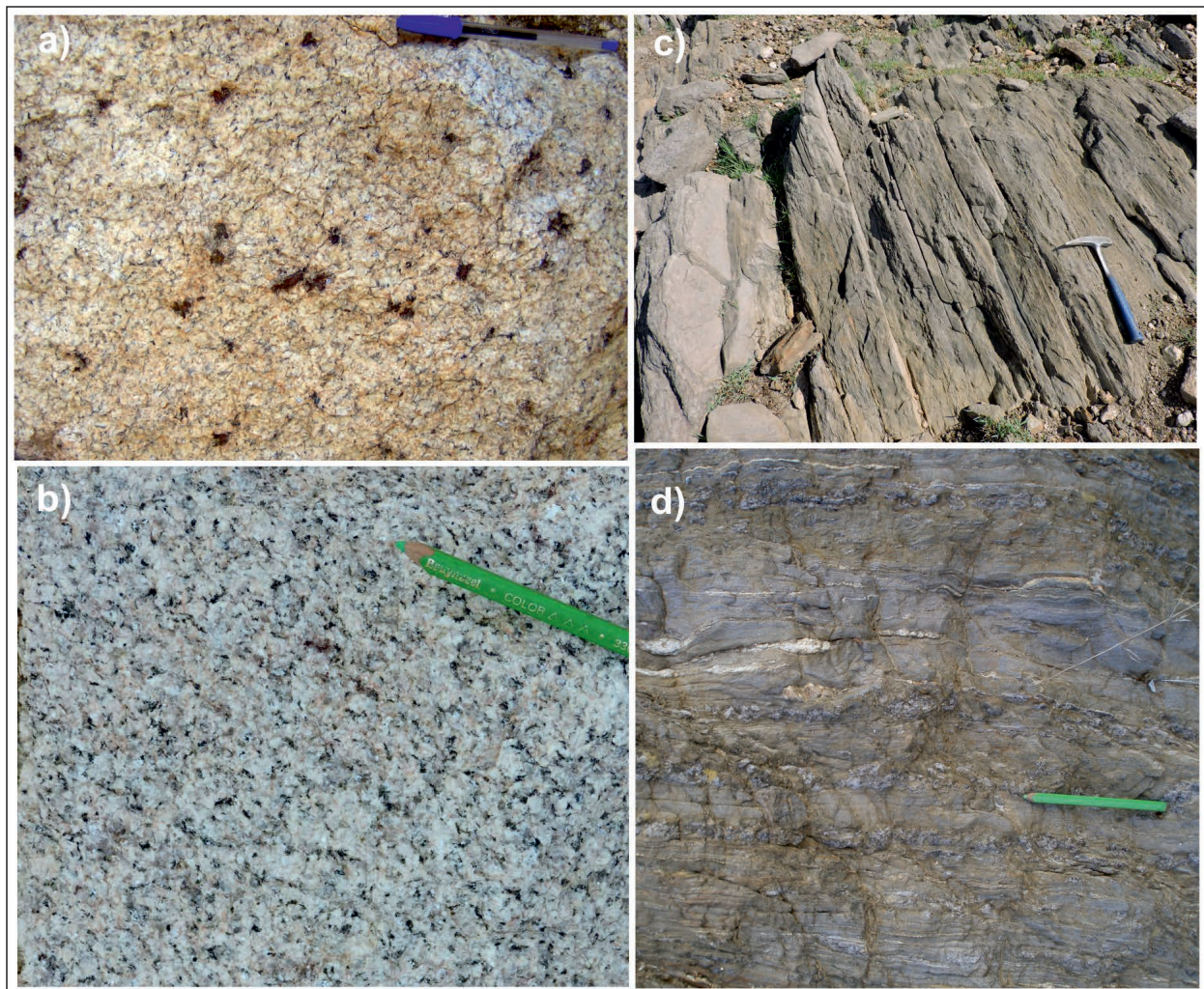
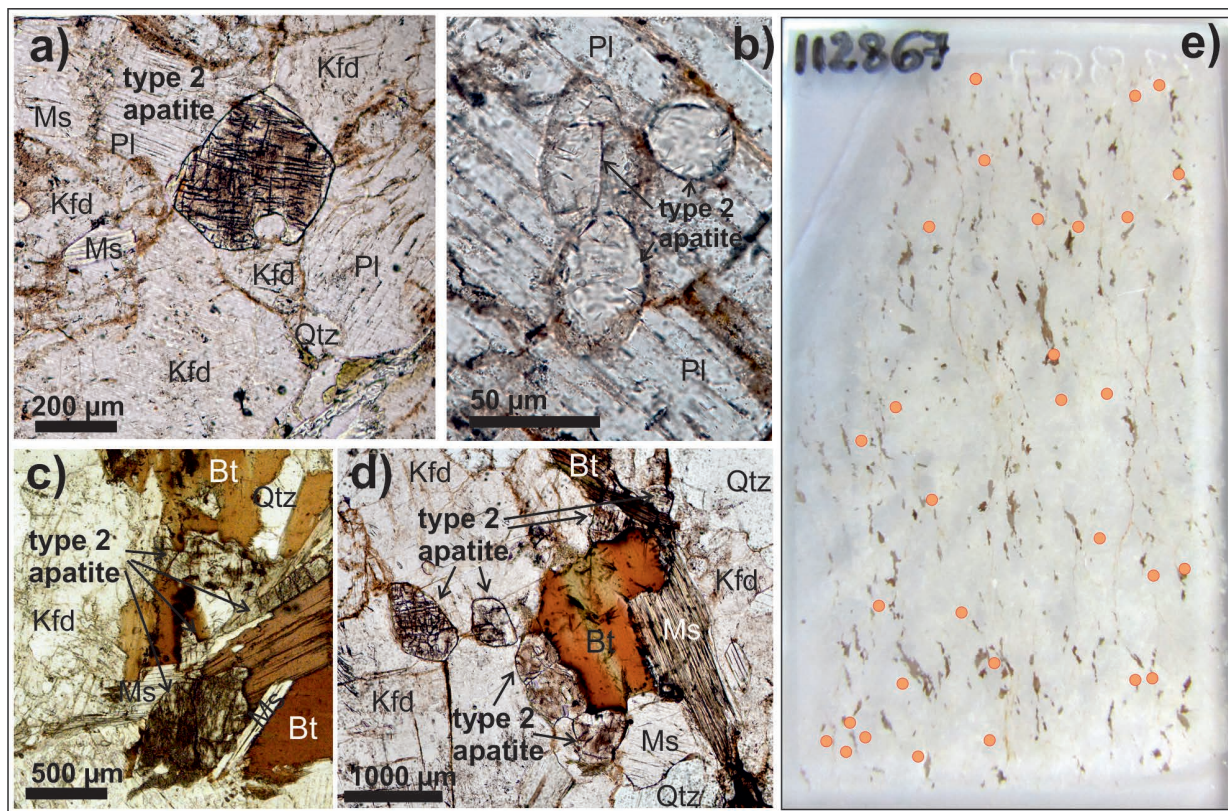


**APPENDIX FIGURE 1.** (a) Summarized geological map of the Central Iberian Zone (CIZ) displaying the two main batholithic areas referenced in this paper: the Spanish Central System (SCS) and the Montes de Toledo (MT). (b) Geological map of the Belvis pluton modified from Pérez-Soba et al. (2014). Sample location of granites with analyzed apatite included in Appendix<sup>1</sup> Table 1 (black asterisk: type 1 apatite; white asterisk: type 2 apatite; number sign: type 3 apatite).



**APPENDIX FIGURE 2.** Outcrop features of the wall-rock and the Belvis pluton granites: (a) and (b) Schist Greywacke Complex, a monotonous sequence of metapelites and metasamites variably affected by contact metamorphism. (c) Cordierite-bearing muscovite leucogranite (G1) exhibiting magmatic foliation and abundant cordierite-quartz nodules. (d) Muscovite-bearing biotite leucogranite medium grained (G3), with a well defined magmatic foliation (parallel to the pencil).





**APPENDIX FIGURE 3.** Photomicrographs (plane-polarized light) in samples from G3 Belvis granite showing textural features and its relationships with the main-rock forming minerals: (a) Thin section of a sample from the G3 granite from the Belvis pluton, with orange dots pointing the localization of type 2 apatite crystals. (b) Type 2 apatite crystals showing the typical dusty and anhedral appearance, with frequent microcracks. (c) Type 2 apatite, exceptionally clear, but including graphite isolated filaments, most of them showing radial disposition. (d) Cluster of three dusty and anhedral type 2 apatite crystals interlocked mainly with biotite and muscovite. (e) Type 2 apatite crystals interlocked with K-feldspar, biotite, muscovite and quartz.