
Supporting information of

**Preparation of ZnO nanoparticles loaded amidoximated wool fibers
as a promising antibiofouling adsorbent for uranium(VI) recovery**

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Table S1 Typical adsorption isotherms, kinetics models equations investigated in the present work [1-3].

| Model | Equation |
|---------------------------|--|
| Langmuir isotherm | $C_e / q_e = 1 / K_L q_m + C_e / q_m$ |
| Freundlich isotherm | $\ln q_e = \ln K_F + \ln C_e / n$ |
| Pseudo-first-order model | $1 / q_t = 1 / (q_e t) + 1 / q_e$ |
| Pseudo-second-order model | $t / q_t = 1 / (k_2 q_e^2) + t / q_e$ |
| Elovich model | $q_t = \frac{\ln \alpha \beta}{\beta} + \frac{\ln t}{\beta}$ |

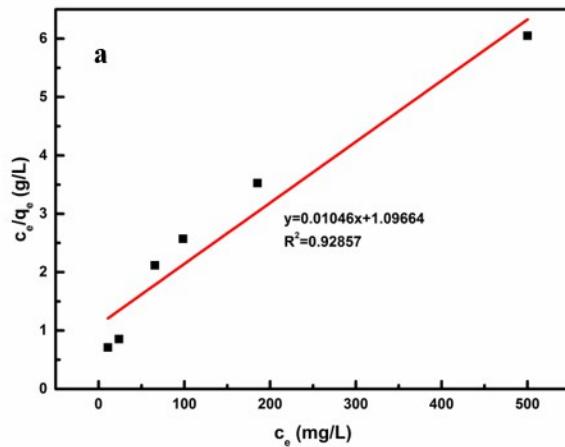
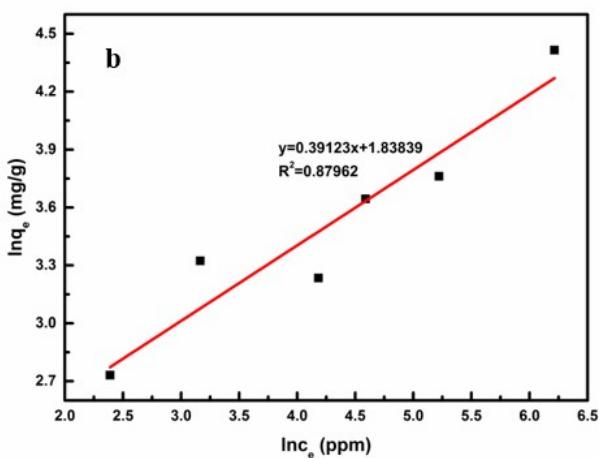


Figure.S1 Absorption isotherms: (a) Langmuir model; (b) Freundlich model. Conditions: pH = 8.0, T = 25 °C, Time = 10 h.

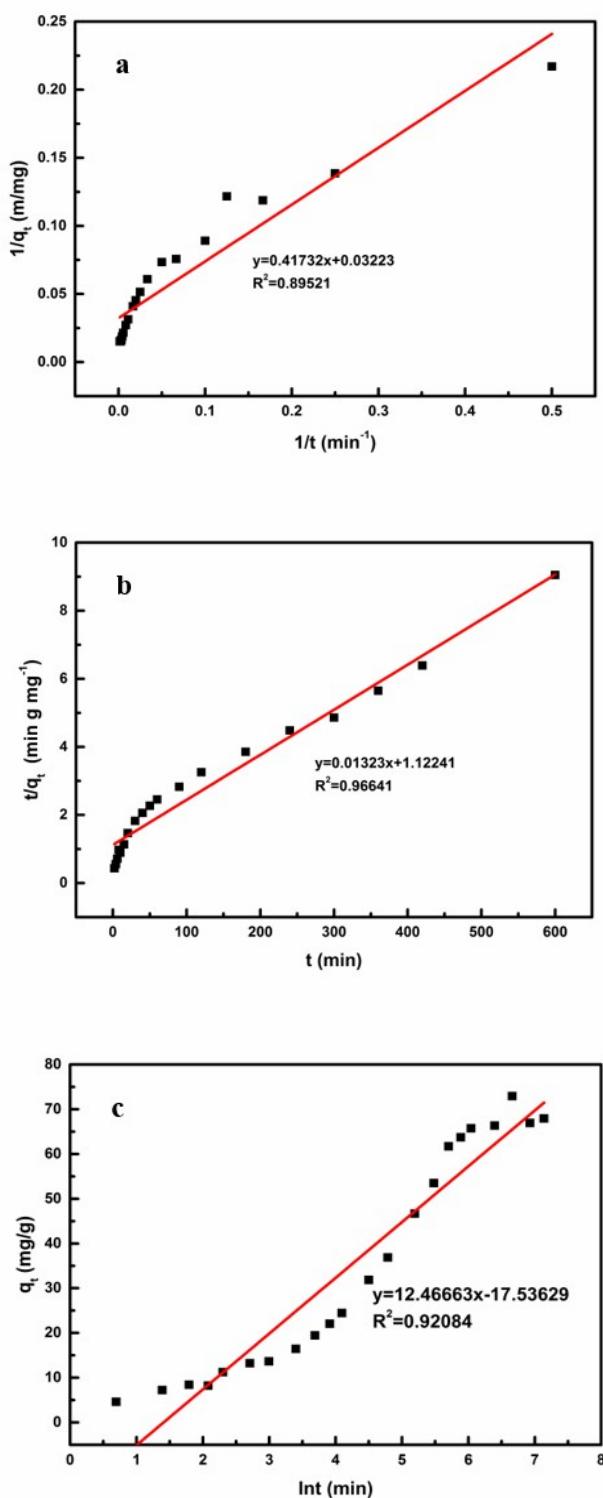


Figure.S2 Absorption kinetics: (a) Pseudo first order model; (b) Pseudo second order model; and (c) Elovich equation. Conditions: pH = 8.0, T = 25 °C, Time = 10 h.

References

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2. Freundlich, H. Over the adsorption in solution. *J. Phys. Chem.* **1906**, *57*, 1100-1107.
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