Carbon micro/nanocoils produced by using $WS_2\ catalyst$ in CVD process

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The chiral single-helix carbon nanocoils as well as double-helix carbon microcoils were produced by the catalytic pyrolysis of acetylene under the presence of WS_2 catalysts depending on different reaction conditions. Various novel morphology and microstructure were examined; the growth mechanism is also dicussed. These carbon coils are very intriguing in size of coil diameter and pitch, and are expected to have many potential applications.