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SILICON-BASED CERAMICS

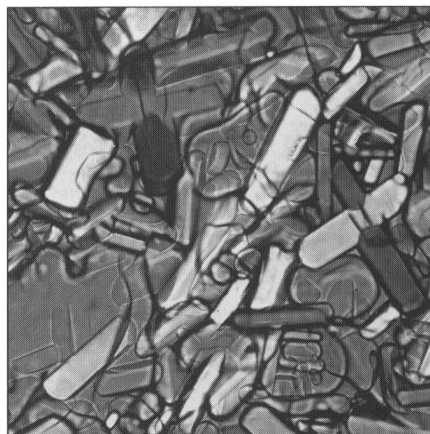
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ON THE COVER: Transmission optical micrograph of silicon nitride ceramics under polarized light. Rodlike grains developed during sintering increase fracture toughness. High-temperature properties are mainly controlled by the chemical composition of the grain boundary phase. For more information on this topic, see "High-Temperature Properties of Si_3N_4 Ceramics" by M.J. Hoffman on page 28.

About the Materials Research Society

The Materials Research Society (MRS), a non-profit scientific association founded in 1973, promotes interdisciplinary goal-oriented basic research on materials of technological importance. Membership in the Society includes nearly 11,600 scientists, engineers, and research managers from industrial, government, and university research laboratories in the United States and nearly 50 countries.

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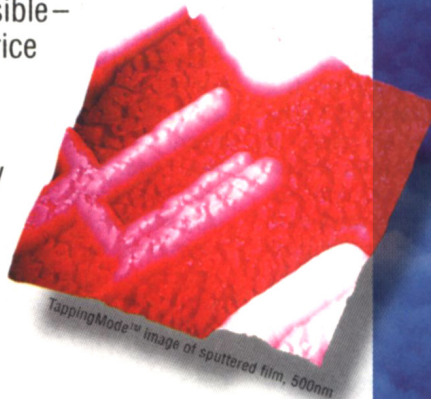
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