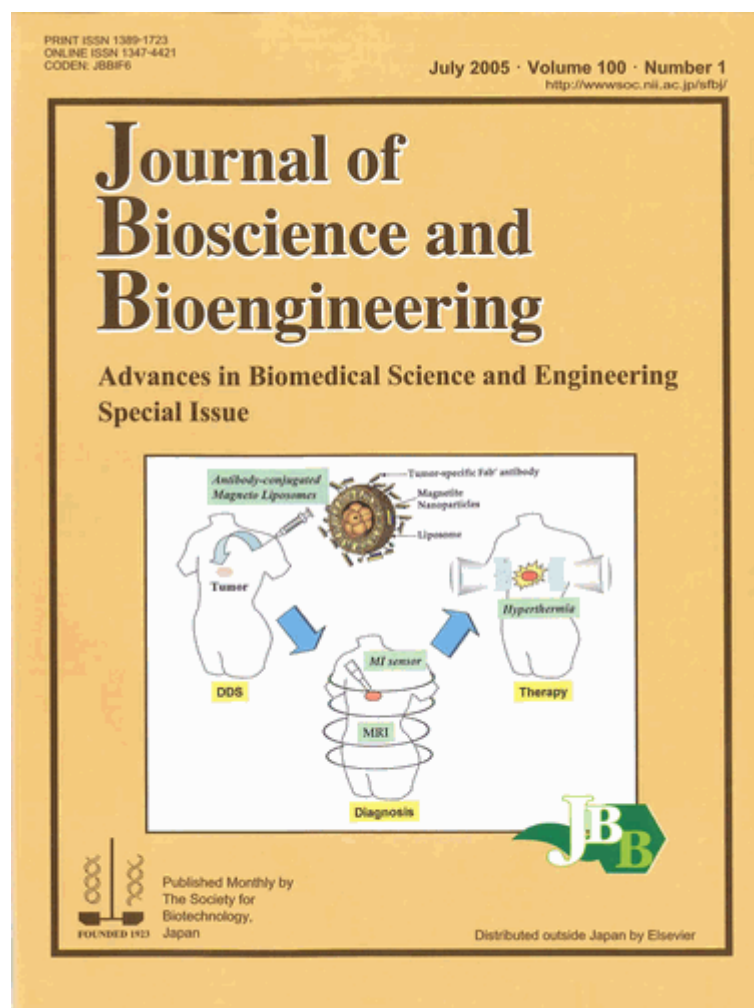


創刊100号記念特集

"Advances in Biomedical Science and Engineering"

**A therapeutic strategy using magnetic nanoparticles.**

Tumor-specific Fab' antibody-conjugated magnetoliposomes accumulate in the tumor tissues via the drug delivery system (DDS). Magnetite nanoparticles can be used for cancer diagnosis by magnetic resonance imaging (MRI) or for a magnetoimpedance (MI) sensor. Hyperthermia can then be induced by an alternating magnetic field (AMF) exposure. Thus, functionalized magnetite nanoparticles can offer a powerful tool for cancer therapy as well as diagnosis.

Related article: Ito, A., Shinkai, M., Honda, H., and Kobayashi, T., "Medical application of functionalized magnetic nanoparticles", *J. Biosci. Bioeng.*, vol. 1001-11 (2005).