“Deceleration of molecular beams by electric fields (Stark-deceleration)”

Cold molecules provide access to fundamental research and give rise to a variety of new possibilities in many fields. To cool down molecules to suitable temperatures, several methods exist. This review deals with the subject of Stark deceleration, a technique which makes use of the interaction between an external electric field and the electric dipole moment of a molecule to decelerate those. The basic theory and different experimental realizations will be discussed. Additional a couple of achieved results and further applications of the decelerated molecules will be given.

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