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   Nota di contenuto   Preface -- Robotic Assistance for Senior People for Safe Mobility and
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| Sommario/riassunto | This volume describes new frontiers in medical and service robotics in the light of recent developments in technology to advance robot design and implementation. In particular, the work looks at advances in design, development and implementation of contemporary surgical, rehabilitation and biorobots. Surgical robots allow surgeons greater access to areas under operation using more precise and less invasive methods. Rehabilitation robots facilitate and support the lives of the infirm, elderly people, or those with dysfunction of body parts affecting movement. These robots are also used for rehabilitation and related procedures, such as training and therapy. Biorobots are designed to imitate the cognition of humans and animals. The need to substitute humans working on delicate, tiresome and monotonous tasks, or working with potentially health-damaging toxic materials, requires intelligent, high-performance service robots with the ability to cooperate, advanced communication and sophisticated perception and cognitive capabilities. Progress in this field is fast and results need to be disseminated to stimulate both practical applications and further research. Thus, these papers are a valuable addition to existing literature. |