Some Aspects of High Temperature Material Research at JPL

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In this lecture I will present and discuss some of the results obtained at JPL on high temperature materials research during the past several years. I will concentrate on our thermoelectric material research with the emphasis on SiGe alloys and the improvements we obtained on both the p- and 11-legs. Also, I will describe some of the new materials that we have looked at and are working on. In addition I will discuss the results of our diamond film research and their use as heat sinks for electronic circuits. All the results I will present have been published in the open literature.