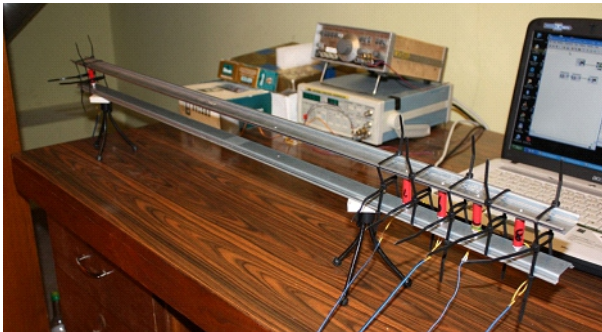
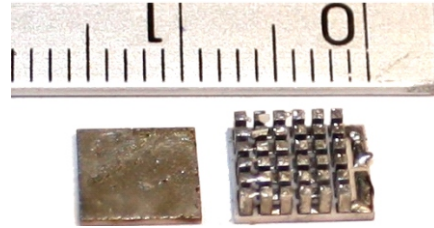


HARVESTING TECHNOLOGIES

Thermoharvesting:

- power supply from the temperature difference greater than 10°C relative to the ambient temperature,
- energy harvesting from human body heat for ultra low-power devices.

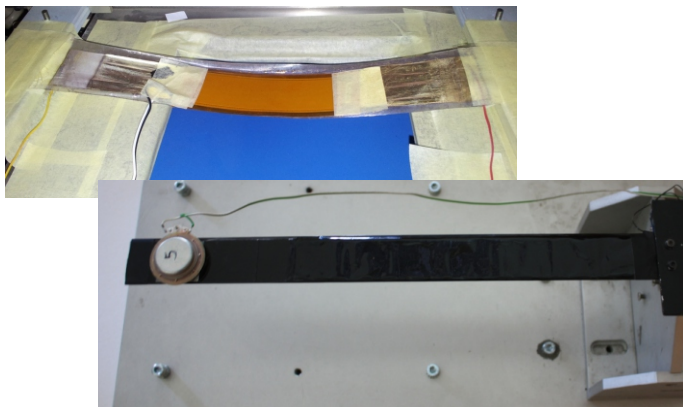
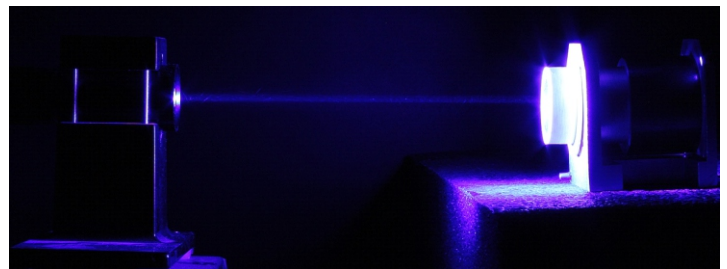


Multi-node harvesting systems which recover the maximum power from the source:

- multi-node harvesting structure based on miniature harvesters with magnetostrictive cores,
- wireless monitoring of harvesting node parameters based on MEMS, for SHM applications,
- ultra-low power microprocessor systems.

Transmission of energy needed to power the Wireless Harvesting Node in the "energy transmitter-energy receiver (ET-ER)" configuration:

- magnetostrictive ultrasonic transducer of mechanical energy,
- power transmission through blue laser,
- electroactive polymer which stimulates a movable magnetic circuit or piezoelectric patches.



Maintenance-free storage of electrical energy in mechanical structures:

- integration of supercapacitors in mechanical constructions,
- determination of the stability of supercapacitor structure under the influence of vibrations and weather conditions.

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