

**Crystal Data:** Monoclinic. *Point Group:* 2. As radiating groups or aggregates of acicular or prismatic crystals, with individual crystals to 1.3 mm.

**Physical Properties:** *Cleavage:* Good on {010}. *Tenacity:* Brittle. *Fracture:* n.d.  
Hardness = 5-5.5 D(meas.) = 3.20(2) D(calc.) = 3.16

**Optical Properties:** Transparent. *Color:* Brown in transmitted light. *Streak:* Very light brown.  
*Luster:* Vitreous.

*Optical Class:* Biaxial (-).  $\alpha = 1.692(2)$   $\beta = 1.734(2)$   $\gamma = 1.747(2)$   $2V(\text{meas.}) = 59.1(5)^\circ$   
 $2V(\text{calc.}) = 56.6^\circ$  *Dispersion:*  $r > v$ , strong.

**Cell Data:** *Space Group:* C2.  $a = 9.1575(4)$   $b = 6.2857(4)$   $c = 12.0431(6)$   $\beta = 91.744(4)^\circ$   $Z = 2$

**X-ray Powder Pattern:** N'Chwaning III mine, Kalahari manganese field, South Africa.  
3.143 (100), 2.785 (61), 4.219 (46), 4.762 (42), 4.459 (41), 2.62 (41), 2.972 (39)

<b>Chemistry:</b>	(1)
SiO <sub>2</sub>	36.06
Mn <sub>2</sub> O <sub>3</sub>	23.15
Fe <sub>2</sub> O <sub>3</sub>	0.65
SrO	25.17
CaO	3.54
<u>H<sub>2</sub>O</u>	<u>[10.85]</u>
Total	99.42

(1) N'Chwaning III mine, Kalahari manganese field, South Africa; average electron microprobe analysis supplemented by Raman spectroscopy, H<sub>2</sub>O from structure; corresponds to  $(\text{Sr}_{1.61}\text{Ca}_{0.42})_{\Sigma=2.03}(\text{Mn}^{3+}_{1.95}\text{Fe}^{3+}_{0.05})_{\Sigma=2.00}\text{Si}_{3.98}\text{O}_{11}(\text{OH})_4 \cdot 2\text{H}_2\text{O}$ .

**Occurrence:** On chemically weathered metamorphosed manganese ore.

**Association:** Sugilite, potassic-magnesio-arfvedsonite, lipuite.

**Distribution:** From the N'Chwaning III mine, Kalahari manganese field, Northern Cape province, South Africa.

**Name:** Prefix, *strontio*, indicates the Sr-dominant analog of *ruizite*.

**Type Material:** Mineral Museum, University of Arizona, Tucson, USA (21486) and the RRUFF Project (R160085).

**References:** (1) Yang, H., X. Gu, B. Cairncross, R.T. Downs, and S.H. Evans (2021) Taniajacoite and strontioruizite, two new minerals isostructural with ruizite from the N'Chwaning III mine, Kalahari manganese field, South Africa. *Can. Mineral.*, 59, 431-444.