## **Supporting information**

Figure s1 Carbon contents of prepared bio-composites with different architectures.

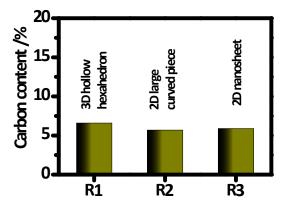


Figure s2 XRD patters of (a) 3D hollow hexahedron (R1) and (b) 2D large curved piece (R2) samples before and after cycles.

