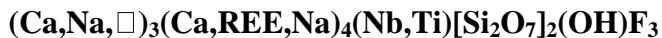


**Roumaite**

**Crystal Data:** Monoclinic. *Point Group:* *m*. As acicular crystals, to 0.5 mm, elongate on [100]. Some individuals appear tabular on (001) by parallel growth of individual fibers.

**Physical Properties:** *Cleavage:* n.d. *Fracture:* n.d. *Tenacity:* Brittle. *D*(meas.) = n.d. *D*(calc.) = 3.33 *Hardness* = n.d.

**Optical Properties:** Transparent. *Color:* Colorless. *Streak:* White. *Luster:* Silky. *Optical Class:* n.d. *n* = 1.652- 1.654 *Pleochroism:* None. Extinction angle on [100] = 4°; positive elongation and weak birefringence.

**Cell Data:** *Space Group:* *Cc*. *a* = 7.473(2) *b* = 11.294(2) *c* = 18.778(4)  $\beta$  = 101.60(2)° *Z* = 4

**X-ray Powder Pattern:** Rouma Island, Los Archipelago, Guinea.

3.057 (100), 2.021 (67.7), 1.680 (60.1), 2.689 (46.4), 2.567 (44.4), 2.790 (40.1), 2.004 (32.5)

Chemistry:	(1)
SiO <sub>2</sub>	29.78
TiO <sub>2</sub>	2.91
ZrO <sub>2</sub>	0.02
ThO <sub>2</sub>	0.07
Y <sub>2</sub> O <sub>3</sub>	0.67
Ce <sub>2</sub> O <sub>3</sub>	13.15
La <sub>2</sub> O <sub>3</sub>	5.02
Nd <sub>2</sub> O <sub>3</sub>	2.28
CaO	20.61
MnO	0.02
Na <sub>2</sub> O	7.83
Nb <sub>2</sub> O <sub>5</sub>	10.51
F	6.46
-O=F	2.72
Total	96.61

(1) Rouma Island, Los Archipelago, Guinea; average of 6 electron microprobe analyses supplemented by Raman spectroscopy, low analytical total attributed to loss of H<sub>2</sub>O under the electron beam; corresponds to (Ca<sub>2.97</sub>Na<sub>2.04</sub>Ce<sub>0.65</sub>La<sub>0.25</sub>Nd<sub>0.11</sub>Y<sub>0.05</sub>) $\Sigma$ =6.07(Nb<sub>0.64</sub>Ti<sub>0.29</sub>) $\Sigma$ =0.93 (Si<sub>2</sub>O<sub>7</sub>)<sub>2</sub>F<sub>2.75</sub>O<sub>0.38</sub>.

**Occurrence:** A late-stage product of hydrothermal activity in cavities in nepheline syenite associated with a peralkaline complex.

**Association:** Aegirine, albite, analcime, arfvedsonite, catapleite, a eudialyte-group mineral, microcline, sodalite, sphalerite, steacyite, villiaumite.

**Distribution:** From Rouma Island, Los Archipelago, Guinea.

**Name:** For *Rouma* Island, a central island in the lagoon of the Los Archipelago, Guinea, where the first specimens were collected. Distribution of REE insufficiently defined for determination of a Levinson suffix.

**Type Material:** Museum of Natural History, Paris, France (MNHN208.1) and the Museum of Natural History, University of Pisa, Italy (#18873).

**References:** (1) Biagioni, C., E. Bonaccorsi, S. Merlino, G.C. Parodi, N. Perchiazzi, V. Chevrier, and D. Bersani (2010) Roumaite, (Ca,Na, $\square$ )<sub>3</sub>(Ca,REE,Na)<sub>4</sub>(Nb,Ti)[Si<sub>2</sub>O<sub>7</sub>]<sub>2</sub>(OH)F<sub>3</sub>, from Rouma Island, Los Archipelago, Guinea: a new mineral species related to dovyrenite. *Can Mineral.*, 48, 17-28. (2) (2011) *Amer. Mineral.*, 96, 1658-1659 (abs. ref. 1).