



## **First geochemical and geochronological data from granitoids in Ordu area, NE Turkey**

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The major and trace elements and Ar-Ar results of the plutonic rocks from the Ordu plutons, Eastern Turkey, were studied to understand petrogenesis. The plutonic rocks consist of a variety of rock types ranging from quartzmonzonite to granite. These plutonic rocks have  $\text{SiO}_2=57,70-77,10$ ,  $\text{Al}_2\text{O}_3=12,35-18,10$ ,  $\text{Fe}_2\text{O}_3=2,17-7,21$ ,  $\text{MgO}=0,33-3,09$ ,  $\text{CaO}=0,25-6,12$ ,  $\text{Na}_2\text{O}=2,65-3,64$ ,  $\text{K}_2\text{O}=3,66-7,48$ . All of the rocks show a shoshonitic affinity. Chondrite-normalized REE patterns are moderately fractionated and relatively flat [(La/Yb)<sub>N</sub>=6 to 15]. They display small negative Eu anomalies with enrichment of LILE and less amount of depletion of HFSE. The  $^{40}\text{Ar}/^{39}\text{Ar}$  ages  $\sim 44$  Ma. These ages are interpreted as crystallization ages of the plutonic rocks and also these ages imply collision of the Pontide and Anatolide–Tauride platform.