1. Record Nr. UNINA9910792081403321

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Titolo	Controlling steady-state and dynamical properties of atomic optical bistability [[electronic resource] /] / Amitabh Joshi, Min Xiao
Pubbl/distr/stampa	Hackensack, NJ ; ; Singapore, : World Scientific, c2012
ISBN	1-283-59362-9 9786613906076 981-4307-56-4
Descrizione fisica	1 online resource (246 p.)
Altri autori (Persone)	XiaoMin
Disciplina	535.2
Soggetti	Optical bistability Quantum optics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Preface; Contents; 1. Introduction; 1.1 Background; 1.2 Nonlinearity in a Two-level Atomic System; 1.2.1 Two-level atoms interacting with a monochromatic field: the density-matrix approach; 1.2.2 Absorption and dispersion spectra in steady-state; 1.2.3 First- and third-order susceptibilities and the saturation phenomenon; 1.3 Doppler Effect in Inhomogeneously-broadened Atomic Systems; 1.3.1 Doppler effect in a two-level atomic system; 1.3.2 Doppler effect in three-level atomic systems; 1.4 Optical Cavity 1.4.1 Optical Fabry-Perot cavity: transmission and reflection functions, finesse and quality factor1.4.2 Optical ring cavity; 1.4.3 Optical ring cavity with an intracavity medium: modification of transmission function; 1.5 Controllable Linear and Nonlinear Susceptibilities in Three-level Atomic Systems; 1.5.1 Early works on coherent population trapping; 1.5.2 Coherent population trapping vs electromagnetically induced transparency; 1.5.3 Controlling linear absorption and dispersion properties in three-level electromagnetically induced transparency systems A. Three-level system in ladder configurationB. Three-level system in - type configuration; 1.5.4 Enhancement and control of Kerr nonlinearity in three-level electromagnetically induced transparency systems; 2. Atomic Optical Bistability in a Two-level System; 2.1 Two-level Atoms

inside an Optical Cavity; 2.1.1 Split in transmission spectrum of the optical cavity; 2.2 Atomic Optical Bistability; 2.2.1 Atomic optical bistability: the mean field theory; 2.3 Absorptive Atomic Optical Bistability; 2.3.1 Simple model of absorptive atomic optical bistability
2.3.2 Mean field theory of absorptive atomic optical bistability2.4 Dispersive/refractive Atomic Optical Bistability; 2.4.1 Simple model of dispersive/refractive atomic optical bistability; 2.4.2 Mean field theory of dispersive/refractive atomic optical bistability; 2.5 Mixed Absorptive-dispersive Atomic Optical Bistability; 2.6 Experimental Demonstrations of Two-level Atomic Optical Bistability; 2.7 Potential Applications of Atomic Optical Bistability; 3. Three-level Atoms as the Intracavity Medium and Atomic Optical Bistability; 3.1 Three-level Atoms as the Intracavity Medium
3.1.1 Cavity linewidth narrowing effect due to three-level medium inside an optical cavity3.1.1.1 Theoretical calculations; 3.1.1.2 Experimental Investigations; 3.1.2 Enhanced cavity ring-down spectroscopy with a three-level electromagnetically induced transparency system; 3.2 Atomic Optical Bistability with Three-level Atomic System; 3.2.1 Equations for three-level atomic dynamics and field propagation; 3.2.2 Experiments on controlling the steady-state shape and thresholds of the atomic optical bistability
3.2.3 Experimental control of the rotating direction of the hysteresis cycle of atomic optical bistability

Sommario/riassunto

This book provides a comprehensive introduction to the theoretical and experimental studies of atomic optical bistability and multistability, and their dynamical properties in systems with two- and three-level inhomogeneously-broadened atoms inside an optical cavity. By making use of the modified linear absorption and dispersion, as well as the greatly enhanced nonlinearity in the three-level electromagnetically induced transparency system, the optical bistablity and efficient all-optical switching can be achieved at relatively low laser powers, which can be well controlled and manipulated. Un