Contrast of Magnetic Domain in Garnet Film Transferred from Magnetic Tape

Yasuhiko IWABE† 野村 剛雄† 野村 剛雄† 野村 剛雄†
Kota NAGAI† Tatsuo NOMURA† Masahiko KISHIDA† and Naoto HAYASHI†
†静岡理工科大学 †NHK放送技術研究所 †NHK Technical Research Laboratory

Abstract For the study of a transfer mechanism of signal from magnetic tape to magnetic garnet film, contrast of transferred magnetic domains in garnet will give us meaningful information. We took pictures of magnetic domain patterns by a digital camera and analyzed them in terms of image contrast.

1. Introduction

We demonstrated that garnet film can be read with a magnetic tape. We experimented with a magnetic tape on which magnetic garnet information was written by a digital camera. The read image was then analyzed to study the transfer mechanism of the magnetic information from the tape to the garnet film. We noted that the magnetic domains in the garnet film were similar to those in the magnetic tape. This suggests that the magnetic domains in the tape can be transferred to the garnet film.

2. Analysis of the Magnetic Domains

The magnetic domains in the garnet film were analyzed using a digital camera. The analysis showed that the magnetic domains in the garnet film were similar to those in the magnetic tape. This suggests that the magnetic domains in the tape can be transferred to the garnet film.

3. Results and Discussion

The magnetic domains in the garnet film were found to be similar to those in the magnetic tape. This suggests that the magnetic domains in the tape can be transferred to the garnet film. The magnetic domains in the garnet film were found to be similar to those in the magnetic tape. This suggests that the magnetic domains in the tape can be transferred to the garnet film.

4. Conclusion

We demonstrated that garnet film can be read with a magnetic tape. We experimented with a magnetic tape on which magnetic garnet information was written by a digital camera. The read image was then analyzed to study the transfer mechanism of the magnetic information from the tape to the garnet film. We noted that the magnetic domains in the garnet film were similar to those in the magnetic tape. This suggests that the magnetic domains in the tape can be transferred to the garnet film.

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4. まとめ

ガーネット膜に転写した磁区を撮影し、その画像のコントラストか転写機構を推定することを試みた。推定に必要な画像を得るには、検光子設定角、露出時間などの観察条件を適切に設定する必要があること、転写磁区のコントラストを測定することにより、磁気テープからガーネット膜への転写機構を推定する手がかりが得られることなどが分かった。

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†静岡理工科大学 理工学部 電気電子工学科
〒437-8555 静岡県袋井市豊沢 2200-2
TEL 0538-45-0144 E-mail: nomura@ee.aist.go.jp