

Supporting Information for

**Intermolecular Interaction-Induced Hierarchical
Transformation in 1D Nanohybrids: Analysis of
Conformational Changes by 2 Dimensional
Correlation Spectroscopy**

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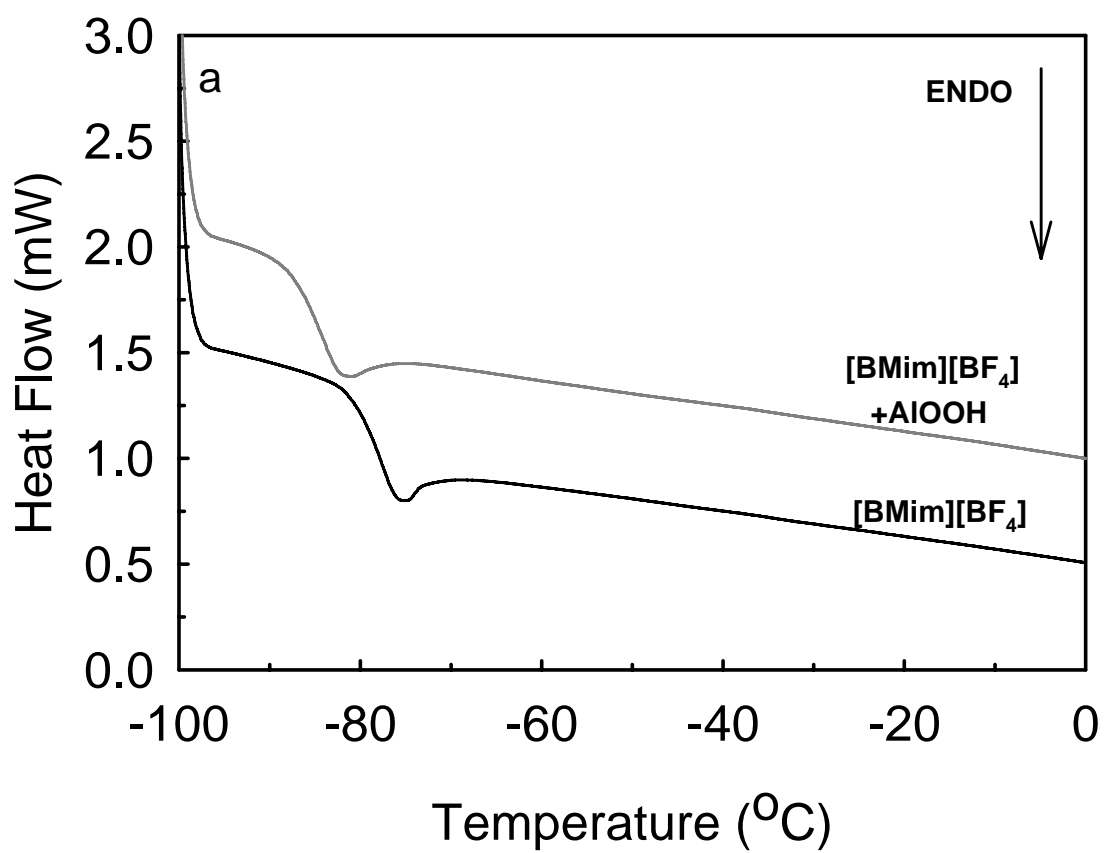


Figure S1. DSC curves of (a) [BMim][BF₄]+AlOOH conventional mixture and [BMim][BF₄] and (b) RAH 1 and RAH 2.

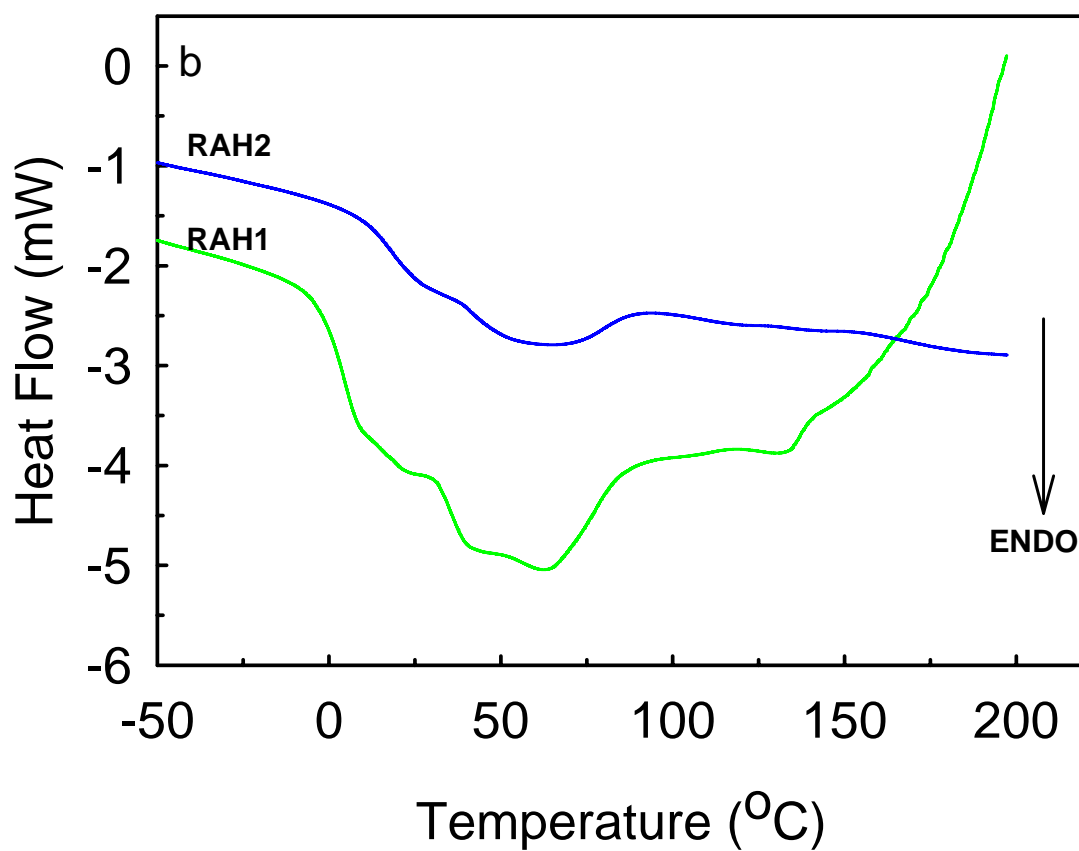


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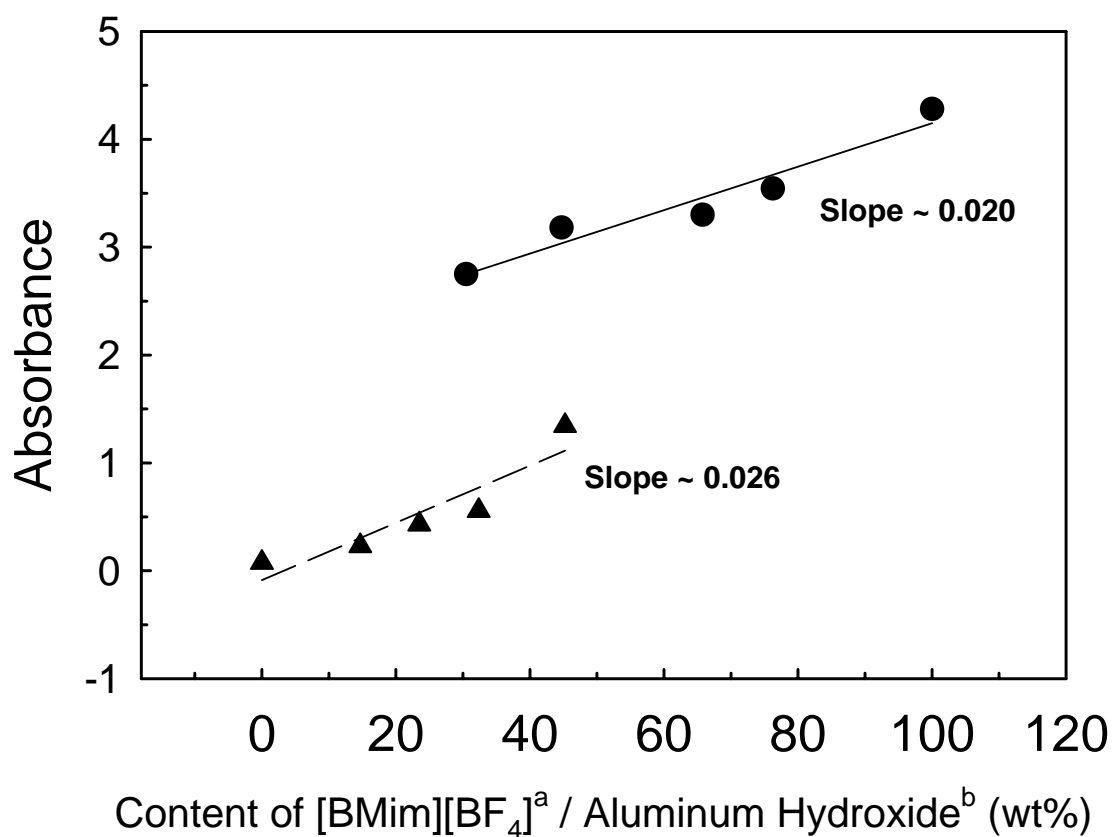


Figure S2. Changes in the absorbance at 230 nm / 300 nm as functions of the contents of [BMim][BF₄] (circle) / aluminum hydroxide (triangle) in hybrids.

^a wt % of [BMim][BF₄] was calculated by elemental analysis.

^b wt % of aluminum hydroxide was determined by subtracting wt % of [BMim][BF₄] and chemisorbed water from hybrids given by Table 1.

As shown in Figure S2, we plotted the changes in the absorbance as functions of the contents of [BMim][BF₄] / aluminum hydroxide. In RAH system, the absorbance of [BMim][BF₄] was increased with its content at 230 nm, whereas the absorbance of aluminum hydroxide was increased with its content at 300 nm. The slopes of two curves obtained from approximate linear relation are ca. 0.020 for [BMim][BF₄] and 0.026 for aluminum hydroxide. Considering reciprocal relation of relative content of [BMim][BF₄] and aluminum hydroxide in RAHs, similar slopes of two curves can support reciprocal transition of UV spectra.