©2001-2005 Mineral Data Publishing, version 1

Crystal Data: Hexagonal. *Point Group:* 32. Crystals, to 3.5 cm, prismatic and acicular $\parallel [0001]$ with (+) and (-) rhombohedra equally developed; also massive, columnar to fine granular.

Physical Properties: Cleavage: Perfect on $\{10\overline{1}0\}$, imperfect on $\{0001\}$. Tenacity: Brittle, somewhat. Hardness = 2–2.5 VHN = 48–66 (10 g load). D(meas.) = 6.1–6.3 D(calc.) = 6.225

Optical Properties: Opaque. Color: Tin-white; in polished section, white. Streak: Gray. Luster: Metallic. Pleochroism: Feeble. Anisotropism: Fairly strong.

 $\begin{array}{l} R_1-R_2\colon (400)\ 58.1-64.2, (420)\ 58.4-64.8, (440)\ 58.7-65.3, (460)\ 59.1-65.7, (480)\ 59.3-66.1, (500)\\ 59.7-66.5, (520)\ 60.0-66.8, (540)\ 60.1-67.0, (560)\ 60.2-66.8, (580)\ 60.0-66.6, (600)\ 59.5-66.0, (620)\\ 58.8-65.2, (640)\ 57.9-64.3, (660)\ 57.1-63.4, (680)\ 56.1-62.3, (700)\ 55.0-61.3 \end{array}$

Cell Data: Space Group: $P3_121$ or $P3_221$. a = 4.4572 c = 5.9290 Z = 3

X-ray Powder Pattern: Synthetic.

3.230 (100), 2.351 (37), 2.228 (31), 3.86 (20), 1.835 (20), 1.479 (13), 1.616 (12)

Chemistry:

(1) Gunnison Co., Colorado, USA.

Occurrence: In hydrothermal veins; may be of both primary and secondary origin; a sublimate in volcanic fumaroles.

Association: Gold, sylvanite, empressite, altaite, pyrite, galena, alabandite, barite, quartz, carbonates.

Distribution: In Romania, from Faţa Băii (Zlatna, Faczebaj) [TL] and Baia-de-Arieş (Offenbánya). At the Fossa volcano, Vulcano, Lipari Islands, Italy. From the Tolbachik fissure volcano, Kamchatka Peninsula, Russia. Large cleavages at the Kochbulak gold deposit, Chatkal-Kuramin Mountains, eastern Uzbekistan. In the USA, from many localities in Colorado, including Cripple Creek, Teller Co.; in the Magnolia, Gold Hill, Ballarat, and Central districts, Boulder Co.; and at the Vulcan mine, Gunnison Co.; in Nevada, at the Mohawk and Clermont mines, Goldfield district, Humboldt Co., and from Delamar, Lincoln Co. At the Moctezuma (Bambolla) mine, 12 km south of Moctezuma, Sonora, Mexico. From the El Indio mine, east of La Serena, Coquimbo, Chile. At Kalgoorlie, Western Australia. In the Teine mine, northwest of Sapporo, Hokkaido, and in the Kawazu mine, near Sizewka, Shizuoka Prefecture, Japan. From the Emperor mine, Vatukoula, Viti Levu, Fiji Islands. At the Guilaizhuang gold deposit, Shandong Province, and in the Dashuigou tellurium deposit, Sichuan Province, China. Additional minor localities are known.

Name: Latin name for the earth, tellus.

References: (1) Palache, C., H. Berman, and C. Frondel (1944) Dana's system of mineralogy, (7th edition), v. I, 138–139. (2) Chenin, P. and P. Unger (1967) ??title?? Acta Cryst., 23, 670–671. (3) (1953) NBS Circ. 539, 1, 26. (4) Criddle, A.J. and C.J. Stanley, Eds. (1993) Quantitative data file for ore minerals, 3rd ed. Chapman & Hall, London, 552. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without the prior written permission of Mineral Data Publishing.