

Note: This is a special corrected Table of Contents and Errata sheet, current through 3 August 2018

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## ERRATA

### PAGE 2

#### Spill the wine

Important pair of ruby and diamond pendent earrings, featuring untreated Mozambique Myanmar rubies of 11.10 and 10.41 ct respectively. These sold for HK\$8,850,000 (US\$1,141,223) at Tiancheng's 15 December 2015 sale. Image © Tiancheng International Auctioneer Ltd.

### PAGE 46

#### Column 2, paragraph 8

Change Zylin Sun to Ziyin Sun.

### PAGE 65

#### Column 2, last paragraph

Change 18 cm to 18 mm.

### PAGE 94

#### Column 1, last paragraph

Change cohesion to adhesion

### PAGE 161

#### Figure 4.78:

Rays C and D were accidentally omitted. See the following page for the correct figure.

### PAGE 161

#### Column 2, add:

Chase, A.B. and Osmer, J.A. (1970) Habit changes of sapphire grown from PbO-PbF<sub>2</sub> and MoO<sub>3</sub>-PbF<sub>2</sub> fluxes. *Journal of the American Ceramic Society*, Vol. 53, No. 6, pp. 343–345; RWHL.

### PAGE 162

#### Column 1, add:

Harlow, George E. and Bender, W. (2013) A study of ruby (corundum) compositions from the Mogok Belt, Myanmar: Searching for chemical fingerprints. *American Mineralogist*, Vol. 98, No. 7, pp. 1120–1132.

### PAGE 163

#### Column 1, change "Moon and Phillips (1991a) to read as follows:

Moon, A.R. and Phillips, M.R. (1991a) Iron and spinel precipitation in iron-doped sapphire. *Journal of the American Ceramic Society*, Vol. 74, No. 4, April, pp. 865–868; RWHL\*.

### PAGE 164

#### Column 1, change "Volynets and Sidorova (1971) to read as follows:

Volynets, F.K. and Sidorova, E.A. (1971) The absorption spectrum of alumina containing vanadium. *Journal of Applied Spectroscopy*, Vol. 14, No. 1, Jan., pp. 68–70; RWHL.

### PAGE 191

#### Column 1, change "Koivula (1980a)..." to read as follows:

Koivula, J.I. (1980a) Fluid inclusions: Hidden trouble for the jeweler and lapidary. *Gems & Gemology*, Vol. 16, No. 9, Spring, pp. 273–276; RWHL\*.

### PAGE 258

#### Column 2, Figure 7.13, line 2

change "In natural stones (right)..." to "In natural stones (left)..."

### PAGE 264

#### Column 2, Table 7.2, Verneuil Syn. Corundum, Red, Pink

change "C<sup>3+</sup>" to "Cr<sup>3+</sup>".

### PAGE 307

#### Column 1, change "Plato (1952)..." to read as follows:

Plato, W. (1952) Oriented lines in synthetic corundum. *Gems & Gemology*, Vol. 7, No. 7, Fall, pp. 223–224; RWHL\*.

### PAGE 326

#### Figure 9.10

change "γ" to "o".

### PAGE 326

#### Column 1, in Meen, V.B. (1969) change "Vol.8" to "Vol. 13".

Meen, V.B. (1969) The largest gems in the crown jewels of Iran. *Gems & Gemology*, Vol. 13, No. 1, Spring, pp. 2–14; RWHL.

### PAGE 549

Figure 12.45. Map. Change "Andranddambo" to "Andranondambo".

### PAGE 549

Figure 12.99. Superb example of a 15 ct untreated Mông Hsu Mogok ruby.

Photo: Wimon Manorotkul; ring: Veerasak Gems

### PAGE 574

#### Column 1 change "Scott (1936a)..." to read as follows:

Scott, W.H. (1936a) The ruby mines of Burma. *Gems & Gemology*, Vol. 2, No. 1, Spring, pp. 3–6; No. 2, Summer, pp. 31–34; RWHL.

### PAGE 675

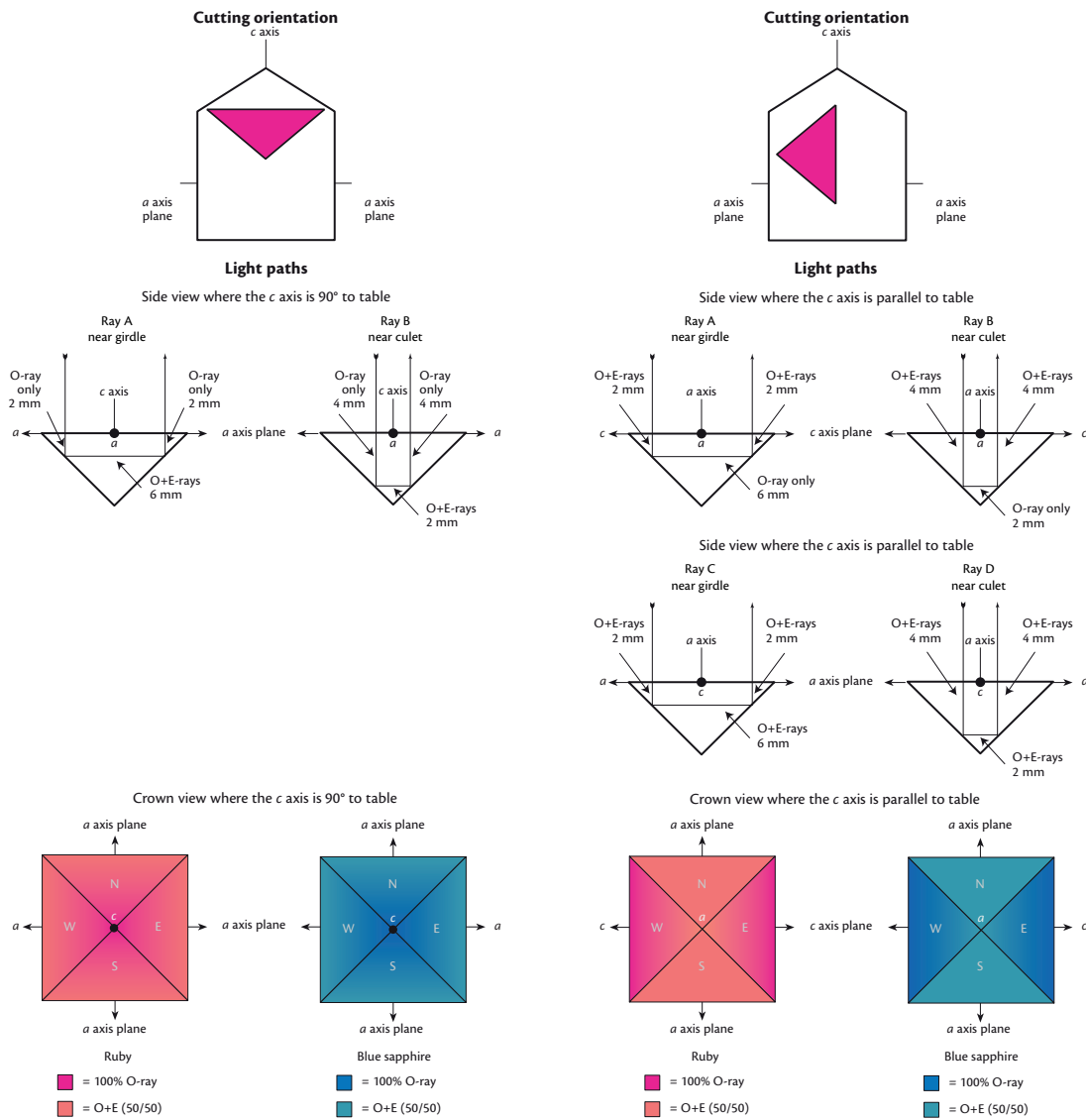
#### Column 1, "Schubnel (1975)..." change "No. 43" to "No. 45":

Schubnel, H.-J. (1975) Excursion à la mine de saphirs de Bò-Phlôi (Thaïlande). *Revue de Gemmologie A.F.G.*, No. 45, December, pp. 8–10; seen.

### PAGE 725

#### Column 2

Add Galibert, Olivier 45, 389, 454–456, 527–528, 571, 656



**Figure 4.78 The visual effects of pleochroism on the appearance of corundum**

The stone above left is cut with the c axis 90° to the table facet.

- Ray A enters near the girdle, traveling 4 mm parallel to the c axis (O-ray only) and 6 mm parallel to the a axis (3 mm of O-ray and 3 mm of E-ray). The color of Ray A therefore consists of 70% O-ray and 30% E-ray.
- Ray B strikes the pavilion much closer to the culet. Ray A and Ray B have identical path lengths, each traveling 10 mm through the gem. But Ray B's light path consists of 8 mm parallel to the c axis (8 mm of O-ray only) and just 2 mm parallel to the a axis (1 mm of O-ray and 1 mm of E-ray). Thus, the color of Ray B is 90% O-ray and only 10% E-ray.

The stone above right is cut with the c axis 90° to the table facet.

- Ray A has 6 mm of O-ray only, and 4 mm of equally mixed O- and E-rays, giving a total of 80% O-ray and 20% E-ray.
- Ray B consists of 2 mm of O-ray only, and 8 mm of equally mixed O- and E-rays, giving a total of 40% O-ray and 60% E-ray. As a result, the color on these facets will show more of the O-ray near the girdle and less at the culet.
- Rays C and D are equal mixtures of O- and E-rays, because their entire journey takes place perpendicular to the c axis. Those facets will display a uniform 50%–50% split.