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Hot matters—Experimental methods for high-temperature property measurement

Experimental methods for measuring high-temperature properties of refractory ceramics will provide data to engineer new materials for extreme service applications.

by Alexandra Navrotsky and Sergey V. Ushakov



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Ceramic reactive membranes made of Magneli-phase titanium oxide decrease operating expenses and increase efficiency in water-treatment plants

Magneli Materials has developed a new manufacturing process to produce industrial quantities of Magneli-phase titanium dioxide, an electrically conductive ceramic with industrial processing applications.

by Robert Sterner and Jay Huang



On the cover

A molten sample of titanium-zirconium-nickel alloy floats inside an electrostatic levitator at NASA's Marshall Space Flight Center (Huntsville, Ala.). Measuring material properties during suspension prevents contamination from containers and is a technique used to make measurements of ceramic materials, too. Image credit: NASA/MSFC/Emmett Given

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