

1 **Supporting Information**

2 **Anion Adsorption on Gold Electrodes Studied by**  
3 **Electrochemical Surface Forces Measurement**

4 *Motohiro Kasuya,<sup>a</sup> Tsukasa Sogawa,<sup>a</sup> Takuya Masuda,<sup>b</sup> Kohei Uosaki,<sup>b,c</sup> Kazue Kurihara<sup>\*a,d</sup>*

5 *<sup>a</sup> Institute of Multidisciplinary Research for Advanced Materials, Tohoku University, Sendai*  
6 *980-8577, Japan.*

7 *<sup>b</sup> Global Research Center for Environment and Energy based on Nanomaterials Science*  
8 *(GREEN) National Institute for Materials Science (NIMS), Tsukuba 305-0044, Japan*

9 *<sup>c</sup> International Center for Materials Nanoarchitectonics (WPI-MANA), National Institute for*  
10 *Materials Science (NIMS), Tsukuba 305-0044, Japan*

11 *<sup>d</sup> WPI-AIMR, Tohoku University, Sendai 980-8577, Japan.*

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1 **Table S1** Parameters for DLVO fitting of force profiles for two gold electrode surfaces in 1 mM  
 2 aqueous electrolyte at various applied potentials.

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| 4  | Electrolyte                    | $E$ (V) | decay length (nm) | $\Delta D$ (nm) | $\psi_0$ (mV) | $\sigma$ ( $\mu\text{C}/\text{cm}^2$ ) | $1/\kappa$ (nm) |
|----|--------------------------------|---------|-------------------|-----------------|---------------|--|-----------------|
| 5  | KClO <sub>4</sub>              | -0.1    | $9.7 \pm 1.1$     | $13.0 \pm 3.3$  | $170 \pm 21$  | $7.1 \pm 1.8$                          | 9.6             |
| 6  |                                | 0.3     | $10.5 \pm 0.6$    | $11.2 \pm 2.6$  | $96 \pm 10$   | $1.3 \pm 0.3$                          |                 |
| 7  |                                | 0.7     | $10.3 \pm 1.2$    | $11.8 \pm 0.5$  | $89 \pm 9$    | $1.0 \pm 0.2$                          |                 |
| 8  | K <sub>2</sub> SO <sub>4</sub> | -0.1    | $7.3 \pm 0.5$     | $11.3 \pm 2.9$  | $153 \pm 12$  | $5.9 \pm 0.9$                          | 5.6             |
| 9  |                                | 0.3     | $6.9 \pm 0.2$     | $15.8 \pm 3.7$  | $87 \pm 6$    | $1.4 \pm 0.3$                          |                 |
| 10 |                                | 0.7     | $7.5 \pm 0.5$     | $3.5 \pm 0.7$   | $106 \pm 28$  | $1.8 \pm 0.7$                          |                 |
| 11 | KCl                            | -0.1    | $10.4 \pm 1.8$    | $14.5 \pm 4.0$  | $160 \pm 27$  | $4.6 \pm 1.8$                          | 9.6             |
| 12 |                                | 0.3     | $10.5 \pm 0.4$    | $12.3 \pm 2.1$  | $137 \pm 12$  | $3.3 \pm 1.4$                          |                 |
| 13 |                                | 0.7     | $9.7 \pm 1.0$     | $8.0 \pm 1.0$   | $107 \pm 12$  | $1.5 \pm 0.2$                          |                 |

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