANG Mu-nan<sup>a,c</sup>, QI Zhi-qi<sup>b,c</sup>, JU Zhi-hua<sup>a,c</sup>, YU Xi<sup>a,c</sup>, PANG Zai-sheng<sup>a,c</sup></i> ( <sup>a</sup> <i>Fortune Electronics Incorporated Company, Ganzhou 341000 China,</i> <sup>b</sup> <i>Department Materials Science and Engineering, Jiangxi University of Science and Technology, Ganzhou 341000 China,</i> <sup>c</sup> <i>Research Center of High-performance Rare Earth Permanent Magnet Material and Device, Ganzhou 341000 China)</i>
P1-48	A0732	The coercivity enhancement by low melting point metal through grain boundary diffusion process of HDDR-NdFeB powder <i>Meng, Lv<sup>(a)</sup>, Wenxian Li<sup>(a)</sup>, Yemin Hu<sup>(a)</sup>, Mingyuan Zhu<sup>(a)</sup>, Hongming Jin<sup>(a)</sup>, Ying Li<sup>(a)*</sup></i> ( <sup>(a)</sup> <i>Laboratory for Microstructures, School of Materials Science and Engineering, Shanghai University, Shanghai 200072, China)</i>

**Tuesday 28.08.2018**

**Poster Installation** 8:00-8:30 Room III (Tower Shadow Multi-function Hall/映塔多功能厅)

**Poster Presentation** 16:00-18:00 Room III (Tower Shadow Multi-function Hall/映塔多功能厅)

### **Poster 2: RE-Co/RE-Fe-N/Rare earth free magnets**

*Chair: Zaven Altounian (McGill University, 845 Sherbrooke Street West, Montreal, Quebec, Canada H3A0G4)*



**Dongtao Zhang** (College of Materials Science and Engineering, Beijing University of Technology, Beijing, China)

P2-1	A0664	Structural and magnetic properties of NdFe <sub>10-x</sub> Co <sub>x</sub> Cr <sub>2</sub> alloys and their ribbons <i>M. Gjokas<sup>a</sup>, C.Sarafidis<sup>b</sup>, D. Niarchos<sup>a</sup> and G. Hadjipanayis<sup>c</sup></i> <i>(<sup>a</sup>INN, NCSR Demokritos, Athens 15310, Greece,<sup>(b)</sup>Department of Physics, AU of Thessaloniki, 54124 Thessaloniki, Greece,<sup>(c)</sup>Department of Physics, U of Delaware, Newark, USA)</i>
P2-2	A0657	Effect of Co substitution on structure and magnetic properties of Nd <sub>0.4</sub> Zr <sub>0.6</sub> Fe <sub>10-x</sub> Co <sub>x</sub> Si <sub>2</sub> (x= 0-3) alloys <i>M. Gjokas<sup>a</sup>, C.Sarafidis<sup>b</sup>, D. Niarchos<sup>a</sup> and G. Hadjipanayis<sup>c</sup></i> <i>(<sup>a</sup>INN, NCSR Demokritos, Athens 15310, Greece,<sup>(b)</sup>Department of Physics, AU of Thessaloniki, 54124 Thessaloniki, Greece,<sup>(c)</sup>Department of Physics, U of Delaware, Newark, USA)</i>
P2-3	A0617	Correlation between Microstructure and Magnetic Properties for 2:17-type Sm-Co Sintered Magnets with Different Iron Contents <i>Shuai Wang, Yikun Fang, Kuikui Song, Nengjun Yu, Minggang Zhu, Wei Li</i> <i>(Division of Functional Materials Research, Central Iron and Steel Research Institute, Beijing 100081, China)</i>
P2-4	A0450	The Effect of Doping Y <sub>2</sub> O <sub>3</sub> on the Mechanical Properties of Sm(Co <sub>bal</sub> Fe <sub>0.09</sub> Cu <sub>0.09</sub> Zr <sub>0.03</sub> ) <sub>7.68</sub> Magnets <i>Tianyi Li<sup>(a)</sup>, Zhuang Liu<sup>(a)</sup>, Chaoyue Zhang<sup>(a)</sup>, Lei Liu<sup>(a)</sup>, Renjie Chen<sup>(a)</sup>, Aru Yan<sup>(a)</sup></i> <i>(<sup>(a)</sup>Key Laboratory of Magnetic Materials and Devices, Ningbo Institute of Material Technology and Engineering, Chinese Academy of Sciences, Ningbo 315201, China)</i>
P2-5	A0392	Effect of residue hydrogen content on microstructure and magnetic properties of Sm(Co <sub>bal</sub> Fe <sub>0.28</sub> Cu <sub>0.053</sub> Zr <sub>0.02</sub> ) <sub>7.84</sub> <i>C. Y. Zhang<sup>(a, b)</sup>, Z. Liu<sup>(a)</sup>, L. Liu<sup>(a)</sup>, T. Y. Li<sup>(a)</sup>, R. J. Chen<sup>(a)</sup>, Don Lee<sup>(a, c)</sup>, A. R. Yan<sup>(a)</sup></i> <i>((a) Key Lab of Magnetic Materials and Devices, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, Ningbo 315201, P. R. China, (b) University of Chinese Academy of Sciences, Beijing 100049, China, (c) University of Dayton, Dayton, OH, USA)</i>
P2-6	A0220	Coercivity kinetics in the course of step cooling of the sintered Sm(Co <sub>0.88-y</sub> Fe <sub>y</sub> Cu <sub>0.09</sub> Zr <sub>0.03</sub> ) <sub>7</sub> magnets <i>A.G. Popov<sup>(a)</sup>, O.A. Golovnia<sup>(a)</sup>, A.V. Protasov<sup>(a)</sup>, V.S. Gaviko<sup>(a)</sup>, D.A. Kolodkin<sup>(a)</sup>, E.G. Gerasimov<sup>(a)</sup>, and R. Gopalan<sup>(b)</sup></i> <i>(<sup>(a)</sup> M.N. Mikheev Institute of Metal Physics, Ural Branch, Russian Academy of Science, ul. S. Kovalevskoi 18, Ekaterinburg, 620990 Russia, (<sup>(b)</sup> International Advanced Research Centre for Powder Metallurgy and New Materials (ARCI), IITM Research Park, Chennai-600113, India)</i>
P2-7	A0211	Comparison on the magnetic properties of melt spun RCo <sub>5-x-y</sub> Fe <sub>x</sub> C <sub>y</sub> (R = Y and Pr)

		<p><i>H.W. Chang<sup>(a)</sup>, H.Y. Wang<sup>(a)</sup>, Y.I. Lee<sup>(a)</sup>, C.W. Shih<sup>(a)</sup>, <u>W.C. Chang<sup>(a)</sup></u>, C.C. Yang<sup>(b)</sup>, C. C. Shaw<sup>(c)</sup></i></p> <p><i>(<sup>(a)</sup>Department of Physics, National Chung Cheng University, Chia-Yi, 621 Chinese Taipei, (<sup>(b)</sup>Department of Physics, Chung-Yuan Christian University, Chungli, 320 Chinese Taipei, (<sup>(c)</sup>Superrite Electronics Co. Ltd., Taipei, 111 Chinese Taipei)</i></p>
P2-8	A0671	<p>Effects of N<sub>2</sub>-gas pressure on structural and magnetical properties of Sm<sub>2</sub>Fe<sub>17</sub>N<sub>x</sub></p> <p><i>J. W. Xu<sup>a</sup>, J. W. Zheng<sup>a,*</sup>, H. B. Chen<sup>a</sup>, L. Qiao<sup>a</sup>, Y. Ying<sup>a</sup>, W. Cai<sup>a</sup>, W. C. Li<sup>a</sup>, J. Yu<sup>a</sup>, M. Lin<sup>b</sup>, S. L. Che<sup>a,*</sup></i></p> <p><i>(<sup>(a)</sup>Research Center of Magnetic and Electronic Materials, College of Materials Science and Engineering, Zhejiang University of Technology, Hangzhou 310014, China, <sup>(b)</sup>Key Laboratory of Magnetic Materials and Devices, Ningbo Institute of Material Technology &amp; Engineering Chinese Academy of Science, Ningbo 315201, China)</i></p>
P2-9	A0669	<p>Strategies to Improve Magnetic Performance of Sm-Fe-N Powders</p> <p><i>Fim, R.G.T.<sup>(a)</sup>, Silva, M.R.M.<sup>(a)</sup>, Lamarão, P.H.<sup>(a)</sup>, Engeroff, J.A.B.<sup>(a)</sup>, Wendhausen, P.A.P.<sup>(a)</sup></i></p> <p><i>(<sup>(a)</sup>Federal University of Santa Catarina, Mechanical Engineering Department, Campus Universitário João David Ferreira Lima, 88040-900, Florianópolis, Brazil.)</i></p>
P2-10	A0663	<p>Selective Laser Sintering of Sm-Fe-N Bonded Magnets</p> <p><i>Engeroff, J.A.B.<sup>(a)</sup>, Baldissera, A.B.<sup>(a)</sup>, Magalhães, M.D.<sup>(a)</sup>, Lamarão, P.H.<sup>(a)</sup>, Wendhausen, P.A.P.<sup>(a)</sup>, Ahrens, C.H.<sup>(a)</sup>, Mascheroni, J.M.<sup>(b)</sup></i></p> <p><i>(<sup>(a)</sup>Department of Mechanical Engineering, Federal University of Santa Catarina, Florianópolis, Brazil, (<sup>(b)</sup> Alkimat Tecnologia, São José Brazil)</i></p>
P2-11	A0648	<p>XMCD studies of alloys based on Sm<sub>2</sub>Fe<sub>17</sub>N<sub>x</sub> after severe plastic deformation by torsion</p> <p><i>Shchetinin I.V.<sup>a</sup>, Menushenkov V.P.<sup>a</sup>, Sundeev R.V.<sup>b</sup>, Menushenkov A.P.<sup>c</sup>, Platonov M.<sup>d</sup>, Rogalev A.<sup>d</sup>, Savchenko A.G.<sup>a</sup></i></p> <p><i>(<sup>(a)</sup>National University of Science and Technology «MISIS», Russia, (<sup>(b)</sup>Moscow Technological University, «MIREA», Moscow, Russia, (<sup>(c)</sup>National Research Nuclear University «MEPhI», Moscow, Russia, (<sup>(d)</sup>European Synchrotron Radiation Facility (ESRF), Grenoble, France)</i></p>
P2-12	A0277	<p>Effect of Element Addition on Magnetic Properties of Melt-Spun SmFeN Powder</p> <p><i>T. Iriyama and R. Omatsuzawa</i></p> <p><i>(Corporate R&amp;D Center, Daido Steel Co., Ltd., Nagoya, Japan)</i></p>
P2-13	A0272	<p>Fabrication of Cr diffused Sm<sub>2</sub>Fe<sub>17</sub>N<sub>x</sub> core-shell powder by reduction diffusion process</p> <p><i>Ruka Matsuda<sup>(a)</sup>, Keisuke Yarimizu<sup>(a)</sup>, Masashi Matsuura<sup>(a)</sup>, Nobuki Tezuka<sup>(a)</sup>, Satoshi Sugimoto<sup>(a)</sup>, Takashi Ishikawa<sup>(b)</sup>, Yukinobu Yoneyama<sup>(b)</sup></i></p> <p><i>(<sup>(a)</sup>Graduate School of Engineering, Tohoku University, Japan, (<sup>(b)</sup> Sumiko Kunitomi Denshi Co., Ltd., Japan)</i></p>

P2-14	A0223	<p>Metal-bonded <math>\text{Sm}_2\text{Fe}_{17}\text{N}_3</math> magnets with Sm-based eutectic binder</p> <p><i>Hee-Ryoung Cha<sup>(a)</sup>, Kohei Ootogawa<sup>(b)</sup>, Kenta Takagi<sup>(a)</sup></i></p> <p><i>(<sup>(a)</sup>Magnetic Powder Metallurgy Research Center, National Institute of Advanced Industrial Science and Technology (AIST), Nagoya, Japan, (<sup>(b)</sup>Department of Advanced Science and Engineering, Graduate School of Advanced Science and Engineering, Waseda University, Tokyo, Japan)</i></p>
P2-15	A0209	<p>Synthesis of high coercivity <math>\text{Sm}_2\text{Fe}_{17}\text{N}_3</math> fine powder by preventing formation of soft magnetic Sm-rich phase</p> <p><i>Shusuke Okada<sup>(a)</sup>, Eri Node<sup>(a)</sup>, Kenta Takagi<sup>(a)</sup>, Kimihiro Ozaki<sup>(a)</sup>, Yoshinori Fujikawa<sup>(b)</sup>, Yasushi Enokido<sup>(b)</sup></i></p> <p><i>(<sup>(a)</sup> Magnetic Powder Metallurgy Research Center, National Institute of Advanced Industrial Science and Technology (AIST), Nagoya, Japan, (<sup>(b)</sup> Materials Development Center, TDK Corporation, Narita, Japan)</i></p>
P2-16	A0616	<p>Grain Refinement in Hot Deformed MnAl-C Magnets</p> <p><i>L. Feng<sup>(a,b)</sup>, K. Nielsch<sup>(a,b)</sup>, and T. G. Woodcock<sup>(a)</sup></i></p> <p><i>(<sup>(a)</sup> IFW Dresden, Institute for Metallic Materials, Helmholtzstrasse 20, 01069 Dresden, Germany, (<sup>(b)</sup> TU Dresden, Institute of Materials Science, 01062 Dresden, Germany)</i></p>
P2-17	A0483	<p>Development of high performance dry-pressed anisotropic permanent ferrite for La-Ca-Sr-Co system</p> <p><i>Daiman Zhu<sup>(a)</sup>, Zhaowen Geng<sup>(a)</sup>, Rongming Liu<sup>(a,b)*</sup>, Xiaowen Zhou<sup>(a)</sup>, Dan Chuai<sup>(a,b)</sup>, Liying Jia<sup>(a,b)</sup>, Qian Wang<sup>(a)</sup>, Kemiao Huang, Guohui Hu<sup>(a)</sup>, Jun Xiong<sup>(a)</sup>, Bingshan Li<sup>(a,b)</sup></i></p> <p><i>(<sup>(a)</sup>National Engineering Technology Research Center for Magnetic Materials, BGRIMM, Beijing, China, (<sup>(b)</sup>BGRIMM Magnetic Materials &amp; Technology CO, Ltd., Beijing, China)</i></p>
P2-18	A0451	<p>Effect of a heat treatment in magnetic field on the lip-formation in Mn-Bi alloys prepared at different quenching conditions</p> <p><i>K. Volkov, N. Kudrevatykh, E. Tarasov, S. Andreev, A. Zinin</i></p> <p><i>(Institute of Natural Sciences &amp; Mathematics at Ural Federal University, 620002, Ekaterinburg, Russia)</i></p>
P2-19	A0215	<p>A new route for RE-free nanostructured bulk permanent magnets</p> <p><i>S. Ener<sup>(a)</sup>, E. Anagnostopoulou<sup>(b)</sup>, I. Dirba<sup>(a)</sup>, L.-M. Lacroix<sup>(b)</sup>, F. Ott<sup>(c)</sup>, T. Blon<sup>(b)</sup>, J.-Y. Piquemal<sup>(d)</sup>, K. P. Skokov<sup>(a)</sup>, O. Gutfleisch<sup>(a)</sup> and G. Viau<sup>(b)</sup></i></p> <p><i>(<sup>(a)</sup>Funktionale Materialien, Institut für Materialwissenschaft, TU Darmstadt, Alarich-Weiss-Str. 16, D-64287 Darmstadt, Germany, (<sup>(b)</sup> Université de Toulouse, Laboratoire de Physique et Chimie des Nano-Objets, UMR 5215 INSA, CNRS, UPS, 135 Avenue de Rangueil, F-31077 Toulouse Cedex 4, France, (<sup>(c)</sup> Laboratoire Léon Brillouin CEA/CNRS, Université Paris-Saclay, CEA Saclay, 91191 Gif sur Yvette, France, (<sup>(d)</sup> Université Paris Diderot, Sorbonne Paris Cité ITODYS, CNRS UMR 7086, 15 Rue J.-A. de Baïf, 75205 Paris Cedex 13, France)</i></p>
P2-20	A0214	<p>Development of high-coercivity state in melt-spun <math>\text{Fe}_{41}\text{Pd}_4\text{B}_8\text{Si}_6\text{P}_4</math> ribbons</p> <p><i>O. A. Golovnia<sup>(a)</sup>, A.G. Popov<sup>(a)</sup>, N. I. Vlasova<sup>(a)</sup>, A. V. Protasov<sup>(a)</sup>, V.S.</i></p>

		<p><i>Gaviko<sup>(a)</sup>, K. A. Yazovskih<sup>(a)</sup>, A. Kashyap<sup>(b)</sup>, and R. Pathak<sup>(b)</sup></i>  <i>(<sup>(a)</sup> M.N. Mikheev Institute of Metal Physics, Ural Branch, Russian Academy of Science, ul. S. Kovalevskoi 18, Ekaterinburg, 620990 Russia, <sup>(b)</sup> Indian Institute of Technology Mandi, Kamand, Mandi (HP)-175005, India)</i></p>
P2-21	A0202	<p><i>Cr<sub>2</sub>Te<sub>3</sub> ultrathin nanosheets with large coercivity obtained by Co and Se codoping</i>  <i>Fang Wang*, Zhenzhen Ma, Huan Yang, Xiaohong Xu</i>  <i>(Research Institute of Materials Science of Shanxi Normal University&amp;Key Laboratory of Magnetic Molecules and Magnetic Information Materials of Ministry of Education, Linfen041004, China.)</i></p>
P2-22	A0606	<p><i>New Insight into the Interaction of Twin Boundaries with Magnetic Domain Walls in MnAl-C</i>  <i>P. Zhao<sup>a,b*</sup>, M. Gusenbauer<sup>c</sup>, T. Schrefl<sup>c</sup>, K. Nielsch<sup>a,b</sup> and T. G. Woodcock<sup>a</sup></i>  <i>(<sup>(a)</sup>IFW Dresden, Institute for Metallic Materials, Helmholtzstrasse 20, 01069 Dresden, Germany, <sup>(b)</sup>TU Dresden, Institute of Materials Science, 01062 Dresden, Germany, <sup>(c)</sup>Danube University Krems, Department of Integrated Sensor Systems, Dr.-Karl-Dorrek-Str. 30, 3500 Krems, Austria)</i></p>
P2-23	A0719	<p><i>Magnetic properties of the Mn-Al <math>\tau</math>-phase doped with V and Cr</i>  <i>R. Gavrea<sup>(a)</sup>, D. Beneda<sup>(a)</sup>, R. Hirian<sup>(a)</sup>, M. Coldea<sup>(a)</sup>, O. Isnard<sup>(b,c)</sup>, and V. Pop<sup>(a)</sup></i>  <i>(<sup>(a)</sup>Faculty of Physics, Babes-Bolyai University Cluj-Napoca, Kogalniceanu str 1, 400084 Cluj-Napoca, Romania, <sup>(b)</sup>Université Grenoble Alpes, Institut Néel, Grenoble, F 38042, France, <sup>(c)</sup>CNRS, Institut Néel, 25 rue des Martyrs, F-38042 Grenoble, France)</i></p>
P2-24	A0303	<p><i>Effect of Additive Elements on the Magnetic Properties of Fe-Cr-Co Magnet with High Br</i>  <i>Yuki Matsushita<sup>(a)</sup>, Surachate Homhuan<sup>(a)</sup>, Masakatsu Fukuda<sup>(b)</sup></i>  <i>(<sup>(a)</sup>MSM(THAILAND) Co., Ltd., A.Sriracha, Chonburi, Thailand, <sup>(b)</sup>Research and Development Center, Mitsubishi Steel Mfg. Co., Ltd., Chiba, Japan)</i></p>
P2-25	A0584	<p><i>Low cost Sm<sub>0.7</sub>Y<sub>0.3</sub>Co<sub>5</sub> sintered magnet produced by traditional powder metallurgy technique</i>  <i>Naixing Cai, Rongchun Zhu, Dongtao Zhang, Weiqiang Liu, Ming Yue</i>  <i>(College of Materials Science and Engineering, Beijing University of Technology, Beijing 100124, China)</i></p>

**Wednesday 29.08.2018**

**Wednesday 29.08.2018**

**Poster Installation** 8:00-8:30 Room III (Tower Shadow Multi-function Hall/映塔多功能厅)

**Poster Presentation** 16:00-18:00 Room III (Tower Shadow Multi-function Hall/映塔多功能厅)

### Poster 3: Others

*Chair: Jinghui Di (Key Laboratory of Magnetic Materials and Devices, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, Ningbo, Zhejiang Province, China)*

*Guangfei Ding (Key Laboratory of Magnetic Materials and Devices, Ningbo Institute of Materials Technology and Engineering, Chinese Academy of Sciences, Ningbo, Zhejiang Province, China)*

P3-1	A0497	Structural and magnetic study of (Sm,Zr)Fe <sub>11</sub> Ti alloys <i>N.V. Kudrevatykh<sup>(a)</sup>, S.V. Andreev<sup>(a)</sup>, M.A. Semkin<sup>(a)</sup>, M.N. Volochaev<sup>(b)</sup>, A.S. Volegov<sup>(a)</sup>, D.S. Neznakhin<sup>(a)</sup></i> <i>(<sup>(a)</sup> Institute of Natural Sciences and Mathematics, Ural Federal University, Ekaterinburg, Russia, (<sup>(b)</sup> Kirensky Institute of Physics, Siberian Branch, Russian Academy of Sciences, Krasnoyarsk, Russia)</i>
P3-2	A0479	Micromagnetic simulation of SrFe <sub>12</sub> O <sub>19</sub> /Fe <sub>65</sub> Co <sub>35</sub> nanocomposite bilayer films <i>Li-ying Jia<sup>(a),(b)</sup>, Zhao-wen Geng<sup>(a)</sup>, Rong-ming Liu<sup>(a),(b)*</sup>, Dai-man Zhu<sup>(a)</sup>, Dan Chuai<sup>(a),(b)</sup>, Xiao-wen Zhou<sup>(a)</sup>, Qian Wang<sup>(a)</sup>, Ke-miao Huang<sup>(a)</sup>, Guo-hui Hu<sup>(a)</sup>, Jun Xiong<sup>(a)</sup>, Bing-shan Li<sup>(a),(b)</sup></i> <i>(<sup>(a)</sup>National Engineering Research Center for Magnetic Materials, Beijing, China (<sup>(b)</sup>BGRIMM Magnetic Materials &amp; Technology (Fuyang) Co Ltd, Fuyang, China;)</i>
P3-3	A0271	Micromagnetic simulation for exchange coupling effect and magnetic properties of SmCo <sub>5</sub> /α-Fe nanocomposite magnets <i>JinGuk Kim, Lianxi Hu*</i> <i>(School of Materials Science and Engineering, Harbin Institute of Technology, Harbin, Heilongjiang, China)</i>
P3-4	A0200	High Coercivity Pr <sub>2</sub> Fe <sub>14</sub> B/α-Fe nanocomposite permanent magnets with Zr addition <i>Mehran Khan. Alam, Guangbing Han<sup>(a)</sup></i>

		<i>(<sup>(a)</sup>School of Physics, Shandong University, Jinan, China)</i>
P3-5	A0179	Magnetic properties of the melt spun $\text{Sm}_{1-x}\text{Zr}_x(\text{Fe}_{0.92}\text{Ti}_{0.08})_{10}$ ( $x = 0 - 0.3$ ) ribbons with $\text{ThMn}_{12}$ structure <i>A.G. Popov<sup>(a)</sup>, A.V. Protasov<sup>(a)</sup>, V.S. Gaviko<sup>(a)</sup>, D.A. Kolodkin<sup>(a)</sup>, P.B. Terentev<sup>(a)</sup>, Tianli Zhang<sup>(b)</sup>, Chengbao Jiang<sup>(b)</sup></i> <i>(<sup>(a)</sup> IMP UB RAS, Ekaterinburg, 620137, Russian Federation, <sup>(b)</sup>School of Materials Science and Engineering, Beihang University, Beijing 100191, People's Republic of China)</i>
P3-6	A0590	FePt/Au multilayers with lower phase transition temperature by $\text{H}^+$ ion exposure using plasma focus device <i>Tao Liu<sup>a</sup>, R.S. Rawat<sup>b</sup>, Ying Wang, Bo Ouyang, Zhaofu Du and Wei Li<sup>a</sup></i> <i>(<sup>(a)</sup> Division of Functional Material, Central Iron and Steel Research Institute, Beijing, China</i> <i>(<sup>(b)</sup> NSSE, National Institute of Education, Nanyang Technological University, Singapore, Singapore, 76 XUEYUANNAN ROAD, Beijing 100081, China)</i>
P3-7	A0631	Experiment Evaluates Temperature and Pressure Sensitivity of Magnetic Properties of Permanent Magnet <i>Lijun Xiao<sup>(a)</sup>, Guodong Yu<sup>(a)</sup>, Jibin Zou<sup>(a)</sup>, Yongxiang Xu<sup>(a)</sup></i> <i>(<sup>(a)</sup>School of Electrical Engineering, Harbin Institute of Technology, Harbin)</i>
P3-8	A0363	Magnetic simulation and optimization of molding die for manufacturing permanent magnets using Simplified Analytical Method <i>Rui Yao<sup>(a)(b)</sup>, Chao Liu<sup>(a)(b)</sup>, Tiejun Zhang<sup>(a)(b)</sup>, Shuoqing Yan<sup>(a)(b)</sup>, Xiaoyu Chen<sup>(a)(b)</sup></i> <i>(<sup>(a)</sup>Hunan Aerospace Magnet &amp; magneto Co. Ltd., Changsha 410200, P.R. China, <sup>(b)</sup>Hunan Engineering Technology R &amp; D Center for Magnetic Materials and Devices, Changsha 410200, P.R. China)</i>
P3-9	A0564	Estimation of effective average permeance coefficient ( $P_c$ ) of rectangular high-end thin Nd sintered magnet : REPM 2018 <i>Maolin Wu, Hiroshi Nagata</i> <i>(Institute of Rare Earth Magnetic Material, Xiamen Tungsten Co. Ltd., Xiamen 361010 China)</i>
P3-10	A0458	Study on magnetization reversal of Ga-doped Nd-Fe-B sintered magnets using FORC analysis and XMCD microscopy <i>K. Miyazawa<sup>(a)</sup>, T. Yomogita<sup>(a)</sup>, S. Okamoto<sup>(a), (b)</sup>, N. Kikuchi<sup>(a)</sup>, O. Kitakami<sup>(a)</sup>, K. Toyoki<sup>(b), (c)</sup>, D. Billington<sup>(b), (c)</sup>, Y. Kotani<sup>(c)</sup>, T. Nakamura<sup>(b), (c)</sup>, T.T. Sasaki<sup>(b)</sup>, T. Ohkubo<sup>(b)</sup>, K. Hono<sup>(b)</sup>, Y. Takada<sup>(d)</sup>, T. Sato<sup>(d)</sup>, Y. Kaneko<sup>(d)</sup>, A. Kato<sup>(e)</sup></i> <i>(<sup>(a)</sup> Tohoku University, Sendai, Japan, <sup>(b)</sup> ESICMM-NIMS Tsukuba, Japan, <sup>(c)</sup>JASRI/SPring-8, Sayo, Japan, <sup>(d)</sup> Toyota Central R&amp;D Labs., Inc., Nagakute, Japan, <sup>(e)</sup>Toyota Motor Corp., Advanced Material Engineering Div., Susono, Japan.)</i>
P3-11	A0418	Multiscale simulations on properties of Nd-Fe-B magnets at elevated temperatures <i>Qihua Gong, Min Yi, Bai-Xiang Xu</i> <i>(Institute of Materials Science, Technical University of Darmstadt, Darmstadt,</i>

		Germany)
P3-12	A0628	<p>The magnetic properties of misch-metal partially substituted Nd-Fe-B magnets sintered by dual alloy method</p> <p><i>Xiong, Jiefu<sup>a,b</sup>; Shang, Rongxiang<sup>a,b</sup>; Liu, Yanli<sup>a,b</sup>; Li, Rui<sup>a,b</sup>; Zhang, Yan<sup>a,b</sup>; Liu, Dan<sup>a,b</sup>; Zuo, Shulan<sup>a,b</sup>; Zhao, Xin<sup>a,b</sup>; Zhang, Bo<sup>a,b</sup>; Zuo, Wenliang<sup>a,b</sup>; Hu, Fengxia<sup>a,b</sup>; Sun, jirong<sup>a,b</sup>; Zhao, Tongyun<sup>a,b</sup>; Chen, Renjie; Shen, Baogen<sup>a,b</sup>;</i></p> <p><i>(<sup>a</sup>State Key Laboratory of Magnetism, Institute of Physics, Chinese Academy of Sciences, Beijing, China.<sup>b</sup>University of Chinese Academy of Sciences, Beijing, China.<sup>c</sup>Key Laboratory of Magnetic Materials and Devices, Ningbo Institute of Materials)</i></p>
P3-13	A0435	<p>Effect of sample thinning on magnetization reversal of hot-deformed Nd-Fe-B magnet</p> <p><i>T. Yomogita<sup>(a)</sup>, N. Kikuchi<sup>(a)</sup>, S. Okamoto<sup>(a), (b)</sup>, O. Kitakami<sup>(a)</sup>, H. Sepehri-Amin<sup>(b)</sup>, T. Ohkubo<sup>(b)</sup>, K. Hono<sup>(b)</sup>, T. Akiya<sup>(c)</sup>, K. Hioki<sup>(c)</sup>, and A. Hattori<sup>(c)(a)</sup></i></p> <p><i>(IMRAM, Tohoku University, Sendai, Miyagi, Japan,<sup>(b)</sup>ESICMM, NIMS, Tsukuba, Ibaraki, Japan,<sup>(c)</sup> Daido Steel Co. Ltd., Nagoya, Aichi, Japan)</i></p>
P3-14	A0311	<p>First-order reversal curve (FORC) diagrams in sintered Nd-Fe-B magnets with different grain alignment</p> <p><i>Hiroyuki Yamamoto<sup>(a)</sup>, Kumi Motai<sup>(a)</sup>, Isao Kitagawa<sup>(a)</sup></i></p> <p><i>(<sup>(a)</sup> Center for Technology Innovation – Electronics, Research &amp; Development Group, Hitachi, Ltd., Saitama 350-0395, Japan)</i></p>
P3-15	A0681	<p>Exchange Bias in LaMnO<sub>3</sub> film Induced by Electron Beam Irradiation</p> <p><i>Mingzhu Xue<sup>a</sup>, Xuegang Chen<sup>d</sup>, Shilei Ding<sup>a</sup>, Youfang Lai<sup>a</sup>, Liang Zha<sup>a</sup>, Yong Men<sup>e</sup>, Zhuang Xu<sup>e</sup>, Xiangdong Kong<sup>e</sup>, Li Han<sup>e</sup>, Kun Li<sup>a</sup>, Zhuyin Shao<sup>a</sup>, Guanyi Qiao<sup>a</sup>, Xin Li<sup>a</sup>, Yinfeng Zhang<sup>a</sup>, Hui Zhao<sup>a</sup>, Xin Wen<sup>a</sup>, Wenyun Yang<sup>a</sup>, Honglin Du<sup>a</sup>, Jingzhi Han<sup>a</sup>, Yingchang Yang<sup>a</sup>, Shunquan Liu<sup>a</sup>, Changsheng Wang<sup>a</sup> and Jinbo Yang<sup>a, b, c*</sup></i></p> <p><i>(<sup>a</sup> State Key Laboratory for Mesoscopic Physics, School of Physics, Peking University, Beijing 100871, P.R. China,<sup>b</sup> Collaborative Innovation Center of Quantum Matter, Beijing, 100871, P.R. China,<sup>c</sup> Beijing Key Laboratory for Magnetoelectric Materials and Devices, Beijing 100871, P. R. China,<sup>d</sup> Department of Physics and Astronomy &amp; Nebraska Center for Materials and Nanoscience, University of Nebraska-Lincoln, Lincoln, NE 68588-0299, USA,<sup>e</sup> Department of Micro-nano Fabrication Technology, Institute of Electrical Engineering, Chinese Academy of Sciences, Beijing 100190, P.R. China)</i></p>
P3-16	A0630	<p>In-situ domain structures and microscopic coercivity of NdCu diffused (MM/Nd) FeB sintered magnets</p> <p><i>Z. F. Hu<sup>(b)</sup>, Q. Ma<sup>(a, b)</sup>, Z. Y. Zhang<sup>(b)</sup>, Y. L. Liu<sup>(a, b)</sup>, X. F. Zhang<sup>(a, b)</sup> *, F. Liu<sup>(b)</sup>, X. M. Ju<sup>(b)</sup>, Y. F. Li<sup>(a, b)</sup></i></p> <p><i>(<sup>(a)</sup> Inner Mongolia Key Laboratory for Utilization of Bayan Obo Multi Metallic Resources: Elected State Key Laboratory, Inner Mongolia University of Science and Technology, Baotou 014010, China,<sup>(b)</sup> School of Science, Inner Mongolia University of Science and Technology, Baotou 014010, China)</i></p>

P3-17	A0481	<p>Influence of Ba substitutions on microstructure and magnetic properties of La-Ca-Co system permanent ferrite</p> <p><i>Xiaowen Zhou<sup>(a)</sup>, Zhaowen Geng<sup>(a)</sup>, Rongming Liu<sup>(a,b)*</sup>, Daiman Zhu<sup>(a)</sup>, Dan Chuai<sup>(a,b)</sup>, Liying Jia<sup>(a,b)</sup>, Qian Wang<sup>(a)</sup>, Kemiao Huang, Guohui Hu<sup>(a)</sup>, Jun Xiong<sup>(a)</sup>, Bingshan Li<sup>(a,b)</sup></i></p> <p><i>(<sup>(a)</sup>National Engineering Technology Research Center for Magnetic Materials, BGRIMM, Beijing, China, (<sup>(b)</sup>BGRIMM Magnetic Materials &amp; Technology CO, Ltd., Beijing, China)</i></p>
P3-18	A0720	<p>Application of HoH<sub>2</sub> Hydride for Improving the Hysteretic Properties of Pr-Fe-B Magnets at Low Temperatures</p> <p><i>N.B. Kolchugina<sup>a</sup>, A.A. Lukin<sup>b</sup>, G.S. Burkhanov<sup>a</sup>, Yu.S. Koshkid'ko<sup>a,c</sup>, K. Skotnicova<sup>d</sup>, M. Kursad<sup>d</sup>, N.A. Dormidontov<sup>a</sup>, T. Cegan<sup>d</sup>, A.B. Mikhailova<sup>a</sup>, T.P. Kaminskaya<sup>e</sup>, B.A. Ginzburg<sup>e</sup></i></p> <p><i>(<sup>(a)</sup>Baikov Institute of Metallurgy and Materials Science, RAS, Moscow, 119334 Russia, (<sup>(b)</sup>JSC SPETSMAGNIT, Moscow, Russia, (<sup>(c)</sup>Institute of Low Temperature and Structure Research, PAS, Wroclaw, Poland, (<sup>(d)</sup>Vysoka Skola Banska, Technical University of Ostrava, Ostrava-Poruba, Czech Republic, katerina. (<sup>(e)</sup>Moscow State University, Physical Department, Moscow, Russia)</i></p>
P3-19	A0422	<p>Sm-Co based magnetic system for 10 MeV technological electron accelerator</p> <p><i>V. A. Bovda, A. M. Bovda, I.S. Guk, S. G. Kononenko, V. N. Lyashchenko, A.O. Mytsykov, L.V. Onischenko</i></p> <p><i>(National Scientific Centre Kharkiv Institute of Physics and Technology, 61108 Kharkiv, Ukraine)</i></p>
P3-20	A0283	<p>The Thrust Characteristics of Transverse Flux Permanent Magnet Linear Motor with the Concentrated Flux Mover</p> <p><i>Mei Zhao<sup>(a)(b)</sup>, Hongyong Yang<sup>(a)</sup>, Ningjun Feng<sup>(a)</sup>, Mingming Xu<sup>(a)</sup>, Dianli Hou<sup>(a)</sup>, Jibin Zou<sup>(b)</sup></i></p> <p><i>(<sup>(a)</sup>School of Information and Electrical Engineering, University of Ludong, Yantai, 264025, China, (<sup>(b)</sup>School of Electrical Engineering, University of Harbin Technology, Harbin, 150001, China)</i></p>
P3-21	A0282	<p>Analysis of a Novel Flux Switching Transverse Flux Permanent Magnet Linear Motor</p> <p><i>Mei Zhao<sup>(a)(b)</sup>, Yao Wei<sup>(a)</sup>, Hongyong Yang<sup>(a)</sup>, Guanlong Deng<sup>(a)</sup>, Fujun Han<sup>(a)</sup>, Mingming Xu<sup>(a)</sup>, Jibin Zou<sup>(b)</sup></i></p> <p><i>(<sup>(a)</sup>School of Information and Electrical Engineering, University of Ludong, Yantai, 264025, China, (<sup>(b)</sup>School of Electrical Engineering, University of Harbin Technology, Harbin, 150001, China)</i></p>
P3-22	A0281	<p>The Thrust Characteristic of Flux-switching Transverse Flux Permanent Magnet Linear Motor</p> <p><i>Mei Zhao<sup>(a)(b)</sup>, Yao Wei<sup>(a)</sup>, Hongyong Yang<sup>(a)</sup>, Fujun Han<sup>(a)</sup>, Dianli Hou<sup>(a)</sup>, Mingming Xu<sup>(a)</sup>, Jibin Zou<sup>(b)</sup></i></p> <p><i>(<sup>(a)</sup>School of Information and Electrical Engineering, University of Ludong, Yantai, 264025, China, (<sup>(b)</sup>School of Electrical Engineering, University of Harbin Technology, Harbin, 150001, China)</i></p>



P3-23	A0700	<p>Magnetism and spin-glass-like behavior of hexagonal Mn<sub>2</sub>Sn alloys</p> <p><i>Kun Li<sup>(a)</sup>, Youfang Lai<sup>(a)</sup>, Fanggui Wang<sup>(a)</sup>, Mingzhu Xue<sup>(a)</sup>, Liang Zha<sup>(a)</sup>, Xin Wen<sup>(a)</sup>, WenyunYang<sup>(a)</sup>, Honglin Du<sup>(a)</sup>, Jingzhi Han<sup>(a)</sup>, Changsheng Wang<sup>(a)</sup>, Shunquan Liu<sup>(a)</sup> and Jinbo Yang<sup>(a) (b) (c)</sup></i></p> <p><i>(<sup>(a)</sup>State Key Laboratory for Mesoscopic Physics, School of Physics, Peking University, Beijing 100871, P.R. China, <sup>(b)</sup>Collaborative Innovation Center of Quantum Matter, Beijing, 100871, P.R. China, <sup>(c)</sup>Beijing Key Laboratory for Magnetoelectric Materials and Devices, Beijing, 100871, P. R. China)</i></p>
P3-24	A0692	<p>Optimizing Substitutions and Processing Parameters of Sr-Ferrite Magnets Using Taguchi Method</p> <p><i>Waleed Khalifa<sup>(a)</sup>, Omayma El-Kady<sup>(b)</sup></i></p> <p><i>(<sup>(a)</sup>Faculty of Engineering, Cairo University, 12613 Giza, Egypt, <sup>(b)</sup>CMRDI, 87 Helwan, Egypt)</i></p>
P3-25	A0333	<p>Effect of polymeric coating on the magnetic properties of recycled sintered NdFeB from automotive waste: REPM 2018</p> <p><i>Muhammad Awais<sup>(a,b)</sup>, Christian Jönsson<sup>(a)</sup>, Malik Degri<sup>(a)</sup>, Neil Rowson<sup>(b)</sup> and Allan Walton<sup>(a)</sup></i></p> <p><i>(<sup>(a)</sup>School of Metallurgy and Materials, University of Birmingham, Edgbaston, UK, <sup>(b)</sup> School of Chemical Engineering, University of Birmingham, Edgbaston, UK)</i></p>
P3-26	A0708	<p>The Magnetic Properties and Microstructure of Hot-pressing NdFeB with Ce-Co Addition</p> <p><i>Qiqi Yang<sup>a,b</sup> Xueguo Yin<sup>a,b</sup>, Yilong Ma<sup>a,b,*</sup>, Bin Shao<sup>a</sup>, Jianchun Sun<sup>a,b</sup>, Dengming Chen<sup>a,b</sup>, Donglin Guo<sup>a</sup></i></p> <p><i>(<sup>a</sup>College of Metallurgy and Materials Engineering, Chongqing University of Science and Technology, Chongqing 401331, China, <sup>b</sup> Chongqing Key Laboratory of Nano/Micro Composite Material and Device, Chongqing 401331, China)</i></p>
P3-27	A0705	<p>Study on Magnetic Properties of SmCo/NdFeB Composite Bonded Magnets</p> <p><i>Xueguo Yin<sup>a,b</sup>, Yue Sui<sup>c</sup>, Yilong Ma<sup>a,b,*</sup>, Qiqi Yang<sup>a,b</sup> Bin Shao<sup>a</sup>, Jianchun Sun<sup>a,b</sup>, Dengming Chen<sup>a,b</sup>, Donglin Guo<sup>a</sup></i></p> <p><i>(<sup>a</sup> College of Metallurgy and Materials Engineering, Chongqing University of Science and Technology, Chongqing 401331, China, <sup>b</sup> Chongqing Key Laboratory of Nano/Micro Composite Material and Device, Chongqing 401331, China, <sup>c</sup> College of Chemistry and Chemical Engineering, Chongqing University of Science and Technology, Chongqing 401331, China)</i></p>
P3-28	A0689	<p>First-order-reversal-curve analysis of the (Nd<sub>0.8</sub>Ce<sub>0.2</sub>)<sub>2</sub>Fe<sub>12</sub>Co<sub>2</sub>B nanocomposite magnets</p> <p><i>Cao Xiao, Ji Tianchi, Wu Qiong, Pan Minxiang, Zhang Pengyue<sup>*</sup></i></p> <p><i>(Magnetism key laboratory of Zhejiang Province, China Jiliang University, 310018 Hangzhou, China)</i></p>
P3-29	A0685	<p>Synthesis, Structure and Magnetization Behaviors of SmCo<sub>5</sub>/α-Fe Nanocomposite Magnet</p> <p><i>Ji Tianchi, Cao Xiao, Wu Qiong, Pan Minxiang, Zhang Pengyue<sup>*</sup></i></p>

		<i>(Magnetism key laboratory of Zhejiang Province, China Jiliang University, 310018 Hangzhou, China)</i>
P3-30	A0614	A novel analytical model for hysteresis loops of exchange-coupled hard-soft magnets <i>J. Zou<sup>(a)</sup>, G. P. Zhao<sup>(a),(b)*</sup></i> <i>(<sup>(a)</sup>College of Physics and Electronic Engineering, Sichuan Normal University, Chengdu 610101, China, <sup>(b)</sup>Collaborative Innovation Center for Shanxi Advanced Permanent Materials and Technology, Linfen 041004, China)</i>
P3-31	A0558	Structure and magnetic properties of nanocrystalline Dysprosium powders <i>Hongjian Li, Qiong Wu, Ming Yue*, Yuqing Li, Jingming Liang</i> <i>(College of Materials Science and Engineering, Beijing University of Technology, Beijing 100022, China)</i>
P3-32	A0541	Magnetic coupling of 4f and 3d moments by EMCD: application to DyFe <sub>2</sub> -based superlattices <i>X. Fu<sup>(a)</sup>, V. Serin<sup>(b)</sup>, B. Warot-Fonrose<sup>(b)</sup>, K. Dumesnil<sup>(c)</sup></i> <i>(<sup>(a)</sup>Chongqing University, Shabeijie 83, Shapingba District, 400044, Chongqing, China. <sup>(b)</sup> CEMES-CNRS UPR 8011, F-31055 Toulouse France, <sup>(c)</sup> Institut Jean Lamour, CNRS, Univ H. Poincaré Nancy, FRANCE )</i>
P3-33	A0524	Change of coercivity mechanism with the soft film thickness in hard-soft trilayers <i>X J. Weng<sup>(a)</sup>, G P. Zhao<sup>(a),(b),*</sup>, H. Tang<sup>(a)</sup>, LC. Shen<sup>(a)</sup>, Y Xiao<sup>(a)</sup></i> <i>(<sup>(a)</sup>College of Physics and Electronic Engineering, Sichuan Normal University, Chengdu 610101, China, <sup>(b)</sup>Collaborative Innovation Center for Shanxi Advanced Permanent Materials and Technology, Linfen 041004, China)</i>
P3-34	A0739	Electric-Field tuning of magnetic anisotropy and exchange bias effect in CoO/Co films <i>X. Wen<sup>(a)</sup>, W.Y. Yang<sup>(a),(b),(c)</sup>, C.S. Wang<sup>(a),(b),(c)</sup>, S.Q. Liu<sup>(a),(b),(c)</sup> and J.B. Yang<sup>(a),(c)</sup></i> <i>(<sup>(a)</sup>State Key Laboratory for Mesoscopic Physics and School of Physics, Peking University, Beijing 100871, P.R. China, <sup>(b)</sup>Beijing Key Laboratory for Magnetoelectric Materials and Devices, Beijing 100871, P. R. China, <sup>(c)</sup>Collaborative Innovation Center of Quantum Matter, Beijing 100871, P. R. China)</i>
P3-35	A0734	Structural and magnetic properties of the R <sub>10</sub> Fe <sub>90-x</sub> Si <sub>x</sub> alloys with R=Y, Ce, Pr, Nd, Sm, Gd, Tb, Dy, Ho, and Er <i>Wenyun Yang<sup>a,b*</sup>, Yinfeng Zhang<sup>a,b</sup>, GuanyiQiao<sup>a,b</sup>, ShunquanLiu<sup>a,b</sup>, Changsheng Wang<sup>a,b</sup>, Jingzhi Han<sup>a,b</sup>, Honglin Du<sup>a,b</sup>, Yan Zhang<sup>a</sup>, Yingchang Yang<sup>a</sup>, Yanglong Hou<sup>b,c</sup>, Jinbo Yang<sup>a,d*</sup></i> <i>(<sup>a</sup>State Key Laboratory for Mesoscopic Physics, School of Physics, Peking University, Beijing, 100871, P.R. China, <sup>b</sup>Beijing Key Laboratory for Magnetoelectric Materials and Devices, Beijing 100871, P. R. China, <sup>c</sup>Department of Materials Science and Engineering College of Engineering, Peking University, Beijing 100871, P. R. China, <sup>d</sup>Collaborative Innovation Center of Quantum Matter, Beijing, P. R. China)</i>

P3-36	A0735	<p>Tunable magnetic and microwave absorption properties of <math>\text{Sm}_{1.5}\text{Y}_{0.5}\text{Fe}_{17-x}\text{Si}_x</math> and their nanocomposites</p> <p>Wenyun Yang<sup>a,b*</sup>, Yinfeng Zhang<sup>a,b</sup>, GuanyiQiao<sup>a,b</sup>, ShunquanLiu<sup>a,b</sup>, Changsheng Wang<sup>a,b</sup>, Jingzhi Han<sup>a,b</sup>, Honglin Du<sup>a,b</sup>, Yan Zhang<sup>a</sup>, Yingchang Yang<sup>a</sup>, Yanglong Hou<sup>b,c</sup>, Jinbo Yang<sup>a,d*</sup></p> <p>(<sup>a</sup>State Key Laboratory for Mesoscopic Physics, School of Physics, Peking University, Beijing 100871, P.R. China, <sup>b</sup>Beijing Key Laboratory for Magnetolectric Materials and Devices, Beijing 100871, P. R. China, <sup>c</sup>Department of Materials Science and Engineering College of Engineering, Peking University, Beijing 100871, P. R. China, <sup>d</sup>Collaborative Innovation Center of Quantum Matter, Beijing, P. R. China)</p>
P3-37	A0736	<p>On nature of the ultra-sharp magnetization step in <math>\text{Sm}(\text{Ni}_{0.5}\text{Fe}_{0.4}\text{Al}_{0.1})_5</math></p> <p>Wenyun Yang<sup>a,b*</sup>, Yinfeng Zhang<sup>a,b</sup>, GuanyiQiao<sup>a,b</sup>, ShunquanLiu<sup>a,b</sup>, Changsheng Wang<sup>a,b</sup>, Jingzhi Han<sup>a,b</sup>, Honglin Du<sup>a,b</sup>, Yan Zhang<sup>a</sup>, Yingchang Yang<sup>a</sup>, Yanglong Hou<sup>b,c</sup>, Jinbo Yang<sup>a,d*</sup></p> <p>(<sup>a</sup>State Key Laboratory for Mesoscopic Physics, School of Physics, Peking University, Beijing 100871, P.R. China, <sup>b</sup>Beijing Key Laboratory for Magnetolectric Materials and Devices, Beijing 100871, P. R. China, <sup>c</sup>Department of Materials Science and Engineering College of Engineering, Peking University, Beijing 100871, P. R. China, <sup>d</sup>Collaborative Innovation Center of Quantum Matter, Beijing, P. R. China)</p>