

Multifunction Integrated Ceramic Based Nanocomposites

Koichi Niihara¹, Tadachika Nakayama¹, Hisayuki Suematsu¹, Tohru Sekino², Takafumi Kusunose²

¹Extreme Energy Density Research Institute, Nagaoka University of Technology, Japan;
²The Institute of Scientific and Industrial Research, Osaka University, Japan

Abstract

It is well known that the nanocomposite concept is very much powerful to develop the ceramic materials with excellent mechanical and thermal properties. Recently, this concept is also found to be very promising to develop various strong nanocomposites with multifunctionality. In the presentation, recent progress of ceramic based nanocomposites with multifunctionality will be presented and the future research direction will be discussed.