

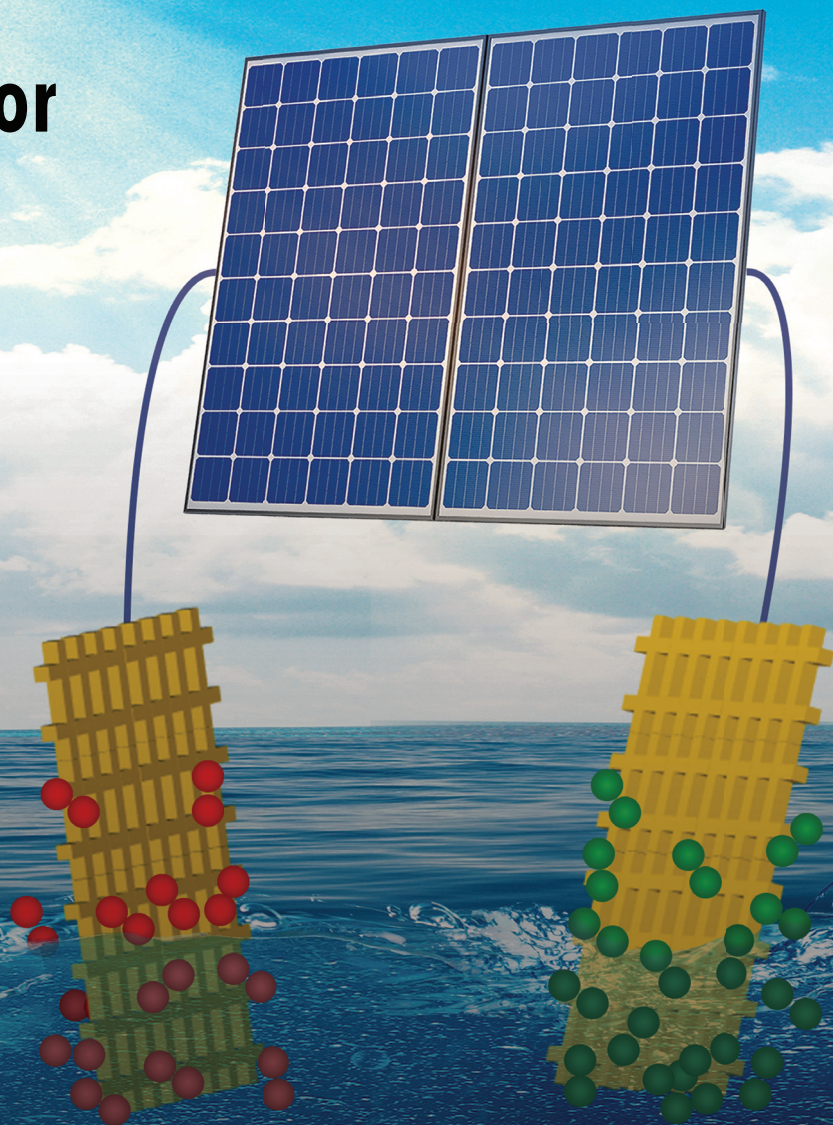
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Nanomaterials for electrochemical water splitting



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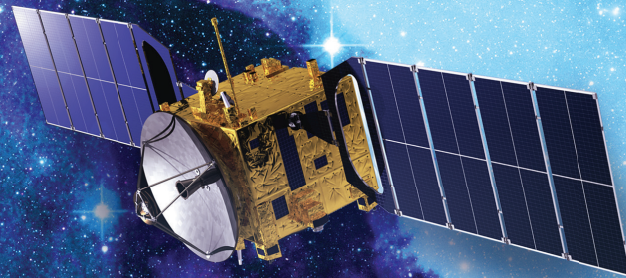
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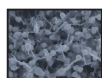
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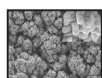
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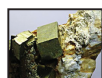
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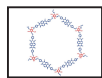
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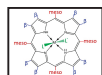
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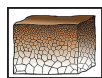
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ON THE COVER

Nanomaterials for electrochemical water splitting. Water-splitting electrolysis using an electrocatalyst and a renewable power source is a promising energy-conversion technology, especially when combined with energy stored in the form of hydrogen that has the benefit of also being environmentally friendly. The electrocatalyst can be rationally designed using nanomaterials spanning from transition-metal-based oxides and their derivatives, organic polymer nanomaterials, to inorganic-organic nanocomposites. This issue of *MRS Bulletin* discusses materials innovations for realizing highly efficient and durable electrocatalysts

for large-scale, cost-effective water splitting. On the cover is a solar cell (with an electrocatalyst) that generates oxygen molecules (red) on the left electrode and hydrogen molecules (green) on the right electrode. See the technical theme that begins on p. 531.



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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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