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Sommario/riassunto	As a research subject, the biomechanics of the urinary bladder are relatively young, yet medical problems associated with them are as old as mankind. Offering an update on recent achievements in the field, the authors highlight the underlying biological, chemical and physical processes of bladder function and present the systematic development of a mathematical model of the organ as a thin, soft biological shell. The book will be a valuable resource for postgraduate students and researchers interested in the applications of computational mathematics and solid mechanics to modern problems in biomedical engineering and medicine.