

Errata to “UTILIZATION OF SCREEN PRINTED LOW CURING TEMPERATURE COBALT NANOPARTICLE INK FOR MINIATURIZATION OF PATCH ANTENNAS”

by M. Nelo, A. Sowpati, V. K. Palukuru, J. Juuti, and H. Jantunen, in Progress In Electromagnetics Research, Vol. 127, 427–444, 2012

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Previous ink characterization results published in the paper are corrected by new characterization measurements from Co ink consisting of the same Co nanoparticles bound together with poly(methyl methacrylate). New measurement result is reported as vol% whereas previous result was reported as wt.%. Correlation 50 vol% = ~90 wt.%.

- 1) In page 437, Figure 10 should be replaced with **modified Figure 10**.

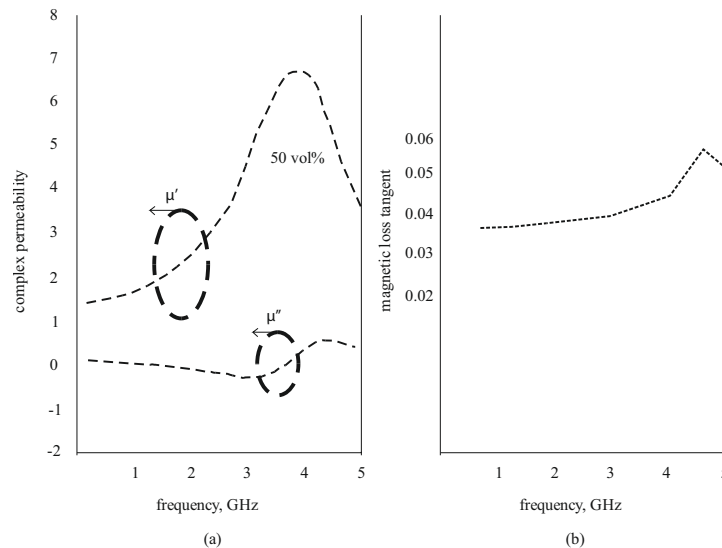


Figure 10. (a) The complex permeability of printed cobalt magnetic thick film. (b) The loss tangent of film.

- 2) In page 437, “The FMR frequency can be observed between 3 and 3.5 GHz” should be replaced with “The FMR frequency can be observed between **3.5 and 5 GHz**”.
- 3) In page 437, “Measured permeability value “ μ_r was 81 and loss tangent \tan was 0.62 at 2.4 GHz frequency” needs to be replaced with “Measured permeability value μ_r was **3.2** and loss tangent \tan was **0.035** at 2.4 GHz frequency”.

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- 4) Page 441, in acknowledgements, I would like to thank Dr. Sami Myllymaki for his support and helpful discussions during making corrections.
- 5) In page 441, we would like to add following references:
 - [36] Wu, M., Y. D. Zhang, S. Hui, T. D. Xiao, S. Ge, W. A. Hines, J. I. Budnick, and G. W. Taylor, "Microwave magnetic properties of Co₅₀/(SiO₂)₅₀ nanoparticles," *Applied Physics Letters*, Vol. 80, 4404–4406, 2002.
 - [37] Kato, Y., S. Sugimoto, K. Shinohara, N. Tezuka, T. Kagotani, and K. Inomata, "Magnetic properties and microwave absorption properties of polymer-protected cobalt nanoparticles," *Materials Transactions*, Vol. 43, No. 3, 406–409, 2002.
 - [38] Chung, J.-Y., K. Sertel, and J. L. Volakis, "Broadband characterization of bulk and thin magnetic composites using stripline structures," *IEEE Transactions on Microwave Theory and Techniques*, Vol. 58, No. 11, 2960–2967, Nov. 2010.