BIOMATERIALS

Advanced Biomaterials for Biomedical Implants

This symposium covers advances in new research directions for biomaterials for biomedical implants. It highlights how researchers and clinicians are pushing the envelope in disease prevention, detection, and treatment. It covers more traditional areas such as hip, craniofacial, and spinal implants but also pushes us in new directions such as implantable sensors that can potentially determine changes in bone health and then respond to those changes to ensure strong healthy bones. It also emphasizes novel solutions to traditionally difficult tissue repair, such as meniscus repair and other organ tissue regeneration strategies. Most importantly, it highlights the dynamic field of implant biomaterials as it introduces new chemistries to tissue regeneration, such as biodegradable metals and new polymers.

- Biomaterials Implantation
- Biomaterials for Nanostructured Implants
- Biomaterials for Antimicrobial Implants
- Biomaterials for Drug-Delivery Implants
- Biomaterials for Sensor Implants
- Biomaterials for Injectable Implants
- Biomaterials for Soft Tissue Implants
- Biomaterials for Total Joint Replacement Implants (Hip, Knee, Spine, Shoulder, Elbow)
- Biomaterials for Dental Implants
- Biomaterials for Oral and Maxillofacial Implants
- Biomaterials for Exoskeletal Implants
- Biomaterials for Cardiovascular Implants
- Biomaterials for Pulmonary Implants
- Biomaterials for Urological Implants
- Biomaterials for Ocular Implants
- Biomaterials for Liver and Kidney Implants
- Biomaterials for Brain Implants
- Biomaterials for Bionic Implants
- Biomaterials for Skin Implants
- Biomaterials for Bladder Implants
- Biomaterials for GI Implants

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