Two-dimensional Hydrogen Hydrate: Structure and Stability

Hong Zhong^a, Liwen Li^b, Rui Ma^b, Jie Zhong^c, Youguo Yan^b, Shuguang Li^a, Jun Zhang^{b*}, Jinxiang Liu^{d*}

^aCollege of Science, China University of Petroleum, Qingdao, 266580, China ^bSchool of Materials Science and Engineering, China University of Petroleum, Qingdao, 266580, China

^cDepartment of Earth and Environmental Science and Department of Chemistry, University of Pennsylvania, Philadelphia, PA,19104-6316, USA

^dSchool of Physics and Technology, University of Jinan, Jinan 250022, China

Supporting Information



Figure S1. The amount of molecular displacement of two-dimensional hydrogen hydrate in confined environment in the Z direction increases with time. (A) BLHH-I from 153K to 273K, (B) BLHH-I from 273K to 153K, (C) BLHH-II from 153K to 273K, (D) BLHH-II from 273K to 153K, (E) BLHH-III from 153K to 273K, (F) BLHH-III from 273K to 153K, (G) BLHH-IV from 153K to 273K, (H) BLHH-IV from 273K to 153K.