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标题: Field-free orientation of CO by a terahertz few-cycle pulse

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摘要: The field-free molecular orientation of CO by a terahertz few-cycle pulse was studied theoretically. The effects of the laser intensity and pulse duration on the molecular orientation, which is created by the terahertz few-cycle pulse, were discussed. Furthermore, it was shown that the enhancement or suppression of the molecular orientation can be coherently manipulated by precisely controlling the carrier-envelope phase of the terahertz few-cycle pulse. Compared with other orientation techniques, better orientation can be achieved by a terahertz few-cycle pulse at lower intensities.

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