Blood Electrolytes Exhibit Strong Influence on Mobility of Artificial Catalytic Microengines

Hong Wang, Guanjia Zhao, Martin Pumera*



Figure S1. Influence of *ionic strength* upon the motion of the Pt-catalyzed microjets in electrolytes solutions. Graph showing the influence of electrolytes ionic strength on the percentage of microjets found to be ejecting bubbles (red bar) and moving (blue bar). Note that ultrapure water was used as the control experiment, both the running and bubbling percentages of which were defined as 100%. Conditions in all of the experiments: temperature of 23 °C, 3 wt% H₂O₂ and 1 wt% SDS.



Figure S2. Influence of *ionic strength* upon the motion of the Pt-catalyzed microjets in electrolytes solutions. Graph showing the influence of electrolytes ionic strength on the velocity of the moving microjets. Note that ultrapure water was used as the control experiment, both the running and bubbling percentages of which were defined as 100%. Conditions in all of the experiments: temperature of 23 $^{\circ}$ C, 3 wt% H₂O₂ and 1 wt% SDS.



Figure S3. Summarized plot of influence of *ionic strength* upon the motion of the Pt-catalyzed microjets in various electrolytes solutions. Conditions, as in Figure S1.