

258. Title: THz laser field effect on the optical properties of cylindrical quantum well wires

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Abstract: The oscillator strength and the linear and third order nonlinear refractive index changes of a cylindrical quantum well wire under intense non-resonant laser field have been investigated within the effective mass-approximation by using a finite element method. We found that the laser amplitude, the incident light and the intersubband relaxation time have an important influence on the refractive index changes.