

List of Keywords

3D analysis Arthroscopy Bone biomechanics Cartilage repair Chromatin modifying enzymes 3-D bio-printing Articular cartilage Bone cells Cartilage surgery Classification 3-D cephalometry Articular fractures Bone cement Cartilage tissue engineering Clavicula 3D culture Cleft lip and palate Articular joint Bone defects CD73 3-D imaging Aseptic loosening Bone defomity Cell and organ culture system Clinical Absorbable materials Clinical epidemiology Augmentation Bone development Cell based therapies Acetabular fracture Autograft Bone filling material Cell culture clinical fracture care Autologous chondrocyte Bone fixation Cell delivery Clinical implantology Acetabulum Cell expansion and Anterior cruciate ligament implantation Bone formation Clinical studies differentiation Clinical trials Adenovirus Autologous stem cell Bone grafts Adipose stem cells transplantation Bone healing Cell senescence Coating Adolescent idipathic scoliosis Back pain Bone histomorphometry Cell signaling pathways Collagen Adolescent spondylolisthesis Bacteria adhesion Bone infections Cell stretching Compartment syndrome Adult deformity **Bacterial infection** Cell-cell adhesion Complex Fractures Bone innervation Adult stem cells Basic research Bone lengthening Cell-matrix interactions Compromised bone healing (by Advanced Neuromonitoring basic Fibroblast growth factor Bone loss Cell-mediated therapy smoking, radiotherapy, Cell-surface interaction osteoporosis...) Aesthetic surgery Biochemistry Bone metabolism Computational biomechanics Alcohol biocompatibility Bone morphogenic proteins Cellular and molecular Allografts Biocomposite Bone perfusion interaction Computational stress analysis Alveolar bone graft Biocorrosion Bone quality Cellular Biology Computed tomography Alveolar Cleft Cellular Diagnostics and Computer assisted planning Bioengineering Bone regeneration analysis of instability Biofilm Bone tissue engineering Therapeutics (CAP) Angiogenesis Biomaterials Bone tumor Cellular differentiation Computer assisted surgery (CAS) Angular fractures, Biomechanical testing Bone viscoelasticity Cellular engineering Congenital anomalies Angular stable nailing Biomechanics Bracing Cellular response to Brain Tissue Oxygenation Animal models environmental stress Connective tissue **Biomimetics** BSEM. uCT Controlled release Ankle Bioprinting Cements Ankle fracture **Bioreactors** Burns Ceramics Cranio-maxillo facial surgery Craniomaxillofacial Ankle surgery Bioresorbable implants Cables, Cerclages, Cerebral Edema Bioresorbable materials Periprosthetic Critical size bone defects Annulus fibrosus Cervical Antibiotic treatment (local and Biostatistics Cadaver studies Cervical fractures Cruciate ligament systemic) Bisphosphonate-related Calcaneum fracture Cervical myelopathy Cvtokine/growth factor Antimicrobials osteonecrosis of the jaws Cancellous bone Cervical spine Cvtokines Damage control / Polytrauma **Apoptosis** Bisphosphonates Cancer Cervical trauma Applied navigation Bisphosphonates C-arm fluoroscopy Chemistry Decompressive Aritifical bone Bone Carpal injury Chemokines hemicraniectomy Bone / Implant interface Deformity correction Arthodesis Cartilage Chest trauma Arthritis Bone adaptation Cartilage biology Chest wall Degeneration Cartilage defect Arthroplasty Bone architecture resection/reconstruction Degenerative diseases Arthroscopic assisted reduction Bone augmentation Cartilage injury Child & adolescent Degradable materials of fractures Bone bioengineering Cartilage mechanics Chondrocvte Degradable metals Bone biology Cartilage regeneration Chondrogenesis Delayed union Arthroscopic surgery



Enthesis

Frontal sinus reconstruction

Delivery system Epidemiology Frontal sinus surgery Immunology Less invasive spine surgery Dental Equine Frontal sinus trauma Implant design Leukotriene Metabolism Dental pulp stem cells Esthetic facial surgery Implant loosening Functional adaptation Ligaments Developmental biology Evidence based medicine Gene expression Implant osseointegration Limb deformities Gene regulation Diabetes Experimental modelling Implant removal Limb Regeneration Diagnosis and imaging Expert nail Gene silencing Limb salvage Implant stability Diaphysis External fixation Genetic engineering **Implants** Listhesis Dicckopf 1 Extra oral implants Gene Therapy In vitro Liver Locked nailing Differentiation Extracellular matrix Genetics In vivo Disaster, mediacl coordinator of Extracorporal shock wave Geriatric In vivo tracking Locking plate the dormant disaster hospital Extremity trauma Geriatric fractures in vivo loading Long bone and course director of MRMI Fabrication Glial cells Induced pluripotent stem cells Low back pain Glycosaminoglycan Infection Low intensity pulsed ultrasound courses Face transplantation Greyhounds Discogenic pain Facet joint mechanics Infection Models or therapeutic ultrasound Growth factors Lower extremity Dislocations Facial deformity Infections Distal extremities fractures -Facial growth Growth Plate Inflammation Lumbar Facial paralysis Guided bone regeneration Information technology Macrophages carpus, tarsus, digits Distal Femur Fracture Facial reconstruction Hand and wrist Innate immunity Magnetic resonance imaging and technology Distal radius Facial skin & soft tissue Head & neck cancer Instability Distraction osteogenesis Facial tissue Regeneration Head & Neck reconstructive Interlocking nails Malalignment Drug delivery and nanomedicine Facial trauma surgery Internal fixation Malunion Dupuytren's disease Fat embolus Head injuries Interspinous devices Management of multiple trauma DXA Health care economics Mandible Femoral Acetabular Intervertebral disc Dynamic loading Impingement/Hip Dysplasia Hemorrhage / Resuscitation Intervertebral disc cells Mandible morphometry and Dynamization Femoral nailing Heparan sulphate Intervertebral disc Degeneration shape Dysphagia Femur and hip Heterotopic bone formation Intracellular pathogen Mandibular reconstruction Education Fibroblast HIF-1 Intracranial Pressure Mandibular trauma Elbow Fibronectin High energy trauma Intramedullary nailing Materials science Hip and Pelvis Intra-operative neuromonitoring Electric and magnetic Finite Element Analysis Mathematics stimulation Fixation stability and tissue Histology or histomorphometry Ionic homeostasis Matrix biology Host pathogen interactions Ischemia / Reperfusion Matrix metalloproteinases Electrospinning regeneration **Embolisation** Fluid flow HTO Joint Mechanical adaptation Embryonic stem cells Fluorescence microscopy Human Joint biomechanics Mechanical analysis Emergency medicine Foot & ankle **Human Motion Analysis** Joint fractures Mechanical engineering Enabling technology Mechanical forces Foot & ankle surgery Humeral nailing Joint modeling Endochondral ossification Foot & ankle trauma Humeral shaft fracture Joint replacement Mechanical Loading Endocrine orbitopathy Forearm and elbow surgery Humerus Joint surgery Mechanical testing Endoprosthesis Forearm fractures Hydrogels Kinematics Mechanobiology Endoscopic assisted surgery Medical education Fracture healing Hypoxia Knee Endoscopic spinal approaches Fracture healing assessment lhh Knee revision Medical physics Endoscopic surgical instruments Fracture related infection (FRI) Iliac fixation Knee surgery Medical software Endothelial cell biology Fragility fractures IM Fixation Kyphoplasty Meniscus Imaging - microCT, DXA, pQCT, Endothelial progenitor cells Free flap reconstruction Large animal models Mesenchymal stem cells Enopthalmous repair Frontal and base of the skull high resolution pQCT Large bone defects meta-analyses Immunohistochemistry Lentivirus Metadherin, AEG-1



Neutrophil

Parathyroid hormone action

Metal & biodegradable implant Patella Fracture Prostaglandins/COX-2 **Nonunions** Rib plating materials Notch signaling Patient specific implants Prosthesis Rigid fixation Metal implants Notochordal cells Pediatric fractures Prosthodontics RNA interference Metastasis Nuclear replacement strategies Pediatric Orthopedics Protein adsorption Robotics **Nucleus Pulposus** Satellite cells Methodology Pediatric plastic surgery Protein expression Microarray analysis Nutrition Pediatric Trauma Scaffolds Proteinase Microbiology Obstructive Sleep Apnea Pedicle screws Scaphoid Proteoglycan microcirculation Syndrom PFFK Proximal humerus Scapula Occupational back pain Pelvis and acetabulum Scheuermanns kyphosis Micro-computed tomography Pseudoarthorosis microRNA Open fracture and related Pelvis fracture Public health Schwann cells Microsurgery healing Peptides Pulsed electromagnetic fields Sciatic nerve Mineralization Operation planning Percutaneous instrumentation QCT Sciatica Minimally invasive surgery Oral oncology Quality of life Sclerostin Periarticular Mircovascular free bone tissue Oral pathology Peri-implantitis Quality of life (QoL) and Scoliosis transfer Orbit Periosteal distraction posttraumatic growth (PTG) Scope & Sports Medicine Mircroarray analysis Orbital Periosteum signaling research Segmentation Orbital reconstruction Peripheral nerve regeneration Quantitative resonance imaging Self-inductive scaffold Modelina Molecular biology Orbital trauma Peripheral nerve tissue Radiation injury to bone Sensor integration engineering Radiation therapy Sepsis Monocyte Organ culture Motion Analysis/ Gait Orthobiologics Periprosthetic fractures Radiculopathy Shape analysis Orthognatic Surgery and Sheep Mouse genetics Pharmaceuticals Radiculopathy Mouse knockout models Photobiology Radiostereometry Shock imaging Orthopaedic medical devices Photochemical crosslinking Radiotherapy Shoulder Mouse models Muscle Orthopaedic trauma Photochemistry Radius Shoulder arthroplasty Myelin disorders Orthopaedics Physical loading Rapid prototyping Shoulder biomechanics Nailing Osseointegration Physiology Rat Shoulder fractures Nanobiotechnology Osteoarthritis Pilon fractures RDG. integrin Shoulder instability Nasal Osteoblast biology Plastic surgery Real-time tracking **Shoulder Surgery** Nasoethmoidal repair Osteochondral graft Plastics Reconstructive Surgery Shoulder trauma Naso-orbito-ethmoid Osteochondral tissue Plate Reduction techniques Signal transduction Silica trauma/reconstruction engineering Plateau fractures Regeneration Navigation Osteoclasts **PMMA** Regenerative medicine Simulation Nerve injury Osteoconduction Polylactide membranes Regulatory (pre-/non clinical) Skeletal development Rehabilitation and Physical Nerve regeneration Osteocytes Polymers Skeletal metastases Neuroanatomy Osteogenesis Polvtrauma Therapy Skull reconstruction Neurobiology/Neuroscience Osteogenic differentiation Positron emission Tomography Remodeling Small animal models Neurocritical Care Osteomyelitis Post trauma reconstructive Repair Small molecule drugs Neuromuscular Osteonecrosis Replacement Soft tissue surgery Post-traumatic arthritis Reverse nailing Soft tissue reconstruction Neuromuscular scoliosis Osteoporosis Neuromuscular spine deformity Osteoporotic fracture Posttraumatic complications Rheumatology Soft tissue trauma Neuronavigation Outcome measures Posttraumatic Deformities RIA (Reamer Irrigator Aspirator) Spinal cord regeneration Neuroscience Oxidative stress and cellular Posttraumatic inflammation Spinal deformity Preclinical Rib and sternal fixation in rib Spinal devices Neurosurgerev ageing Neurotrauma Pain fractures and pseudoarthrosis Spinal fracture proprioception

Prosimal humerus

Rib fracture

Spinal fusion



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Spinal stenosis	Tibia		
Spinal trauma	Tibia fracture		
Spinal tumor	Tibia Plateau Fracture		
Spine	Tissue engineering		
Spine biomechanics	Tissue reaction		
Spine degeneration	Titanium		
Spondylolisthesis	TMJ ankylosis		
Sport medicine	Tooth development		
Squamous cell carcinoma	Total disc replacement		
Staphylococcal aureus	Total elbow arthoplasty		
Staphylococcus physiology	Total hip arthroplasty		
Statins	Total joint replacement		
Statistics	TPLO		
Stem cell biology	Trabecular bone		
Stem cell therapy	Transforming growth		
Stereotactic navigation	factor,TGF-b		
Sternal closure	Transcription factors		
Sternal fixation	Transgenic animal models		
Sternal reconstruction	Transient response		
Sternum	Transmembrane signaling		
Stress fractures	Transplantation		
Stroma	Trauma		
Structure-function	Traumatic brain injury		
Subchondral bone	Tribology		
Subchondral cysts	Ulna		
Surface characteristics	Ultrasound		
Surface chemistry	Upper extremity		
Surface coating	Vascularization		
Surface energy	VEGF		
Surface modification	Vertebra		
Surgery	Veterinary orthopedics		
Surgical alternatives to bone	Viral vectors		
graft	Virtual reconstructions		
Surgical approaches	Viscoelasticity		
Surgical decision making	War surgery		
Synovium	Wear		
Systematic review	Whiplash		
talus	Whole body vibration		
Temporomandibular joint	Wireless sensing		
Tenascin-C	wnt signaling		
Tendon	Wound healing		
Tendon regeneration	Wrist		
Tendon stem/progenitor cells	Zygoma		
Thoracic surgery	70		
Thorax			