

Abstract Submitted
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A Complete Charge Model For The High T_c Superconductivity YOUNG HOON KIM, PEI HERNG HOR, University of Houston — Focusing on the recent transport, far-infrared (far-IR), and neutron scattering data, we establish a model for the high temperature superconductivity (HTS) built on the two-dimensional (2D) square electronic lattices in the CuO_2 planes and their three-dimensional ordering. We demonstrate that our model captures all the essential physics that bring about a coherent picture of the HTS and offers the key to the mechanism for the HTS.

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