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## Impact of Lattice Vibrations on Diffusion in Solids

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submissions:

**closed (31 May 2021)**

### Message from the Guest Editor

Dear Colleagues,

Understanding diffusion in a solid is highly relevant to cutting-edge material science from ionic conductivity in novel battery materials to thin film technology. Diffusion is usually a thermally activated process and, therefore, it is naturally coupled to lattice vibrations through the attempt frequency. Moreover, vibrations also cause the energy landscape and the potential barriers to be time-dependent. In addition, phonon instability can drive phase transitions and thereby facilitate migration processes.

With this Special Issue, we aim to provide an interdisciplinary collection of studies on the impact of lattice vibrations on diffusion in solids. We would like to bring the ideas and tools of physicists closer to the practical world of material scientists. Therefore, we invite the submission of original research articles and high-quality reviews that describe complex topics and phenomena in a way that non-specialists can understand.

Dr. Fanni Jurányi

*Guest Editor*



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# Special Issue



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## Message from the Editor-in-Chief

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