Special Issue

Modern Methods, Modern Users, and Modern Materials: Solid-State Materials Synthesis and Crystal Growth Methods

Message from the Guest Editors

The history of solid-state materials synthesis and crystal growth methods is riddled with examples of modern ideas and innovations that lead to important materials discoveries, advances in industrial societies, and even defined time eras. Such examples include but are not limited to Bednorz and Müller's discovery of high-temperature superconductivity hosted in ceramics, Jan Czochralski's serendipitous observation of the formation of a single-crystal whisker produced upon mistakenly dipping his pin in the molten tin, and early BCE civilizations alloying copper leading to the bronze era. Today, scientists, engineers, and industrial entrepreneurs are defining a different modern era in materials synthesis and crystals growth, whereupon "Modern Methods, Modern Users, and Modern Materials" comprise extreme state variable synthesis, automated and high-throughput growth methods beyond silicon, synthetic user facilities, and quantum materials that will lead humanity beyond the current technological revolution. In this Special Issue, we seek to comprehensively cover this and other "modern" topics.

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Inorganic chemistry remains a lynchpin of modern chemistry, not only embracing the function and reactivity of combinations of most elements of the periodic table, but also providing a footing for studies of materials, catalysts, drugs, fuels and industrial chemicals. Arguably, the role and reach of inorganics in society have never been as great as today. Adventurous research at the heart and at the extremes of inorganic chemistry is vital to further advances and Inorganics offers authors the opportunity to publish exciting new research in an open access format.

Editor-in-Chief

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