## How can we realize chirality-specific growth of single-walled carbon nanotubes

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Single-walled carbon nanotubes (SWNTs) present structure-determined outstanding properties and may find important applications in many fields. However, the chirality-controlled growth of SWNTs has been a great challenge for many years. By carefully analyzing the previous studies, it is found that both catalysts and growth conditions are crucial for the chirality control. Then we chose tungsten-based alloy nanocatalysts as catalysts and realized chirality-specific growth of SWNTs by optimizing the growth conditions.

## **Reference:**

 F. Yang, X. Wang, D.Q. Zhang, J. Yang, D. Luo, Z.W. Xu, J.K. Wei, J.-Q. Wang, Z. Xu, F. Peng, X.M. Li, R.M. Li, Y.L. Li, M.H. Li, X.D. Bai, F. Ding, Y. Li\*. Chirality-specific growth of single-walled carbon nanotubes on solid alloy catalysts. *Nature*, 2014, *510*, 522-524.