

**Table S7** Response slope and R<sup>2</sup> of proposed electrode under the condition of various concentrations and pH

| log <sub>c</sub> (ClO <sup>-</sup><br>4) vs E (mV) | pH     |        |        |        |        |        |        |        |        |
|----------------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|                                                    | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     |
| -4                                                 | 389.56 | 407.54 | 402.16 | 405.75 | 405.75 | 427.32 | 425.74 | 427.47 | 425.59 |
| -3                                                 | 321.32 | 327.80 | 326.49 | 338.62 | 338.62 | 337.97 | 342.28 | 348.26 | 372.02 |
| -2                                                 | 246.77 | 264.54 | 269.15 | 261.32 | 257.32 | 270.89 | 266.62 | 274.85 | 281.43 |
| -1                                                 | 182.89 | 190.77 | 196.36 | 182.43 | 178.43 | 209.09 | 200.16 | 213.74 | 216.45 |
| Slope<br>(mV/decade)                               | -69.46 | -71.36 | -67.47 | -74.73 | -76.33 | -72.18 | -75.24 | -71.46 | -71.80 |
| R <sup>2</sup>                                     | 0.999  | 0.998  | 0.997  | 0.999  | 0.998  | 0.992  | 0.998  | 0.997  | 0.991  |