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Effects of intense laser field and position dependent effective mass in Razavy quantum wells and quantum dots

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Increasing (decreasing) functions of the intense laser field parameter, in the case of the optical absorption and relative changes in the refractive index coefficients, we have shown blueshifts or redshifts by changing the A-, M-, and alpha(0)-parameters and by considering the effects of the position-dependent effective mass. In spherical quantum dots, we have shown that with an appropriate value of A- and M-parameters the system can evolve from a spherical quantum dot with infinite parabolic potential.

Keywords

Author Keywords: Position dependent effective mass; Razavy quantum well; Razavy quantum dot; Intense laser field
Keywords Plus: NONLINEAR-OPTICAL PROPERTIES; SCHRODINGER-EQUATION; ABSORPTION-COEFFICIENTS; IMPURITY STATES; MINIMA PROBLEM; ENERGY

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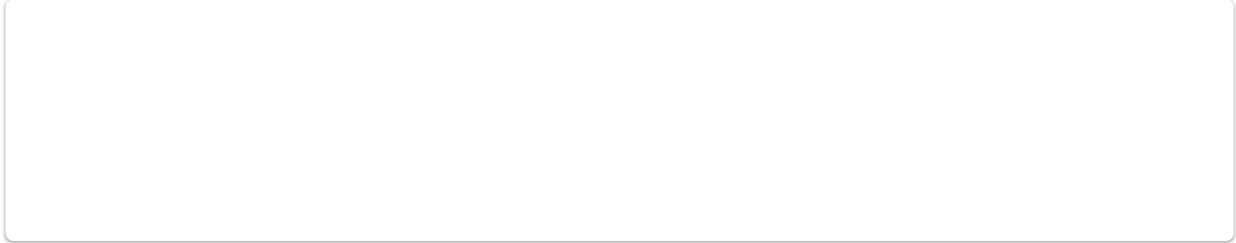
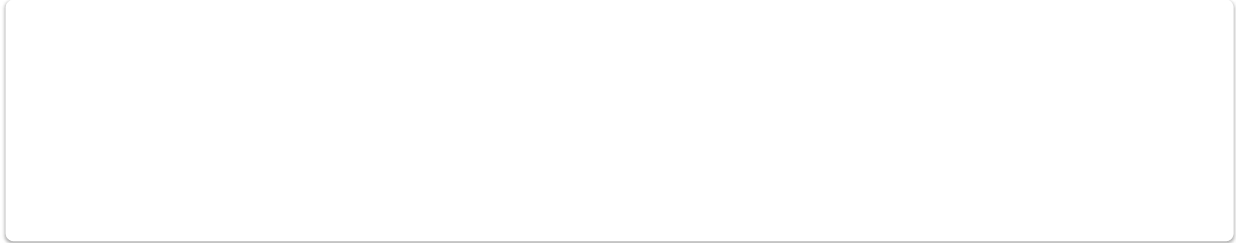
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