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= / kb) °C XCO2 = /

(P

Zn Cu W Au Fe

)

Sn Mo

. (Einaudi et al 1981) (

Sokolov and Sangster 1969)

(Einaudi et al 1981 Grigorev, 1977

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(

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(EDS)

(WDS)

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(Forster 1978)

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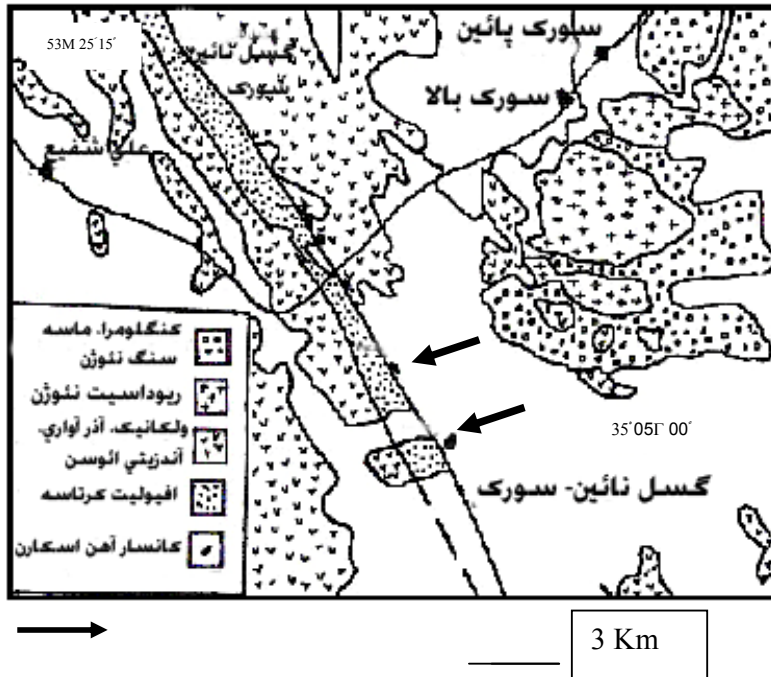
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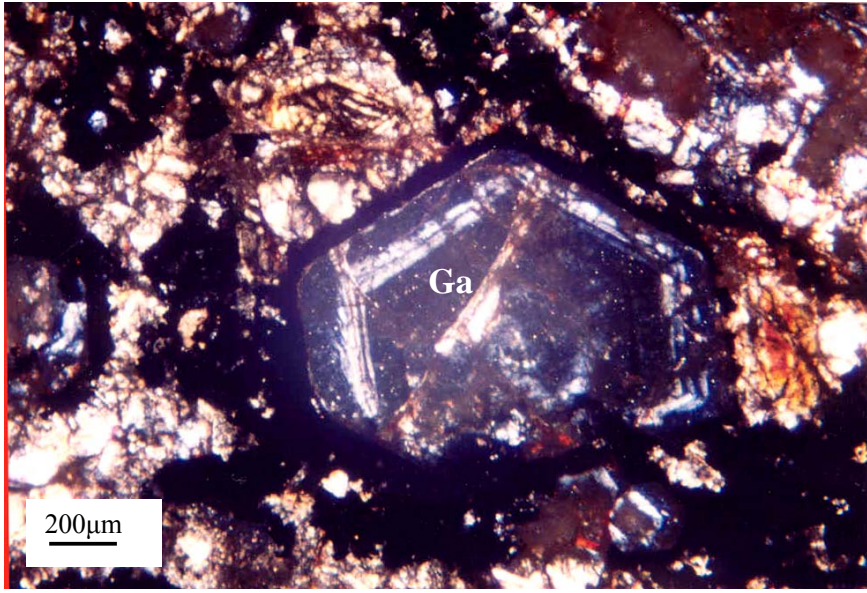
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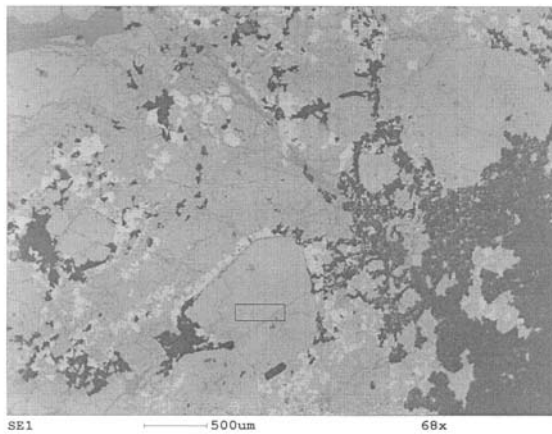
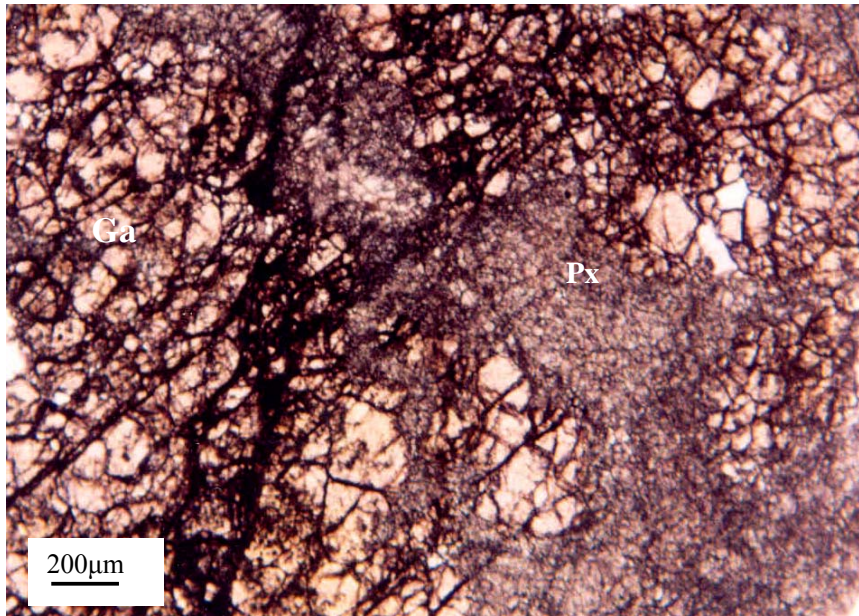


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Element	Wt%	At%
Na2O	0.77	0.87
MgO	1.00	1.74
Al2O3	2.74	1.89
SiO2	39.69	46.47
CaO	30.05	37.69
Fe2O3	25.76	11.34

EDS

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BSE

EDS

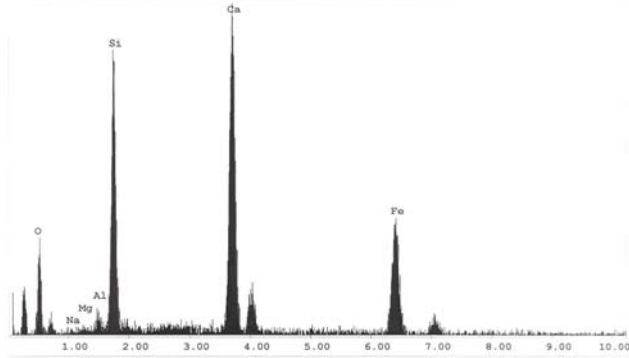
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WDS

EDS

UNTITLED
 Su.1
 kV:25.0 Tilt:0.00 Tkoff:25.01 Det:SUTM Reso:129.70 Amp.T:100.0
 FS : 321 LSec : 13.9 Prat:20C 9-Nov-2004 10:39:37

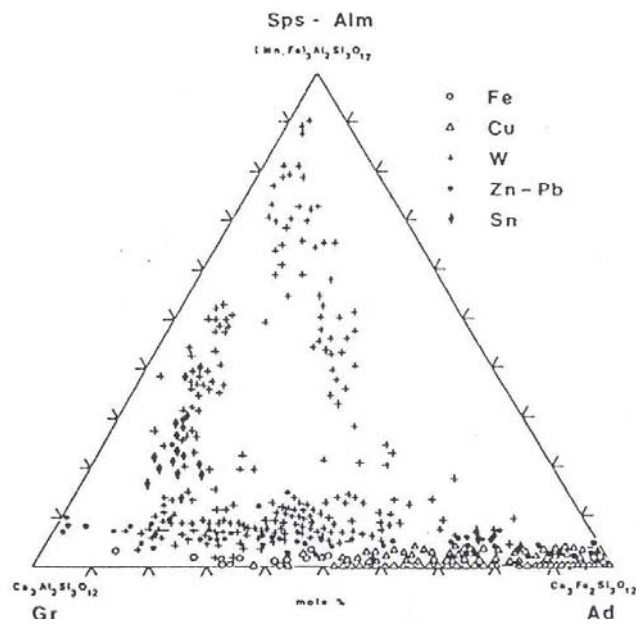
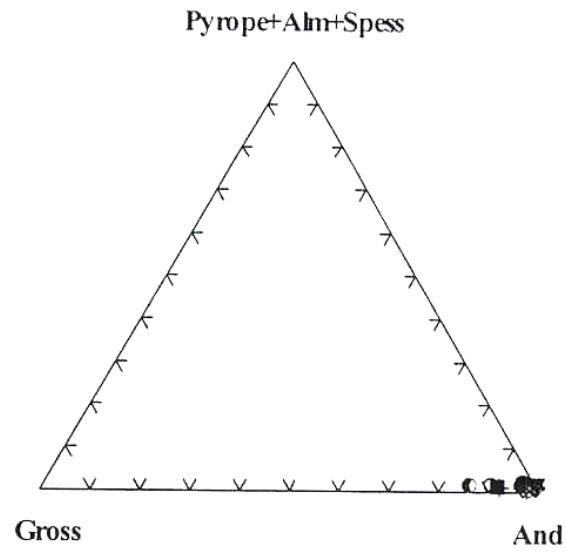


EDS

Sample%					
SiO2	/	/	/	/	/
TiO2	/	/	/	/	/
Al2O3	/	/	/	/	/
*FeO	/	/	/	/	/
MnO	/	/	/	/	/
MgO	/	/	/	/	/
CaO	/	/	/	/	/
Total	/	/	/	/	/

Si	/	/	/	/	/
Ti	/	/	/	/	/
Al	/	/	/	/	/
*Fe	/	/	/	/	/
Mn	/	/	/	/	/
Mg	/	/	/	/	/
Ca	/	/	/	/	/
Total	/	/	/	/	/
And%	/	/	/	/	/
Gross%	/	/	/	/	/
Spess%	/	/	/	/	/
Pyrope%	/	/	/	/	/

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(Einaudi et al 1981)

(Einaudi et al 1982)

Ca Fe

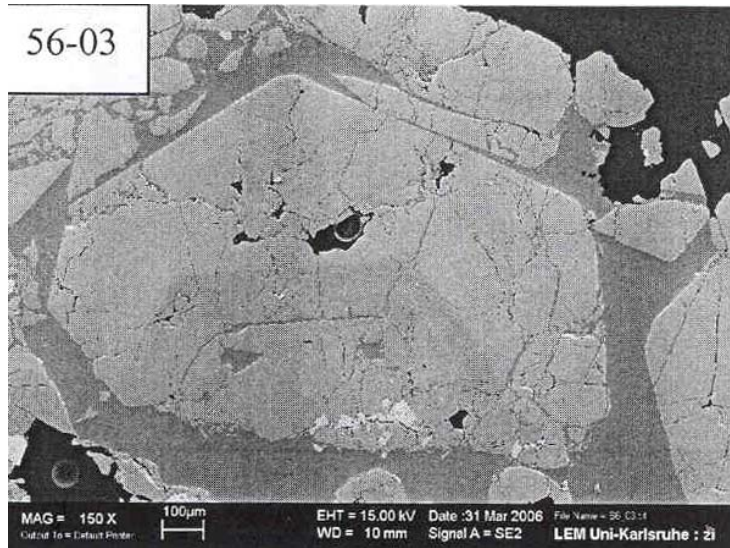
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Al

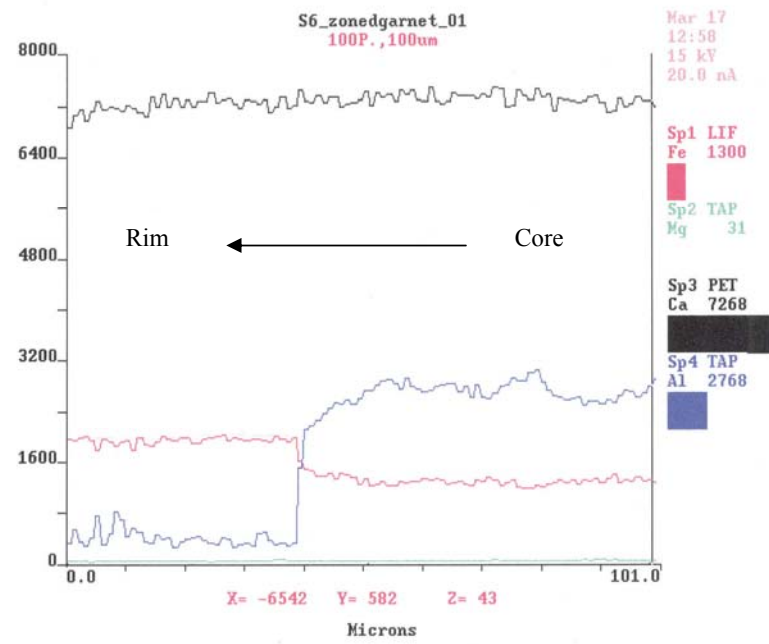
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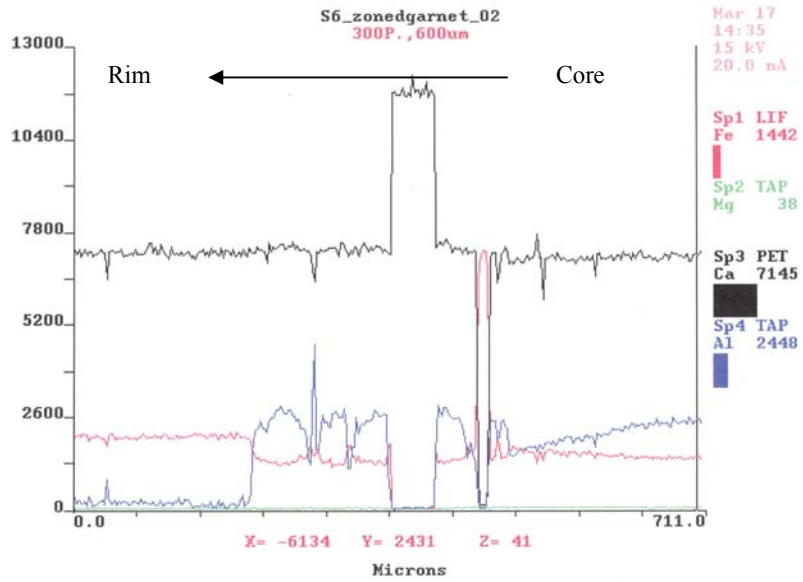
EPMA



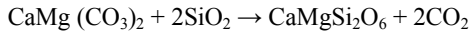
(BSE)



Al Ca Fe



:(Wenk and Bulakh, 2005)



.(Yardly et al 1991)

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$a\text{Fe}^{3+}/a\text{Al}^{3+}$

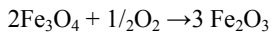
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Fe^{+3}

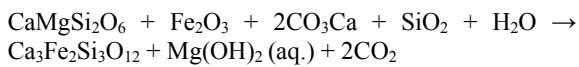
Fe^{2+}

$\text{Si}_{6.01}(\text{Fe}^{+3}, \text{Al}^{6+})_{4.05}(\text{Ca}, \text{Mn}, \text{Fe}^{+2})_6\text{O}_{24}$



Fe_2O_3 CaO SiO_2

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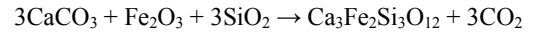


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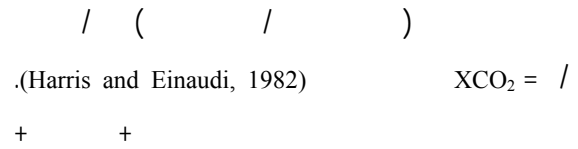
/ / CO_2

Fe⁺³/Al⁺³

(Deer et al 1991)



(Evans 1987)



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