

Supporting Information

Magnetic-field-induced diameter-selective synthesis of single-walled carbon nanotubes

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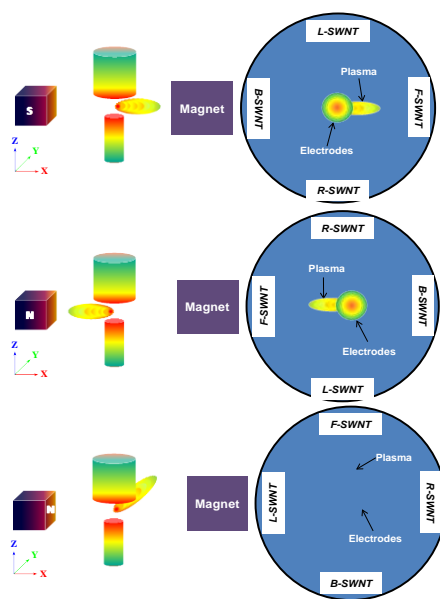


Figure S1. SWNTs samples collected in four different regions, remarked by *F-SWNT*, *B-SWNT*, *R-SWNT*, and *L-SWNT*, respectively.

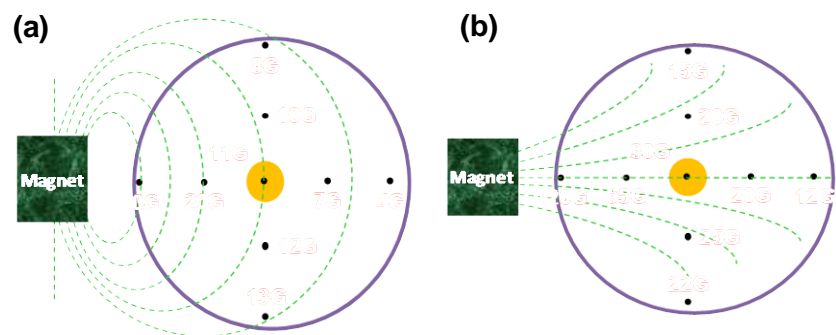


Figure S2. The magnetic field strengths in different regions after applying X , $-X$ magnetic fields (a) and Y magnetic field (b).

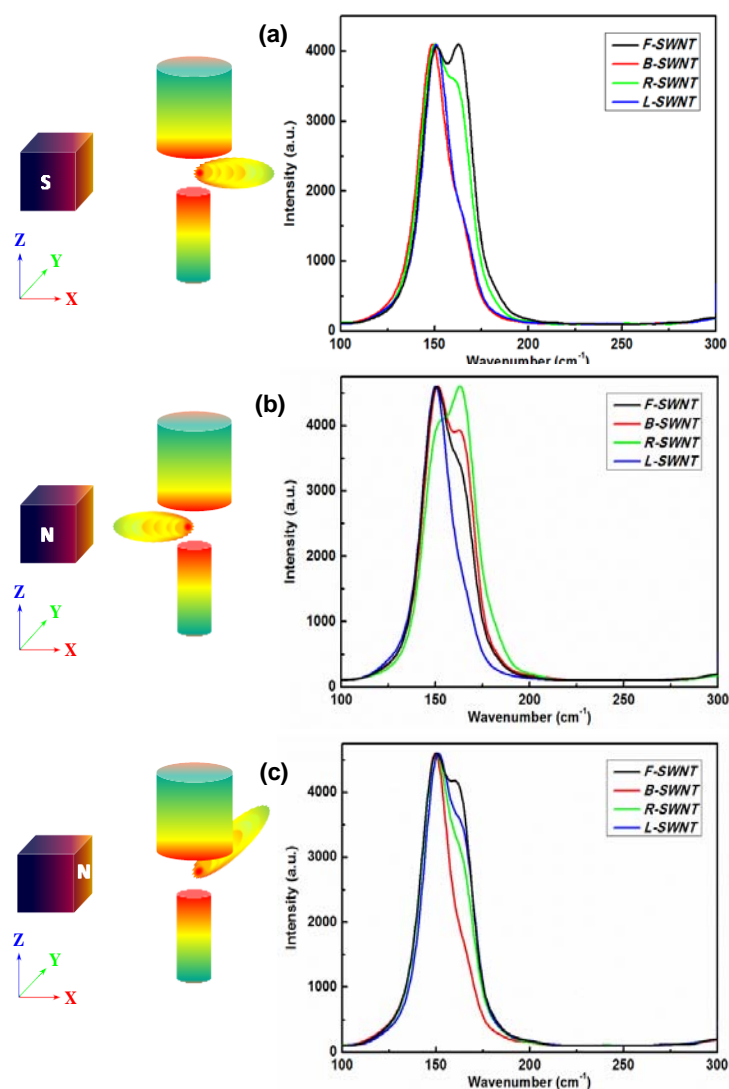


Figure S3. Schematic diagram of arc plasma morphologies and RBM spectra of the as-synthesized SWNTs in different regions using 785 nm excitation. RBM peaks were normalized to the maximum peaks.

Table S1. Peak areas of S_{22} and M_{11} and relative ratios of S/M in different SWNT samples.

Samples	$S_{22} \times 10^3$	$M_{11} \times 10^3$	Relative ratios (S/M)
<i>F-SWNT</i>	16.43	2.09	7.86
<i>B-SWNT</i>	17.76	2.42	7.34
<i>R-SWNT</i>	17.06	2.39	7.14
<i>L-SWNT</i>	17.67	2.28	7.75