

Feedback control of MEMS to atoms

Jason J. Gorman, editor

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=20418618&lokasi=lokal>

Abstrak

Control from MEMS to atoms illustrates the use of control and control systems as an essential part of functioning integrated systems. The book is organized according to the dimensional scale of the problem, starting with micro-scale systems and ending with atomic-scale systems. Similar to macro-scale machines and processes, control systems can play a major role in improving the performance of micro- and nano-scale systems and in enabling new capabilities that would otherwise not be possible. However, the majority of problems at these scales present many new challenges that go beyond the current state-of-the-art in control engineering. This is a result of the multidisciplinary nature of micro/nanotechnology, which requires the merging of control engineering with physics, biology and chemistry.