

Ultrafast X-ray Study Reveals Solvation Suppresses Electronic Rearrangement in Pyrazine

- A significant breakthrough in understanding ultrafast electronic dynamics, revealing the profound impact of aqueous solvation on electronic rearrangement processes in pyrazine.
- Using advanced X-ray spectroscopy, the team observed that electronic relaxation via conical intersections, a fundamental pathway in excited-state molecular dynamics, is entirely suppressed in aqueous solution, dephasing within an astonishingly short timescale of less than 40 femtoseconds (fs), one fs is the millionth of a billionth of a second.

准教授 Zhong Yin

