

Abstract Submitted
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Growth of Single-Walled Carbon Nanotubes with Size-Controlled Catalysts YAQIONG XU, Department of Electrical & Computer Engineering and Carbon Nanotechnology Laboratory, Rice University, KUNAL SHAH, Department of Chemistry and Carbon Nanotechnology Laboratory, Rice University, BEHRANG HAMADANI, Department of Physics, Rice University, RICHARD SMALLEY¹, ROBERT HAUGE, Department of Chemistry and Carbon Nanotechnology Laboratory, Rice University — A single-walled carbon nanotube (SWNT) growth system has been developed with chlorine-containing gas to control the size of catalysts during growth. The role of catalyst size has been studied with respect its effects on SWNT growth, such as random surface growth, organized vertical growth and SWNT seeds re-growth. The effect of catalyst size on SWNT etching will also be reported.

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