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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

2019 60

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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<http://iopscience.iop.org/journal/1742-6596>

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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

Atom Zh. Muradyan, Gevorg Muradyan

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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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