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🌐 Language skills

Հայերեն Русский English

📖 Publications

Article

Jaynes-Cummings Model in Counter Propagating Waves Basis: Large Numbers of Excitations

A.Zh. Muradyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 134-139

Article

Spin-dependent multichannel scattering of electron in a quantum wire

A.Zh. Muradyan, D.A. Badalyan

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Article

Far resonance Kapitza-Dirac diffraction: from Raman-Nath to Bragg and multiple beam atomic interferometer

Atom Zh. Muradyan

Optical Memory and Neural Network 2023 S296-S304

Article

Absorptive Atom Interferometer

A. Zh. Muradyan

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Article

Quantum Tunneling Time of a Moderately Singular Potential: Regularization Method

A.Zh. Muradyan

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Article

Spin-dependent multichannel scattering of electron in a quantum wire with a point defect

D.A. Badalyan, A. Zh. Muradyan

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Article

On Quantum Tunneling of a Singular Potential

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Article

Spontaneous Emission of a Semiconductor Quantum Dot without the Dipole Approximation

G. A. Muradyan, L. R. Arzumanyan, A. Zh. Muradyan

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Manual

Լաբորատոր պարապմունքների ուղեցույց: Մոլեկուլային ֆիզիկա

Ա. ժ. Մուրադյան, Դ. Հ. Բադալյան, Ռ. Յ. Գաբրիելյան, Մ. Վ. Հայրապետյան, Լ. Ա. Հովհաննիսյան

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Article

Approximate Formula for Superposition State of two Level Atom and Large Number of Counterpropagating Photons

A. Zh. Muradyan, G. A. Muradyan, L. R. Arzumanyan

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Article

Лазерные бегущие волны для дифракции Капицы-Дирака в атомном интерферометре

А.Ж. Мурадян, Г.А. Мурадян

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Article

Переходы между квантованными стоячими волнами при взаимодействии с атомом в режиме Рамана-Ната

А.Ж. Мурадян, Г.А. Мурадян, Л.Р. АРЗУМАНЯН

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Квазиклассическое приближение для резонансного рассеяния Капицы-Дирака

А.Ж. Мурадян, Г.А. Мурадян

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Article

Tunneling dynamics of a two-atom system

A Zh Muradyan, G Muradyan, H Hakobyan

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Generalized Bloch states of a two-level atom in the field of counterpropagating waves: application to the Kapitza-Dirac diffraction problem

Atom Zh Muradyan, Gevorg Muradyan

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Approximate solution of the Schrödinger equation for an atom in the field of a standing wave

L. A. Hovhannisyan, G. A. Muradyan, A. Zh. Muradyan

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Article

Total transparency in quantum tunneling of counterpropagating waves

A. Zh. Muradyan, G. A. Muradyan, H. R. Hakobyan

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Article

Raman - Nath approximation for diffraction of atoms in the laser field taking into account spontaneous emission of atoms for ground and high energy level

L Hovhannisyan, A Zh Muradyan

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Quantum superposition principle and generation of short optical pulses

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Article

Improvement of the Raman-Nath approximation for the resonant Kapitza-Dirac scattering

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Train of high-power femtosecond pulses: Probe wave in a gas of prepared atoms

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Article

Collapse and revival in atom internal dynamics due to quantum translational motion

A Zh Muradyan, G A Muradyan

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Theory of a compound large-angle atom beam splitter. II. Initial state deflection

A. Zh. Muradyan, G. A. Muradyan, P. R. Berman

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A. Zh. Muradyan, A. A. Poghosyan, P. R. Berman

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Article

Stationary states of the Jaynes-Cummings model with atomic centre-of-mass quantum motion: analytical approximation to transfer counterpropagating waves into a standing wave in a large photon number limit

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Momentum transfer for an optical transition in a prepared two-level atom

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Conference

Atom diffraction by a standing wave: from Raman-Nath to Bragg and multi-beam atom interferometry

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