A cartography of the van der Waals territories

07.05.2013 - A researcher in Spain has analysed over five million intermolecular distribution maps to propose a consistent set of van der Waals radii for most naturally occurring elements. The set of values illustrate clear periodic trends which were not apparent before. Until now researchers have used values published by Bondii in 1964, but these only cover 38 elements. In this work Santiago Alvarez performed a careful analysis of the Cambridge Structural Database (CSD) to come up with a new set of values for 93 elements. These values might eventually become reference values for the CSD and textbooks.

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S Alvarez, Dalton Trans., 2013