Biomaterials research in Japan

Organized by Tadashi Kokubo

Introduction
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Articles
Time-lapse observation of cell alignment on nanogrooved patterns
S. Fujita, M. Ohshima & H. Iwata

Bioinspired interface for nanobiodevices based on phospholipid polymer chemistry
K. Ishihara & M. Takai

Temperature-responsive intelligent interfaces for biomolecular separation and cell sheet engineering
K. Nagase, J. Kuboyama & T. Okano

Biomaterial technology for tissue engineering applications
Y. Tabata

Polymeric micelles from poly(ethylene glycol)—poly(amino acid) block copolymer for drug and gene delivery
K. Osada, R. J. Christie & K. Kataoka

Interconnected porous hydroxyapatite ceramics for bone tissue engineering
H. Yoshikawa, N. Tamai, T. Murase & A. Myoui

Bioactive ceramic-based materials with designed reactivity for bone tissue regeneration
C. Ohtsuki, M. Kamiyakahara & T. Miyazaki

An overview of biofunctionalization of metals in Japan
T. Hanawa

Material nanosizing effect on living organisms: non-specific, biointeractive, physical size effects