



Код: 10651

S.W. Arms, C.P. Townsend, M.J. Hamel, S.J. Distasi, J.H. Galbreath

Energy Harvesting Wireless Sensor Networks for Embedded Structural Health Monitoring

Издательство DEStech Publications, Lancaster, 2010 год

6 стр; формат: 23,5 x 16 см; библиографический список: 10 единиц
ISBN: 978-1-60595-024-2

Wireless sensors, combined with embedded processing and remote reporting, represent an exciting technology for structural health monitoring (SHM). A major barrier to widespread use has been the need to replace batteries. Energy harvesting converts ambient energy from the environment into power to overcome this barrier. This work describes energy harvesting power management circuits that can scavenge ambient energies from strain, vibration, thermal gradients, ambient light, and electromagnetic fields. Strategies for minimizing wireless sensor node power consumption are also provided.

Ключевые слова:

Содержание.

Energy Harvesting Wireless Sensor Networks for Embedded Structural Health Monitoring