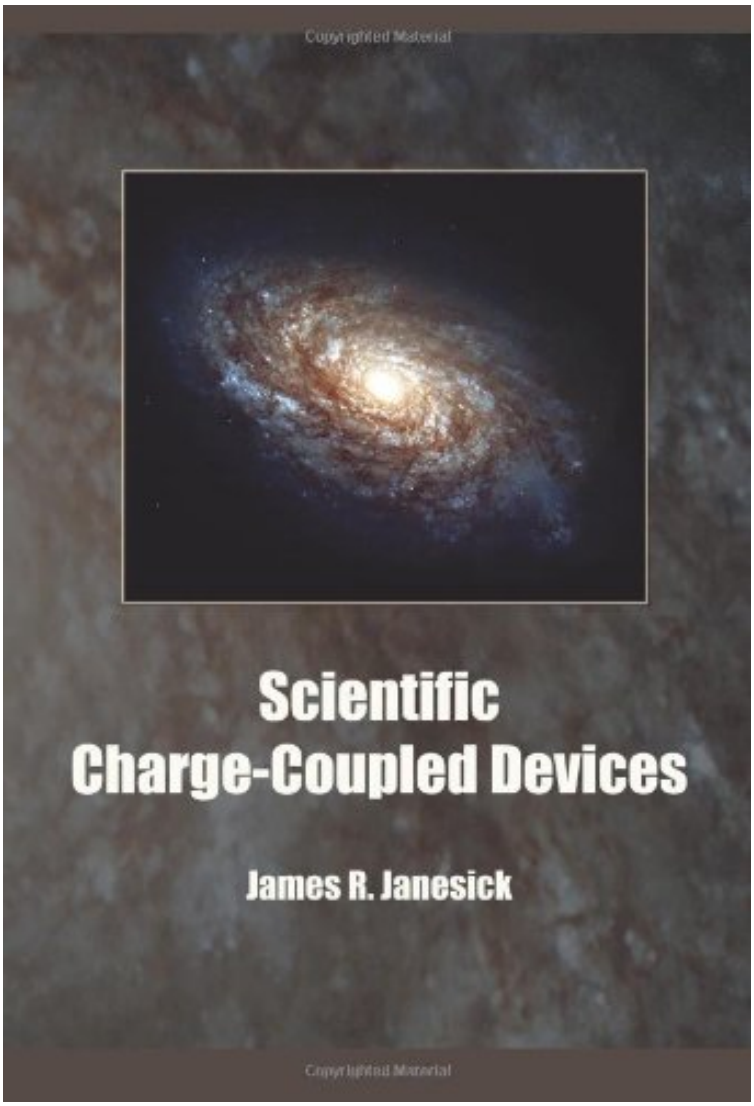
Scientific Charge-Coupled Devices (SPIE Press Monograph Vol. PM83)

James R. Janesick
*DOC | *audiobook | ebooks | Download PDF | ePub*



#1017282 in Books SPIE Publications 2001-01-01Original language:EnglishPDF # 1 9.75 x 7.00 x 2.00l, 3.90 #File Name: 0819436984920 pages | File size: 71.Mb

James R. Janesick : Scientific Charge-Coupled Devices (SPIE Press Monograph Vol. PM83) before purchasing it in order to gage whether or not it would be worth my time, and all praised Scientific Charge-Coupled Devices (SPIE Press Monograph Vol. PM83):

0 of 0 people found the following review helpful. Best book of its typeBy Rodger L. CarterExcellent book! Details the history of astronomical telescope imagers (CCDs) and how they work. Every observatory should have a copy of this book in their library.0 of 0 people found the following review helpful. Five StarsBy CustomerVery good!0 of 0 people

found the following review helpful. Best resource on scientific CCDBy Buy-GuyI have not seen a better, clearer, more comprehensive and complete resource on the subject. It has everything from the principles to the technology of CCDs.

The invention of the charge-coupled device 30 years ago was the beginning of a remarkable image capture technology that has changed the course of imaging in fields ranging from astronomy to biotechnology. This book presents a comprehensive history, tutorial, and state-of-the-art description of CCDs and is intended for scientists, engineers, imaging hardware managers, and graduate students.Contents - Preface - History, Operation, Performance, Design, Fabrication and Theory - CCD Transfer Curves and Optimization - Charge Generation - Charge Collection - Charge Transfer - Charge Measurement - Noise Sources - Damage - Appendices - Glossary of CCD Terms - Index

About the AuthorJames R. Janesick has written more than 75 publications on CCDs, including many NASA Tech Briefs, and holds 12 patents for various CCD innovations. During his 22 years at the Jet Propulsion Laboratory, he focused on scientific CCDs and support electronics used in many NASA spaceborne imaging systems, including the Hubble Space Telescope and the Galileo and Cassini projects. Janesick received NASA medals for Exceptional Engineering Achievement in 1982 and 1992.