

+  
#0009

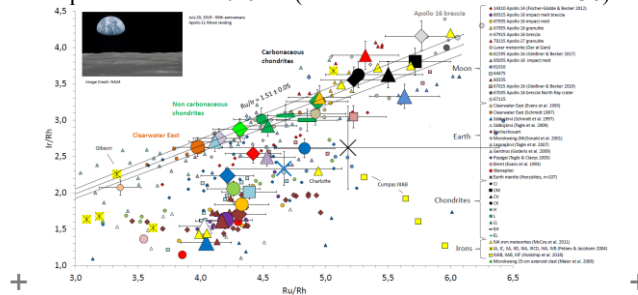
+

### Ru/Rh and Ir/Rh as diagnostic mass ratios for the identification of specific impactor compositions of terrestrial impact craters

Schmidt, G., Heidelberg University, Institute of Earth Sciences, [Gerhard.Schmidt@geow.uni-heidelberg.de](mailto:Gerhard.Schmidt@geow.uni-heidelberg.de)

Nebular processes and fractional crystallization during core formation of planets have produced some compositional variation in the platinum group element chemistry of stony meteorites and irons. More reduced materials like enstatite and ordinary chondrites have low Ru/Rh and Ir/Rh mass ratios compared to more oxidized and volatile-rich materials such as carbonaceous chondrites that formed at greater heliocentric distance. This compositional variation makes it possible to identify projectile types from impact craters. Clearwater East and Lappajärvi samples have low Ru/Rh and Ir/Rh mass ratios unknown from meteorite collections.

[1] Schmidt, G. (2019) Abstract #5006; Large Meteorite Impacts VI 2019 (LPI Contrib. No. 2136)



Cite abstract as:

Schmidt, G. (2019) Ru/Rh and Ir/Rh as diagnostic mass ratios for the identification of specific impactor compositions of terrestrial impact craters. Paneth Kolloquium, Nördlingen (Germany), abstract URL: <http://www.paneth.eu/PanethKolloquium/2019/0009.pdf> (abstract #0009).