Three independent graphs for sEMG recording under each movement are provided as supplement of the revised manuscript.


Traditional electrode

$$
\begin{aligned}
& f_{2.5}^{2.0} \\
& -1.5 \\
& -1.0 \\
& -0.5 \\
& -0.0 \\
& -0.5 \\
& -1.0 \\
& -1.5 \\
& -2.0
\end{aligned}
$$

(a)


Traditional electrode



Flexible electrode
(b)


Traditional electrode

(c)


Figure S1. movement of fist (a) the sEMG of fist 1 (b) the sEMG of fist 2 (c) the sEMG of fist 3



Traditional electrode




Flexible electrode
(b)

Traditional electrode



Figure S2. movement of continuous fist (a) the sEMG of continuous fist 1 (b) the sEMG of continuous fist 2 (c) the sEMG of continuous fist 3


Figure S3. movements of arm flex combining fist (a) the sEMG of arm flex combining with fist 1 (b) the sEMG of arm flex combining with fist 2.

