1. Record Nr.   UNINA9910813516903321

   Autore   Young S. Susan

   Titolo   Signal processing and performance analysis for imaging systems / / S. Susan Young, Ronald G. Driggers, Eddie L. Jacobs

   Pubbl/distr/stampa Boston, : Artech House, c2008

   ISBN   1-59693-288-0

   Edizione   [1st ed.]

   Descrizione fisica 1 online resource (322 p.)

   Collana   Artech House optoelectronics series

   Altri autori (Persone) DriggersRonald G
                           JacobsEddie Lynn

   Disciplina   621.36/7

   Soggetti   Imaging systems
                       Signal processing
                       Image processing
                       Optical data processing
                       Optoelectronics

   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   pt. 1. Basic principles of imaging systems and performance -- pt. 2. Basic principles of signal processing -- pt. 3. Advanced applications.

   Sommario/riassunto From image resampling to image fusion, this hands-on book brings a wealth of cutting-edge signal and image processing tools into focus. You get step-by-step details on a super-resolution image reconstruction methods that produces superior high-resolution images from low-cost, low-resolution video. You discover an image deblur/restoration technique that works even in the presence of high noise. The book includes contrast enhancement tools for generating the highest-contrast images in low-light situations, as well as non-uniformity correction (NUC) methods that most effectively reduce fixed-pattern noise from the imaging sensor. What's more, the book presents a special tone scale technique that creates the best image presentation whether on-screen or in print. You also find powerful image fusion techniques for improving such tasks as target recognition and identification. This well-illustrated book is supported with nearly 350 time-saving equations.