Supplementary Information

Hypercrosslinked Porous Polymer Nanosheets: 2D RAFT Agent Directed Emulsion Polymerization for Multifunctional Applications

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Figure S1. SEM images of a) GHCP-1 and b) GHCP-2

Figure S2. TEM image HCP.
Raman spectroscopy has been widely used to characterize the structure of carbon materials, particularly the defects and the degree of ordering of carbon. Typically, GHCP-2 was pyrolized at different temperatures for 2h under inert atmosphere. The produced porous carbon materials were denoted as GHCP-2-X (X= 600, 750, 900 °C). The Raman spectra of GHCP-2-X were shown in Figure S3. There are two prominent peaks at 1338.5 and 1595.5 cm\(^{-1}\), corresponding to the D and G bands, respectively. As is known, the G band is related to the E\(_{2g}\) vibration mode of sp\(^2\) carbon domains, which can be used to explain the degree of graphitization, while the D band is associated with structural defects and partially disordered structures of sp\(^2\) domains. The I\(_D/I_G\) ratio of GHCP-2-X (0.69–1.01) indicates less defects and disordering under high temperature treatment, which implies that the graphitic degree for carbonized samples is improved at these temperatures.

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