

Motivation

Electromechanical semiconductor devices enable the study of new physical phenomenon than can only be observed in these dynamical systems thus allowing us to develop new technologies based on these principles.

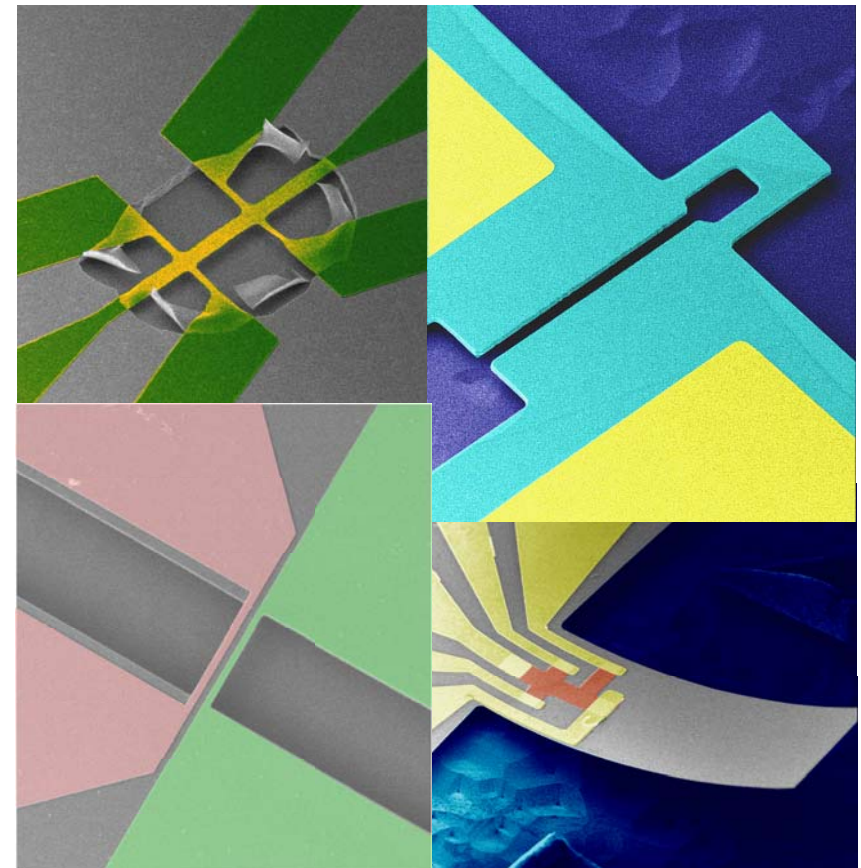
Originality

New technologies are developed that enable the integration of low dimensional semiconductor structures into micro/nano-sized mechanical oscillators enabling dynamic studies of optoelectronic effects and electron transport.

Impact

The opportunity to fabricate a new class of devices for example highly sensitive force sensors, opto-mechanical switches and mechanical logic exists.

Contact person: Dr. Hajime Okamoto
Physical Science Laboratory, NTT Basic Research Laboratories
TEL: 046-240-2522 FAX: 046-240-4317
e-mail: hajime@nttbl.jp



Semiconductor micro/nanomechanical devices