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# Elements

An International Magazine of Mineralogy, Geochemistry, and Petrology

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## Continental Crust at Mantle Depths

JANE A. GILOTTI, Guest Editor

**Ultrahigh-Pressure Rocks**

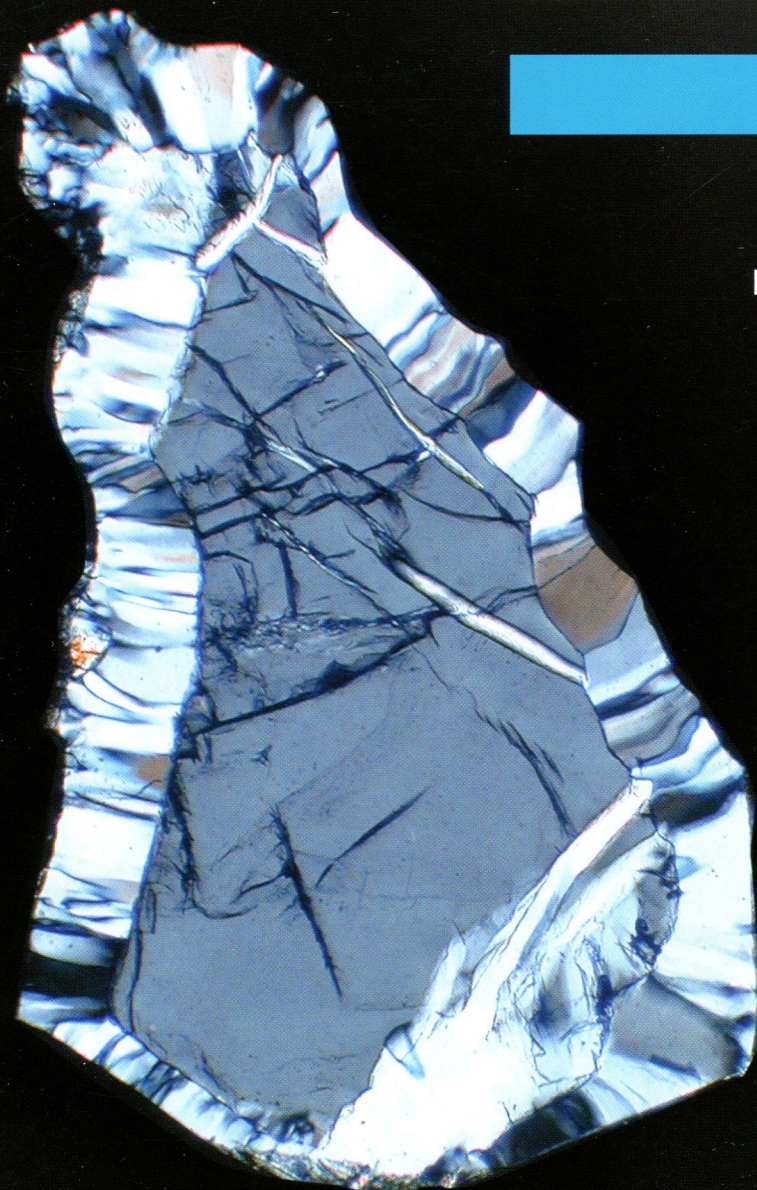
**Key Minerals and Microstructures**

**Constructing the  
Pressure–Temperature Path**

**Linking Time to the  
Pressure–Temperature Path**

**Deep Fluids in Subducted  
Continental Crust**

**Formation and Exhumation of  
Ultrahigh-Pressure Terranes**





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## Continental Crust at Mantle Depths

Guest Editor: **Jane A. Gilotti**



### The Realm of Ultrahigh-Pressure Metamorphism

Jane A. Gilotti



### Continental Crust at Mantle Depths: Key Minerals and Microstructures

Hans-Peter Schertl and Patrick J. O'Brien



### Constructing the Pressure–Temperature Path of Ultrahigh-Pressure Rocks

Hans-Joachim Massonne



### Linking Time to the Pressure–Temperature Path for Ultrahigh-Pressure Rocks

William C. McClelland and Thomas J. Lapen



### Deep Fluids in Subducted Continental Crust

Jörg Hermann, Yong-Fei Zheng, and Daniela Rubatto



### Formation and Exhumation of Ultrahigh-Pressure Terranes

Bradley R. Hacker, Taras V. Gerya, and Jane A. Gilotti

ABOUT THE COVER: An inclusion of coesite surrounded by a striped rim of palisade quartz and trapped in garnet (black) is a classic indicator of ultrahigh-pressure metamorphism. The quartz forms from the incomplete transformation of coesite during decompression. From a pyrope quartzite, Dora-Maira massif, Italy. The inclusion is approximately 100  $\mu\text{m}$  long and is shown under crossed polarizers.

PHOTO COURTESY OF HANS-PETER SCHERTL

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