

## Review Paper

# Optical Lattice Clock

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### Abstract

Latest progress in optical atomic clocks is so rapid that serious discussions toward the redefinition of the second is initiated. Besides single ion clocks developed since early 1980s, optical lattice clocks just invented a decade ago are one of strong candidates as a method to realize the revised definition. The current situation of this emerging method of optical clocks is briefly described.

### Keywords

Atomic clock – Optical frequency standard – Lattice clock – Alkaline earth atoms – Laser cooling