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用GRASP程序计算高电荷态离子的跃迁谱线

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摘要 用相对论原子结构计算程序GRASP(general purposerelativisticatomicstructureprogram)计算了高电荷态离子S10+ S13+、Br23+、Br24+、Ge20+、Ge21+的跃迁波长和相对强度,并与实验结果进行了比较。计算中考虑了Breit相互作用、真空极化和电子自能效应。

关键词 [高电荷态离子](#) [GRASP](#) [跃迁谱线](#)

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Transition Lines Calculation of Highly Charged Ions by Means of GRASP Code

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Abstract Transition lines of highly stripped ions S 10+ S 13+ , Br 23+ , Br 24+ , Ge 20+ , Ge 21+ are calculated by means of GRASP code. Corrections to the energy levels, due to the retarded Coulomb interaction(Breit interaction), the polarization of the vacuum by the nuclear charge distribution and the electron self energy, are included in a perturbation approximation. Comparisons with the experimental data are presented.

Key words [highly charged ion](#) [GRASP](#) [transition lines](#)

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