Supplemental file

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

Lobiak E.V.1,Kuznetsova V.R.1,2,Flahaut E.3, Okotrub A.V.1, Bulusheva L.G.1

1Nikolaev Institute of Inorganic Chemistry SB RAS, Novosibirsk, Russia

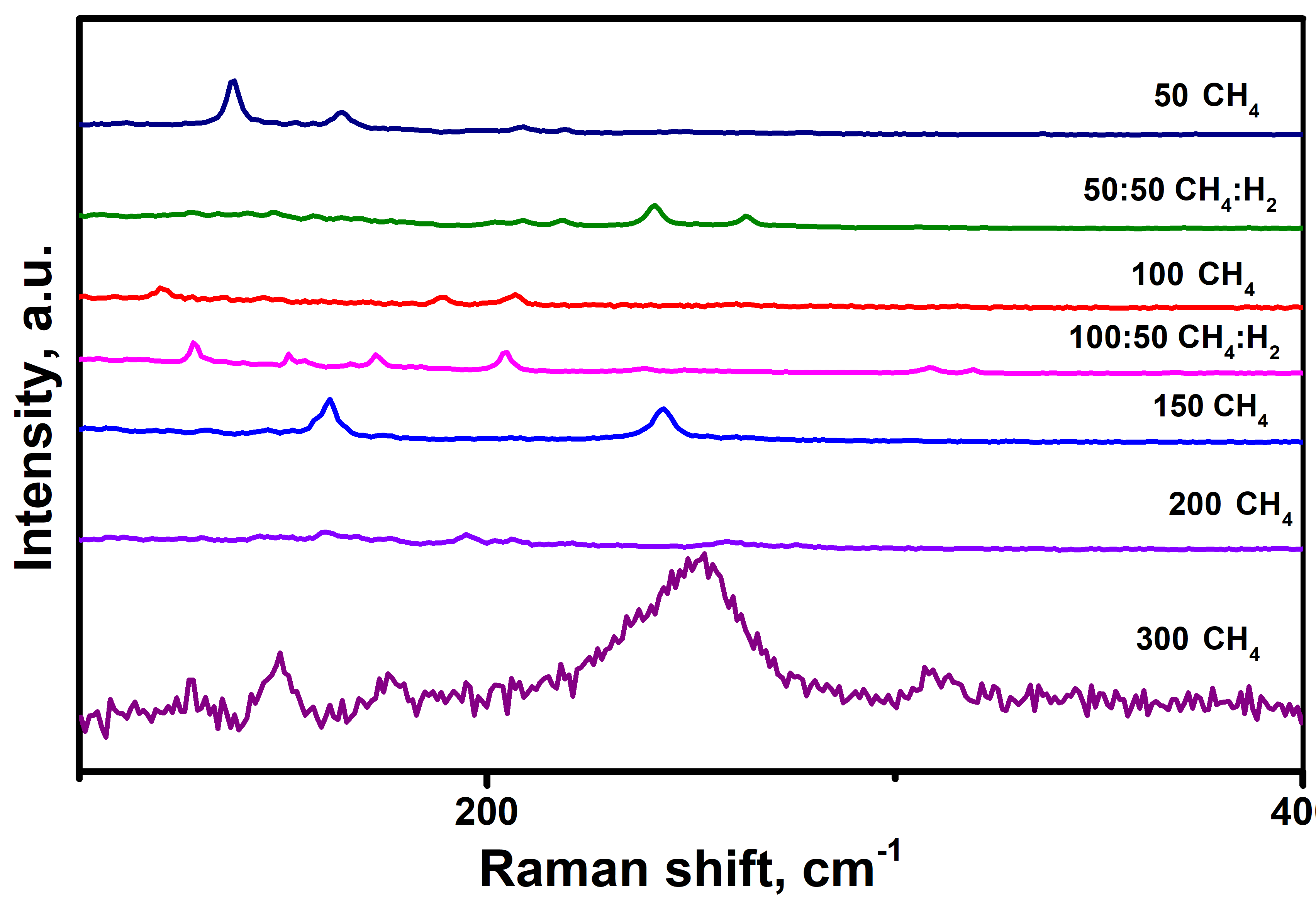
2Novosibirsk State Technical University, Novosibirsk, Russia

3CNRS, Institut Carnot Cirimat, F-31062 Toulouse, France

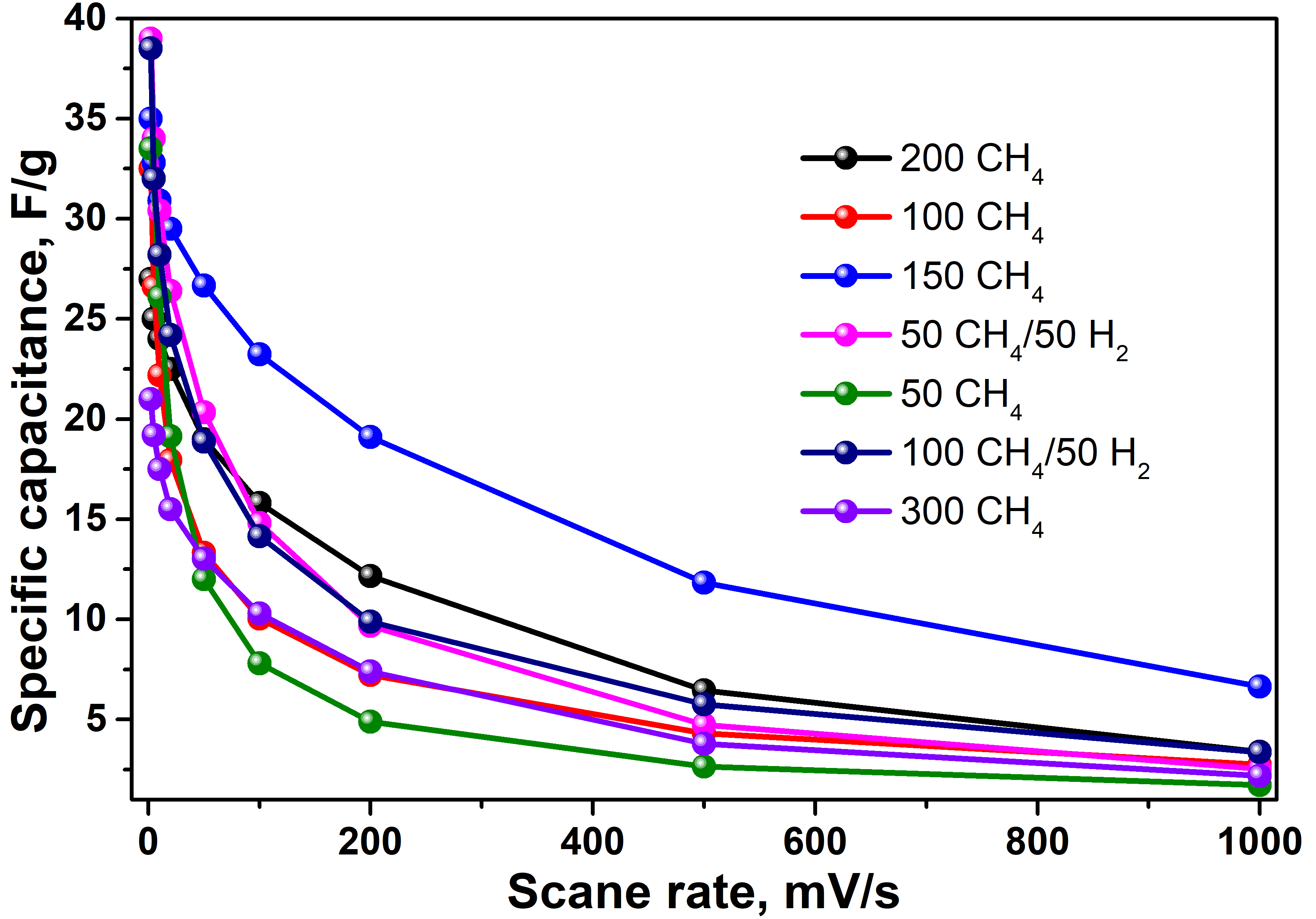
Lobiak E.V. lobiakev@niic.sbras.ru Nikolaev Institute of Inorganic Chemistry SB RAS, Novosibirsk, Russia

|  |  |
| --- | --- |
| Ratio of CH4/H2 mixture, mL/min | RBM position, cm-1 |
| 50/0 | 138, 209.3, 218.5, 164.5, 162 |
| 50/50 | 87-92-97,2-103,4-105,5  109-127,6-134,5-138,7-141,4-147,6-157,3-164,9-168,4-176,6-179,3  201,4-209-218-240,8-262,9 |
| 100/0 | 119,8-189,2-207 |
| 100/50 | 127,7-151,6-155,4-166,6-173,3-183-204,8  239,2-249,7-256,4  307,9-319,9 |
| 150/0 | 146.2-152.5-161.4  243.5-260.8 |
| 200/0 | 160.4-167.7-174-176.4-194.8-202.2-209.7-218.2-221.2-223  259-262-265-267.2-272.4 |
| 300/0 | 127.6-149-175.9  252, 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.