## Accepted Manuscript

Title: Evanescent-mode-resonator-based and antenna-integrated wireless passive pressure sensors for harsh-environment applications

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## ACCEPTED MANUSCRIPT

## **Highlights:**

A wireless passive pressure sensor is demonstrated up to 800°C;

Pressure sensing mechanism is based on evanescent-mode resonator;

Robust Polymer-Derived Ceramic material is used to survive harsh environments;

A soft-lithography technique is developed to build the 3-D PDC sensor structure;

A patch antenna is seamlessly integrated with the pressure sensor.

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