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Femtosecond Laser Pluses: Concept and Measurement Technique

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Abstract: *Since the birth of the laser, nearly 40 years ago, scientists have been continually interested in generation of ultrafast laser pulses in the picoseconds and femtosecond time domain. The recent development of all-solid state femtosecond lasers, tunable in the visible and near-infrared spectral regions, has already shown an impact on spectroscopic investigations in different areas in physics, chemistry and biology. This study gives a brief introduction into the world of femtosecond laser pulses and the most frequently used techniques to measure such ultra short pulses. The advent of femtosecond lasers has spawned whole new fields of scientific investigation.*

Keywords: Ultrafast Laser, Femtosecond, Infrared, Frequently, Investigations

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