

**Erratum: Pairing correlations with  $s^*$  and  $d$  symmetry: exact results for the  $\text{Cu}_4\text{O}_8$  cluster [JETP 79(5), 789–798 (1994)]**

V. F. Elesin, A. V. Krasheninnikov, and L. A. Openov

*Moscow Engineering-Physics Institute, 115409 Moscow, Russia*

The abstract should read as follows:

The pairing correlation functions in the  $\text{Cu}_4\text{O}_8$  cluster, which is an elementary fragment of a  $\text{CuO}_2$  plane, a common element of the crystal lattice of high- $T_c$  superconductors, have been numerically calculated by exact diagonalization. Cases corresponding to  $s$ ,  $s^*$ , and  $d$  symmetry of the Cooper pair have been considered. It has been shown that at realistic values of the parameters of a model Hamiltonian and a nearly optimal doping level ( $x=0.25$  excess carriers per copper atom) there are no pairing correlations with  $s$  symmetry and that the correlations with  $s^*$  symmetry are considerably stronger than the correlations with  $d$  symmetry. This is true for both hole and electron doping. The predominance of pairing correlations in the  $s^*$  channel is consistent with the experimental data on the influence of nonmagnetic defects on high- $T_c$  superconductors. When  $x=0.5$ , which corresponds to the nonsuperconducting metallic state of a  $\text{CuO}_2$  plane, the pairing correlations in all the channels either vanish or are strongly suppressed. © 1995 American Institute of Physics.