

## **THERMAL RADIATION PROPERTIES OF MAGNETO-OPTICAL NANOPARTICLES**

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**ABSTRACT.** In this work, we investigate the magneto-optical effect on the thermal radiation properties of nanoparticles. It is found that an external static magnetic field can split the resonance emission peaks of the nanoparticles. The external magnetic field can effectively tune the spectral position, the polarization and the angular direction of these resonance emission peaks, showing that the magnetic field can be a useful tool for the active control of thermal radiation properties of nanoparticles.