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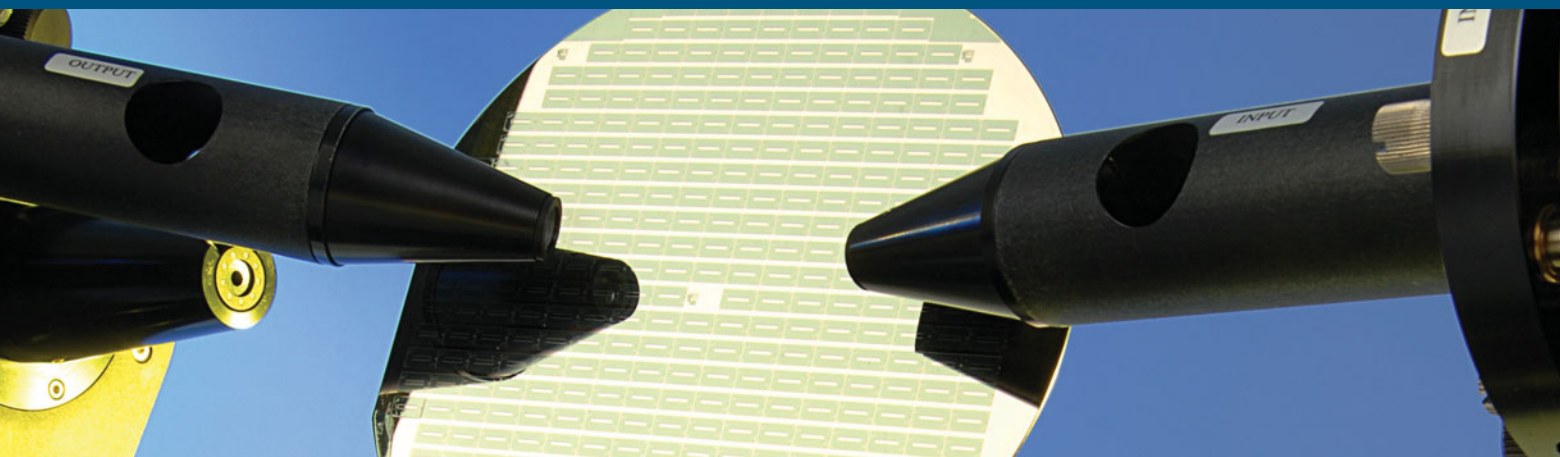
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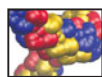
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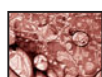
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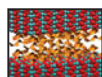
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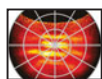


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ON THE COVER

Multiscale mechanics of biological, bioinspired, and biomedical materials.

Recent decades have seen a growing interest in applying mechanical property measurement protocols to biological materials or materials mimicking or replacing biological tissue. This issue highlights different approaches to the challenge of extending theoretical and applied mechanics to the level needed for satisfying and capturing biological

materials. The cover shows progressive decrimping of collagen fibers in the adventitia of a rabbit carotid artery. The same area was imaged using confocal microscopy for different pressure steps from 0 mmHg to 140 mmHg. The image is a result of a joint collaboration between the groups of Frans van de Vosse at Eindhoven University of Technology and Nikos Stergiopoulos at the Swiss Federal Institute of Technology, Lausanne. See the technical theme that begins on page 309.

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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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