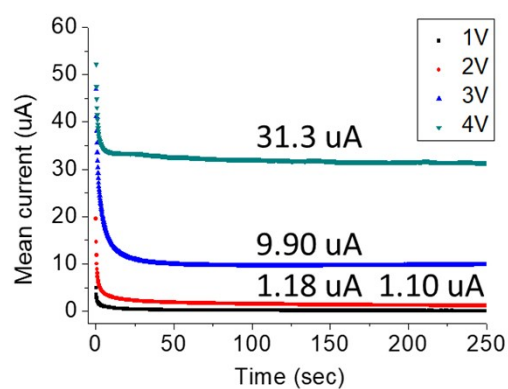
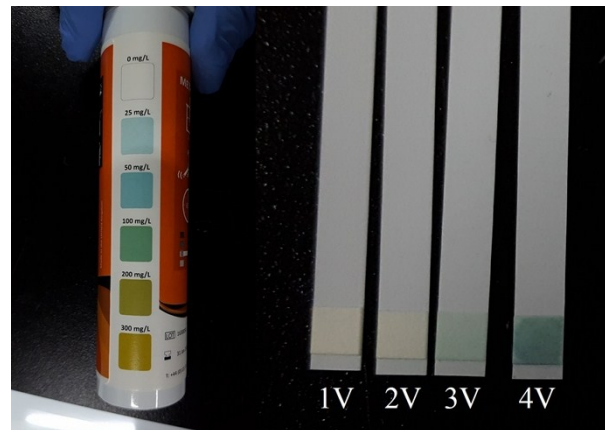


### Supplementary information



**Figure S1.** Ion current trace for 250 seconds flowing in the system from 1 to 4 V. The displayed number is the average value of the current flowing during the last 30 seconds.



**Figure S2.** Simplified test strip results for HOCl detection. Reactive chlorine ions were detected at a concentration higher than 25 mg/L at 3 and 4 V, but not at 1 and 2 V.