Elements Of Optical Coherence Theory

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Optical pumping has been discussed for example by Cohen-Tannoudji and V. N. Tatarinov (1978) and Elements of Optical Coherence Theory by A. S.
Quantum theory of optical interference experiments Glauber’s 1963 contribution. In Ref. [9], Glauber presents the basic features of his quantum theory of optical coherence. The formal features were expanded on in two long articles [10] in the same year. This material was to form the basis for the development of Quantum Optics up to the present time. This is particularly true in atomic spectroscopy, where increasing spectral resolution led to the observation of atomic fine structure (due to the electronic spin), hyperfine structure (due to the nuclear spin), and volume isotopic shifts (due to the different charge distributions of the nuclei of isotopic species of an element).

Optical elements. Nonlinear optics. Load Previous Page. Optics and information theory. General observations. The initial tie between optics and communication theory came because of the numerous analogies that exist between the two subjects and because of the similar mathematical techniques employed to formally describe the behaviour of electrical circuits and optical systems. A topic of considerable concern since the invention of the lens as an optical imaging device has always been the description of the optical system that forms the image; information about the object is relayed and presented as an image. The term spatial coherence is used to describe partial coherence arising from the finite size of an incoherent source.