1 **Perovskite Platelet Structured Strontium Titanate Decorated on Graphene**

2 **Oxide as a Nanocatalyst for Electrochemical Determination of**

3 **Neurotransmitter Dopamine**

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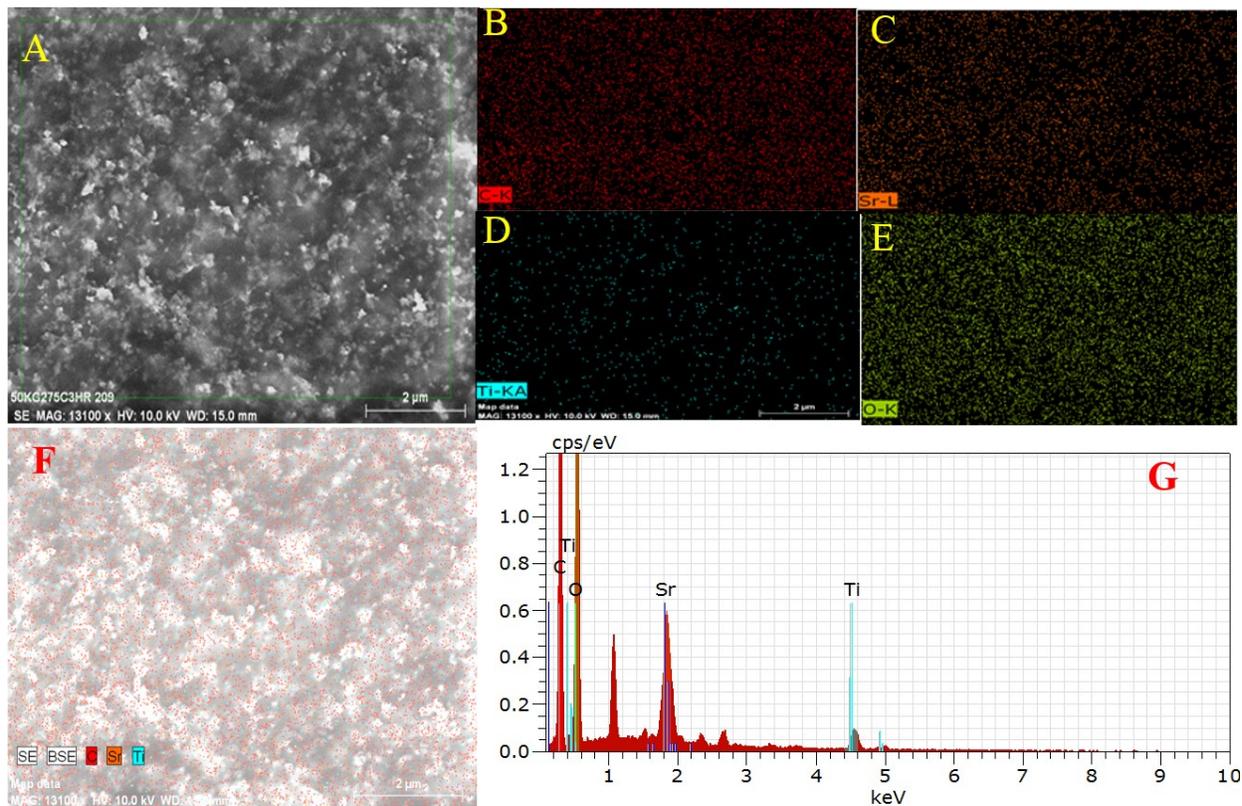
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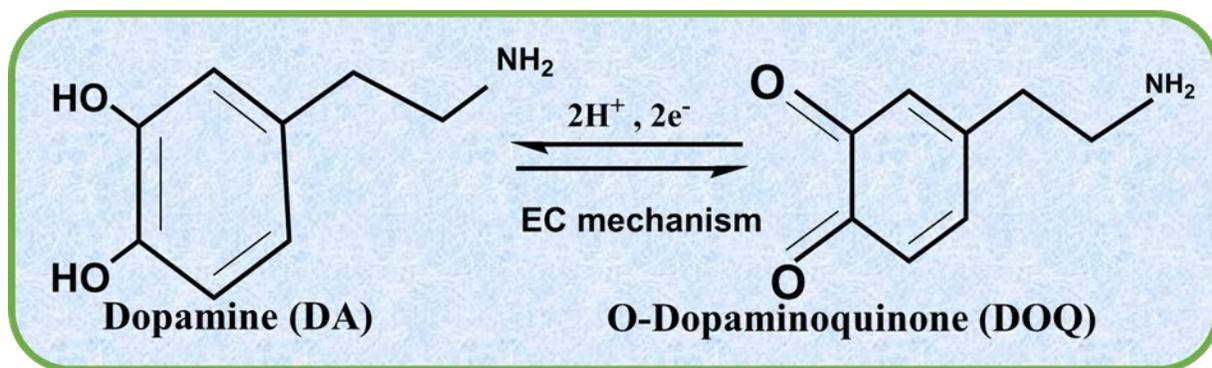26 E-mail: smchen78@ms15.hinet.net

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2 **Fig S1:** A) SEM image of the composite material. (B, C, D, E & F) Shows the mapping analysis

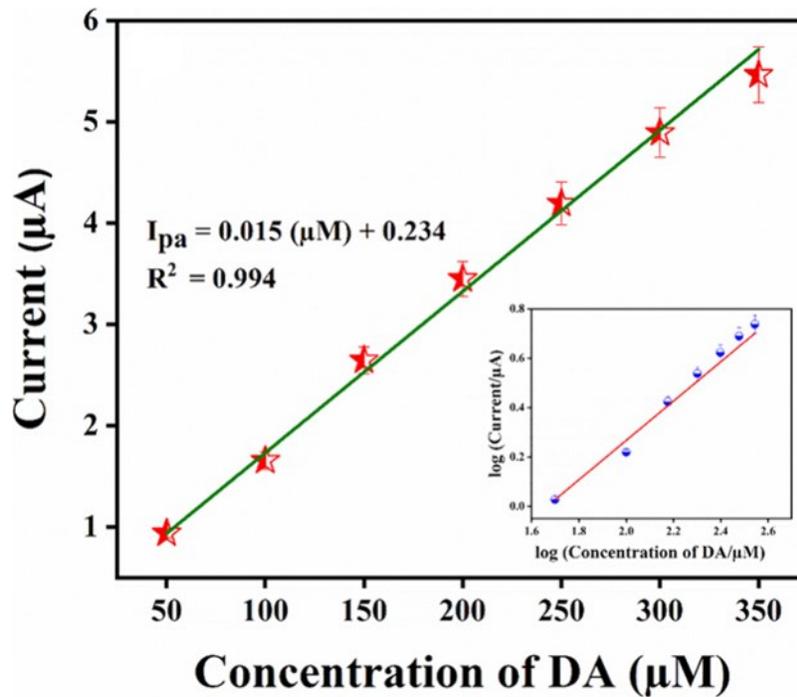3 of elemental compositions of C, Sr, Ti, O & SrTiO$_3$-GO. G) EDAX of SrTiO$_3$-GO composite.
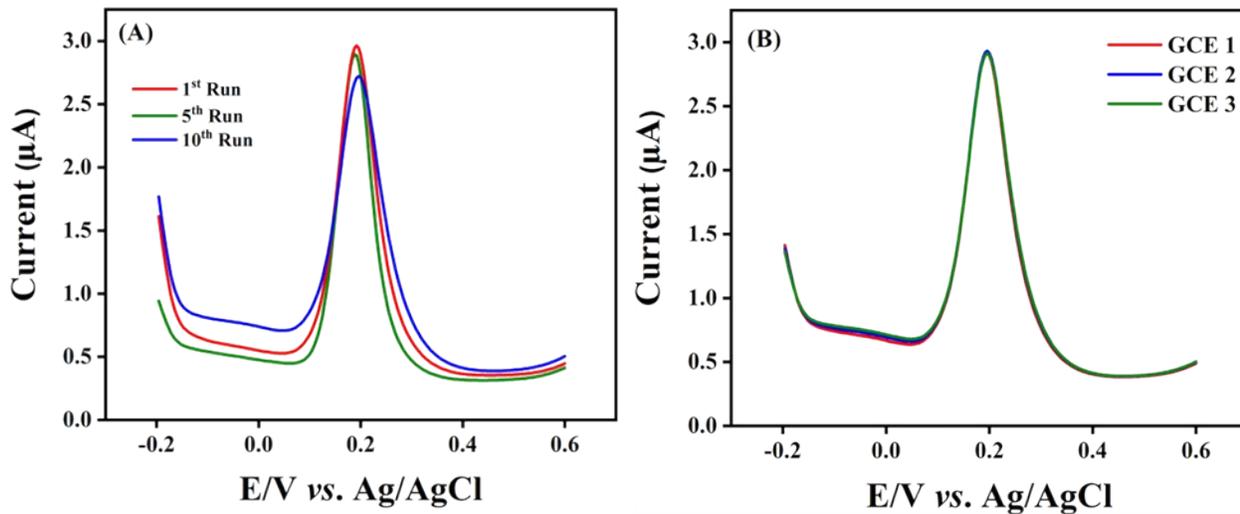
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7 **Scheme S1**. Electrochemical mechanism for detection of Dopamine

$$I_{pa} = 0.015 \, (\mu M) + 0.234$$
$$R^2 = 0.994$$

Fig S2: Corresponding linear dependence plot for concentration of DA (μM) *vs* current (μA). (insert: linear calibration plot for log concentration of DA (log μM) vs log current (log μA)).

Fig S3: A) DPV response of $SrTiO_3$-GO/GCE composite electrode in the detection of DA stability of electrode with a time interval, B) DPV of $SrTiO_3$-GO in the detection of DA with a different number of electrodes