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Titolo	Bone-Implant Interface in Orthopedic Surgery : Basic Science to Clinical Applications / / edited by Theofilos Karachalios
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Soggetti	Orthopedics Molecular biology Surgical Orthopedics Molecular Medicine
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Current evidence in designs and fixation surfaces in total hip arthroplasty (a brief overview) -- Early and late mechanical stability of the cementless bone implant interface in total joint arthroplasty -- Cement- bone interface in total joint arthroplasty -- The implant cement interface in total hip arthroplasty -- Cobalt-Chrome porous coated implant-bone interface in total joint arthroplasty -- Titanium porous coated implant-bone Interface in Total Joint Arthroplasty -- Grit blasted implant bone interface in total joint arthroplasty Eduardo García-Rey, Eduardo García-Cimbrelo -- HA coated implant - bone interface in total joint arthroplasty -- Trabecular metal - bone interface in total joint arthroplasty -- Assessment of bone implant interface failure in total joint arthroplasty -- The biology of aseptic loosening -- Cement-bone interface in total joint revision arthroplasty -- Cementless fully porous coated implant-bone interface in revision total hip arthroplasty -- Cementless tapered fluted implant bone interface in revision total joint arthroplasty -- Bone-graft and implant-graft interface in total hip arthroplasty -- The effect of pharmacological

agents on the bone implant interface -- Bone-implant interface in biofilm associated bone and joint infections -- Modular interfaces -- Local and distant reaction to metallic wear debris -- Bone-implant interface in spine surgery -- Bone-tendon and bone- ligament interface -- Bone implant interface in patients with neoplastic disease.

Sommario/riassunto

What is the optimal design and fixation of the implants we use for orthopedic reconstructions? What is the gold standard for the management of patients requiring implants? Is there scope for improvement still further? Huge efforts have been made both by research scientists in orthopedics and the implant industry to furthering the options available for arthroplasty without necessarily considering the cost-effectiveness of this research to clinical outcomes. It has also become apparent that theoretical and laboratory studies do not always match the results of long-term clinical studies of which there regrettably few of sufficient quality. The Editor and his carefully chosen selection of contributors critically evaluate data from basic science, experimental in vivo and in vitro biological and mechanical models, autopsy specimens and long-term clinical studies to answer these questions. *Bone-Implant Interface in Orthopedic Surgery: Basic Science to Clinical Applications* focuses on the bone-orthopedic implant interface in general and will be useful both for the novice who seeks a quick introduction to this specific topic and for more experienced surgeons who seek an in depth critical review of current practices.