

**Supplementary Information**

**Synergistic effect of RuO<sub>2</sub> nanoparticles decorated V<sub>2</sub>O<sub>5</sub>  
heterostructure for high-performance asymmetric supercapacitors**

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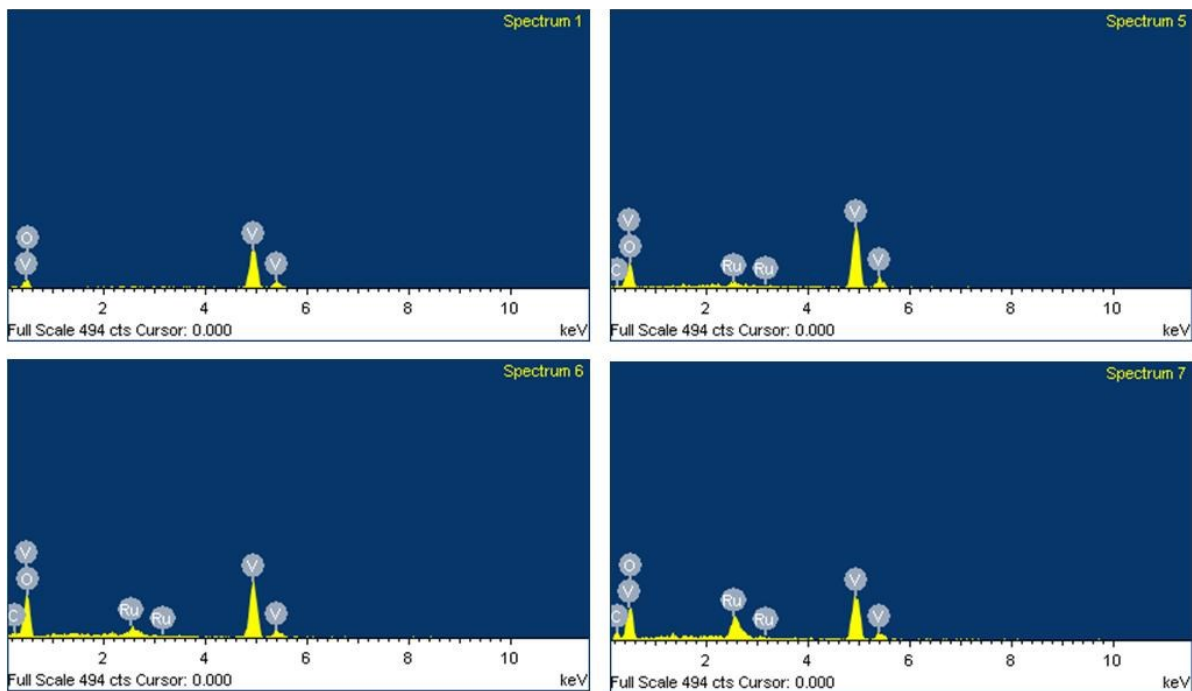


Fig.S1. EDX spectra of prepared nano composites (a) V, (b) R1, (c) R2 and (d) R3

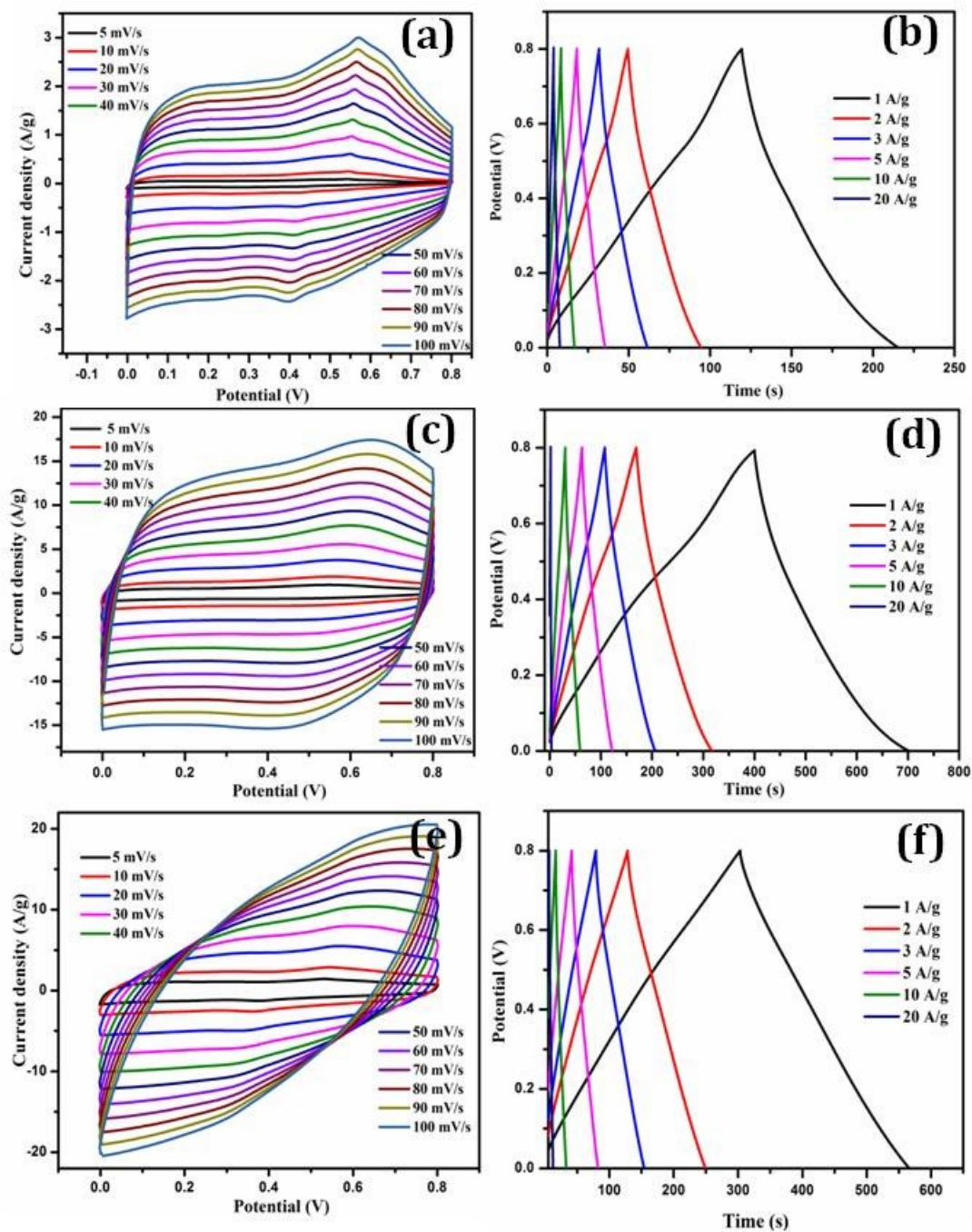


Fig.S2. ((a), (c) and (e)) Cyclic voltammetry curve of V, R1 and R2 at scan rates from 5 to 100 mV/s ,( b), (d) and (f)) Galvanostatic charge-discharge curves of V, R1 and R2 at current densities from 1 to 20 A/g , respectively.

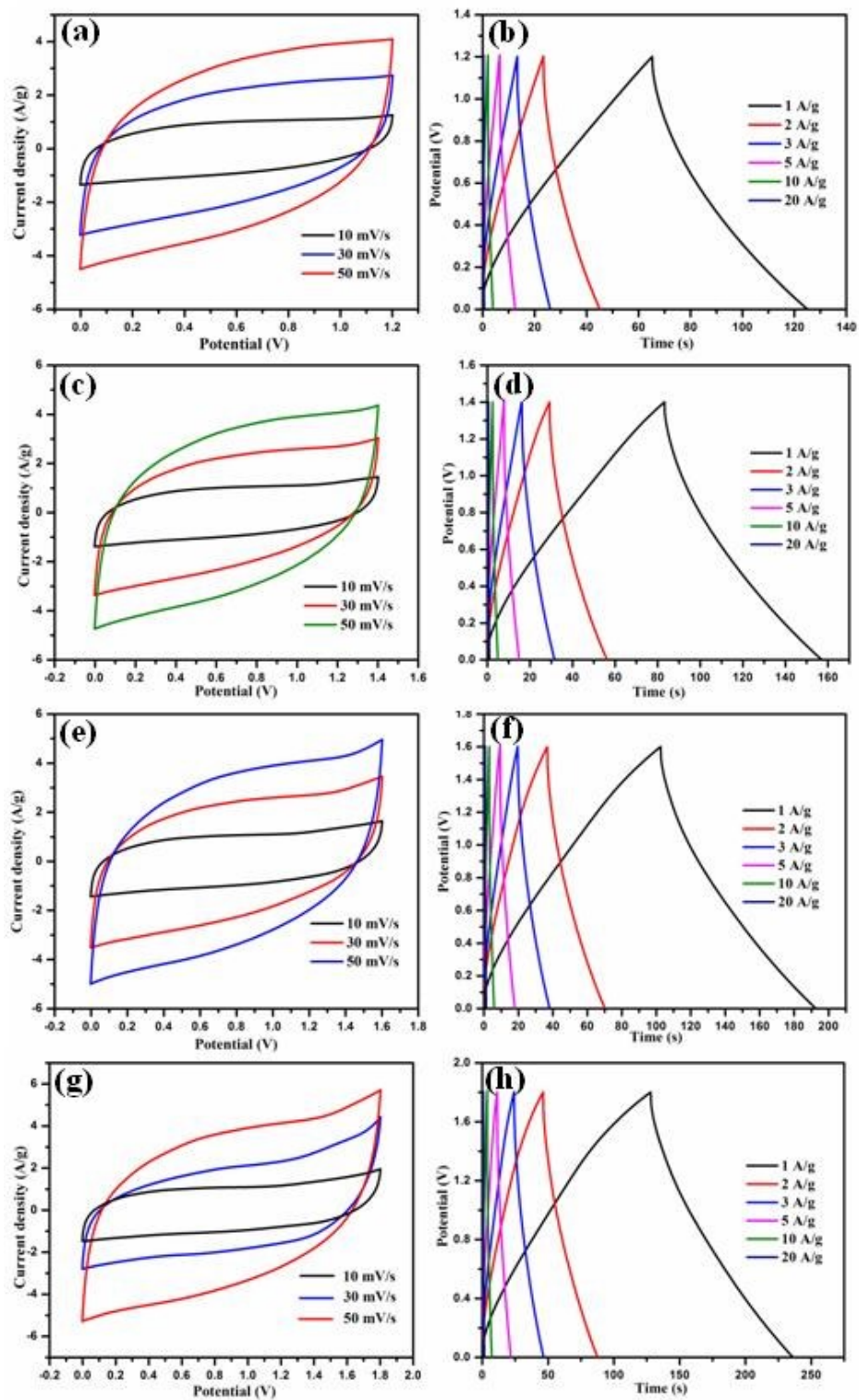


Fig.S3. ((a), (c), (e) and (g)) CV curves of R2//AC device at different cell voltages (1.2 to 2.0 V) at different scan rates from 10 to 50 mV/s ((b), (d), (f) and (h)) Charge-discharge curves of R2//AC device at current densities form 1 to 20 A/g, respectively