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Sommario/riassunto	Neutron and Synchrotron radiation methods have matured to become powerful techniques for the study of a vast range of materials, including metals. The characterization methods comprise the categories of diffraction, spectroscopy and imaging, which themselves can alter greatly in detail, to include hundreds of variants, problems and sample environments. In a similar way, their applications to metals and hard condensed matter materials cover disciplines spanning engineering, physics, chemistry, materials science and their derivatives such as geology, energy storage, etc. ... The present book, "Metals Challenged by Neutron and Synchrotron Radiation" is a first compilation in Metals of 20 original and review works on research utilizing or designing those state-of-the-art techniques at modern facilities. The Editorial reviews the context of and identifies thematic links between these papers, grouping them into five interwoven themes, namely Sintering Techniques and Microstructure Evolution, Titanium Aluminides and Titanium Alloys Under Extreme Conditions, Metallic Glass and Disordered Crystals, In Situ and Time-Resolved Response to Mechanical Load and Shock, and Thin Films and Layers. This book represents a good cross-section of the status quo of neutron and synchrotron radiation with respect to questions in the metallurgical

field, which by far is not exhaustive. Nor are the methods and other materials, which motivated me to the creation of a new sister-journal, entitled Quantum Beam Science. With this, I would like to thank all authors, reviewers and contributors behind the scene for the creation of this work, presenting to you a piece of interesting reading and reference literature.