

Electronic Supplementary Information
for
Identification of two types of exchangeable sites for monovalent copper ions exchanged in MFI-type zeolite

Toshinori Mori,^a Atsushi Itadani,^b Eiji Tabuchi,^a Yoji Sogo,^b Ryotaro Kumashiro,^b Mahiko Nagao^{a,b} and Yasushige Kuroda^a

^a Department of Fundamental Materials Science, Graduate School of Natural Science and Technology, Okayama University, Tsushima, Okayama 700-8530, Japan. Fax: +81-86-251-7853; Tel: +81-86-251-7844; E-mail: kuroda@cc.okayama-u.ac.jp

^b Research Laboratory for Surface Science, Faculty of Science, Okayama University, Tsushima, Okayama 700-8530, Japan.

Fig. S1: The first and second adsorption isotherms (a) and adsorption heats of CO (b) at 301 K on Sample Cu/SiO₂·Al₂O₃(5) which had been evacuated at 873 K.

Fig. S2: IR spectra in the desorption stage of CO species adsorbed on the (1) 873-treated Cu/SiO₂·Al₂O₃(5) samples.

Supplementary Figures

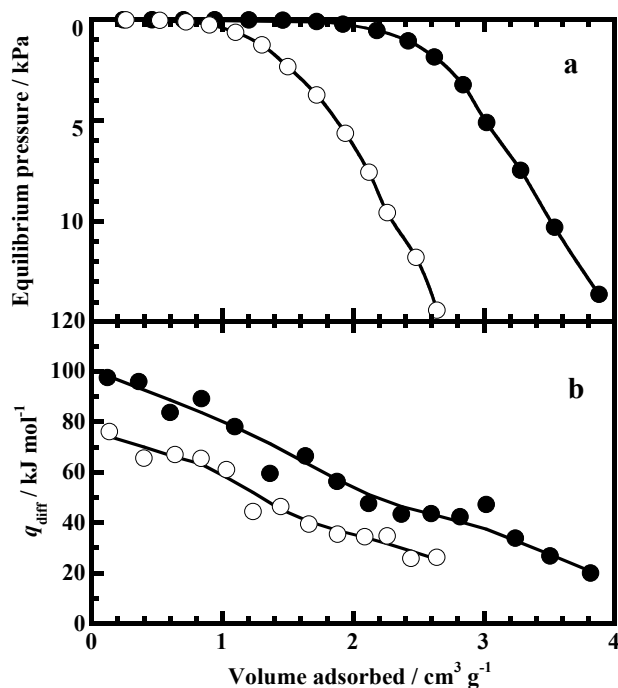


Fig. S1 The first and second adsorption isotherms (a) and adsorption heats of CO (b) at 301 K on Sample Cu/SiO₂·Al₂O₃(5) which had been evacuated at 873 K. Solid circles indicate the first run and open circles the second one.

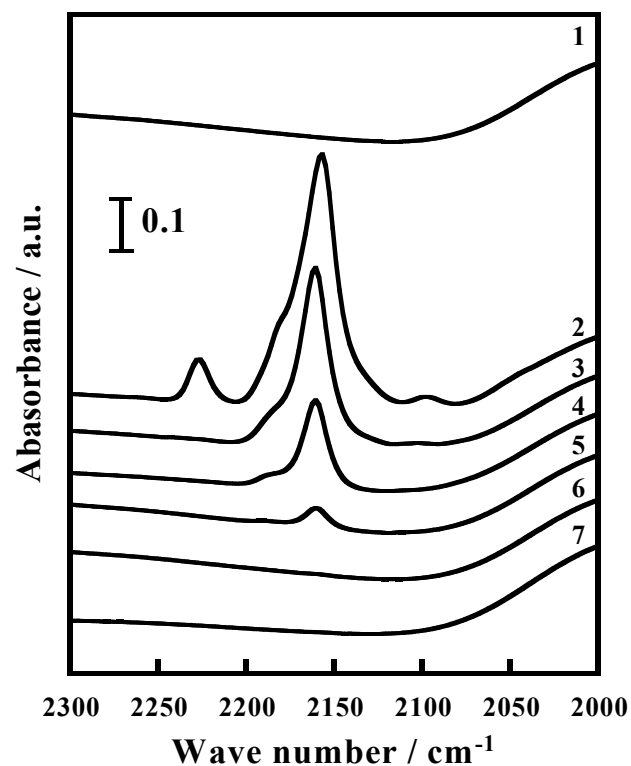


Fig. S2 IR spectra in the desorption stage of CO species adsorbed on the (1) 873-treated Cu/SiO₂·Al₂O₃(5) samples: (2) equilibrated under the pressure of 13.3 kPa of CO, and re-evacuated at (3) 300, (4) 373, (5) 473, (6) 573 and (7) 673 K.