Electronic Supplementary Material (ESI) for RSC Advances.

Influence of fertilizers on fluoride accumulation in tea leaves and its remediation using polyphenol-Ce adsorbents

Shilin Zhao,[a,b*] Yong Liu,[a] Jun Ma,[a] Hui Mao,[a] Ting Lan,[a] Yunfu Jiang,[a] Yang Liao,[a,b*]

[a] College of Chemistry and Materials Science, Sichuan Normal University, Chengdu, PR China, 610068.

[b] The Engineering Research Center for the Development of Farmland Ecosystem Service Functions, Sichuan Province Institutions of Higher Education Chengdu, PR China, 610068.

Correspondence and requests for materials should be addressed to S. Z. (zhaoslin@aliyun.com) or Y. L. (liaoyang_sicnu@163.com)

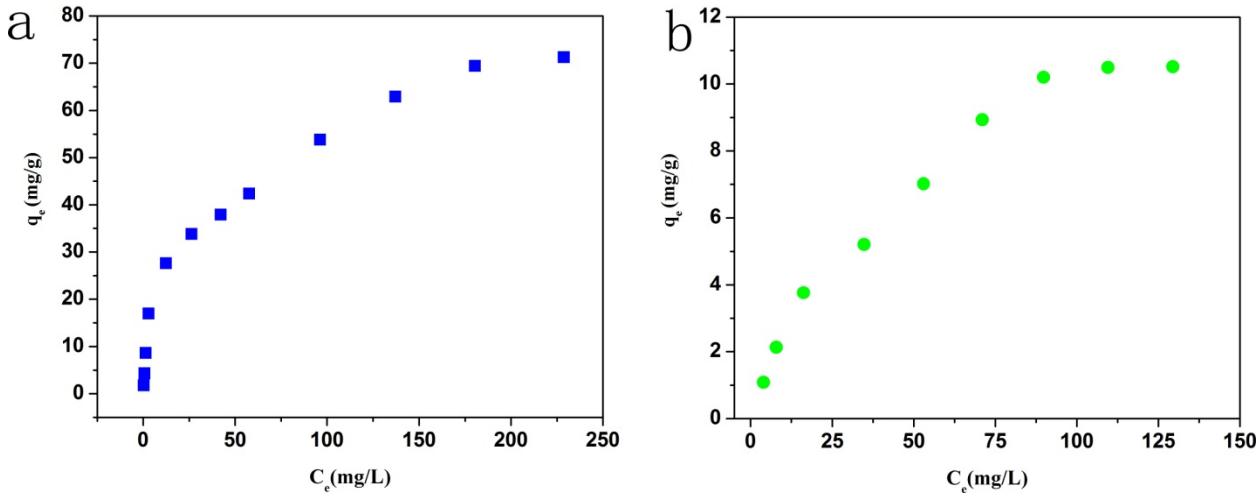

Fig. S1. Adsorption capacities of polyphenols-Ce to F^- (a) and Al^{3+} (b) at 298 K. Experimental conditions: 0.1 g polyphenols-Ce, 100 mL F solution (2-300 mg/L) or Al^{3+} (5-140 mg/L) solution.

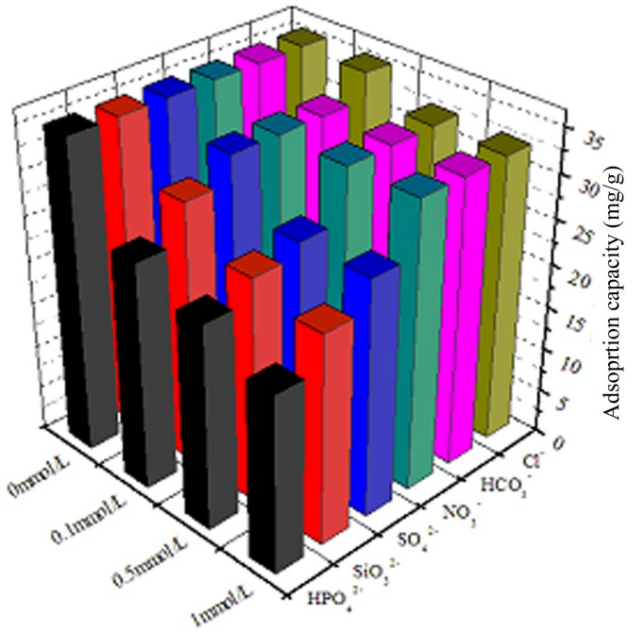

Fig. S2. Influence of anions on the adsorption of Fluoride on polyphenols-Ce absorbent. Experimental conditions: 0.1 g polyphenols-Ce, 100 mL 50 mg/L F^- solution containing Cl^-, HCO_3^-, NO_3^-, SO_4^{2-}, SiO_3^{2-} and HPO_4^{2-} with different condensations (0-1.0 mmol/L)