Geosystems of Transition Zones, 2018, vol. 2, N 1, p. 33–41 Геосистемы переходных зон, 2018, т. 2, № 1, с. 33–41 <u>http://dx.doi.org/10.30730/2541-8912.2018.2.1.033-041</u>



https://elibrary.ru/item.asp?id=32561111

## Formal clustering method application to data on large and super-large ore deposits

A.R. Shatakhtsyan

LLC "M.P.A. Medical Partners", Moscow, Russia

## Abstract

The paper is devoted to application of formal mathematical methods to analyzing data on ore deposits and clustering ore deposits using proximity measures. The database on world large and super-large deposits has been used. It is confirmed that the data on the reserves of the world's large ore deposits can be described by a power law. The applicability and effectiveness of methods for analyzing the behavior of dynamic systems for the analysis of data on ore deposits has been shown. Also, the applicability and efficiency of the formal clustering apparatus based on the Tanimoto–Rogers proximity measure has been shown, as well as the consistency with the previously proposed expert versions of the classification. The grounds of the choice of the hierarchical classification approach is given.

## **Keywords:**

ore deposits, deposits' clustering, reserves' distribution, dynamic systems, ore deposits' dendrogramm.



*Cit. as*: Shatakhtsyan A.R. Formal clustering method application to data on large and super-large ore deposits. *Geosystems of Transition Zones*, vol. 2, N 1, p. 33–41. doi:10.30730/2541-8912.2018.2.1.033-041