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## Influence of hydrophobization of fumed oxides on interactions with polar and nonpolar adsorbates

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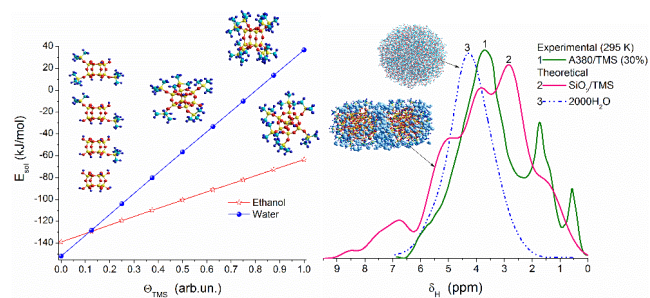
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### Graphical abstract



### Highlights

- Textural characteristics of modified fumed oxides are affected by modification degree and modifier type
- Interfacial behavior of water depends more strongly on surface modification than that of n-decane
- Confined space effects appear for both polar (water) and nonpolar (decane) adsorbates

### Abstract

A variety of unmodified and modified fumed silica A-300 and silica/titania (ST20 and ST76 at 20 and 76 wt.% of titania, respectively) was prepared to analyze features of their interactions with polar and nonpolar adsorbates. The materials were studied using nitrogen adsorption-

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