

1. Record Nr.	UNINA9910819126903321
Autore	Prutchi David
Titolo	Design and development of medical electronic instrumentation : a practical perspective of the design, construction, and test of medical devices / / David Prutchi, Michael Norris
Pubbl/distr/stampa	Hoboken, N.J., : Wiley-Interscience, c2005
ISBN	9780471681847 1-5231-3071-7 1-280-27528-6 9786610275281 0-470-36173-5 0-471-68183-0 1-60119-386-6 0-471-68184-9
Edizione	[1st ed.]
Descrizione fisica	1 online resource (479 pages)
Altri autori (Persone)	NorrisMichael
Disciplina	681/.761
Soggetti	Medical instruments and apparatus - Design and construction
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	DESIGN AND DEVELOPMENT OF MEDICAL ELECTRONIC INSTRUMENTATION; CONTENTS; PREFACE; DISCLAIMER; ABOUT THE AUTHORS; 1 BIOPOTENTIAL AMPLIFIERS; 2 BANDPASS SELECTION FOR BIOPOTENTIAL AMPLIFIERS; 3 DESIGN OF SAFE MEDICAL DEVICE PROTOTYPES; 4 ELECTROMAGNETIC COMPATIBILITY AND MEDICAL DEVICES; 5 SIGNAL CONDITIONING, DATA ACQUISITION, AND SPECTRAL ANALYSIS; 6 SIGNAL SOURCES FOR SIMULATION, TESTING, AND CALIBRATION; 7 STIMULATION OF EXCITABLE TISSUES; 8 CARDIAC PACING AND DEFIBRILLATION; EPILOGUE; APPENDIX A: SOURCES FOR MATERIALS AND COMPONENTS; APPENDIX B: ACCOMPANYING CD-ROM CONTENT; INDEX
Sommario/riassunto	Design and Development of Medical Electronic Instrumentation fills a gap in the existing medical electronic devices literature by providing background and examples of how medical instrumentation is actually designed and tested. The book includes practical examples and

projects, including working schematics, ranging in difficulty from simple biopotential amplifiers to computer-controlled defibrillators. Covering every stage of the development process, the book provides complete coverage of the practical aspects of amplifying, processing, simulating and evoking biopotentials. In addition, two ch
