

# **Massive parallel ionization through intense short wavelength light**

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We investigate multiphoton absorption by photons with frequencies in the XUV regime and higher.

Here, nonlinear photon absorption proceeds via many electrons absorbing one photon each which gives rise to a new kind of many electron dynamics in extended systems such as clusters and biomolecules. It does not occur with

traditional intense infrared light, since there nonlinear photoabsorption typically couples many photons to only a few electrons.