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## Collisional dynamics of ultracold polar molecules in a microwave field

The collisions at ultracold temperatures between diatomic polar molecules in a microwave field with a circular polarization are theoretically analyzed. We demonstrate the possibility of trapping polar molecules in the standing-wave electromagnetic field and a successful evaporative cooling not only for samples of molecules in their absolute ground states but in some rotationally excited states in the appropriate regions of frequencies of a field.

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