Kinetics of thermal decomposition of copper(II) acetate monohydrate

The thermal decomposition of copper(II) acetate monohydrate was studied in air and nitrogen atmospheres by means of DTA-TG and SEM measurements. The kinetics of the thermal decomposition steps in air was studied by using isothermal and non-isothermal thermogravimetric techniques. The results are discussed in terms of various reaction interface models and different techniques of computational analysis of non-isothermal data. The activation parameters, calculated by using a composite method of integral analysis of non-isothermal data, revealed not only their independence from the heating rate and fractional reaction, but also a better correlation and agreement with the results obtained under isothermal conditions.

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البحث:

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