Abstract Submitted
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Carbon dioxide adsorption on open single walled carbon nanohorn aggregates[1] SHREE BANJARA, VAIVA KRUNGLEVICIUTE, ALDO MIGONE, Southern Illinois University Carbondale, MASAKO YUDASAKA, National Institute of Advanced Industrial Science and Technology, Nanotube Research Center, Japan, SUMIO IIJIMA, National Institute of Advanced Industrial Science and Technology, Nanotube Research Center; Fundamental Research Laboratory, NEC Corporation, Japan — The adsorption of carbon dioxide was measured on aggregates of single-walled carbon nanohorns treated with H2O2. Volumetric adsorption isotherms were conducted at several temperatures between 162 and 212 K (below the triple point for CO2). Results on adsorption equilibration times, on the substrate-loading dependence of the isosteric heat, and on the binding energy will be presented. The effective specific surface area values obtained in this study will be compared with the ones obtained for other carbon nanohorn samples.

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