

Supplementary Materials

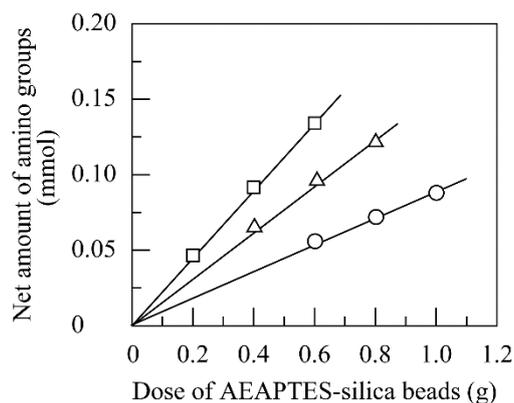


Figure S1: Changes in the net amount of amino groups with the dose of silica beads for AEAPTES-silica beads with the amount of amino groups of 0.030 (\triangle), 0.080 (\square), and 0.220 (\diamond) mmol/g.

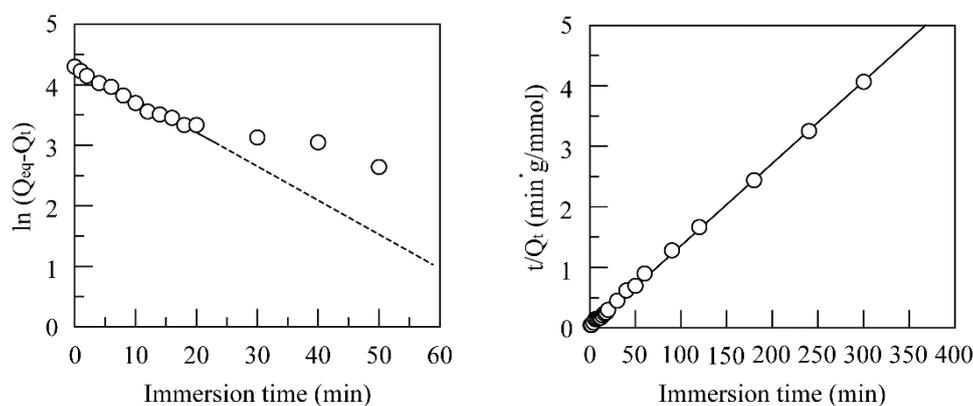


Figure S2: Determination of (a) the pseudo-first order constant, k_1 , and (b) pseudo-second order constant, k_2 , for adsorption of Cr(VI) ions on AEAPTES-silica beads with the amount of amino groups of 0.220 mmol/g in a 0.20 mM $K_2Cr_2O_7$ solution at pH 3.0 and 30°C.

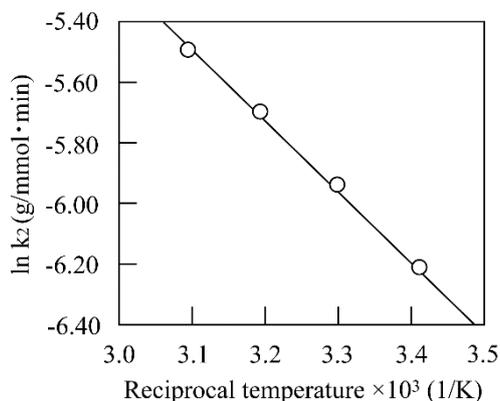


Figure S3: The linear relationship between the k_2 value and the reciprocal temperature in Arrhenius plot for adsorption of Cr(VI) ions on AEAPTES-silica beads with the amount of amino groups of 0.220 mmol/g in a 0.20 mM $K_2Cr_2O_7$ solution at pH 3.0 and 30°C.

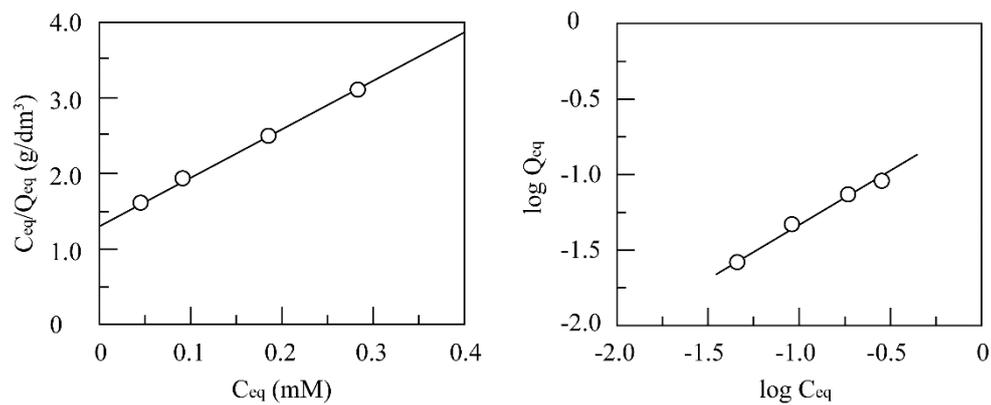


Figure S4: The linear forms of (a) Langmuir and (b) Freundlich isotherms for adsorption of Cr(VI) ions on AEAPTES-silica beads with the amount of amino groups of 0.220 mmol/g in a 0.20 mM $K_2Cr_2O_7$ solution at pH 3.0 and 30°C.