

MRS Bulletin

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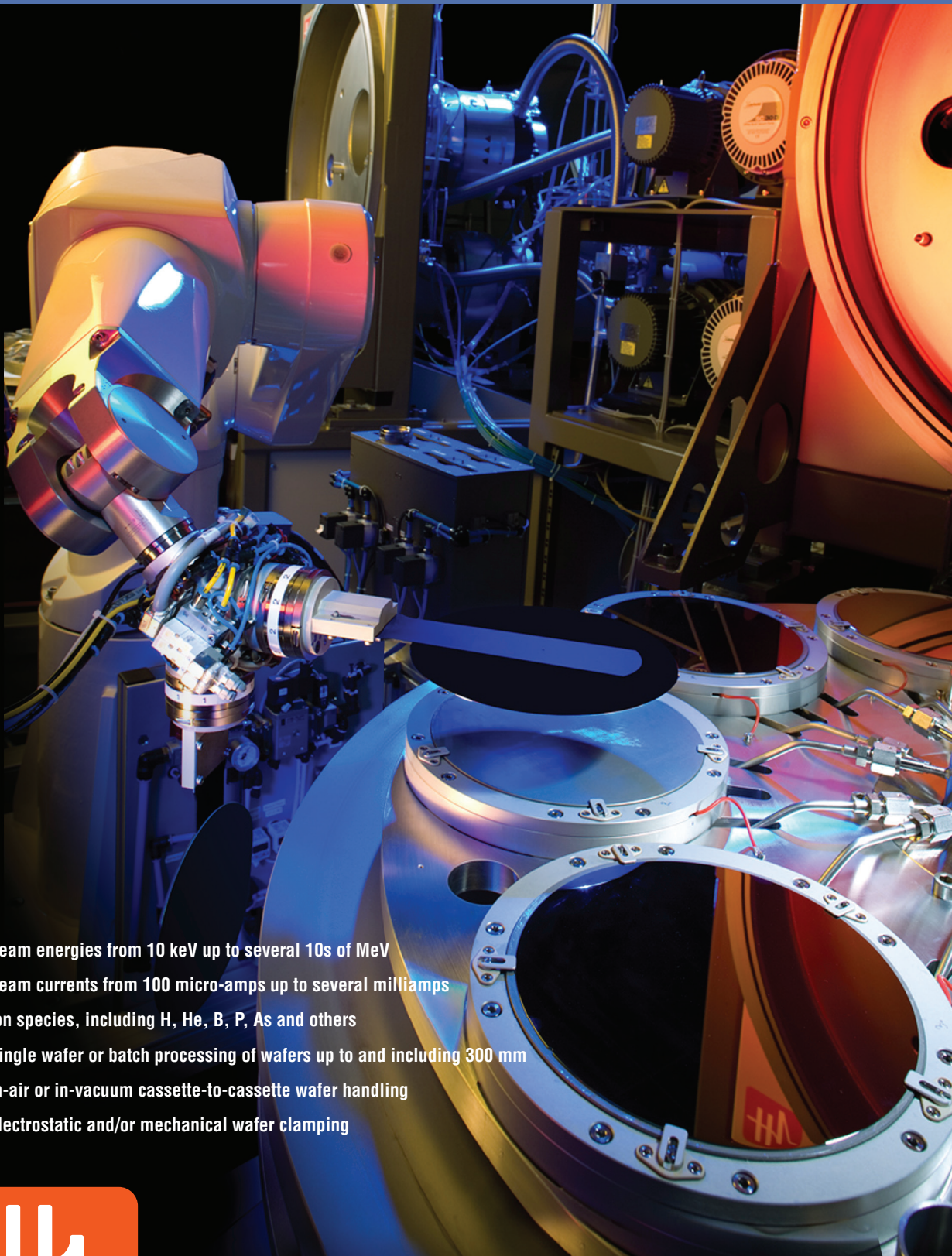
Synchrotron radiation research in materials science

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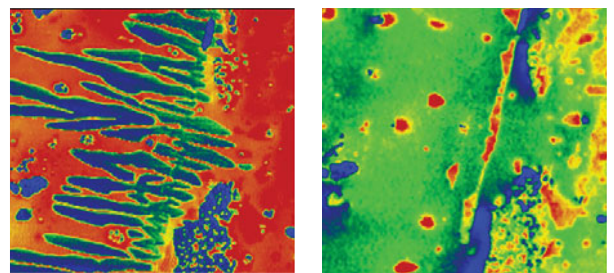
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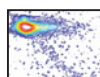


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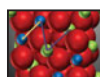
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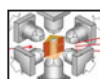
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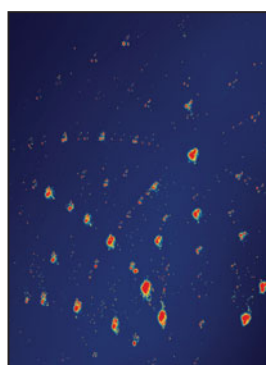


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ON THE COVER

Synchrotron radiation research in materials science. Synchrotron-based techniques have evolved in past decades, and advanced synchrotron techniques for materials research continue to emerge. Synchrotron facilities and beamlines are being created, upgraded, and refurbished around the world. Applications and technologies are developing toward technical and optical limits, combining multiple methods for a bright future for

this field. The articles in this issue focus on several state-of-the-art synchrotron-based techniques and applications for materials science. On the cover is a synchrotron x-ray Laue diffraction pattern from a sea urchin tooth that is made of calcite. See the technical theme that begins on page 435.

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The Materials Research Society (MRS), a not-for-profit scientific association founded in 1973 and headquartered in Warrendale, Pennsylvania, USA, promotes interdisciplinary materials research. Today, MRS is a growing, vibrant, member-driven organization of over 16,000 materials researchers spanning over 80 countries, from academia, industry, and government, and a recognized leader in the advancement of interdisciplinary materials research.

The Society's interdisciplinary approach differs from that of single-discipline professional societies because it promotes information exchange across many scientific and technical fields touching materials development. MRS conducts three major international annual meetings and also sponsors numerous single-topic scientific meetings. The Society recognizes professional and technical excellence and fosters technical interaction through University Chapters. In the international arena, MRS implements bilateral projects with partner organizations to benefit the worldwide materials community. The Materials Research Society Foundation helps the Society advance its mission by supporting various projects and initiatives.

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