The Korean Research and Development Program on Micro-Electro-Mechanical Systems (MEMS) in medical applications

Kim T.S., Kim S.J., Chung B.H., Yoo K.-H., Park S.H.

Intelligent Microsystem Center, Korean Institute of Science and Technology (KIST), South Korea; School of Electrical Engineering, Seoul National University, Seoul, South Korea; BioNanotechnology Research Center, Korea Research Institute of Bioscience and Biotechnology, South Korea; Department of Physics and Nanomedical Graduate Program, Yonsei University, Yonsei, South Korea; IT-BT Group, Electronics and Telecommunications Research Institute, South Korea

Abstract: Non or minimally invasive approaches for medical applications are very important for the alleviation of patient complaints. The miniaturization of medical devices using micro & nano technologies might be one of the possible solutions. Several national research and development (R&D) programs have been launched by the Korean government to further the development of biological & medical micro/nano devices in this country. This paper gives an overview of the current status of national R&D programs which are related to the development of micro-electro-mechanical systems (MEMS)/Nano technology in biological and medical applications and discusses the main activities of each program.

Author Keywords: Medical devices; MEMS; Nano-bio; Nanotechnology

Year: 2007

Source title: Minimally Invasive Therapy and Allied Technologies

Volume: 16

Issue: 2

Page: 109-119

Link: Scorpus Link

Document Type: Review

Source: Scopus

Authors with affiliations:

- 1. Kim, T.S., Intelligent Microsystem Center, Korean Institute of Science and Technology (KIST), South Korea
- 2. Kim, S.J., School of Electrical Engineering, Seoul National University, Seoul, South Korea
- 3. Chung, B.H., BioNanotechnology Research Center, Korea Research Institute of Bioscience and Biotechnology, South Korea
- 4. Yoo, K.-H., Department of Physics and Nanomedical Graduate Program, Yonsei University, Yonsei, South Korea
- 5. Park, S.H., IT-BT Group, Electronics and Telecommunications Research Institute, South Korea