

Atom Zhora Muradyan

Institute of Physics

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

☎ 23-39

✉ muradyan@ysu.am

🌐 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

Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 31-37

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

Journal of Contemporary Physics (Armenian Academy of Sciences) 2023 355 - 361

Article

Quantum Tunneling Time of a Moderately Singular Potential: Regularization Method

A.Zh. Muradyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2022 230-237

Article

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

D.A. Badalyan, A. Zh. Muradyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2022 41-48

Article

On Quantum Tunneling of a Singular Potential

A. Zh. Muradyan

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. 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

Journal of Contemporary Physics (Armenian Academy of Sciences) 2019 11 - 16

Article

Лазерные бегущие волны для дифракции Капицы-Дирака в атомном интерферометре

А.Ж. Мурадян, Г.А. Мурадян

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

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

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

251-256

Article

Квазиклассическое приближение для резонансного рассеяния Капицы-Дирака

А.Ж. Мурадян, Г.А. Мурадян

Известия НАН РА. Физика (Journal of Contemporary Physics (Armenian Academy of Sciences) 2017

271-278

Article

Tunneling dynamics of a two-atom system

A Zh Muradyan, G Muradyan, H Hakobyan

Journal of Physics: Conference Series 2016 012013 (5)

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

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

Physica Scripta 2015 115401 (9)

<http://iopscience.iop.org/journal/1402-4896>

Article

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

Journal of Contemporary Physics (Armenian Academy of Sciences) 2014 6-11

Article

Total transparency in quantum tunneling of counterpropagating waves

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

Journal of Contemporary Physics (Armenian Academy of Sciences) 2014 98 -102

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

Journal of Physics: Conference Series 2012 012011

Article

Quantum superposition principle and generation of short optical pulses

Atom Zh Muradyan, Gevorg Muradyan

Journal of Physics: Conference Series 2012 012006

Article

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

L. A. Hovhannisyan, A. Zh. Muradyan

Journal of Contemporary Physics (Armenian Academy of Sciences) 2010 12-16

Article

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

Atom Zh. Muradyan, Gevorg Muradyan

Physical Review A 2009 035801

Article

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

A Zh Muradyan, G A Muradyan

Journal of Physics B: Atomic, Molecular and Optical Physics 2004 4471 - 4482

Article

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

Physical Review A 2003 033604

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

Journal of Physics B: Atomic, Molecular and Optical Physics 2002 3995 - 4013

Article

Optical transition and momentum transfer in atomic wave packets

A. Zh. Muradyan, V. A. Poghosyan

Physical Review A 2001 013416

Article

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

A. Zh. Muradyan, H. L. Haroutyunyan

Physical Review A 2000 013401

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

A. Muradyan
