

# Comparative planetary mineralogy: Pyroxene major- and minor-element chemistry and partitioning of vanadium between pyroxene and melt in planetary basalts

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## DEPOSIT ART INFORMATION (4 pages)

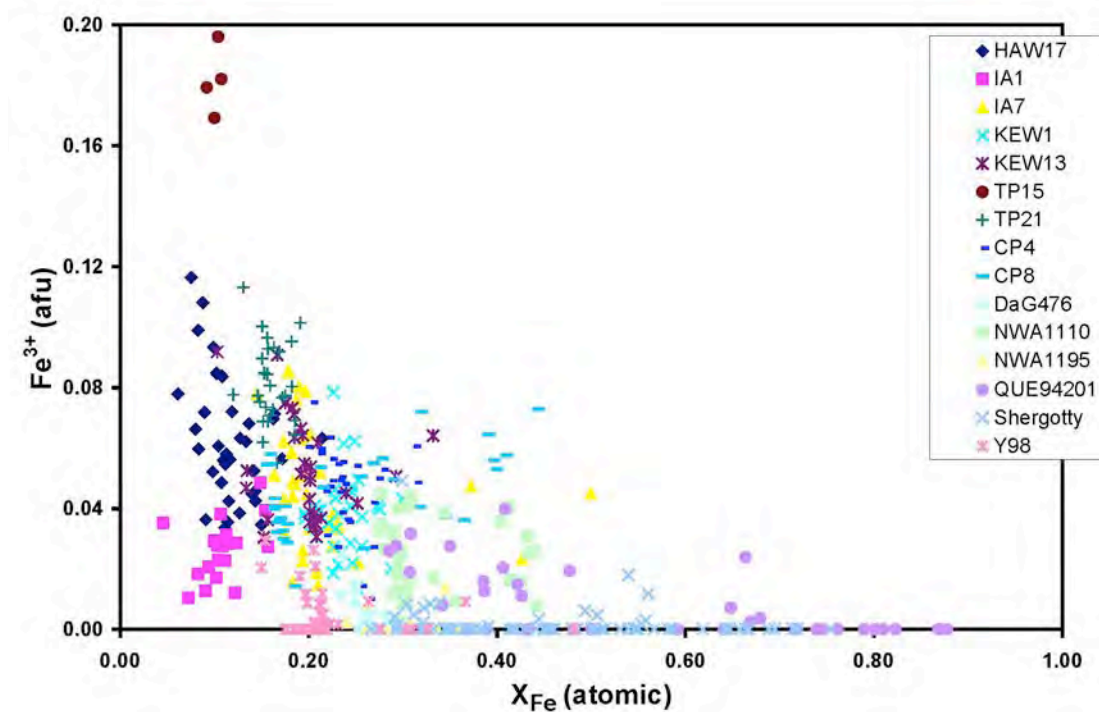


FIGURE A-1. Fe<sup>3+</sup> vs. X<sub>Fe</sub> for all of the terrestrial and martian pyroxene. See Figure A-2 caption for explanation of abbreviations.

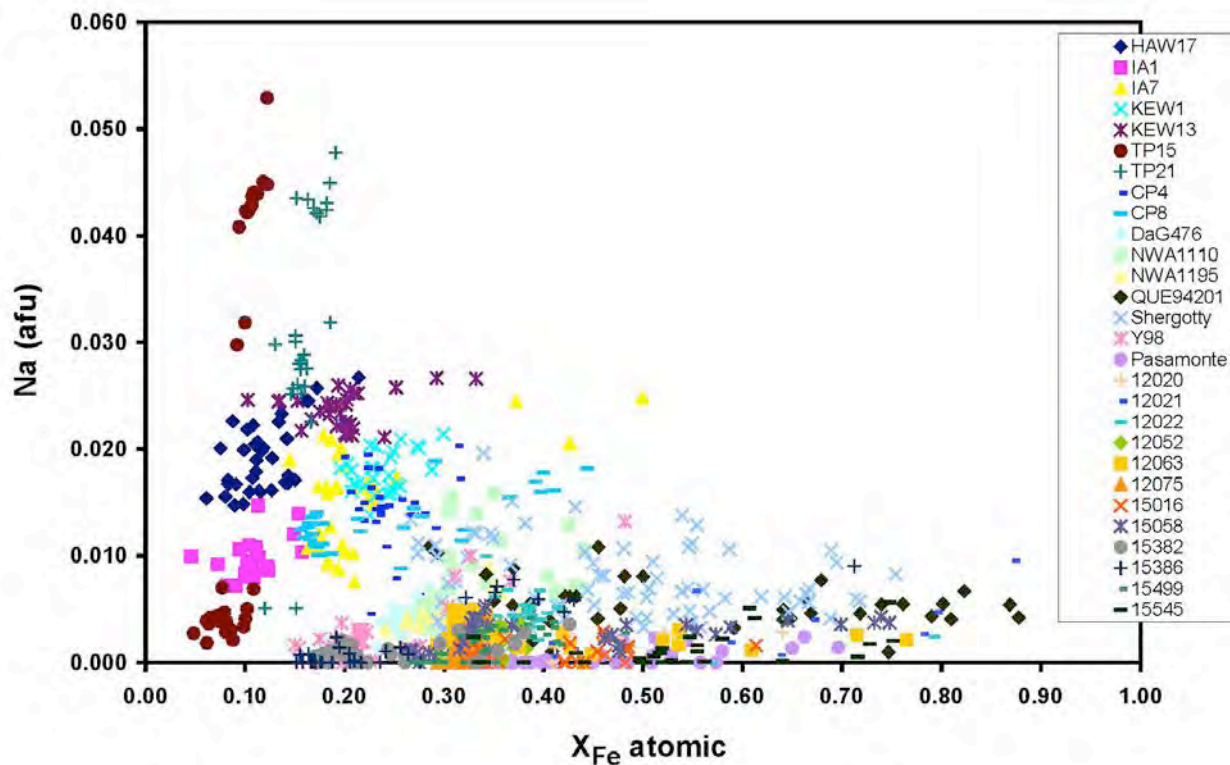


FIGURE A-2. Na vs.  $X_{Fe}$  variation diagram for pyroxene grains from all of the planetary basalt samples. KEW=Keweenawan, IA=Island Arc, CP=Columbia Plateau, HAW=Hawaiian, and TP=Taos Plateau. Lunar samples are listed by thin section number. Martian samples are DaG476, NWA1195, NWA1110, Shergotty and Yamato 980459 (Y98). The sample from 4 Vesta is Pasamonte.

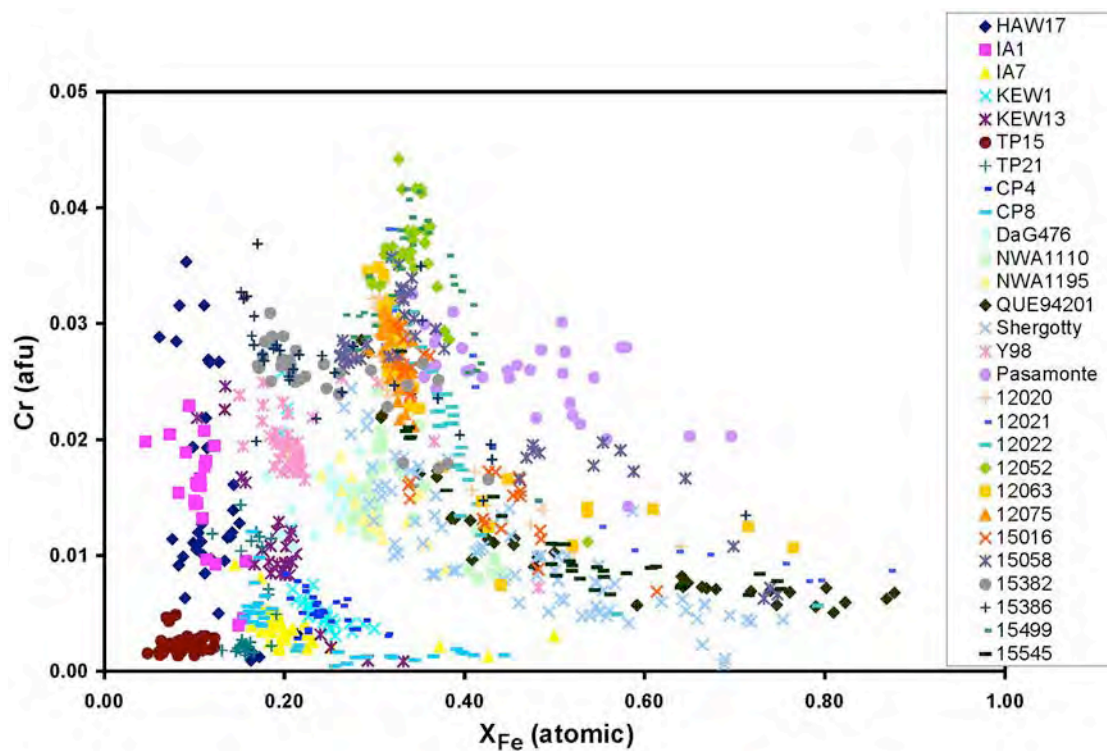


FIGURE A-3. Cr vs.  $X_{Fe}$  for pyroxene grains from all of the planetary basalt samples.

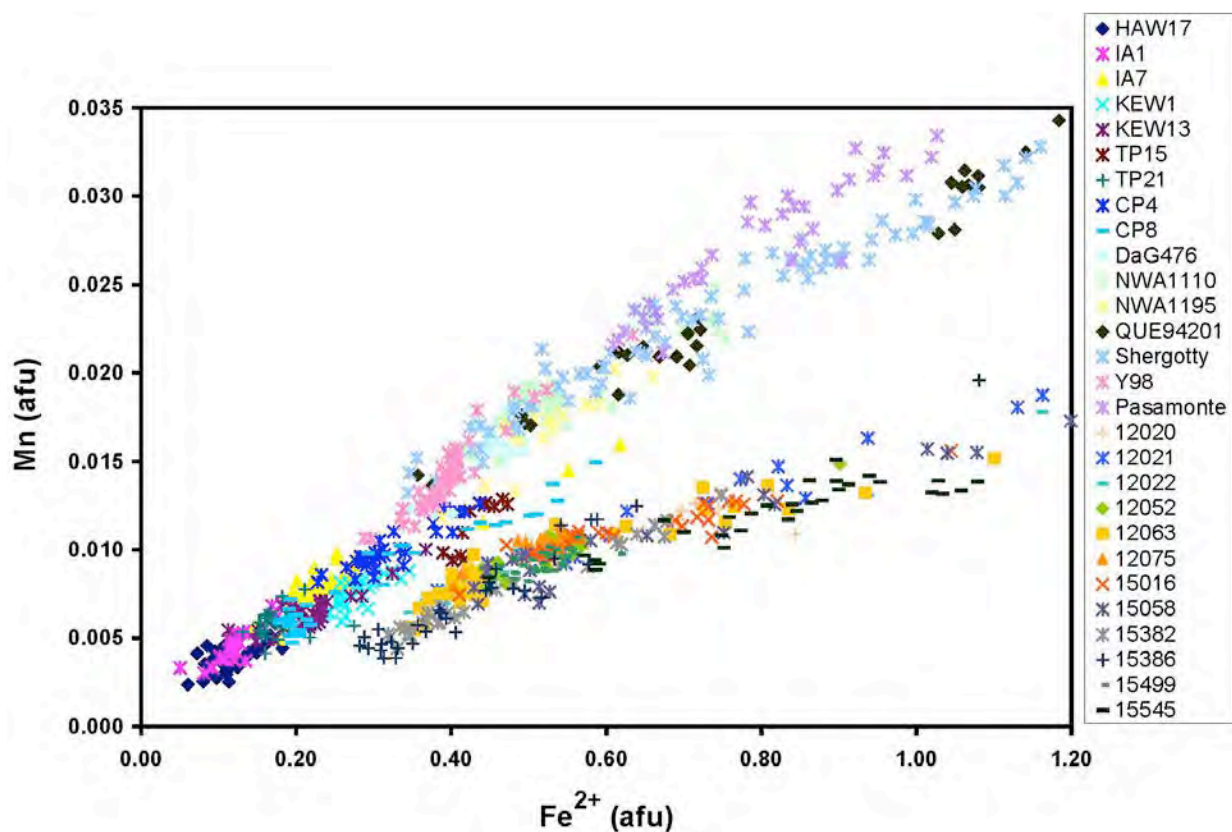


FIGURE A-4. Mn vs.  $\text{Fe}^{2+}$  in atoms per formula unit (afu) for pyroxene analyses from each thin section from the different basalt suites.

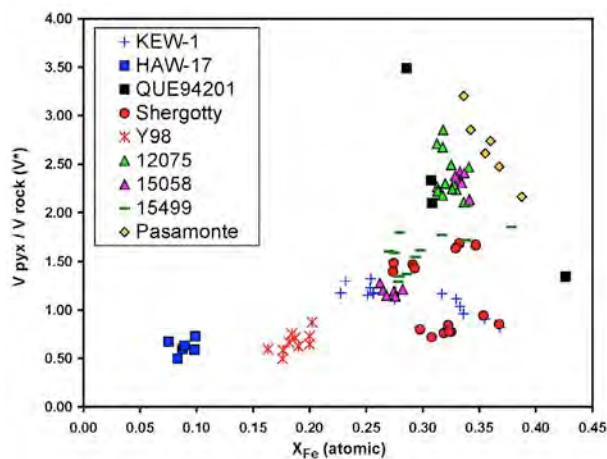


FIGURE A-5. V pyroxene/V rock ( $V^*$ ) vs.  $X_{\text{Fe}}$  for pyroxene grains from select basalt suites from the four different planets.

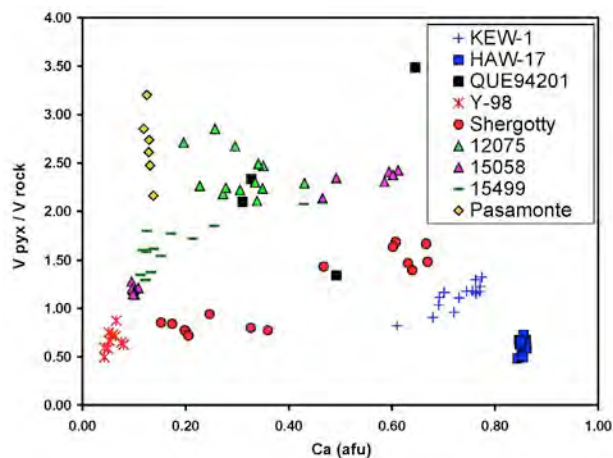


FIGURE A-6.  $V^*$  vs. Ca (afu) for the same pyroxene analyses as in Figure A-5.

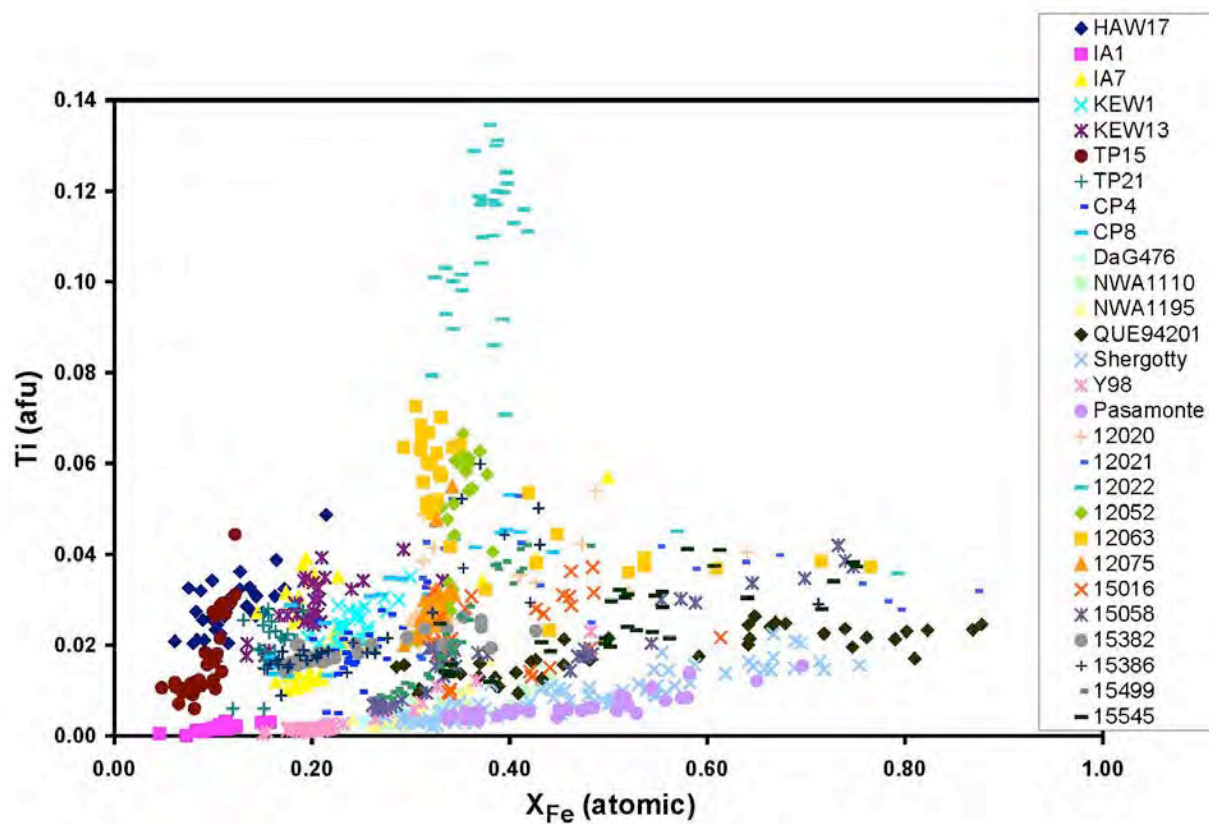


FIGURE A-7. Ti vs.  $X_{\text{Fe}}$  for pyroxene grains from all the planetary basalt samples.

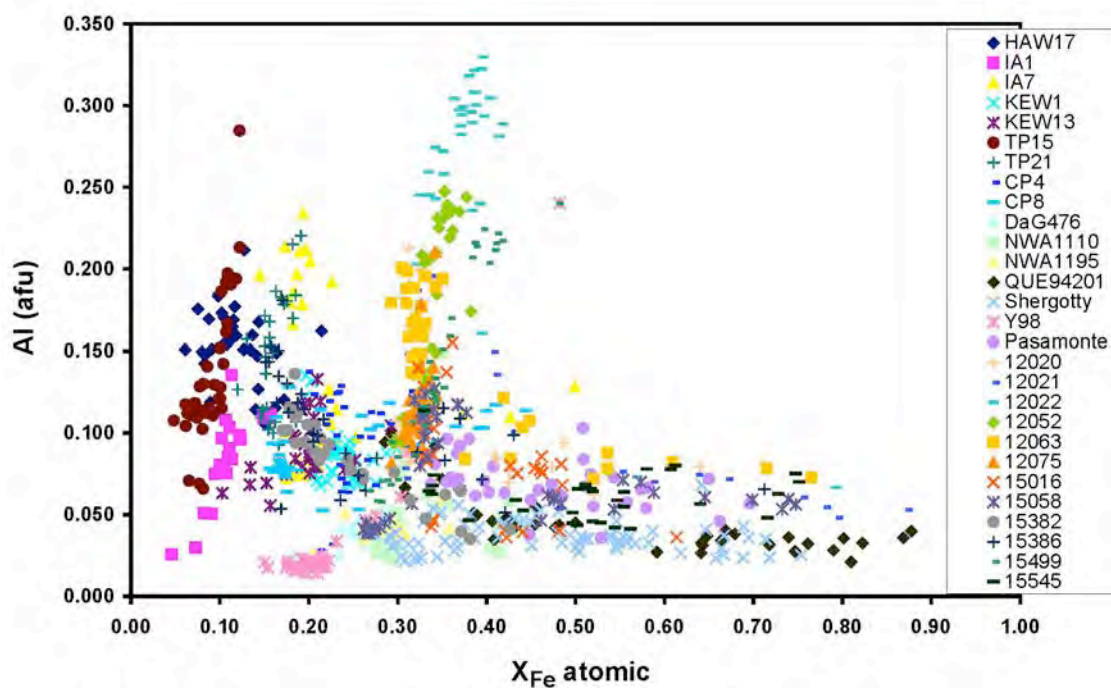


FIGURE A-8. Al vs.  $X_{\text{Fe}}$  for pyroxene grains from all the planetary basalt samples.