Supporting Information

Preparation of Ultrathin Peroskite Nanosheets by Exfoliation of H₂CaTa₂O₇ for High-Performance Lead Removal from Waters

Yan Wang^{a,b}, Yi Ren^a, Jingjing Luo^a, Qiaoyan Hao^a, Biao Li^a, Zhan Gao^a, Yiwei Hu^a, Dan Lin^a, Kaibin Tang^{*a}

^aDivision of Nanomaterials and Chemistry, Hefei National Laboratory for Physical Sciences at the Microscale, Department of Chemistry, University of Science and Technology of China, Hefei, 230026, P.R. China.

^bState Key Laboratory of Pulsed Power Laser Technology, Electronic Engineering Institute, 460 Huangshan Road, Hefei, Anhui, 230037, P.R. China

Article

Submitted to RSC Adv.

* Corresponding author. Tel.: + 86-551-63601791; fax: +86-551-63607402

E-mail address: kbtang@ustc.edu.cn;



Figure S1. XPS spectra of sample U-HCT-Pb after washing with HCl.



Figure S2. The XRD patterns of U-HCT sample in different state: (a) U-HCT; (b) U-HCT after uptake Pb(II) at pH 1.3; (c) U-HCT after uptake Pb(II) at pH 5.0; (d) U-HCT after uptake Pb(II) at pH 6.8; (e) U-HCT after uptake Pb(II), 1 M HCl solution washed repeatedly.



Figure S3. Effect of competitive ions on uptake of lead ions onto U-HCT (a) calcium ions, (b) magnesium ions.



Figure S4. Static settling properties in various time intervals of U-HCT with adsorbed lead ions (initial Pb(II) concentration is 300 m/L).