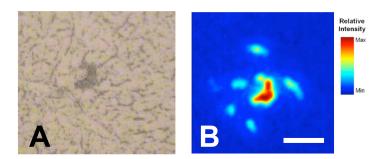


Supplementary Figure 1: Evidence for the exicstance of creatine zwitterion or HCl salt. FTIR functional group image of creatine deposit using (**A**) the $v_s(COO^-)$ band centered at 1402 cm⁻¹, and (**B**) the band centered at 2780 cm⁻¹ (assigned to a molecular vibration of the NH₃⁺ group or the HCl salt). (**C**) A representaive spectrum from the creatine deposit, highlighting the band centered at 2780 cm⁻¹ (arrow).



Supplementary Figure 2: (A) Optical image of a creatine micro-deposit on a thin section of tissue mounted on a Si_3N_4 window. (B) FTIR functional group image of creatine micro-deposit (second-derivative intensity at 1402 cm⁻¹) collected in transmission mode. Scale Bar = 50 μ m.