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Elemental composition of dust particles in the Tunguska body

O.G. Gladysheva
Ioffe Physical-Technical Institute, Russia

The Tunguska body (TM) matter proved to be rather heterogeneous. The extent of the changes in the concentration of Na, Mg, Al, Ca, and Mn in silicate spherules amounts to an order in magnitude. Several fragments of substances can contain between 75 to 90% of Ti or Fe, or Cu, or Ni in a particle. In some samples, the individual contents of Ca, S, and P exceed 30%. The chemical composition of the TM remnants could only be determined approximately. It is noteworthy that the elements Na, K, Ca, Ag, Ba, Au, Hg, Pb, as well as C, N, and S appear to be enriched in the material of the Tunguska comet. It is not impossible that the Tunguska body, just as all comets, was formed on the periphery of the protoplanetary nebula, beyond the ecliptic plane at that time when the sun already was shining as a star.