NLTE Spectral analysis of iron group elements in the hot subluminous O-star BD+28°4211

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An analysis of UV spectra of BD+28°4211 obtained with the STIS spectrograph onboard the HST is presented. The spectral analysis is based on NLTE model calculation, which deal with the lineblanketing of iron group elements in great detail. Improved model atoms for iron group elements were set up and new interband cross sections were calculated. Comparison with observation allowed, Mn and Cr lines to be identified for the first time. The abundances of Fe, Ni, Cr and Mn are determined and point to the presence of diffusion processes in the atmosphere of BD+28°4211.