

Special Issue

Sensors for Extreme Environments

Message from the Guest Editors

Microelectronic sensors have revolutionised our understanding of the world in which we live. Based on the phenomenal advances in silicon technology, it is possible to sense a vast array of systems, analyse the data, and transmit them across the world. However, the material properties of silicon limit its application to benign environments, precluding it from a wide range of applications relevant to industry and scientific exploration. Extreme environments, characterised by temperatures over 175 °C, high radiation flux or chemically aggressive species, are found in automotive, aerospace, nuclear, space geothermal, and oil and gas applications. These are not accessible to conventional silicon-based technology and so, knowledge of these environments is lacking. This Special Issue of *Sensors* is dedicated to the challenges of sensing in these extreme environments and welcomes submissions describing all aspects of the field, from fundamental sensor technology and system level challenges to the failure of conventional technology in these environments and specific challenges of emerging disciplines.

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Message from the Editor-in-Chief

Sensors is a leading journal devoted to fast publication of the latest achievements of technological developments and scientific research in the huge area of physical, chemical and biochemical sensors, including remote sensing and sensor networks. Both experimental and theoretical papers are published, including all aspects of sensor design, technology, proof of concept and application. *Sensors* organizes Special Issues devoted to specific sensing areas and applications each year.

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