Supplemental file

Effect of Co-Mo catalyst preparation and CH4/H2 flow on carbon nanotube synthesis

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| --- | --- |
| Ratio of CH4/H2 mixture, mL/min | RBM position, cm-1 |
| 50/0 | 138, 209.3, 218.5, 164.5, 162 |
| 50/50 | 87-92-97,2-103,4-105,5109-127,6-134,5-138,7-141,4-147,6-157,3-164,9-168,4-176,6-179,3201,4-209-218-240,8-262,9 |
| 100/0 | 119,8-189,2-207 |
| 100/50 | 127,7-151,6-155,4-166,6-173,3-183-204,8239,2-249,7-256,4307,9-319,9 |
| 150/0 | 146.2-152.5-161.4243.5-260.8 |
| 200/0 | 160.4-167.7-174-176.4-194.8-202.2-209.7-218.2-221.2-223259-262-265-267.2-272.4 |
| 300/0 | 127.6-149-175.9252, 308, 314 |

**Table S1.**



**Figure S1.**



**Figure S2.**

**Table S1.** RBM positions of CNTs synthesized using *comb*-prepared catalyst at different CH4/H2 ratios and flow rates.

**Fig. S1.** RBM Raman spectra peaks of CNTs synthesized using *comb*-prepared catalyst at different CH4/H2 ratios and flow rates.

**Fig. S2.** Specific capacitance as a function of scan rate of CNTs obtained with *comb*-prepared catalyst at different CH4/H2 ratios and flow rates.