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Titolo	Navigation Assisted Robotics in Spine and Trauma Surgery / / edited by Wei Tian
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Nota di contenuto	History and Development of Robotic Assisted Orthopedic Surgery -- Basic Principle of Robot-Assisted Orthopedic Surgery -- Use of Artificial Potential Field Theory to Determine the Spatial Position of a Navigation-Guided Orthopedic Surgical Robot -- Future Trends and Perspectives -- Magerl method of C1-C2 transarticular screw fixation -- Robot-Assisted posterior C1 and C2 Screw Fixation -- Robot-Assisted Odontoid Fracture Anterior Screw Fixation -- Robot-assisted C2 Pedicle Screw Placement for the Treatment of Hangman Fracture -- Robot Assisted Cervical Pedicle Screw Fixation -- Robot assisted thoracic pedicle screw fixation technique -- Robot-assisted Spine Surgery in Spinal Deformities -- Robot-assisted Lumbar Pedicle Screw Fixation -- Vertebroplasty in Osteoporotic Spine -- Robot-assisted Translaminar Lag Screw Fixation of Spondylolysis -- Robot assisted Percutaneous Transforaminal Endoscopy Discectomy -- Cortical Bone Trajectory for Lumbar Pedicle Screw Placement -- The Complications of Robot-assisted Spine surgery -- Robot-Assisted Free Vascularised Fibular Grafting for the Treatment of Osteonecrosis of the Femoral Head -- An Overview of Robotic Applications in Traumatic Orthopedics -- Research Study of Robotic-assisted Pelvic Fracture Reduction -- Application of Navigation Assisted Robot in Internal Fixation of Fracture.
Sommario/riassunto	The book introduces the using of navigation assisted robotic system in orthopedic surgery. The system is based on real-time 3D navigation. In

the first part, it covers spine surgery, which includes pedicle screw fixation on cervical, thoracic, lumbar spine, dens screw fixation, Margerl screw fixation, PVP, PKP, and MED. The second part is about trauma surgery, which covers screw fixation in pelvis fracture and acetabulum fracture. This book is mainly written for spine surgeons, neurosurgeons, and traumatic orthopedic surgeons.