

Synthesis of Soft-Magnetic Alloy Nanoparticles

Applications

- Magnetic hyperthermia for cancer treatment
- Material for magnetic heads

Problem & Solution

For applications such as magnetic heads, it is important that there is no residual magnetization of the head so that the data or signal will be accurate. The air-stable soft-magnetic nanoparticles of this technology, exhibit low coercivity and high saturation magnetization, making them well suited to applications such as magnetic heads. Further, their biocompatibility makes them suitable for cancer treatment by magnetic hyperthermia.

Benefits

- Stable in air
- Bio-compatible
- Method applicable to other materials

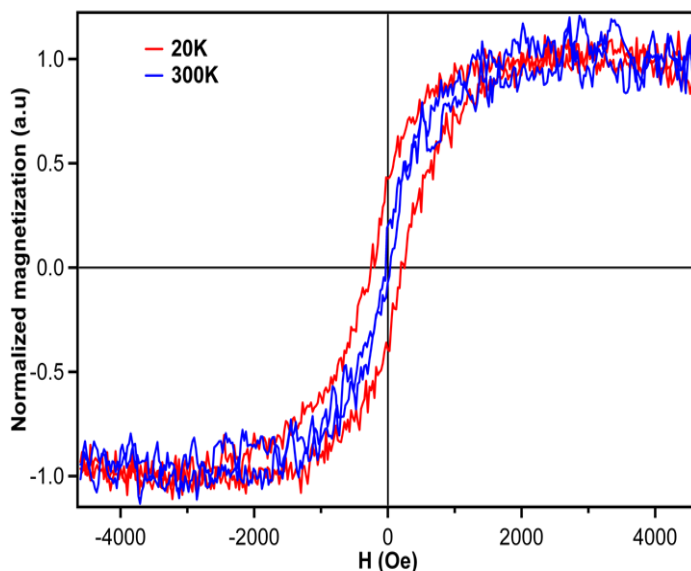
Patent Pending

Keywords

Magnetic hyperthermia, cancer treatment, biocompatibility, magnetic head, magnetic storage, soft magnetic, nano-alloy, low coercivity, high saturation magnetization

For more information

Business Development/Technology Licensing Section
bdtl@oist.jp or +81-(0)98-966-8937



Magnetization curve showing low coercivity and high saturation magnetization of soft magnetic alloy nanoparticles at 20K (red) and room temperature (blue).