

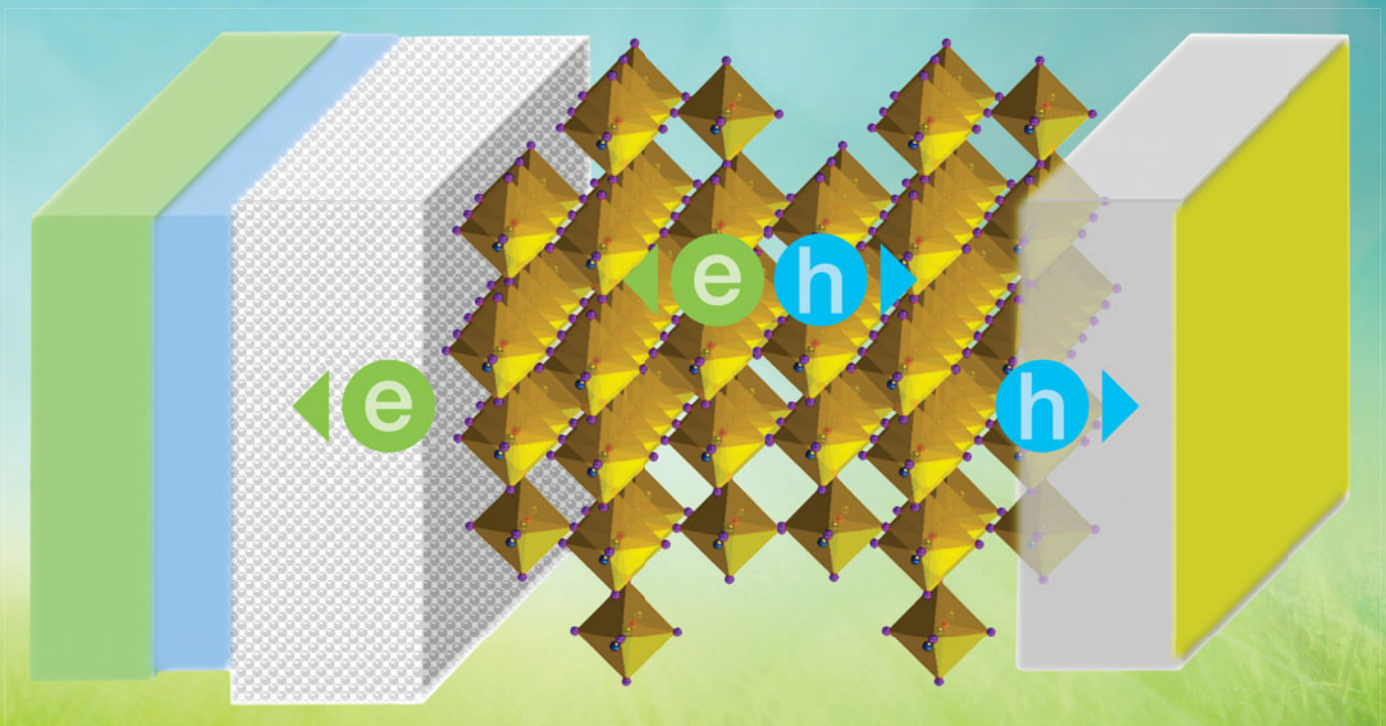
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Perovskite photovoltaics

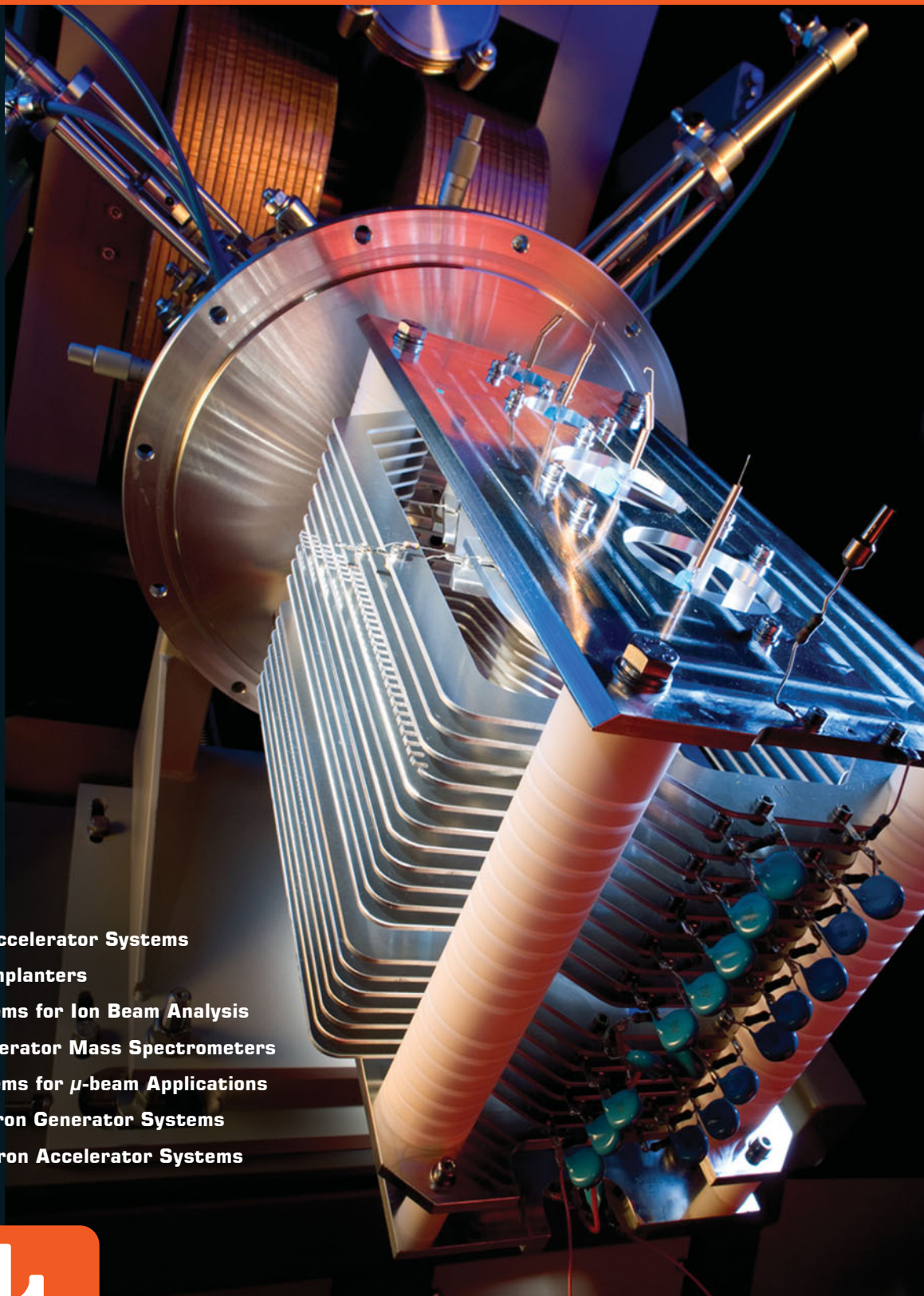


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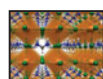
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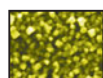
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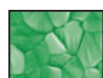
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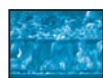
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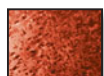
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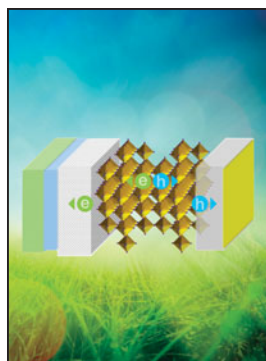
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Perovskite photovoltaics. Perovskite solar cells, especially those based on methylammonium lead triiodide, have seen unprecedented progress in recent years. This issue of *MRS Bulletin* overviews perovskite photovoltaics. The articles highlight various deposition methods of perovskite absorbers, vapor-assisted solution process techniques, as well as hole-transporting material-free perovskite solar cells. The cover

shows a schematic representation of a perovskite solar-cell architecture for solar energy conversion into electricity. The three-dimensional perovskite materials are deposited using various methods and sandwiched between two electrodes, which concurrently act as a light absorber and an electron and hole transporter, generating power-conversion efficiency exceeding 20% under 1 sun illumination. See the technical theme that begins on page 641.

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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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