

2008 年度業績 一中谷 亮一

学術論文・解説記事

1. Y. Shiratsuchi, R. Nakatani, M. Yamamoto, Contribution of Langevin behavior to the low temperature maximum of zero-field-cooled magnetization in the discontinuous Fe films, *Journal of Applied Physics*, 103, 07B503-1 - 07B503-3, 2008
2. Y. Endo, H. Fujimoto, S. Kumano, Y. Matsumura, I. Sasaki, Y. Kawamura, M. Yamamoto, and R. Nakatani, Study on the magnetization reversal process in a magnetic nanowire and a magnetic dot observed by magnetic field sweeping magnetic force microscopy measurement (invited), *Journal of Applied Physics*, 103, 07D918-1 - 07D918-6, 2008
3. T. Sato, Y. Endo, Y. Kawamura, R. Nakatani and M. Yamamoto, Study on magnetic behavior and structure of V-doped AlN films, *Journal of Physics: Conference Series*, 106, 012005-1 - 012005-5, 2008
4. Y. Endo, Y. Matsumura, R. Nakatani and M. Yamamoto, Dependence of magnetization process in a Ni-Fe nanowire on the width of the nanowire, *Journal of Physics: Conference Series*, 106, 012006-1 - 012006-5, 2008
5. T. Sato, Y. Endo, Y. Kawamura, F. Kirino, R. Nakatani, and M. Yamamoto, Study on Absence of Room-Temperature Ferromagnetism in the Mn-AlN Films With Various Mn Concentrations, *IEEE Transaction on Magnetics*, 44, 2688-2691, 2008
6. Y. Endo, H. Fujimoto, Y. Kawamura, R. Nakatani, and M. Yamamoto, Effect of the Dot Separation on the Switching Behavior of Ni-Fe Elliptical Dot Arrays, *IEEE Transaction on Magnetics*, 44, 2718-2721, 2008
7. Y. Endo, H. Fujimoto, R. Nakatani, and M. Yamamoto, Local Probing of Magnetization Reversal in Ni-Fe Elliptical Dots With Variable Geometry, *IEEE Transaction on Magnetics*, 44, 3244-3247, 2008
8. 中谷亮一, 白土優, 遠藤恭, 磁場スイープ MFM 法の原理と磁化過程の観測, *金属*, 78, 30-35, 2008
9. 白土優、久富和郎、中谷亮一, SrTiO₃(001)基板上に作製した Co 薄膜の構造と磁性, *ICICE Technocal Report*, 108, 1-4, 2009
10. 永山達郎、野村光、遠藤恭、中谷亮一, 狹窄構造を有する Ni-Fe 磁性細線における磁壁の挙動の検討, *ICICE Technocal Report*, 108, 17-21, 2009
11. Yu Shiratsuchi, Toshihiro Nakatani, Ryoichi Nakatani, and Masahiko Yamamoto, Fabrication of Cr oxide thin film and its influence on magnetic properties of ultrathin Co film, *Journal of Physics: Conference Series*, in-press, 2009
12. Ryoichi Nakatani, Hikaru Nomura and Yasushi Endo, Magnetic Logic Devices Composed of

- Permalloy Dots, Journal of Physics: Conference Series, in-press, 2009
- 13. Hideki Etoh, Junichi Sato, Yoshiteru Murakami, Akira Takahashi, and Ryoichi Nakatani, Magnetic Properteis of Mn-Zn Ferite Thin Films Fabricaetd by Pulsed Laser Deposition, Journal of Physics: Conference Series, in-press, 2009
 - 14. Hikaru Nomura, Daisuke Yokota, and Ryoichi Nakatani, Development of A Magnetic Force Microscopy for Magnetically Soft Materials, Journal of Physics: Conference Series, in-press, 2009
 - 15. Takanobu Sato, Yasushi Endo, Fumiyoji Kirino, and Ryoichi Nakatani, Difference of Structure and Magnetic Behavi o r of Mn-AlN Films Due to Substrate Materials, Journal of Physics: Conference Series, in-press, 2009
 - 16. Yoshiyuki Hirayama, Ichiro Tamai, Ikuo Takekuma, and Ryoichi Nakatani, Role of Underlayer for Srggregated Structure Formation of CoCrPt-SiO₂ Film, Journal of Physics: Conference Series, in-press, 2009

受賞

- 1. 関東地方発明表彰「神奈川県支部長賞」，中谷亮一，他 9 名, 2008 年 11 月 15 日

シンポジウム開催状況

- 1. 3 大学連携事業「アトミックテクノロジー創出事業」マグネティクスグループ研究会, 参加人数 30(外国人参加者数 0)
- 2. 3rd International Symposium on Atomic Technology(ISAT-3), 主な招待講演者 : Dr. Shigehiro Ohnuma(Research Institute for Electric and Magnetic Materials Japan), Prof. Katsuji Nakagawa(Nihon University, Japan), 参加人数 50(外国人参加者数 10)

特許権などの知的財産権

- 1. 電圧誘起磁化反転を用いた磁気メモリとその製造方法, 発明者 : 白土優, 中谷亮一, 権利者 : 大阪大学, 特願 2009-54827, 出願年月日 : 2009 年 3 月 9 日