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Poster

THE QUASI-MOLECULAR ABSORPTION BANDS CAUSED BY THE NON-SYMMETRIC ION-ATOM RADIATIVE PROCESSES IN ALKALI PLASMAS

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Opacities of the stellar atmospheres are naturally caused by a large number of radiative processes. For the development of more sophisticated stellar atmosphere models, it is needed further investigation of the known processes and the inclusion of all processes not considered before. The influence of some hydrogen and alkali radiative processes on the optical characteristics of the stellar atmospheres are investigated here. It is shown that the examined processes generate rather wide quasimolecular absorption bands in the UV and VUV regions. We present the results of calculation in the tabulated form easy for further use with a particular accent to the applications for astrophysical plasma research and low temperature laboratory plasma created in gas discharges, where plasma conditions may be favorable for processes investigated here.