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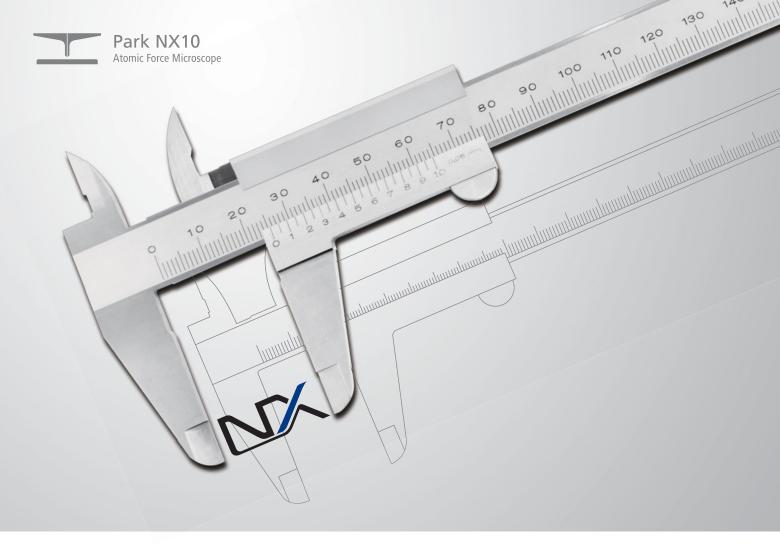
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THE ACCURATE CHOICE I



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THREE DECADES OF MANY-BODY POTENTIALS IN MATERIALS RESEARCH



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ON THE COVER

Three decades of many-body potentials in materials research. This issue of MRS Bulletin celebrates the rapid succession of many-body potentials that were introduced in the early to mid-1980s by reviewing the impact that these potentials have had on materials research and outlining where the field will be headed in the future. The cover image represents the rapid progression of research that has been enabled by these many-body potentials over the past three decades: it illustrates a low-density polymer foam, simulated using the ReaxFF potential to study its shock compression response, as described in the article by Steven J. Plimpton and Aidan P. Thompson in this issue. See the technical theme that begins on page 469.



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The Materials Research Society (MRS), a not-for-profit scientific association founded in 1973, promotes interdisciplinary goal-oriented basic research on materials of technological importance. Membership in the Society includes almost 16,000 scientists, engineers, and research managers from industrial, government, and university research laboratories in the United States and over 80 countries.

The Society's interdisciplinary approach differs from that of single-discipline professional societies because it promotes information exchange across the many technical fields touching materials development. MRS sponsors three major international annual meetings encompassing approximately 125 topical symposia, and also sponsors numerous single-topic scientific meetings. The Society recognizes professional and technical excellence and fosters technical interaction in local geographic regions through Sections and University Chapters.

MRS participates in the international arena of materials research through the International Union of Materials Research Societies (IUMRS). MRS is a member of the Alliance for Science & Technology Research in America and is an affiliate of the American Institute of Physics.

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