

TABLE 6. Chemical composition of marble-hosted ruby from various deposits by LA-ICP-MS^a, EDXRF^b, and EDS^c analyses.

Oxide (wt.%)	Snezhnoe, Tajikistan (n = 6)	Luc Yen, Vietnam (n = 1)	Afghanistan (n = 15)	Mogok, Myanmar (n = 19)	Mong Hsu, Myanmar (n = 11)	Nepal (n = 3)	Southern Yunnan, China (n = 2)
TiO ₂	0.0009–0.011 (0.0064)	0.02	0.009–0.091 (0.045)	0.015–0.047 (0.026)	0.019–0.207 (0.078)	0.059–0.096 (0.080)	0.007–0.024 (0.016)
V ₂ O ₃	0.0076–0.0179 (0.0166)	0.01	bdl–0.016 (0.009)	0.028–0.171 (0.066)	0.024–0.104 (0.048)	0.014–0.024 (0.017)	0.017–0.022 (0.020)
Cr ₂ O ₃	0.2476–0.6138 (0.5545)	0.37	0.205–0.575 (0.350)	0.255–1.02 (0.562)	0.576–1.16 (0.887)	0.190–0.347 (0.260)	0.608–1.29 (0.950)
FeO	bdl	–	0.009–0.133 (0.070)	0.006–0.080 (0.028)	bdl–0.022 (0.010)	0.012–0.038 (0.029)	0.012–0.072 (0.042)
Fe ₂ O ₃	bdl	0.02	–	–	–	–	–
Ga ₂ O ₃	0.0082–0.0112 (0.0097)	0.01	bdl–0.011 (0.006)	bdl–0.026 (0.012)	bdl–0.014 (0.009)	0.009–0.025 (0.018)	0.008

^a Oxide values for Tajik rubies are recalculated from table 5; n = number of measurements; minimum and maximum values are given, along with average (in parentheses); bdl = below detection limit.

^b Values for rubies from Afghanistan, Myanmar, Nepal, and southern Yunnan are from Muhlmeister et al. (1998).

^c Values for Vietnamese rubies are from Pham et al. (2004).