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Institute of Physics

Chair of General Physics and Astrophysics named after Academician Victor Hambardzumyan
Professor

🌐 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

Polarimetric Light-Pulse Atom Interferometer: Two-Level Scheme [Поляриметрический светоимпульсный атомный интерферометр: двухуровневая схема]

A. Zh. Muradyan
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371 - 377

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

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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

A. Zh. Muradyan

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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

Լարուածոր պարապմունքների ուղեցույց: Մոլեկուլային Փիզիկա

Ա. Ժ. Մոլուանյան, Դ. Հ. Բադալյան, Ո. Յ. Գաբրիելյան, Մ. Վ. Հայրապետյան, Լ. Ռ. 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

Ա.Ջ. Մուրադյան, Գ.Ա. Մուրադյան

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2018

135-142

Article

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

Ա.Ջ. Մուրադյան, Գ.Ա. Մուրադյան, Լ.Ր. ԱՐՅՈՒՄԱՆՅԱՆ

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Квазиклассическое приближение для резонансного рассеяния Капицы-Дирака

Ա.Ջ. Մուրադյան, Գ.Ա. Մուրադյան

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Article

Tunneling dynamics of a two-atom system

A Zh Muradyan, G Muradyan, H Hakobyan

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Article

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

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

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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

Physical Review A 2004 065601

*Article***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**

A Zh Muradyan, G A Muradyan

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*Article***Optical transition and momentum transfer in atomic wave packets**

A. Zh. Muradyan, V. A. Poghosyan

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

A. Zh. Muradyan, H. L. Haroutyunyan

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*Article***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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