

## عنوان مقاله:

+Ab initio potential energy curves and transition dipole moments for the low-lying singlet states of SiH

## محل انتشار:

هجدهمین همایش شیمی فیزیک ایران (سال: 1394)

تعداد صفحات اصل مقاله: 2

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## خلاصه مقاله:

The SiH<sup>+</sup> ion was observed in the laboratory for the first time by Douglas and Lutz in 1970 and it was detected in a solar photospheric spectrum in the same year from the emission of the SiH<sup>+</sup> A1Π - X1Σ<sup>+</sup> transition. Because of its astrophysical importance, it has been the subject of several experimental, theoretical and astronomical investigations [1-4]. We report ab initio calculations on five singlet states of SiH<sup>+</sup> using the multi-reference configuration interaction (MRCI) method with large active space and basis sets. We have computed potential energy curves, dipole moments and transition dipole moments for the X1Σ<sup>+</sup>, 11Π, 11Δ, 21Σ<sup>+</sup> and 21Π states of SiH<sup>+</sup>.

## کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/552587>

