CHARGE DENSITIES OF LIGHT NUCLEI IN THE $\alpha\text{-}CLUSTER$ MODEL WITH DISPERSION

Yu. A. Berezhnoy, V. P. Mikhailyuk, V. V. Pilipenko

One-particle charge densities and root mean square radii of ${}^9\mathrm{Be}$, ${}^{12,13}\mathrm{C}$, ${}^{13}\mathrm{N}$, ${}^{16}\mathrm{O}$ and ${}^{20}\mathrm{Ne}$ nuclei have been calculated on the basis of the α -cluster model with dispersion. The density parameters were obtained from the comparison of the calculated and measured charge formfactors of these nuclei. The results obtained are in agreement with existing experimental data.