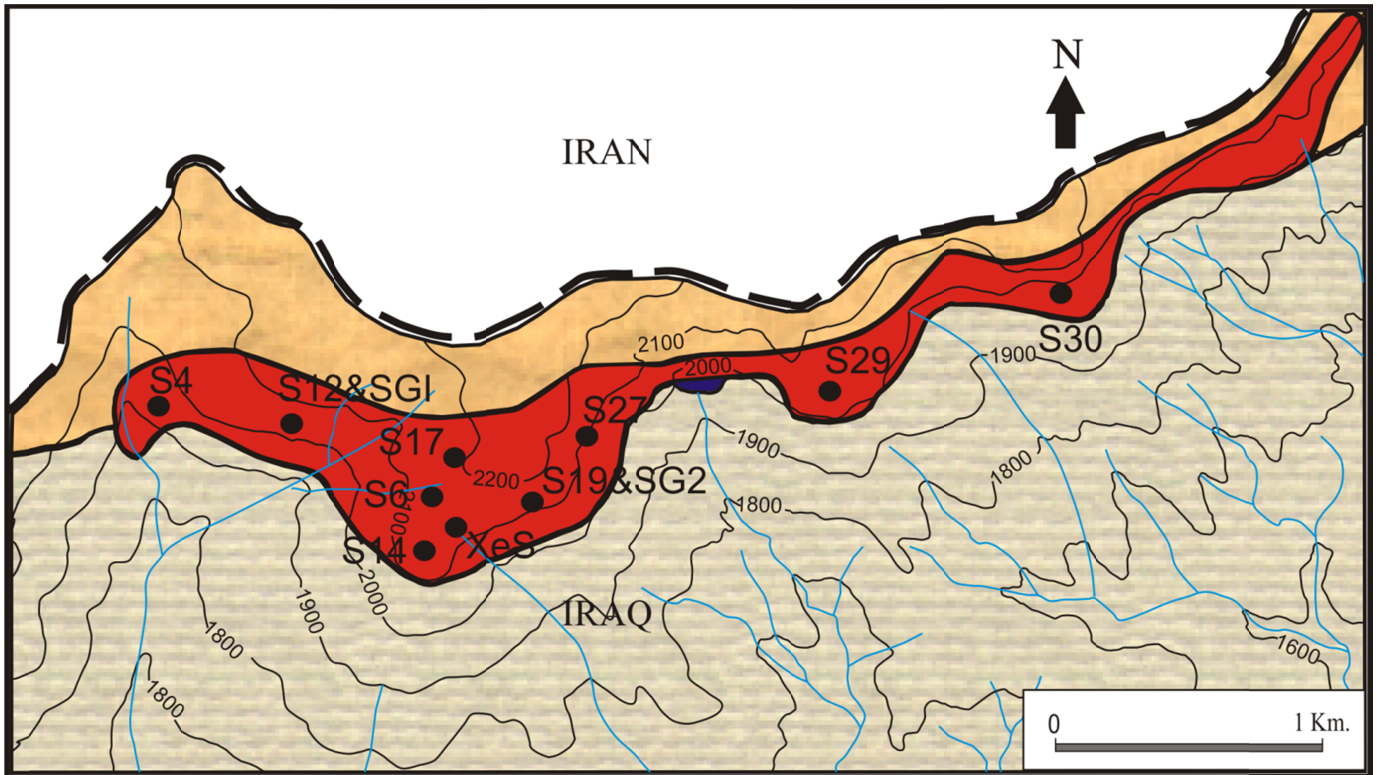


Fig. SM 1. The main tectonic units of the Zagros Orogenic Belt (modified from Alavi, 1994), showing location of the Shaliar Valley area. ZDF: Zagros Deformation Front; MZT – Main Zagros Thrust.



LEGEND



Fig. SM 2. The sampling locations of Siristan granitoids (SG) are shown as solid circles.

Note that the age of the SG is considerably revised in this study (i.e. Albian).

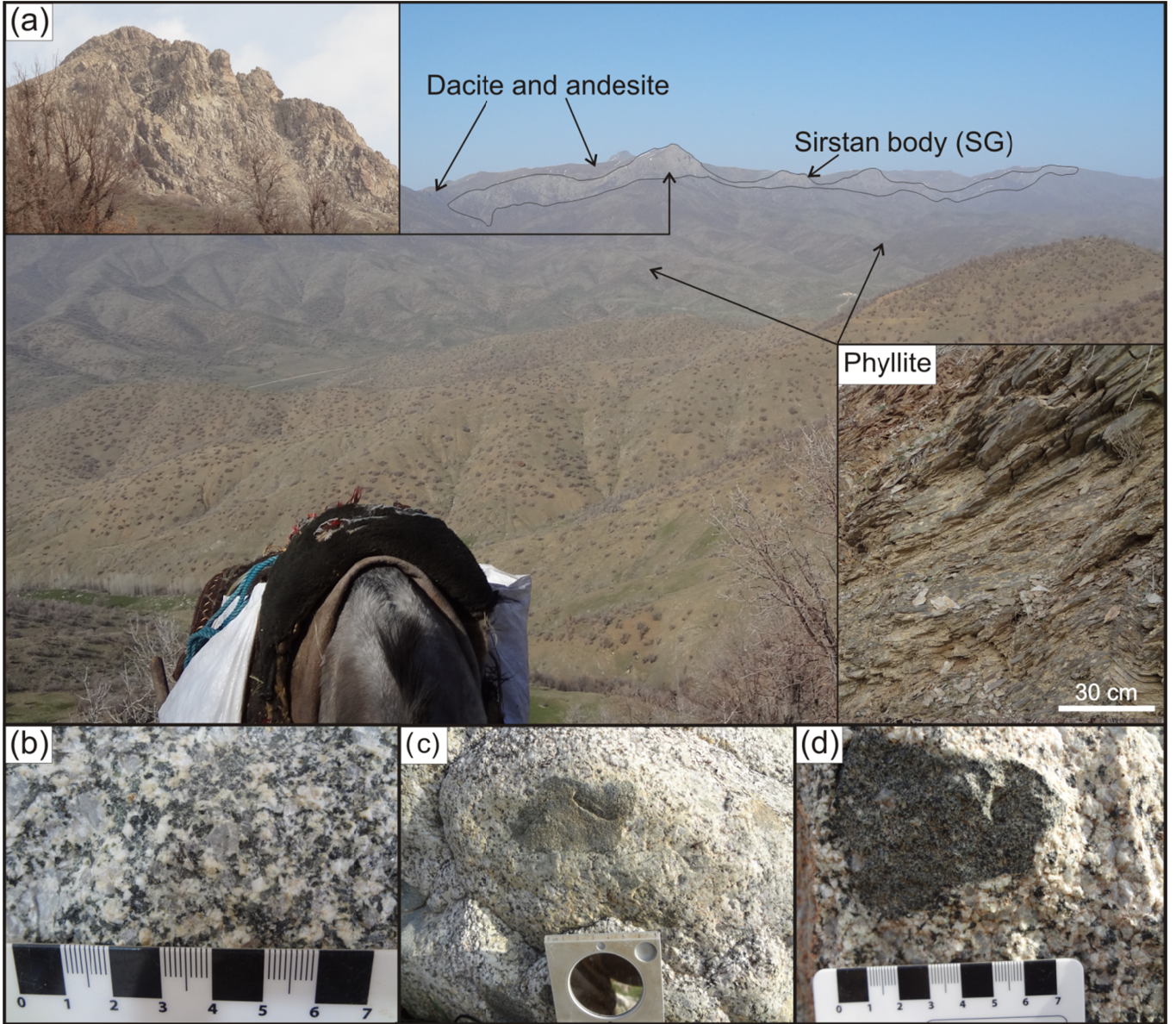


Fig. SM 3. (a) Field photographs of the SG showing the contact with the surrounding rocks. (b) Coarse grained granodiorite with microgranitoid enclaves in the SG body (c, d).

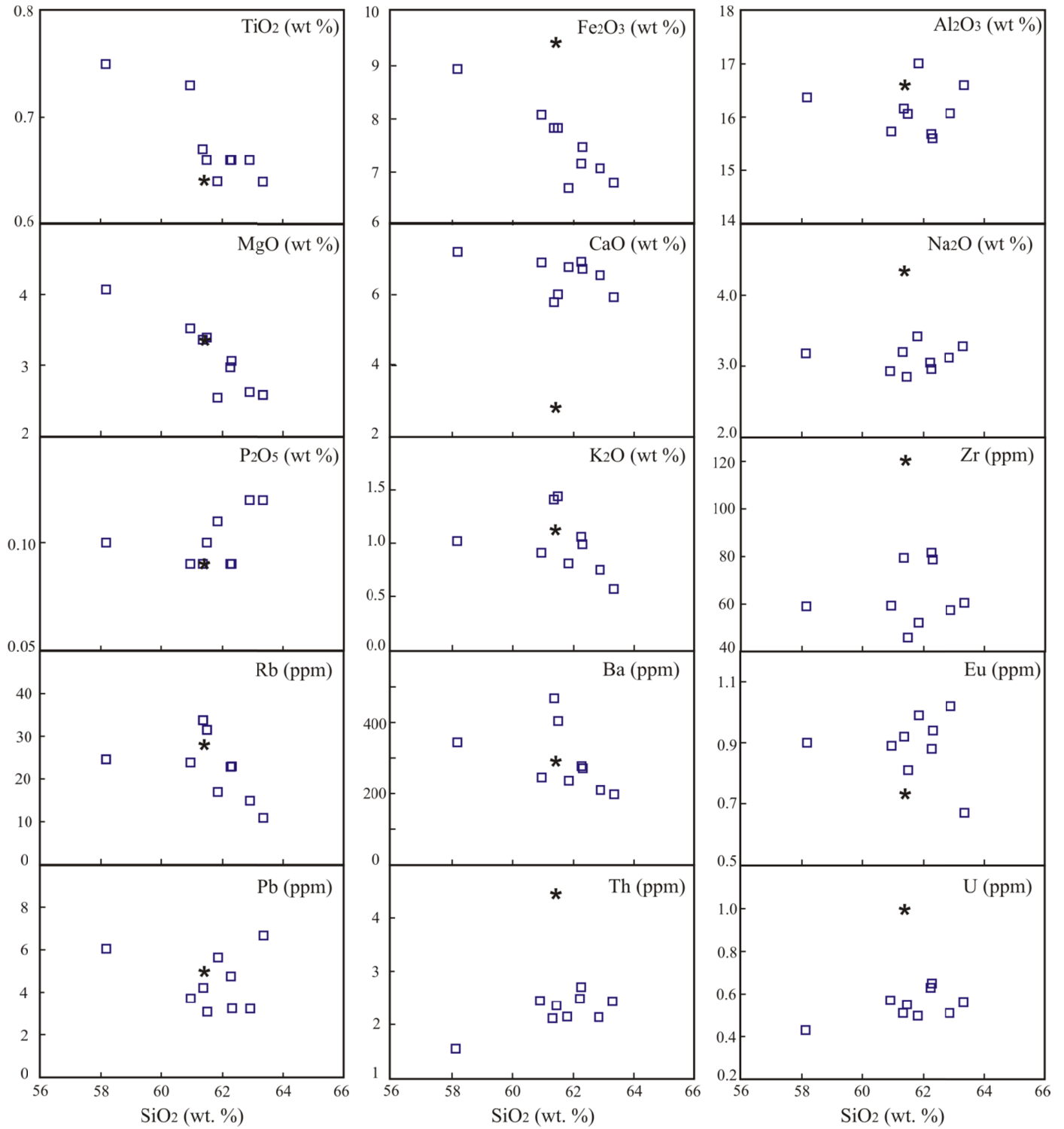


Fig. SM 4. Harker diagrams for the SG rock samples. The star symbols correspond to enclave samples.

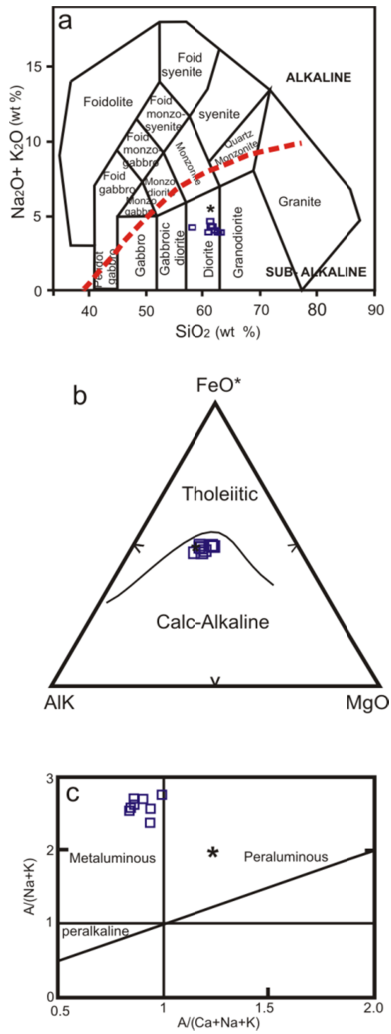


Fig. SM 5. (a) Alkali-silica diagram (Middlemost, 1985), (b) AFM diagram (Irvine and Baragar 1971), (c) $\text{Al}_2\text{O}_3/(\text{CaO} + \text{Na}_2\text{O} + \text{K}_2\text{O})$ vs. $\text{Al}_2\text{O}_3/(\text{Na}_2\text{O} + \text{K}_2\text{O})$ of Shand (1943) for the SG rock samples. The star symbols correspond to enclave samples.

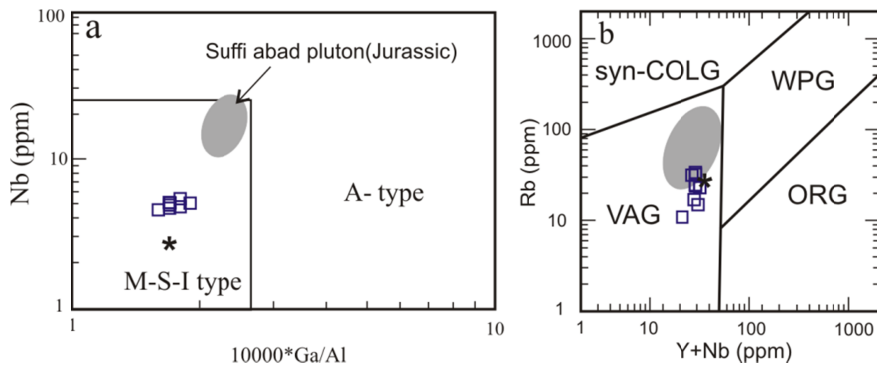


Fig. SM 6. (a) $10,000 \times \text{Ga}/\text{Al}$ versus Nb (Whalen et al., 1987), (b) Rb versus Y+Nb (Pearce et al., 1984) for the SG rock samples. VAG: volcanic arc granite, syn-GOLG: syn-collisional granite, WPG: within plate granite and ORG: ocean ridge granite. Data for the Suffi abad pluton from Azizi et al. (2011). The star symbols correspond to enclave samples.

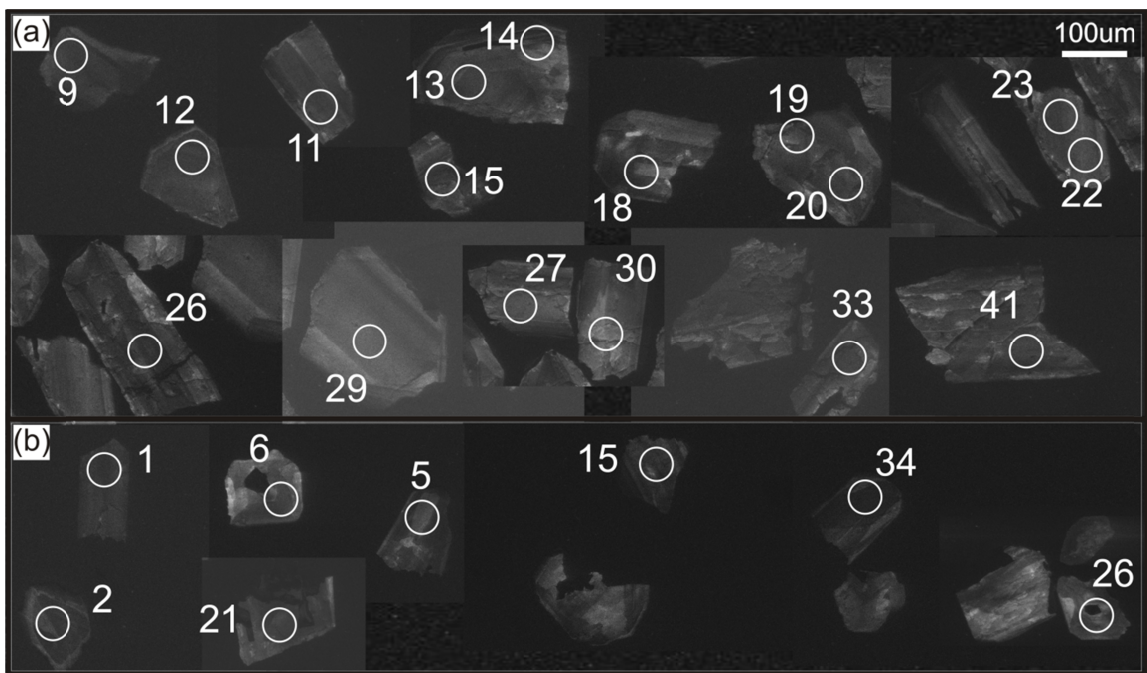


Fig. SM 7. Cathodoluminescence images (CL) of zircon grains from the SG: (a) SG1 and (b) SG2.

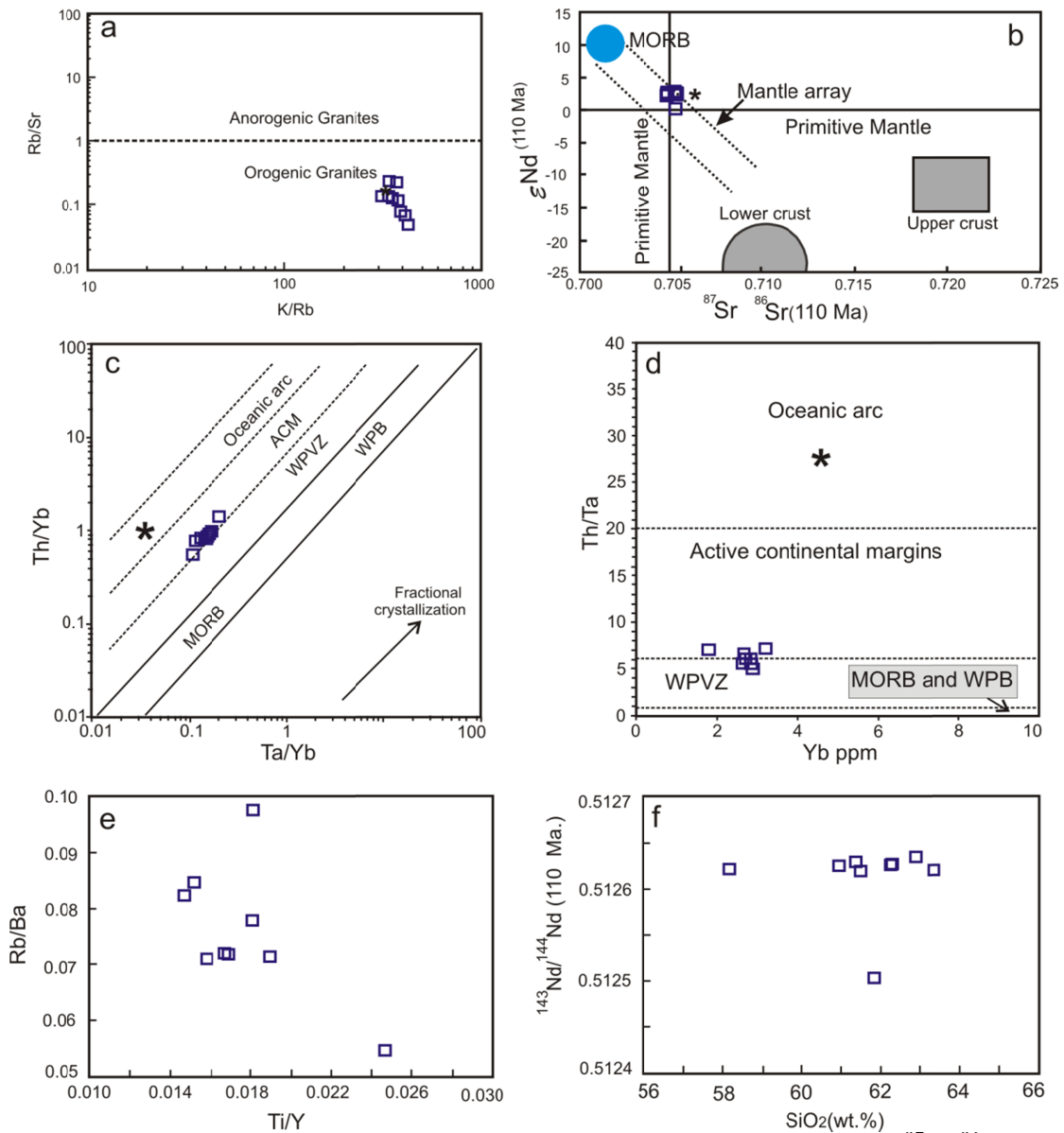


Fig. SM 8. (a) Rb/Sr vs. K/Rb (Abdel Rahman and El-Kibbi, 2001), (b) $^{87}\text{Sr}/^{86}\text{Sr}$ vs. ϵ_{Nd} (110 Ma), (c) and (d) Ta/Yb vs. Th/Yb and Yb vs. Th/Ta (Gorton and Schandl, 2000), (e) Ti/Y vs. Rb/Ba and (f) SiO_2 vs. $^{143}\text{Nd}/^{144}\text{Nd}$ (110 Ma) for the SG rock samples. The star symbols correspond to enclave samples.