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🌐 Language skills

Հայերեն Русский English

📖 Publications

Article

Stationary States of an Electron in a Prolate Spheroidal Quantum Dot [Стационарные состояния электрона в вытянутой сфероидальной квантовой точке]

M. V. Hayrapetyan, A. Zh. Muradyan

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2024
144 - 148

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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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

Journal of Contemporary Physics (Armenian Academy of Sciences) 2020 317-322

Manual

Լաբորատոր պարապմունքների ուղեցույց: Մոլեկուլային ֆիզիկա

Ա. Ժ. Մուրադյան, Դ. Հ. Բաղայան, 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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Article

Квазиклассическое приближение для резонансного рассеяния Капицы-Дирака

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Article

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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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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

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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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Article

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

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

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Article

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

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Theory of a compound large-angle atom beam splitter

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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Optical transition and momentum transfer in atomic wave packets

A. Zh. Muradyan, V. A. Poghosyan

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

A. Zh. Muradyan, H. L. Haroutyunyan

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Перетяжка каустики при резонансной самофокусировке с малым насыщением нелинейности

А. Ж. Мурадян

Квантовая Электроника (Quantum Electronics) 1986 1935-1938

Conference

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

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