

| | |
|-------------------------|---|
| 1. Record Nr. | UNINA9910814947103321 |
| Autore | Gupta Sandeep K. S. <1966-> |
| Titolo | Body area networks : safety, security, and sustainability // Sandeep K. S. Gupta, Tridib Mukherjee, Krishna Kumar Venkatasubramanian |
| Pubbl/distr/stampa | Cambridge, : Cambridge University Press, 2013 |
| ISBN | 1-107-23568-5 1-107-34166-3 1-107-34416-6 1-107-34900-1 1-107-34791-2 1-299-40337-9 1-139-10812-3 1-107-34541-3 |
| Edizione | [1st ed.] |
| Descrizione fisica | 1 online resource (xvi, 141 pages) : digital, PDF file(s) |
| Altri autori (Persone) | MukherjeeTridib VenkatasubramanianKrishna Kumar |
| Disciplina | 610.285/468 |
| Soggetti | Body area networks (Electronics) |
| Lingua di pubblicazione | Inglese |
| Formato | Materiale a stampa |
| Livello bibliografico | Monografia |
| Note generali | Title from publisher's bibliographic system (viewed on 05 Oct 2015). |
| Nota di bibliografia | Includes bibliographical references and index. |
| Nota di contenuto | Introduction -- Body area networks -- BAN models and requirements -- Safety -- Security -- Sustainability -- Implementation of BANs -- Epilogue. |
| Sommario/riassunto | Body area networks (BANs) are networks of wireless sensors and medical devices embedded in clothing, worn on or implanted in the body, and have the potential to revolutionize healthcare by enabling pervasive healthcare. However, due to their critical applications affecting human health, challenges arise when designing them to ensure they are safe for the user, sustainable without requiring frequent battery replacements and secure from interference and malicious attacks. This book lays the foundations of how BANs can be redesigned from a cyber-physical systems perspective (CPS) to overcome these issues. Introducing cutting-edge theoretical and practical techniques and taking into account the unique environment- |

coupled characteristics of BANs, the book examines how we can re-imagine the design of safe, secure and sustainable BANs. It features real-world case studies, suggestions for further investigation and project ideas, making it invaluable for anyone involved in pervasive and mobile healthcare, telemedicine, medical apps and other cyber-physical systems.
