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# PROGRAMME & ABSTRACTS

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Fisher method. The results are found to be $T_C = 285.7 \pm 0.2$, $\beta = 0.450 \pm 0.021$, $\gamma = 1.290 \pm 0.032$ and $d = 3.867 \pm 0.053$. It can be seen that the obtained critical parameters fall between those of the mean-field model and 3D Heisenberg model, showing the coexistence of long-range and short-range ferromagnetic interactions in the alloy ribbons.

MEP-P28

## BROADBAND AND POLARIZATION-INSENSITIVE METAMATERIAL ABSORBER USING CHIRAL STRUCTURE

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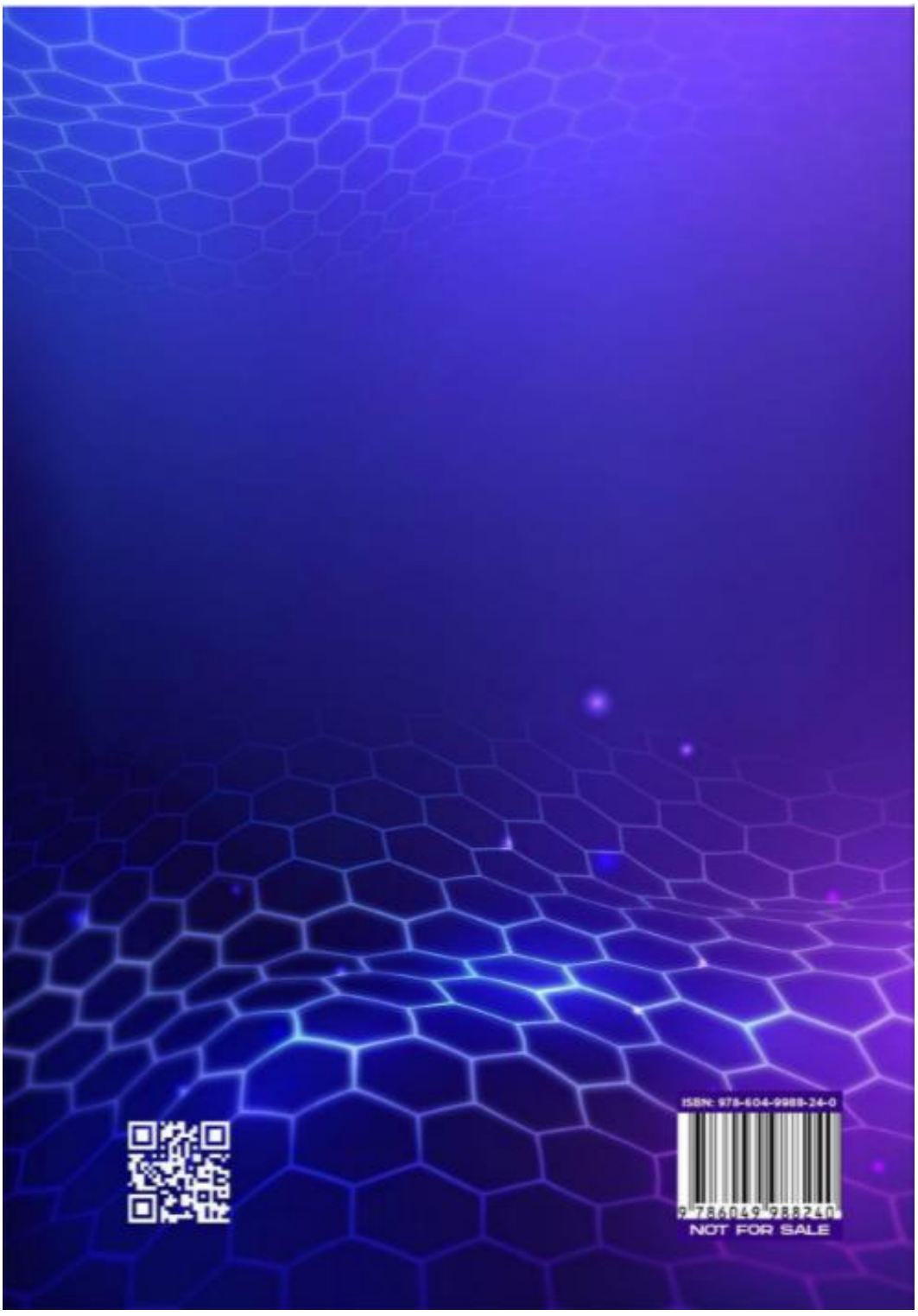
### ABSTRACT

Metamaterial is an artificial structure designed to achieve the desired properties that natural materials do not exhibition. Broadband and polarization-insensitive absorption is an important characterization of metamaterial-based devices. In this work, we present a simple approach to enhance bandwidth and absorptivity of the metamaterial absorber (MA) in GHz region. The proposed MA is designed and simulated by computer simulation technology (CST) Microwave Studio. The results indicate that the absorption performance of the MA strongly depends on the conductivity of polymer. By using chiral structure with low conductive polymer of 700 S/m, the absorption bandwidth is expanded up to 12.9 GHz with absorptivity over 80 %. Our design might be useful to fabricate broadband MA.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