

1 **Microelectrodes with gold nanoparticles and self-assembled**
2 **monolayers for *in vivo* recording of striatal dopamine**

3

4

5 Tien-Chun Tsai^a, Chun-Xian Guo^{b,c}, Huan-Zhang Han^a, Yu-Ting Li^a,

6 Ying-Zu Huang^d, Chang-Ming Li^{b,c}, Jia-Jin Jason Chen^{a,e*}

7

8 ^a *Department of Biomedical Engineering, National Cheng Kung University, Tainan*

9 *701, Taiwan*

10 ^b *School of Chemical and Biomedical Engineering, Nanyang Technological*

11 *University, Singapore 637457, Singapore*

12 ^c *Center for Advanced Bionanosystems, Nanyang Technological University,*

13 *Singapore 637457, Singapore*

14 ^d *Department of Neurology, Chang Gung Memorial Hospital, Taoyuan 333, Taiwan*

15 ^e *Medical Device Innovation Center, National Cheng Kung University, Tainan 701,*

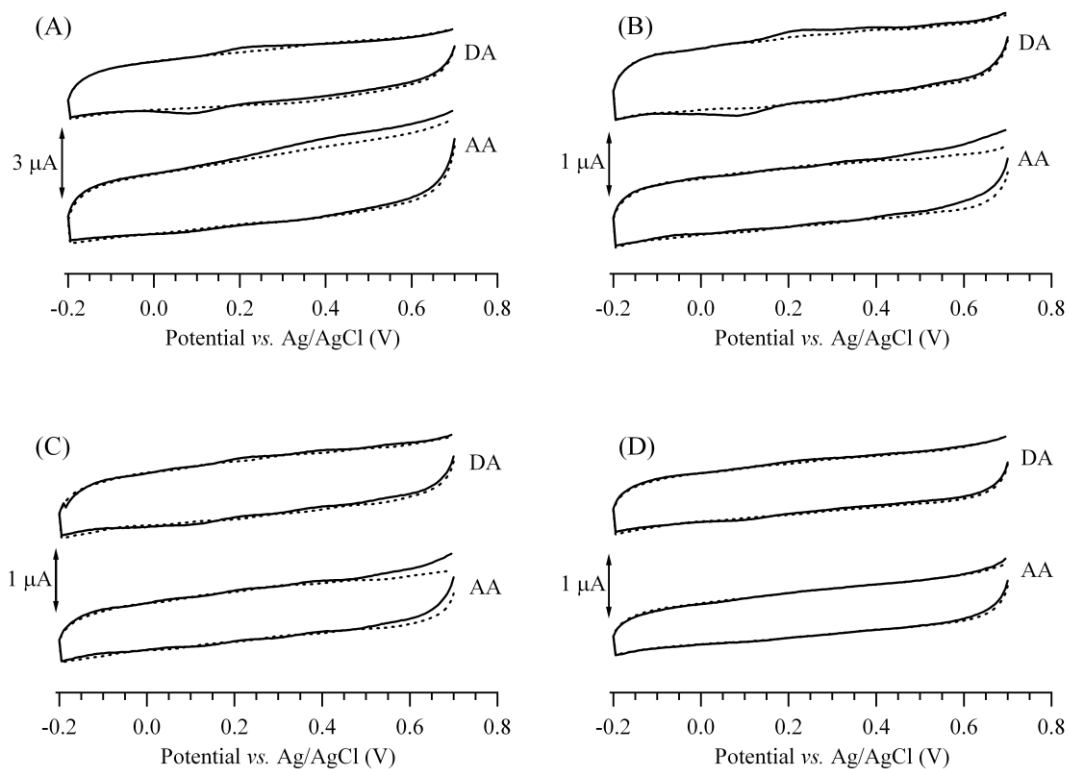
16 *Taiwan*

17

1

Electronic Supplementary Information

2



3

4

5 **Fig. S1** Cyclic voltammograms of 10 μM DA and 1 mM AA obtained from (A)
6 Au-NP, (B) Au-NP/MPA, (C) Au-NP/MOA and (D) Au-NP/MUA modified
7 microelectrodes in 0.1 M PB solution (dotted line); scan rate: 10 V s^{-1} .

8