

PREPARATION OF COPPER NANOPARTICLES IN WATER AND ACETONE BY LASER ABLATION

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TÓM TẮT:

Using the Quanta Ray Pro 230 Nd:YAG laser, we produced copper nanoparticles in water and acetone by laser ablation. The average size and optical properties of the nanoparticles were observed by a transmission electron microscopy (JEM 1010 – JEOL) and UV-visible 2450 spectrometer. The average diameter of copper nanoparticles in water and acetone were 23 nm and 5 nm, respectively. The absorption spectra of copper nanoparticles showed that there was no indication of copper oxide nanoparticles. The experimental results showed advantages of the laser ablation method. The results and discussions will be represented in this report