

Crystal Data: Monoclinic. *Point Group:* 2/*m*. Crystals stumpy prismatic, to 250 μm.
Twining: Contact twins, individuals having [010] in common.

Physical Properties: *Fracture:* Conchoidal. Hardness = ~6 VHN = 725–783, 750 average (50 g load). D(meas.) = n.d. D(calc.) = 3.48 Cathodoluminescence, dull gray with greenish tint.

Optical Properties: Transparent. *Color:* Colorless. *Luster:* Vitreous.
Optical Class: Biaxial (+). *Orientation:* X = c; Y = b; Z = a. α = 1.652 β = 1.658
γ = 1.670 2V(meas.) = ~72°

Cell Data: *Space Group:* P2₁/a. a = 10.42 b = 10.16 c = 7.36 β = 91.1° Z = 4

X-ray Powder Pattern: Dupezeh Mountain, Iraq.
2.84 (100), 2.98 (85), 3.23 (80), 3.04 (75), 2.88 (70), 7.30 (45), 1.702 (40)

Chemistry:	(1)
SiO ₂	29.26
TiO ₂	2.11
ZrO ₂	27.00
Al ₂ O ₃	0.03
Fe ₂ O ₃	0.11
MgO	0.05
CaO	41.44
Na ₂ O	0.02
Total	100.02

(1) Dupezeh Mountain, Iraq; by electron microprobe, average of 26 analyses of four crystals; estimated to contain HfO₂ ~0.16%; corresponds to Ca_{3.00}(Zr_{0.89}Ti_{0.11})_{Σ=1.00}(Si_{1.98}Fe_{0.01})_{Σ=1.99}O₉.

Occurrence: In a melilite skarn in contact with banded diorite, in roof pendant xenoliths of calc-silicate marbles and hornfels.

Association: Åkermanite, perovskite, schorlomite, monticellite, wollastonite, foshagite, calcite, phlogopite, spinel, cuspidine, baddeleyite, pyrrhotite, djerfisherite, valleriite (melilite skarn); andesine, kaersutite, titanian augite, ilmenite, titanian magnetite, xonotlite (banded diorite).

Distribution: On Dupezeh Mountain, near Hero Town, Qala-Diza region, northeastern Iraq.

Name: For Baghdad, the capital of Iraq.

Type Material: n.d.

References: (1) Al-Hermezi, H.M., D.M. McKie, and A.J. Hall (1986) Baghdadite, a new calcium zirconium silicate mineral from Iraq. *Mineral. Mag.*, 50, 119–123. (2) (1987) *Amer. Mineral.*, 72, 222 (abs. ref. 1).