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The characteristics of the MWCNT after treatment with inductively coupled plasma HUNSU LEE, WOOYOUNG KIM, YONG CHAE JUNG, KIST — The treatment of the carbon nanotubes with plasma is being reported as an effective method to enhance the dispersion properties and functionalization. The characteristics of carbon nanotube such as the degree of defect of atomic composition differs according to the plasma source used for the treatment and the difference affect the electrical or mechanical properties of the composite materials using the nanotube as filler. In this poster, the effect of plasma treatment with capacitively coupled plasma and inductively coupled plasma on the characteristics and the measured plasma parameters is discussed. The ion bombardment energy on the surface of the nanotube, electron temperature and electron density affected the characteristics of the carbon nanotube and the control of the carbon nanotube composite is thought to be enabled with proper selection of the plasma source for the treatment.

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