

2009 年度業績 —中谷 亮一

学術論文・解説記事

1. Hiroaki Nemoto, Ikuko Takekuma, Ryoko Araki, Kiwamu Tanahashi and Ryoichi Nakatani, Ultrahigh-Hc granular media with [CoB/Pt]_n multilayer film sputtered under Ar+O₂ atmosphere, Journal of Applied Physics, 105, 07B705-1-07B705-3, 2009
2. Yu Shiratsuchi, Toshihiro Nakatani, Shin-ichi Kawahara and Ryoichi Nakatani, Magnetic coupling at interface of ultrathin Co film and antiferromagnetic Cr₂O₃(0001) film, Journal of Applied Physics, 106, 033903-1—033903-7, 2009
3. Yu Shiratsuchi, Mitsuyoshi Yamashita, Ryoichi Nakatani and Masahiko Yamamoto, Magnetic properties of L1₂-type CrPt₃(111) film having the different order parameters, Journal of Magnetism Society of Japan, 33, 447-450, 2009
4. Noboru Iwata, Yoshiteru Murakami, Akira Takahashi, Hikaru Nomura and Ryoichi Nakatani, Amorphous Magnetic Film Patterned Media with Columnar Structure, Journal of Magnetism Society of Japan, 33, 459-462, 2009
5. Yu Shiratsuchi, Toshihiro Nakatani, Shin-ichi Kawahara and Ryoichi Nakatani, Fabrication of Antiferromagnetic α -Cr₂O₃(0001) Thin Film and Influence on Magnetism of Ultrathin Co Film, Journal of Magnetism Society of Japan, 33, 467-472, 2009
6. Yu Shiratsuchi, Fumihiro Nishiura, Kenichi Tachibori, Akifumi Higashiura, Atsushi Nakagawa, Ryoichi Nakatani, Tomitake Tsukihara and Masahiko Yamamoto, Magnetic properties of P₄V encapsulating of Ni ions, Journal of Magnetism Society of Japan, 33, 473-476, 2009
7. Ryoichi Nakatani, Hikaru Nomura and Yasushi Endo, Magnetic logic devices composed of permalloy dots, Journal of Physics: Conference Series, 165, 012030 - 1-012030-6, 2009
8. Hideki Etoh, Junichi Sato, Yoshiteru Murakami, Akira Takahashi and Ryoichi Nakatani, Magnetic properties of Mn-Zn ferrite thin films fabricated by pulsed laser deposition, Journal of Physics: Conference Series, 165, 012031 - 1-012031-4, 2009
9. Takanobu Sato, Yasushi Endo, Fumiyoshi Kirino and Ryoichi Nakatani, Differences in structure and magnetic behavior of Mn-AlN films due to substrate material, Journal of Physics: Conference Series, 165, 012032 - 1-012032-4, 2009
10. Yoshiyuki Hirayama, I. Tamai, I. Takamura and Ryoichi Nakatani, Role of underlayer for segregated structure formation of CoCrPt-SiO₂ granular thin film, Journal of Physics: Conference Series, 165, 012033 - 1-012033-4, 2009
11. Yu Shiratsuchi, Toshihiro Nakatani, Ryoichi Nakatani and Masahiko Yamamoto, Superparamagnetism of ultrathin Co film on antiferromagnetic Cr₂O₃ layer, Journal of Physics: Conference Series, 165, 012034 - 1-012034-6, 2009

12. Hikaru Nomura, Tatsuro Nagayama, Daisuke Yokota and Ryoichi Nakatani, Development of a magnetic force microscopy for magnetically soft materials, Journal of Physics: Conference Series, 165, 012036 - 1-012036-4, 2009
13. Yasushi Endo, Isao Sasaki, Ryoichi Nakatani and Masahiko Yamamoto, Local probing of vortex core movement in a Ni-Fe disk using magnetic field sweeping-magnetic force microscopy, Japanese Journal of Applied Physics, 48, 66502-1-66502-5, 2009
14. 河原信一, 納富隼人, 白土 優, 中谷亮一, α -Cr₂O₃(0001)薄膜上に作製した Co 超薄膜の磁気異方性に対する Cr スピンの影響, 信学技報 (ICICE Technical Report), 109, 11-16, 2010
15. Yu Shiratsuchi, Shin-ichi Kawahara, Hayato Noutomi, and Ryoichi Nakatani, Interface magnetism of Au/Co/Cr₂O₃(0001) epitaxial film with perpendicular magnetic anisotropy and perpendicular exchange bias, IEEE Transaction on Magnetism, 46, in press, 2010

受賞

1. 中谷亮一, 全国発明表彰, 2009 年 7 月 29 日
2. 西浦文浩 (M2), 第 4 回 3 大学 (東京理科大学・筑波大学・大阪大学) 連携学生研究会 審査員奨励賞, 2009 年 8 月 28 日

シンポジウム開催状況

1. Magnetism and Optics Research International Symposium for New Storage Technology 2009, 主な招待講演者: K. Sato (Japan Science and Technology Agency), B. Terris (Hitachi GST), Th. Rasing (Radboud Univ. Nijmegen), 参加人数 110 (外国人参加者数 30)
2. 第 33 回日本磁気学会学術講演会, 参加人数 670 (外国人参加者数 100)