

Receptor properties of nanoporous material based on dipeptide L-alanyl-L-valine toward vapor of organic compounds and water

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Abstract

The receptor properties of the dipeptide L-alanyl-L-valine toward the vapours of organic compounds and water were studied using quartz crystal microbalance. The reversibility of sorbate binding was studied by simultaneous thermogravimetry and differential scanning calorimetry with mass-spectrometric analysis of gaseous products of decomposition. The surface morphology of thin films of dipeptide before and after interaction with the sorbate was studied by atomic power microscopy.