Origin and evolution of paramagnetic states in mixtures of ZnO and carbon nanoparticles during intensive mechanical treatment

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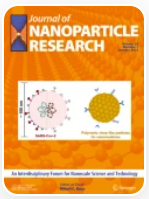

Journal of Nanoparticle Research

Aims and scope

Submit manuscript

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Abstract

In this study, the microstructural evolution and reaction processes in the mixture of ZnO + *x*C nanoparticles during prolonged high-energy mechanical activation were explored. The formation of paramagnetic centers has been identified. It was observed that the evolution of various paramagnetic defects reveals several macroscopic flow processes that take place in the system. Some of these processes are the destruction of primary durable