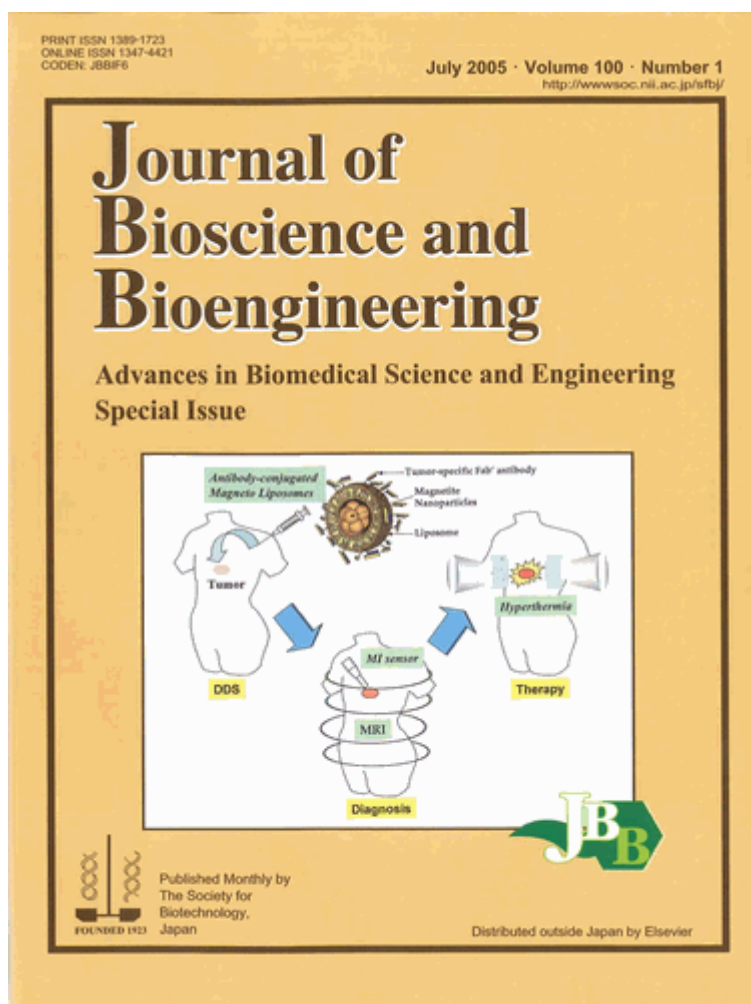


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A therapeutic strategy using magnetic nanoparticles.

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).

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