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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)

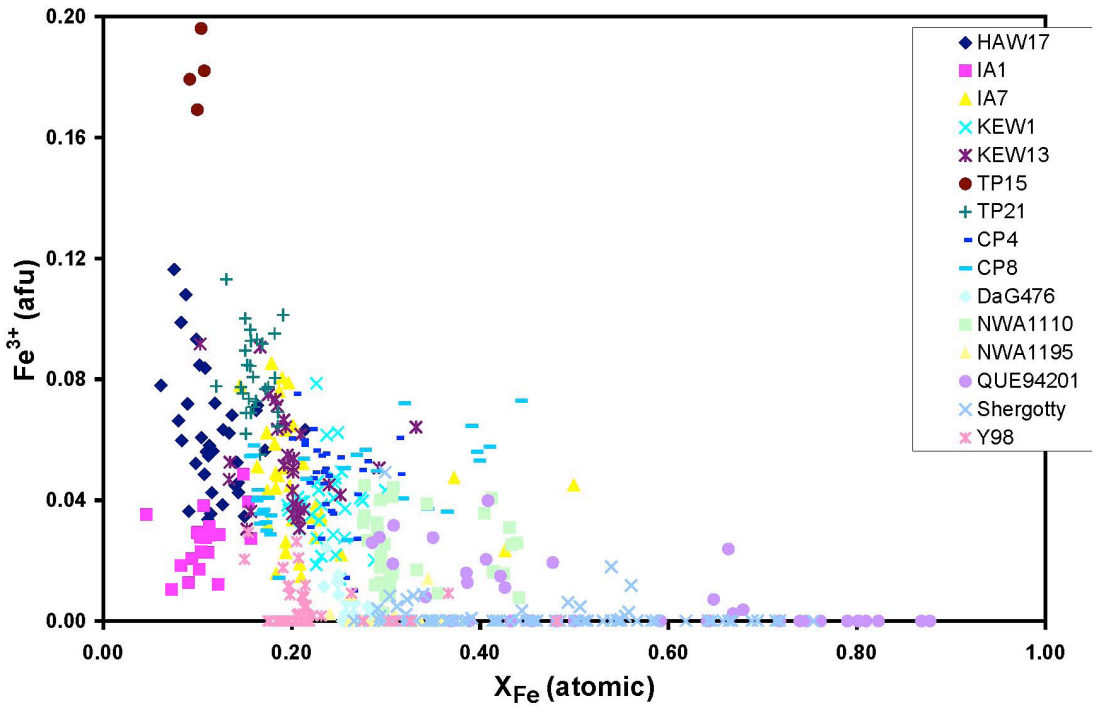

FIGURE A-1. Fe^{3+} vs. X_{Fe} for all o fhte terrestrial and martian pyroxene. See Figure A-2 caption for explanation of abbreviations.

0003-004X/06/0010–xxx$05.00/DOI: 10.2138/am.2006.2103 (appendix)

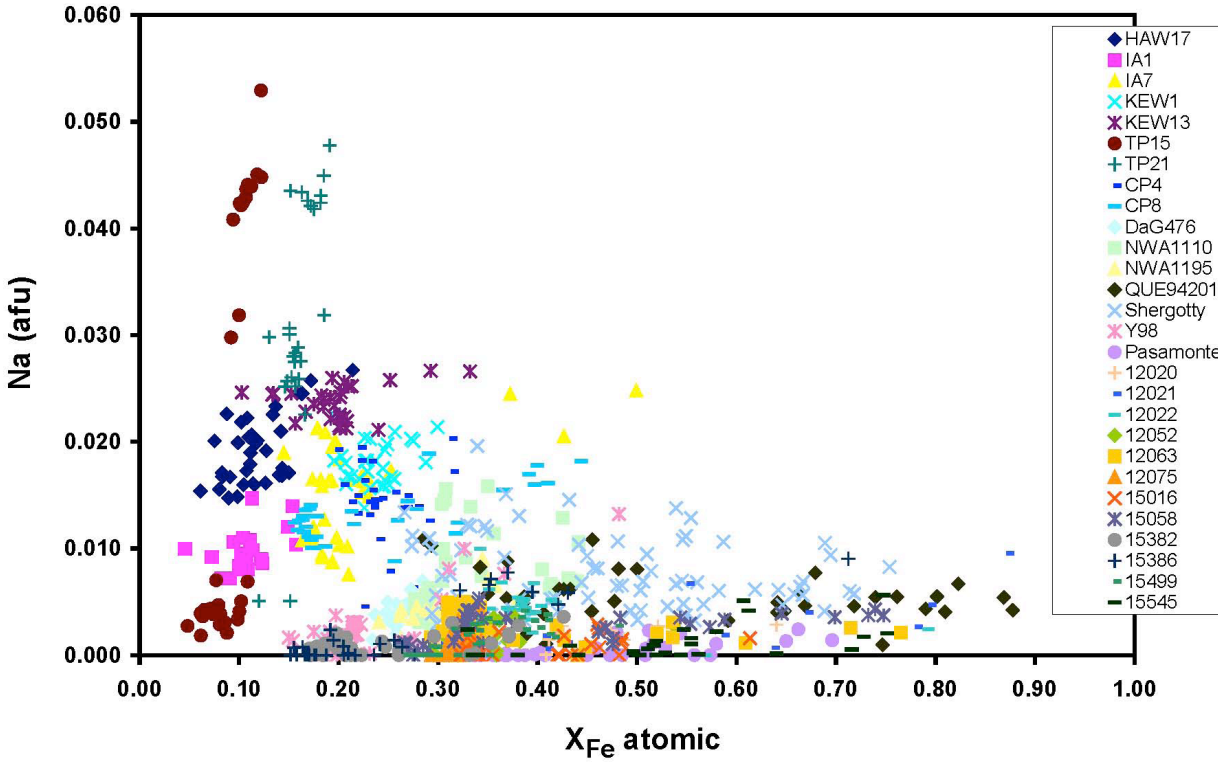

FIGURE A-2. Na vs. X_{Fe} variation diagram for pyroxene grains from all of the planetary basalt samples. KEW=Keweenawan, IA=Island Arc, CP=Columbia Plateau, HAW=Hawaiian, and TP=Taos Plateau. Lunar samples are listed by thin section number. Martian samples are DaG476, NWA1195, NWA1110, Shergotty and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

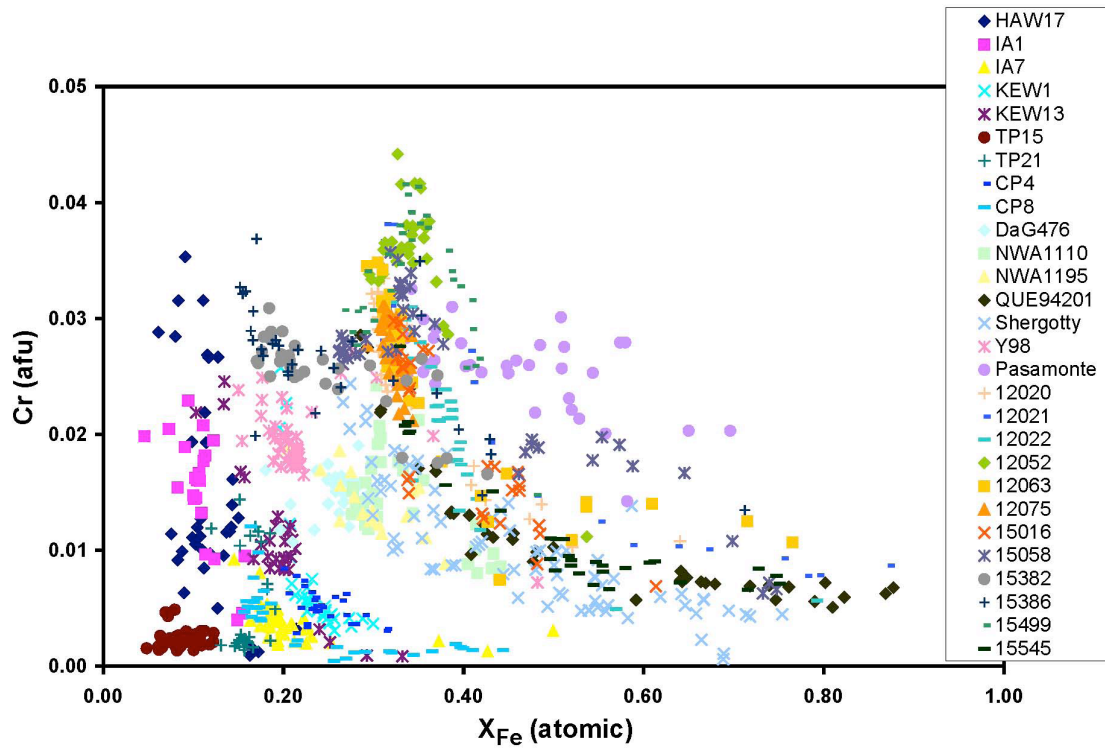

FIGURE A-3. Cr vs. X_{Fe} for pyroxene grains from all of the planetary basalt samples.

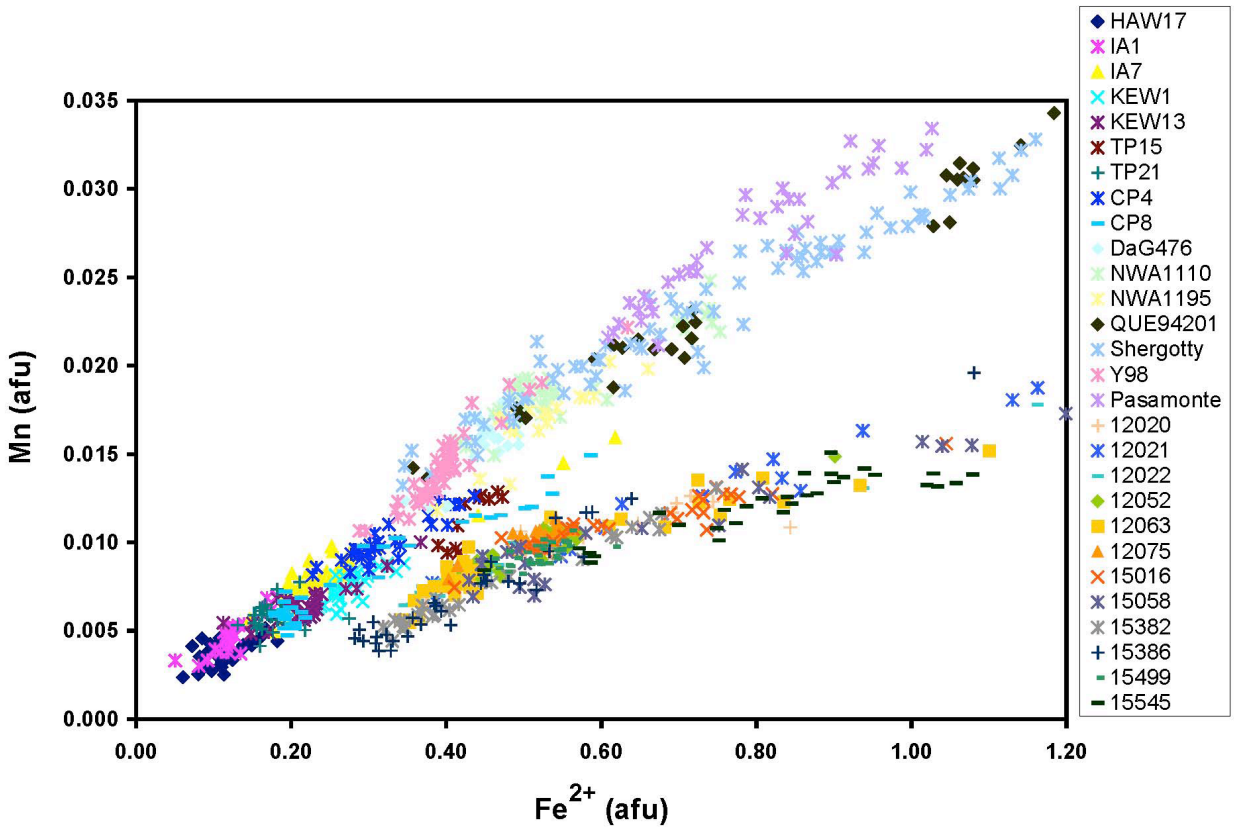

FIGURE A-4. Mn vs. Fe^{2+} in atoms per formula unit (afu) for pyroxene analyses from each thin section from the different basalt suites.

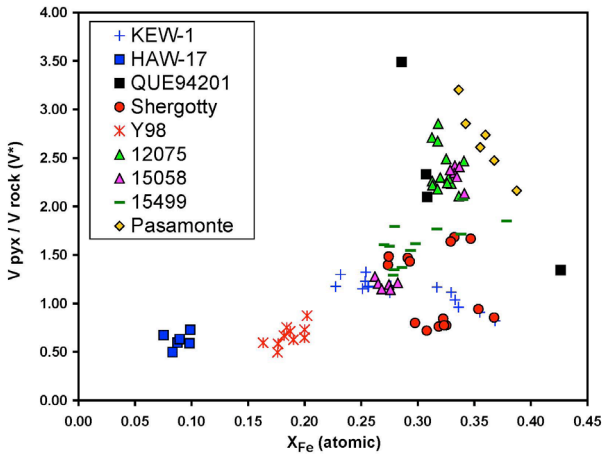

FIGURE A-5. V pyroxene/V rock (V*) vs. X_{Fe} for pyroxene grains from select basalt suites from the four different planets.

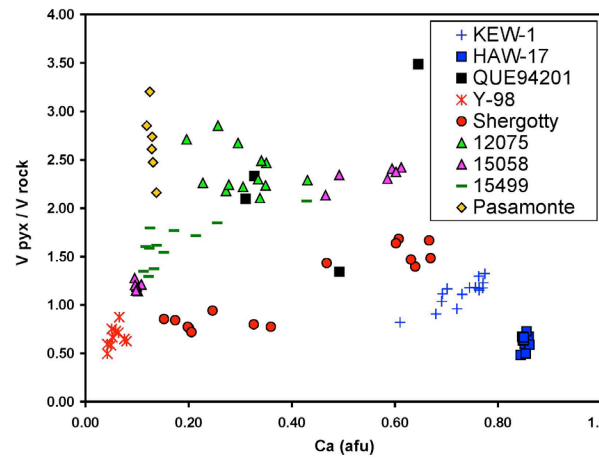

FIGURE A-6. V* vs. Ca (afu) for the same pyroxene analyses as in Figure A-6.

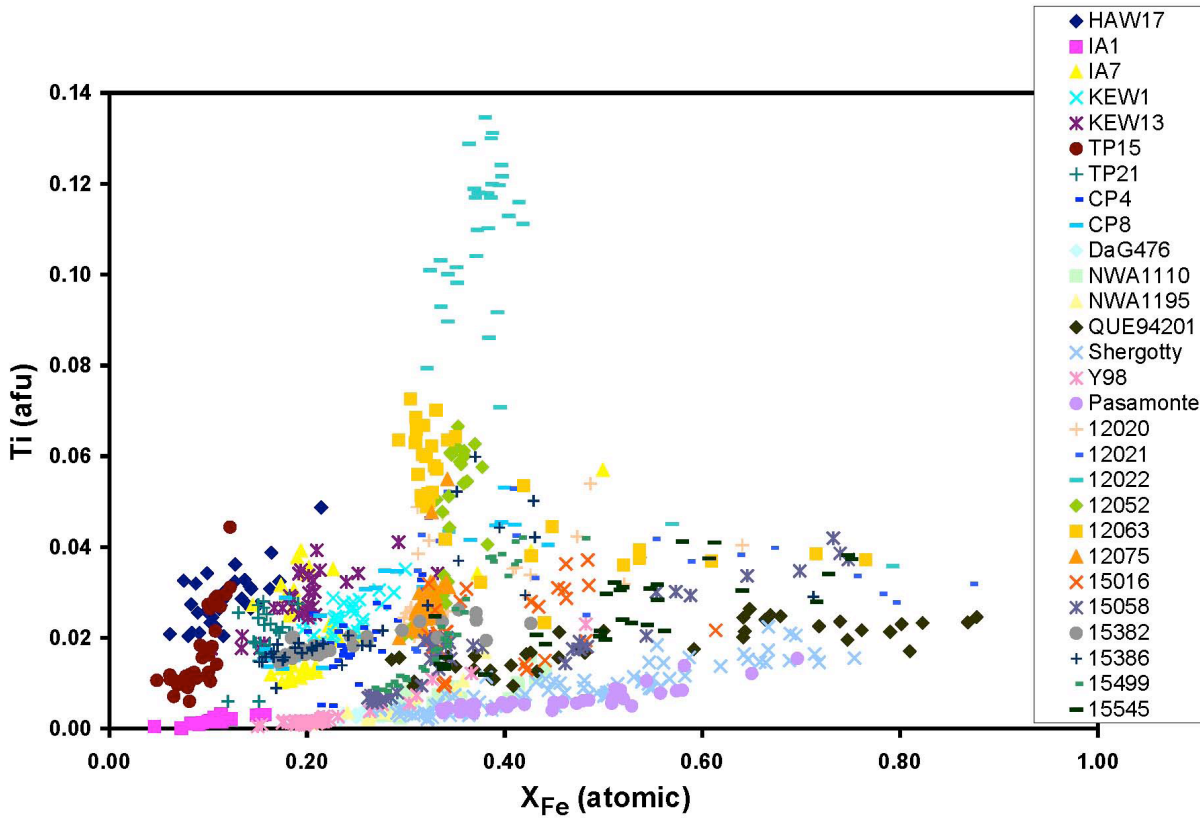

FIGURE A-7. Ti vs. X_{Fe} for pyroxene grains from all the planetary basalt samples.

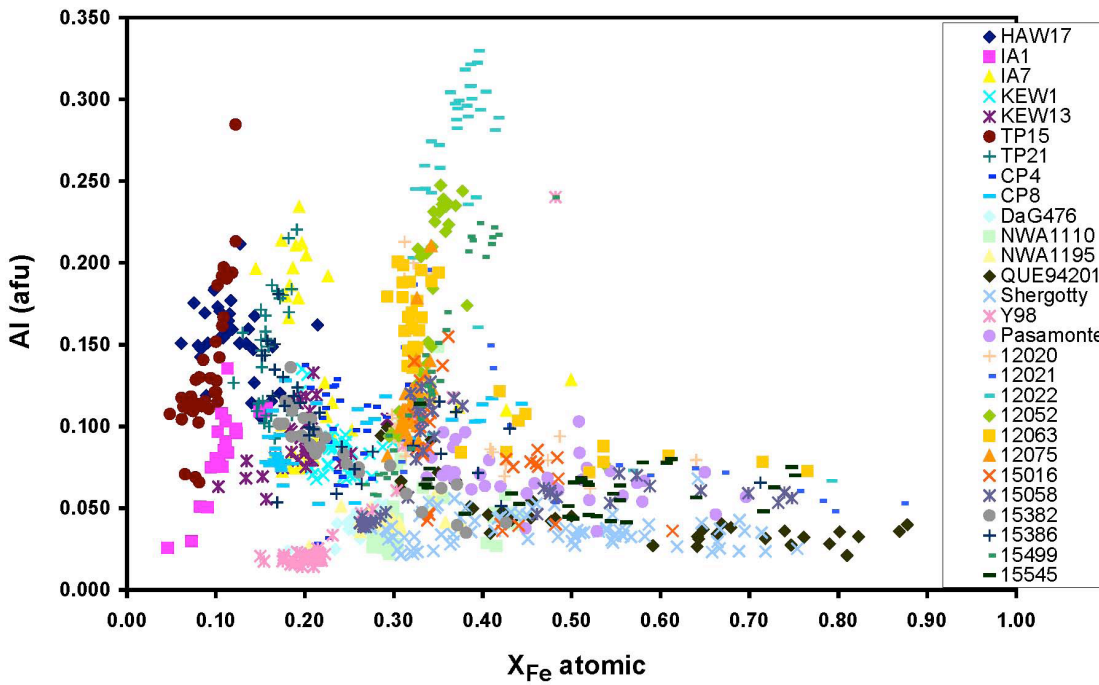

FIGURE A-8. Al vs. X_{Fe} for pyroxene grains from all the planetary basalt samples.