## Supplementary Table S5 Details of extraction procedure for Shiowatana method

As speciation	Extractive reagents	Reaction time and temperature
Water-soluble As (F <sub>S1</sub> )	Deionized water $(pH = 6)$	25 °C, 16 h
Surface-adsorbed As (F <sub>S2</sub> )	$0.5 \text{ M NaHCO}_3 \text{ (pH} = 9)$	25 °C, 16 h
Fe/Al associated As (F <sub>S3</sub> )	0.1  M NaOH (pH = 13)	25 °C, 16 h
Acid-extractable As (F <sub>S4</sub> )	1 M HCl	25 °C, 16 h
Residual As (F <sub>S5</sub> )	14 M HNO <sub>3</sub>	200 °C, 15 min