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Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Finite element model construction -- Parameters affecting finite element predictions -- The effect of implant design on stability -- Surgical and pathological parameters affecting micro motion -- Conclusion.
Sommario/riassunto	This book presents analyses of the most commonly reported failure modes of hip stems: loosening and thigh pain; both are attributed to the relative motion and instability at the bone-implant interface due to failure to achieve sufficient primary fixation. The book investigates various factors that could affect primary stability and therefore the long-term outcome of hip arthroplasty. The results complement experimental work carried out in this area as in-vitro experiments have several limitations that could be addressed through computer simulations.