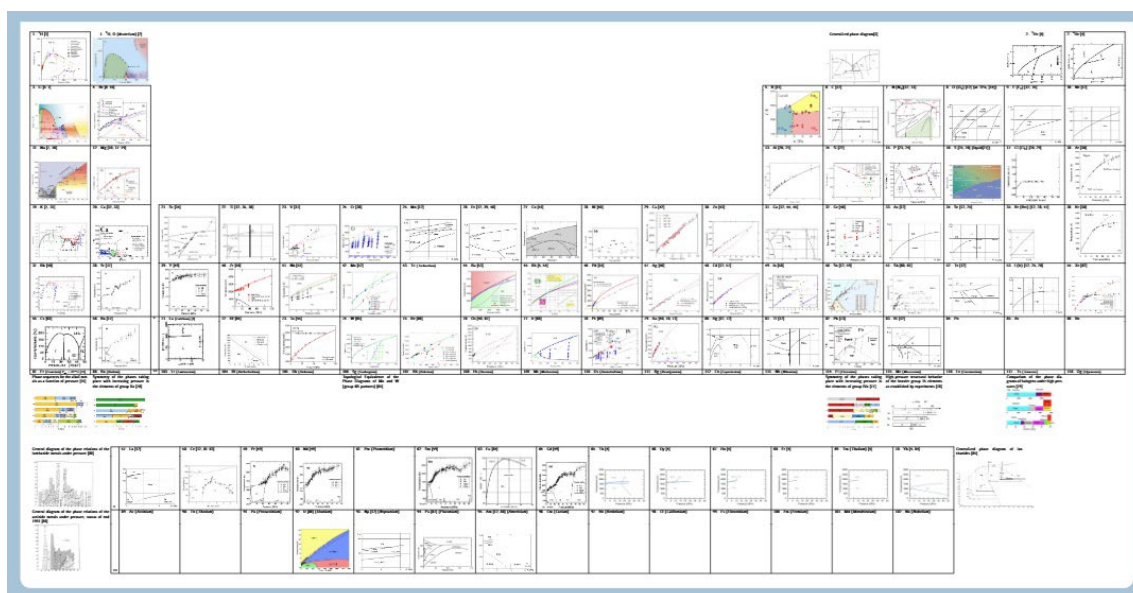


Periodic table of phase diagrams of the elements

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Abstract

This poster proposes an up-to-date overview of all the thermodynamical phase diagrams of the pure elements. This work is inspired by the seminal books of D. A. Young [1] and E. Yu. Tonkov & E. G. Ponyatovsky [4]. Some phase diagrams of isotopes of light elements were added. The phase diagrams are arranged in the shape of the periodic table to highlight the trends in groups (columns) and in periods (rows). In addition, a few illustrative charts from the literature are proposed, such as “generalized phase diagrams” [3], or colored crystalline phases sequences with increasing pressure. A similar approach, illustrating the structural diversity of the elements, was done by W. B. Holzapfel [4, 5]. This type of methodology could help determine the unknown parts of phase diagrams.



Bibliography

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