Special Issue on Challenges and Possibilities of Magnetic Semiconductors

■ RESEARCH HIGHLIGHTS

080201 Toward intrinsic room-temperature ferromagnetism in two-dimensional

semiconductors

[1 page] Fanlong Ning

080202 Magnetism in do oxides

[1 page] Xiaohong Xu

080203 Epitaxial lift-off of ferromagnetic (Ga,Mn)As nanoflakes for van der Waals

heterostructures

[1 page] Gang Xiang

080204 Controlling magnetism in 2D Crl, by electrostatic doping

[1 page] Zheng Han

■ COMMENTS AND OPINIONS

080301 Families of magnetic semiconductors — an overview

[5 pages] Tomasz Dietl, Alberta Bonanni, and Hideo Ohno

■ EDITORIAL

080101 Preface to the Special Issue on Challenges and Possibilities of Magnetic

Semiconductors

[1 page] Xinyu Liu, Dahai Wei, and Jianhua Zhao

■ REVIEWS

081501 The predicaments and expectations in development of magnetic semiconductors

[11 pages] Qiang Cao and Shishen Yan

081502 Magnetization dynamics and related phenomena in semiconductors with

ferromagnetism

[8 pages] Lin Chen, Jianhua Zhao, Dieter Weiss, Christian H. Back, Fumihiro Matsukura, and Hideo Ohno

081503 Interlayer exchange coupling in (Ga,Mn)As ferromagnetic semiconductor

multilayer systems

[8 pages] Sanghoon Lee, Sunjae Chung, Hakjoon Lee, Xinyu Liu, M. Dobrowolska, and J. K. Furdyna

081504 High temperature magnetic semiconductors: narrow band gaps and

two-dimensional systems

[9 pages] Bo Gu

temperature

[8 pages]

Advances in new generation diluted magnetic semiconductors with independent spin 081505 and charge doping [12 pages] Guoqiang Zhao, Zheng Deng, and Changqing Jin Progress on microscopic properties of diluted magnetic semiconductors by NMR 081506 and µSR Yilun Gu, Shengli Guo, and Fanlong Ning [7 pages] Mn-doped topological insulators: a review 081507 Jing Teng, Nan Liu, and Yongqing Li [17 pages] 081508 Perspectives on exfoliated two-dimensional spintronics Xiaoxi Li, Baojuan Dong, Xingdan Sun, Hanwen Wang, Teng Yang, Guoqiang Yu, and Zheng Vitto Han [11 pages] Two-dimensional ferromagnetic materials and related van der Waals heterostructures: 081509 a first-principle study Baoxing Zhai, Juan Du, Xueping Li, Congxin Xia, and Zhongming Wei [8 pages] Amorphous magnetic semiconductors with Curie temperatures above room 081510

Na Chen, Kaixuan Fang, Hongxia Zhang, Yingqi Zhang, Wenjian Liu, Kefu Yao, and Zhengjun Zhang