Characterization analysis of 1064 nm and 532 nm dual pulsed laser fragmentation in liquid on copper target

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This study using two pulsed laser light sources (i.e. 1064 nm and 532 nm pulsed laser) to conduct laser fragmentation in liquid analysis on copper target with a purity of 99.99 wt%. Due to the energy gap values of the two laser light sources are different, to obtain the interaction relationship between the laser and the material, light detectors and spectrometers are used to monitor the key signals of each process during the fragmentation process. The basis for parameter adjustment and optimization in the interaction process of induced and reduced preparation of nanoparticle composite materials is used to construct a theoretical model of the laser/material interaction process of nanomaterials under liquid phase conditions.

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