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**The structure dependence of the electrical conductance in the single carbon fullerene** MAKOTO YOSHIDA, YOSHIHIKO KURUI, YOSHIFUMI OSHIMA, KUNIO TAKAYANAGI, Department of Physics Tokyo Institute of Technology, CREST-JST COLLABORATION — In this study, we observed simultaneously the conductance and the structure of the single carbon fullerene (SCF) which was composed with a single shell or multi shells. A STM system fitted with a TEM operated at 200kV system was employed to the conductance measurement at room temperature. As a result, it was found that a SCF showed a linear I-V character at zero bias voltage like a metallic conductance. The order of the conductance value was not affected by the structure of SSF whether the single shell or multi shells, which implied that the electrical conductance of SCF did not depend on the internal structure.

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