

THE COMPLEX EMMITER INSIDE DENSE PLASMA,
CONTINUATION OF A COULOMB CUT-OFF
APPROACH, ARGON CASE

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Abstract. The work onto inclusion of the more complex emitters in plasma of moderate and high non-ideality modeling has been carried on. Since there were a good initial results in adopting a ab-initio generated pseudo-potentials as a candidates for describing of optical properties of dens plasma, this is step further where the complex argon case system is described and analyzed. The ionic core of the emitter has a strong influence onto the dipole matrix element and as so onto optical properties of analyzed plasma. Also the calculations of dense packing of emitters has been carried out, and it is expected to have more applicable pseudo-potential in near future. One of the advantages of presented calculations are complete quantum mechanical approach. The presented results are step forward towards a more detailed and more precise describing of a optical properties of dense plasma (see e.g. Srećković et al. 2018; Dimitrijević et al. 2018).

Acknowledgements

The authors acknowledge the support from the Institute of Physics Belgrade which was made possible by grants from the Ministry of Science, Technological Development., and supported by the Science Fund of the Republic Serbia, Grant No. 3108/2021—NOVA2LIBS4fusion. This article is based upon work from COST Action CA21101 Confined molecular systems: from a new generation of materials to the stars (COSY), supported by COST (European Cooperation in Science and Technology).

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