Supporting Information

Absorption of SO₂ at High Temperatures by Ionic Liquids and the Absorption Mechanism

Shidong Tian, Yucui Hou,[†] Weize Wu,^{*} Shuhang Ren, and Jianguo Qian

State Key Laboratory of Chemical Resource Engineering, Beijing University of Chemical Technology, Beijing 100029, China. *E-mail: wzwu@mail.buct.edu.cn [†]Department of Chemistry, Taiyuan Normal University, Taiyuan 030031, China Received February 17, 2014, Accepted May 29, 2014



Figure S1. The absorption capacities of the ILs at temperatures from 25 to 120 °C: \blacksquare , $[N_{2222}]L$; \Box , [Bmim]L.



Figure S2. The FT-IR spectra of (a) $[N_{2222}]L$ and (b) [Bmim]L before absorption and after desorption: A, IL before absorption; B, IL after desorption.



Figure S3. The (a) FT-IR, (b) ¹H NMR and (c) ¹³C NMR spectra of [Bmim]L before and after absorption: A, [Bmim]L; B, [Bmim]L-SO₂. (The absorption band assigned to S=O is overlapped by the absorption band near 1172 cm⁻¹)

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