

## Morphology, microstructure and magnetic properties of thermionic vacuum arc deposited NiFeCu ferromagnetic thin films

Viorel IONESCU<sup>a\*</sup>, Gabriel PRODAN<sup>a</sup>, Ionut JEPUR<sup>b</sup>, Ion MUSTATA<sup>b</sup>,  
Cristian Petrica LUNGU<sup>b</sup> and Eugeniu VASILE<sup>c</sup>

<sup>a</sup>*University of Constanta, Physics and Electronics Department, 124 Mamaia Blvd, 900527 Constanta, Romania*

<sup>b</sup>*National Institute for Lasers, Plasma and Radiation Physics, Magurele-Bucharest, 077125 Romania*

<sup>c</sup>*Metav-CD S.A., Bucharest, 050025, Romania*

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**Abstract** NiFeCu granular ferromagnetic thin films were deposited on glass and silicon wafer substrates in thermionic vacuum arc plasma with simultaneous ignition of plasma in Cu and NiFe vapors. The structural and morphological properties of the prepared films were investigated by TEM Transmission Electron Microscopy (TEM) and Scanning Electron Microscopy (SEM). Elemental composition of the films was revealed after X-ray energy dispersive spectroscopy analysis (EDAX). The magneto-optical longitudinal Kerr rotation spectra of the samples were also measured and compared.

**Keywords:** TVA method, HRTEM, MOKE measurements

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