

Crystal Data: Cubic. *Point Group:* $4/m\bar{3}2/m$. As irregular grains, tabular crystals, or dendritic aggregates, to 0.35 mm.

Physical Properties: *Cleavage:* None. *Fracture:* n.d. *Tenacity:* n.d.
Hardness = n.d. VHN = 140-150 (10 g load). D(meas.) = n.d. D(calc.) = 8.32

Optical Properties: Opaque. *Color:* Golden yellow; bright yellow in reflected light.
Streak: Bronze. *Luster:* Metallic (tarnishes readily in air).
Optical Class: Isotropic.
R: (405) 57.7, (437) 50.8, (480) 43.9, (549) 81.1, (591) 90.0, (645) 93.7

Cell Data: Space Group: $Im\bar{3}m$. $a = 2.952(2)$ $Z = 1$

X-ray Powder Pattern: Boxian meteorite, China.
2.089 (100), 1.201 (80), 1.044 (60), 1.470 (50)

Chemistry:	(1)	(2)
Cu	50.46	53.68
Zn	45.83	49.32
Cr	0.00	0.25
Fe	0.11	0.16
Al	0.04	0.06
Ni	0.00	0.01
Total	99.98	99.99

(1) Boxian meteorite, China; low average of 6 electron microprobe analyses. (2) Do.; high average of 6 electron microprobe analyses, corresponds to $\text{Cu}_{1.056}\text{Zn}_{0.935}\text{Fe}_{0.003}\text{Al}_{0.003}\text{Cr}_{0.003}$.

Polymorphism & Series: Forms a series with Cu_2Zn ("tongxinite") and CuZn_2 (danbaite).

Occurrence: In the matrix of a chondrite meteorite.

Association: Olivine, orthopyroxene, clinopyroxene, plagioclase, orthoclase, whitlockite, quartz, biotite, dolomite, calcite, corundum, troilite, kamacite, taenite, chromite, ilmenite, magnesioferrite, pentlandite, graphite, wüstite, copper.

Distribution: From the Boxian meteorite that fell on Boxian County, Anhui Province, China, on October 20, 1977.

Name: Honors Zhang Heng (79-139), a famous Chinese astronomer.

Type Material: n.d.

References: (1) Wang, K. (1986) Zhanghengite - a new mineral (in Chinese, English abstract). *Acta Mineralogica Sinica*, 6, 220-223. (2) (1990) *Amer. Mineral.*, 75, 244 (abs. ref. 1).