

Template based synthesis of different mesoporous carbon nanostructures

X. C. Chen, K. Cendrowski, J. Srenscek-Nazzal, R. J. Kalenczuk, Ewa Borowiak-Palen

West Pomarina University of Technology, Szczecin, 70-322, Poland
xchen@zut.edu.pl

Different mesoporous carbon nanomaterials were produced from mesoporous silica templates. In this method, mesoporous carbon nanotube, mesoporous carbon flowers and mesoporous hollow carbon spheres were synthesized with different diameters through CVD reacton in a controlled manner. In these reactions, CTAB was served as carbon seeds for the carbon growth during CVD process. The potential applications such as Lithium ion battery and supercapacitor properties for the mesoporous carbon structures were also studied. The samples have been innestigated via high resolution transmission electron microscopy with EDX, X-Ray Diffraction and BET analysis.

References

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Figures

