Devilliersite $Ca_4Ca_2Fe^{3+}_{10}O_4[(Fe^{3+}_{10}Si_2)O_{36}]$

Crystal Data: Triclinic. *Point Group*: $\bar{1}$.

Physical Properties: *Cleavage*: *Tenacity*: *Fracture*:
Hardness = D(meas.) = D(calc.) =

Optical Properties: *Color*: *Streak*: *Luster*:
Optical Class:

Cell Data: *Space Group: P*$\bar{1}$. a = 10.5662(1) b = 10.9497(1) c = 9.08459(7) α = 106.4300(8)° β = 95.7466(7)° γ = 124.298(1)°

X-Ray Diffraction Pattern: Parsa Mountain, Hatrurim Basin, ~10 km southeast of Arad, Israel. 2.596 (100), 2.593 (81), 2.591 (79), 2.733 (60), 2.731 (58), 2.999 (52), 3.001 (49)

Chemistry:

Polymorphism & Series:

Mineral Group: Sapphirine supergroup.

Occurrence:

Association:

Distribution: From Parsa Mountain, eastern part of the Hatrurim Basin, Negev Desert, ~10 km southeast of Arad, Israel.

Name:

Type Material: A.E. Fersman Mineralogical Museum, Russian Academy of Sciences, Moscow, Russia (5296/1).

References: (1) Miyawaki, R., F. Hatert, M. Pasero, and S.J. Mills (2021) IMA Commission on New Minerals, Nomenclature and Classification (CNMNC) Newsletter 59. Eur. J. Mineral., 33, 141. (2) Krüger, B., H. Krüger, I.O. Galuskina, E. Galuskin, and Y. Vapnik (2021) The crystal structure of the new mineral devilliersite, $Ca_4Ca_2Fe^{3+}_{10}O_4[(Fe^{3+}_{10}Si_2)O_{36}]$. Acta Crystal. A77, C1141-C1142.