



Research division: Nanocrystalline metal oxides

Simultaneous thermogravimetric analysis and differential scanning calorimetry (STA 449 C Jupiter – Netzsch)

We offer contract measurement:

- simultaneous measurement of thermogravimetric analysis and differential scanning calorimetry in different atmospheres up to 1400 °C; released gases analysis
- results interpretation of the analysis for understanding the mechanism of the thermal material transformation, crystallization processes, phase processes etc.
- studying of dehydration processes, decarboxylation, oxidation and reduction depending on temperature and used atmosphere
- material calcination with exactly defined temperature programme

Measuring conditions

- temperature range from 25 °C to 1400 °C
- heating and/or cooling rates: 0,01 up to 50 °C/min
- weight range: 5 g
- working gases: Ar, N₂, synthetic/compressed air, reduction atmosphere (10 % H₂ in N₂)
- TG resolution: 0,1 µg
- DSC resolution: 1 µW
- weight range for mass spectrometer: 1 up to 300 amu
- Instruments: STA 449 C Jupiter (Netzsch), QMS 403 Aëolos (Netzsch)



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