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Structural Properties of Small Pd Clusters[1] JOSÉ ROGAN, Universidad de Chile, GRISELDA GARCíA, P. Universidad Catolica de Chile, JUAN ALEJANDRO VALDIVIA, Universidad de Chile, RICARDO RAMíREZ, MIGUEL KIWI, P. Universidad Catolica de Chile — The properties of small Pd clusters ($2 \leq N \leq 21$) are computed by means of the most common phenomenological many body potentials, and also by *ab initio* methods. The lowest energy configuration is found by means of an unbiased search using computational space annealing (CSA). Satisfactory agreement between the results of the several methods implemented is achieved. Of special interest is the fact that different phenomenological potentials yield the same symmetry group for the lowest energy cluster geometries. Moreover, they are in general compatible with *ab initio* results both of our own and other already published data.

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