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Descrizione fisica	1 online resource (ix, 179 pages) : digital, PDF file(s)
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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	1. Introduction -- 2. Nature-made biological nanomachines -- 3. Molecular communication in biological systems -- 4. Molecular communication paradigm -- 5. Mathematical modelling and simulation -- 6. Communication and information theory of molecular communication -- 7. Design and engineering of molecular communication systems -- 8. Application areas of molecular communication -- 9. Conclusion -- Appendix. Review of probability theory.
Sommario/riassunto	This comprehensive guide, by pioneers in the field, brings together, for the first time, everything a new researcher, graduate student or industry practitioner needs to get started in molecular communication. Written with accessibility in mind, it requires little background knowledge, and provides a detailed introduction to the relevant aspects

of biology and information theory, as well as coverage of practical systems. The authors start by describing biological nanomachines, the basics of biological molecular communication and the microorganisms that use it. They then proceed to engineered molecular communication and the molecular communication paradigm, with mathematical models of various types of molecular communication and a description of the information and communication theory of molecular communication. Finally, the practical aspects of designing molecular communication systems are presented, including a review of the key applications. Ideal for engineers and biologists looking to get up to speed on the current practice in this growing field.

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