

Beryllium diffusion

GIA announces updated wording on identification reports for the new corundum treatment process (2002) GIA press release, May 29. Available online at http://www.gia.edu/newsroom/608/2761/news_release_details.cfm.

GIA issues report of preliminary testing on a new corundum treatment from Thailand (2002) GIA press release, January 31. Available online at http://www.gia.edu/newsroom/608/122/news_release_details.cfm.

McClure S., Moses T., Koivula J.I., Wang W. (2002) A new corundum treatment from Thailand. *GIA Insider*, Vol. 4, Issue 3,
http://www.gia.edu/newsroom/issue/2798/21/insider_newsletter_details.cfm#2.

McClure S., Moses T., Wang W., Koivula J.I. (2002) An update on the orange to orangy pink treated natural sapphires. *GIA Insider*, Vol. 4, Issue 9,
http://www.gia.edu/newsroom/issue/2798/1042/insider_newsletter_details.cfm#3.

McClure S.F. (2002) Bulk diffusion—Treated sapphire with synthetic overgrowth. *GIA Insider*, Vol. 4, Issue 22,
http://www.gia.edu/newsroom/issue/2798/1362/insider_newsletter_details.cfm#3.

McClure S.F. (2002) Gem News International: Bulk diffusion-treated sapphire with synthetic overgrowth. *Gems & Gemology*, Vol. 38, No. 3, pp. 255–256.

McClure S.F. (2002) Swarovski scientists identify possible source of beryllium in new treated sapphires. *GIA Insider*, Vol. 4, Issue 10,
http://www.gia.edu/newsroom/issue/2798/1046/insider_newsletter_details.cfm#3.

McClure S.F., Moses T., Wang W., Hall M., Koivula J.I. (2002) Gem News International: A new corundum treatment from Thailand. *Gems & Gemology*, Vol. 38, No. 1, pp. 86–90.

Moses T. (2002) Gem Trade Lab Notes: Sapphire bulk or lattice diffusion treated. *Gems & Gemology*, Vol. 38, No. 3, pp. 254–255.

Moses T., Wang W., McClure S., Hall M., Koivula J.I. (2002) GIA researchers uncover important data on new treated corundum. *GIA Insider*, Vol. 4, Issue 5,
http://www.gia.edu/newsroom/issue/2798/162/insider_newsletter_details.cfm#3.

Moses T.M., Hall M., Wang W. (2002) Gem Trade Lab Notes: More bulk diffusion—Rubies and orange sapphire. *Gems & Gemology*, Vol. 38, No. 4, pp. 342–343.

Shor R. (2003) Gem News International: AGTA corundum panel. *Gems & Gemology*, Vol. 39, No. 1, pp. 58–59.

Unified AGTA/GIA/Gübelin/SSEF disclosure policy (2002) GIA press release, February 26. Available online at http://www.gia.edu/newsroom/608/375/news_release_details.cfm.

Update on the new corundum bulk diffusion treatment (2002) *GIA Insider*, Vol. 4, Issue 24, http://www.gia.edu/newsroom/issue/2798/1382/insider_newsletter_details.cfm#4.

Update on the new corundum bulk diffusion treatment (2002) GIA press release, November 1. Available online at http://www.gia.edu/newsroom/608/6898/news_release_details.cfm.

Wang W., Green B. (2002) An update on treated natural corundum. *GIA Insider*, Vol. 4, Issue 27, http://www.gia.edu/newsroom/issue/2798/1482/insider_newsletter_details.cfm#2.

Wang W., Green B. (2002) Gem News International: Update on Be-diffused corundum. *Gems & Gemology*, Vol. 38, No. 4, pp. 363–364.

Other diffusion processes

Crowningshield G.R. (1985) Gem Trade Lab Notes: Surface-induced stars. *Gems & Gemology*, Vol. 21, No. 3, pp. 171–172.

Crowningshield G.R. (1992) Gem Trade Lab Notes: Durability of diffusion-treated sapphire. *Gems & Gemology*, Vol. 28, No. 4, p. 266.

Crowningshield G.R. (1995) Gem Trade Lab Notes: Sapphire, with diffusion-induced color and star. *Gems & Gemology*, Vol. 31, No. 1, pp. 56–57.

Crowningshield G.R. (1995) Gem Trade Lab Notes: Synthetic ruby with diffusion-induced “fingerprint” inclusions and asterism. *Gems & Gemology*, Vol. 31, No. 2, pp. 126.

Fryer C. (1981) Gem Trade Lab Notes: Induced surface coloration of natural sapphires. *Gems & Gemology*, Vol. 17, No. 1, p. 46.

Fryer C. (1982) Gem Trade Lab Notes: Treated synthetic sapphire. *Gems & Gemology*, Vol. 18, No. 2, p. 107.

Fryer C. (1982) Gem Trade Lab Notes: Sapphire, diffusion colored. *Gems & Gemology*, Vol. 18, No. 3, p. 173.

Hargett D., Crowningshield G.R. (1990) Gem Trade Lab Notes: Sapphire, diffusion treated Montana rough. *Gems & Gemology*, Vol. 26, No. 3, pp. 224–225.

- Hurwit K. (1995) Gem Trade Lab Notes: Corundum diffusion treated, *Gems & Gemology*, Vol. 31, No. 3, pp. 196–197.
- Identifying diffusion-treated red corundum (2000) *GIA Insider*, Vol. 2, Issue 14, http://www.gia.edu/newsroom/issue/2798/964/insider_newsletter_details.cfm#3.
- Johnson M.L., Koivula J.I., Eds. (1997) Gem News: Titanium and chromium diffusion-induced star sapphires. *Gems & Gemology*, Vol. 33, No. 4, pp. 308–309.
- Johnson M.L., Koivula J.I., Eds. (1998) Gem News: Diffusion-treated synthetic sapphire. *Gems & Gemology*, Vol. 34, No. 4, pp. 301–302.
- Kammerling R.C. and DeGhionno D. (1993) Gem Trade Lab Notes: Diffusion treatment obscured by mounting, *Gems & Gemology*, Vol. 29, No. 4, pp. 283–284.
- Kammerling R.C., Koivula J.I., Kane R.E. (1990) Gemstone enhancement and its detection in the 1980s. *Gems & Gemology*, Vol. 26, No. 1, pp. 32–49.
- Kane R.E., Kammerling R.C., Koivula J.I., Shigley J.E., Fritsch E. (1990) The identification of blue diffusion-treated sapphires. *Gems & Gemology*, Vol. 26, No. 2, pp. 115–133.
- Koivula J.I., Kammerling R.C., Eds. (1991) Gem News: Distinguishing diffusion treatment from surface coating. *Gems & Gemology*, Vol. 27, No. 3, pp. 187–188.
- Koivula J.I., Kammerling R.C., Eds. (1991) Gem News: More experimentation with blue diffusion-treated sapphires . . . and red stones too. *Gems & Gemology*, Vol. 27, No. 3, pp. 187–188.
- Koivula J.I., Kammerling R.C., Eds. (1991) Gem News: More on diffusion-treated sapphires. *Gems & Gemology*, Vol. 27, No. 1, p. 53.
- Koivula J.I., Kammerling R.C., Fritsch E., Eds. (1992) Gem News: Diffusion-treated sapphire cabochons sold as natural. *Gems & Gemology*, Vol. 28, No. 3, pp. 204–205.
- Koivula J.I., Kammerling R.C., Fritsch E., Eds. (1992) Gem News: Instrument for detecting diffusion treatment. *Gems & Gemology*, Vol. 28, No. 1, p. 67.
- Koivula J.I., Kammerling R.C., Fritsch E., Eds. (1992) Gem News: Update on diffusion-treated sapphires. *Gems & Gemology*, Vol. 28, No. 1, pp. 62–63.
- Koivula J.I., Kammerling R.C., Fritsch E., Eds. (1994) Gem News: Update on diffusion treatment. *Gems & Gemology*, Vol. 30, No. 1, pp. 55–56.

- Mayerson W. (2001) Gem Trade Lab Notes: Sapphires with diffusion-induced stars. *Gems & Gemology*, Vol. 37, No. 4, pp. 324–325.
- McClure S.F. (2002) Gem News International: Cobalt-“diffused” sapphire. *Gems & Gemology*, Vol. 38, No. 2, pp. 167–168.
- McClure S.F., Kammerling R.C., Fritsch E. (1993) Update on diffusion-treated corundum: Red and other colors. *Gems & Gemology*, Vol. 29, No. 1, pp. 16–28.
- McClure S.F., Smith C.P. (2000) Gemstone enhancement and detection in the 1990s. *Gems & Gemology*, Vol. 36, No. 4, pp. 336–359.
- Moses T. (2002) Gem Trade Lab Notes: Synthetic sapphire treated by “traditional” bulk diffusion with transitional elements. *Gems & Gemology*, Vol. 38, No. 3, pp. 256–257.
- Muhlmeister S., Fritsch E., Shigley J.E., Devouard B., Laurs B.M. (1998) Separating natural and synthetic rubies on the basis of trace element chemistry. *Gems & Gemology*, Vol. 34, No. 2, pp. 80–101.
- Nassau K. (1981) Heat treating ruby and sapphire: Technical aspects. *Gems & Gemology*, Vol. 17, No. 3, pp. 121–131.
- Smith C.P. (2002) “Diffusion ruby” proves to be synthetic ruby overgrowth on natural corundum. *Gems & Gemology*, Vol. 38, No. 3, pp. 240–248.