

1. Record Nr.	UNINA9910830159403321
Autore	Middleton David <1920->
Titolo	Non-Gaussian statistical communication theory // David Middleton
Pubbl/distr/stampa	Hoboken, New Jersey : , : Wiley-IEEE Press, , 2012 [Piscataway, New Jersey] : , : IEEE Xplore, , [2012]
ISBN	1-118-16195-5 1-283-55015-6 9786613862600 1-118-16193-9
Edizione	[1st ed.]
Descrizione fisica	1 online resource (661 p.)
Collana	IEEE series on digital & mobile communication ; ; 22
Classificazione	SCI067000
Disciplina	003.54 003/.54 621.382
Soggetti	Statistical communication theory Information theory - Statistical methods Gaussian processes
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Reception as a Statistical Decision Problem -- Space-Time Covariances and Wave Number Frequency Spectra: I. Noise and Signals with Continuous and Discrete Sampling -- Optimum Detection, SpaceTime Matched Filters, and Beam Forming in Gaussian Noise Fields -- Multiple Alternative Detection -- Bayes Extraction Systems: Signal Estimation and Analysis, $\rho = 1$ -- Joint Detection and Estimation, $\rho = 1$: I. Foundations -- Joint Detection and Estimation under Uncertainty, $\rho < 1$. II. Multiple Hypotheses and Sequential Observations -- The Canonical Channel I: Scalar Field Propagation in a Deterministic Medium -- The Canonical Channel II: Scattering in Random Media; 'Classical' Operator Solutions -- Appendix A1 -- Index -- IEEE Press Series on Digital and Mobile Communication.
Sommario/riassunto	"The book is based on the observation that communication is the central operation of discovery in all the sciences. In its "active mode" we use it to "interrogate" the physical world, sending appropriate "signals"

and receiving nature's "reply". In the "passive mode" we receive nature's signals directly. Since we never know a priori what particular return signal will be forthcoming, we must necessarily adopt a probabilistic model of communication"--
