

**Crystal Data:** Cubic. *Point Group:*  $4/m\bar{3}2/m$ . Polycrystalline globules, to 2 mm; exsolved from yixunite.

**Physical Properties:** *Tenacity:* "weakly malleble." Hardness = 5.3 VHN = 434-529, 485 average (50 g load). D(meas.) = n.d. D(calc.) = 10.95

**Optical Properties:** Opaque. *Color:* Steel-black; bright white with a yellowish tint in reflected light. *Streak:* Black. *Luster:* Metallic.

*Optical Class:* Isotropic.

R: (400) 65.4, (420) 51.4, (440) 49.3, (460) 49.0, (480) 49.9, (500) 52.0, (520) 55.0, (540) 58.5, (560) 62.5, (580) 66.5, (600) 70.2, (620) 74.5, (640) 77.7, (660) 81.5, (680) 84.2, (700) 86.9

**Cell Data:** *Space Group:*  $Fm\bar{3}m$ .  $a = 6.363(4)$   $Z = 4$

**X-ray Powder Pattern:** Near Damiao village, China.

2.25 (100), 1.299 (80), 1.006 (70), 1.92 (60), 1.59 (60), 1.125 (60), 3.67 (50)

**Chemistry:**

	(1)	(2)
Pt	45.6	45.93
In	53.5	54.07
Total	99.1	100.00

(1) Near Damiao village, China; by electron microprobe, average of nine analyses. (2) PtIn<sub>2</sub>.

**Occurrence:** In a contact metasomatic Co-Cu-Pt-bearing vein in garnet-amphibole pyroxenite in contact with anorthosite and granite.

**Association:** Moncheite, sperrylite, cooperite, yixunite, cobaltian malanite, bornite, chalcocopyrite, carrolite, magnetite.

**Distribution:** From near Damiao village and the Yixun River, about 270 km north of Beijing, Hebei Province, China [TL].

**Name:** For its occurrence near the village of Damiao, China.

**Type Material:** n.d.

**References:** (1) Yu Zuxiang (1997) Damiaoite – a new native indium and platinum alloy. *Acta Geol. Sinica*, 71(4), 328–331 (in Chinese with English abs.). (2) (1998) *Amer. Mineral.*, 83, 653 (abs. ref. 1).