

# Congratulations on the acceptance of the paper “Localized to Propagating Surface Plasmon Resonance Transition in Ni-Au Magneto-Plasmonic Gratings”



The paper entitled **“Localized to Propagating Surface Plasmon Resonance Transition in Ni-Au Magneto-Plasmonic Gratings”** is written by Morteza Alizadeh Oskuie under the direct supervision of Dr Seyedeh Mehri Hamidi and it is accepted in the **journal of Superconductivity and novel magnetism**. The abstract is as follows:

Magneto-plasmonic structures, which are the best candidates for different applications, have been the subject of intense research in recent years. In this paper, we proposed new magneto-plasmonic structures based on different uni-dimensional gratings to investigate the localized to propagative surface plasmon resonance transition. For

this purpose, simulation of reflectance and also surface plasmon resonance coupling were used in three different fabricated samples compared with nickel thin film under different azimuthally excitations. The fabricated samples show an enhanced magneto-optical rotation due to the transition of two types of plasmon in the sample with intermediate dimensions. The prospects of magneto-plasmonic response dependency on the azimuthally excitation are discussed.