

MRS Bulletin

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Frontiers of *in situ* electron microscopy

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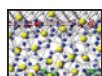
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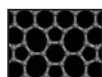


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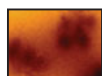
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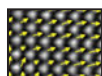
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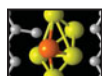


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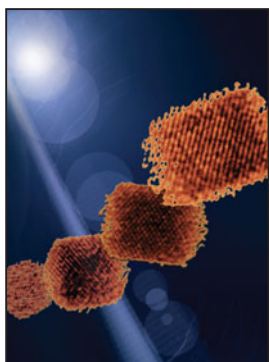
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ON THE COVER

Frontiers of *in situ* electron microscopy. *In situ* transmission electron microscopy (TEM) is a powerful tool, especially for nanomaterials characterization, which allows for dynamic characterization of changes in size, shape, interface structures, electronic state, and chemical composition in materials at and below the nanoscale. The sequential TEM images on the cover show facet development of a Pt nanocube in a liquid cell. A growth

solution of platinum bis(acetylacetonate) in a solvent mixture of oleylamine, oleic acid, and pentadecane was used. Images courtesy of Hong-Gang Liao, Lawrence Berkeley National Laboratory. See the technical theme that begins on page 12.



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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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