Hot Rocky Super-Earths atmospheres, a revision of gas phase metal chemistry and the relevance of reverse chemistry

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There are approximately 2600 reported exoplanets. Among these celestial bodies there is a class of super-Hearts with an orbit smaller than Mercury (0.387 AU) know as Hot Rocky Super-Earths (HRSE). The proximity of this rocky type of planets to their parent start means that their surface can be similar to Bulk Silicate Earth (BSE) at high temperatures. Currently, there are few attempts to estimate the atmospheric composition and chemistry of a HRSE.

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