Omeiite  
(\(\text{(Os, Ru)As}_2\))

**Crystal Data:** Orthorhombic.  
**Point Group:** 2/m 2/m 2/m, or mm2.  
Crystals are tabular or elongated \(\parallel [010] \), to 20 \(\mu\)m.

**Physical Properties:**  
Cleavage: Parallel to elongation.  
Tenacity: Brittle.  
Hardness = n.d.  
VHN = n.d.  
\(D(\text{meas}) = n.d.\)  
\(D(\text{calc}) = 11.20\)

**Optical Properties:**  
Opaque.  
**Color:** Dull steel-gray; in polished section, white with a yellow tint in air, milky yellow in oil.  
**Luster:** Metallic.  
Pleochroism: Weak, yellow to grayish yellow.  
Anisotropism: Distinct.  
\(R_1 - R_2\): n.d.

**Cell Data:**  
**Space Group:** \(P_{nnm}\) or \(Pn\_n2\).  
\(a = 5.409\)  
\(b = 6.167\)  
\(c = 3.021\)  
\(Z = 2\)

**X-ray Powder Pattern:** Danba, China.  
2.63 (100), 1.915 (100), 2.67 (80), 4.06 (60), 2.06 (60), 2.01 (60), 1.209 (60)

**Chemistry:**
\[
\begin{array}{cccc}
\text{Os} & 48.9 \\
\text{Ru} & 4.0 \\
\text{Ir} & 0.6 \\
\text{Ni} & 0.3 \\
\text{Fe} & 0.2 \\
\text{Co} & 0.1 \\
\text{As} & 44.2 \\
\hline
\text{Total} & 98.3
\end{array}
\]

(1) Danba, China; by electron microprobe, average of six analyses; corresponding to \((\text{Os}_{0.87}\text{Ru}_{0.14}\text{Ir}_{0.01})_2\text{As}_{2.00}\).

**Polymorphism & Series:** Forms a series with anduoite.

**Occurrence:** In a Cu–Ni sulfide deposit associated with an ultramafic body.

**Association:** Pyrrhotite, pentlandite, chalcopyrite, violarite, cubanite, bornite, sphalerite, galena, linnaeite, magnetite, testibiopalladite, sudburyite, michenerite, sperrylite, kotulskite, gold, argentian gold.

**Distribution:** From Danba, Sichuan Province, China [TL].

**Name:** For Omeishan, a well-known mountain in Sichuan Province, China.

**Type Material:** Museum of Geology, National Bureau of Geology [Beijing?], China.

**References:**  
(2) (1979) Amer. Mineral., 64, 464 (abs. ref. 1).