

Isotopes of Flerovium

Isotope	Atomic Mass	Half-life	Mode of Decay
Fl-285	285	0.00058 seconds	α to Cn-281
Fl-286	286	0.10 seconds	SF
Fl-287	287	5.00 seconds	α to Cn-283
Fl-288	288	6.00 seconds	α to Cn-284
Fl-289	289	21.00 seconds	α to Cn-285



Flerovium was discovered by workers in 1998 at the Nuclear Institute in Dubna, Russia. It was named for the Flerov Laboratory of Nuclear Reactions, where “element 114” was synthesized. The lab, in turn, was named in honor of Georgiy N. Flerov, an eminent physicist who discovered the spontaneous fission of uranium. He was also the founder of the Joint Institute for Nuclear Research.

Recent research results show that flerovium's reaction with gold is similar to that of copernicium, showing that it is a very volatile element that may even be gaseous at standard temperature and pressure, and that while it would show metallic properties, consistent with its being the heavier homologue of lead, it would also be the least reactive metal in group 14.

Properties of Flerovium

Name	Flerovium
Symbol	Fl
Atomic number	114
Atomic weight	[289]
Standard state	Presumably a solid at 298 °K
CAS Registry ID	54085-16-4

Properties of Flerovium (continued)

Group in periodic table	14
Group name	None
Period in periodic table	7
Block in periodic table	p-block
Color	Unknown, but probably metallic and silvery white or gray in appearance
Classification	Metallic
Melting point	67 °C (predicted)
Boiling point	147 °C
Heat of vaporization	38 (predicted) kJ·mol ⁻¹
Density of solid	14 g/cm ³ (predicted)
Electron configuration	[Rn]5f ¹⁴ 6d ¹⁰ 7s ² 7p ²
Oxidation states	0, +2, +4