Record Nr. UNINA9910780881803321 Advances in MRI of the knee for osteoarthritis [[electronic resource] /] / **Titolo** edited by Sharmila Majumdar Pubbl/distr/stampa Singapore, : World Scientific, 2010 **ISBN** 1-282-75797-0 9786612757976 981-4271-71-3 Descrizione fisica 1 online resource (284 p.) Altri autori (Persone) MajumdarSharmila Disciplina 616.07/548 616.722307548 Soggetti Osteoarthritis - Magnetic resonance imaging Knee - Magnetic resonance imaging Knee - Diseases - Diagnosis Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Contents; Contributors; Preface; 1. Anatomy and Physiology of the Knee by Richard B. Souza and Ryan Doan; 2. Clinical Presentation and Natural History of Osteoarthritis by Ehsan Saadat, Radu I. Bolbos and Michael D. Ries: 3. Current Radiographic Diagnosis for Osteoarthritis of the Knee by Ehsan Saadat and Thomas M. Link; 4. Introduction to Magnetic Resonance Imaging by Roland Krug, Tobias D. Henning, Reinhard Meier and Brian Hargreaves; 5. Current Magnetic Resonance Imaging Techniques for Clinical Diagnosis and Staging of Knee Osteoarthritis by Ehsan Saadat, Thomas M. Link and C. Benjamin Ma 6. Quantitative Morphological Imaging of the Knee Joint by Julio Carballido-Gamio and Felix Eckstein7. Functional Imaging of the Knee Joint by Gabrielle Blumenkrantz, Xiaojuan Li, Ravinder R. Regatte, Alexej Jerschow and Sharmila Majumdar; 8. Bone and Osteoarthritis by Janet Goldenstein, Gabrielle Blumenkrantz, Radu I. Bolbos and Xiaojuan Li; Index Sommario/riassunto Osteoarthritis is a condition in which low-grade inflammation results in joint pain, and it is the most common joint disease. Interactions

between all of the major joint tissues, including the articular cartilage.

synovium, bone marrow, subchondral bone, trabecular bone, and muscle, have been implicated in osteoarthritis. Magnetic resonance images have been used to quantify the cartilage morphology, volume and thickness, and focal defects, and may reflect changes in the biochemical composition of articular cartilage. This book brings together contributions from key investigators in the area of