

Spectrum processing :

No peaks omitted

Processing option : All elements analyzed (Normalised)

Number of iterations = 6

Standard :

C CaCO3 1-Jun-1999 12:00 AM

O SiO2 1-Jun-1999 12:00 AM

F MgF2 1-Jun-1999 12:00 AM

Al Al2O3 1-Jun-1999 12:00 AM

Si SiO2 1-Jun-1999 12:00 AM

Ti Ti 1-Jun-1999 12:00 AM

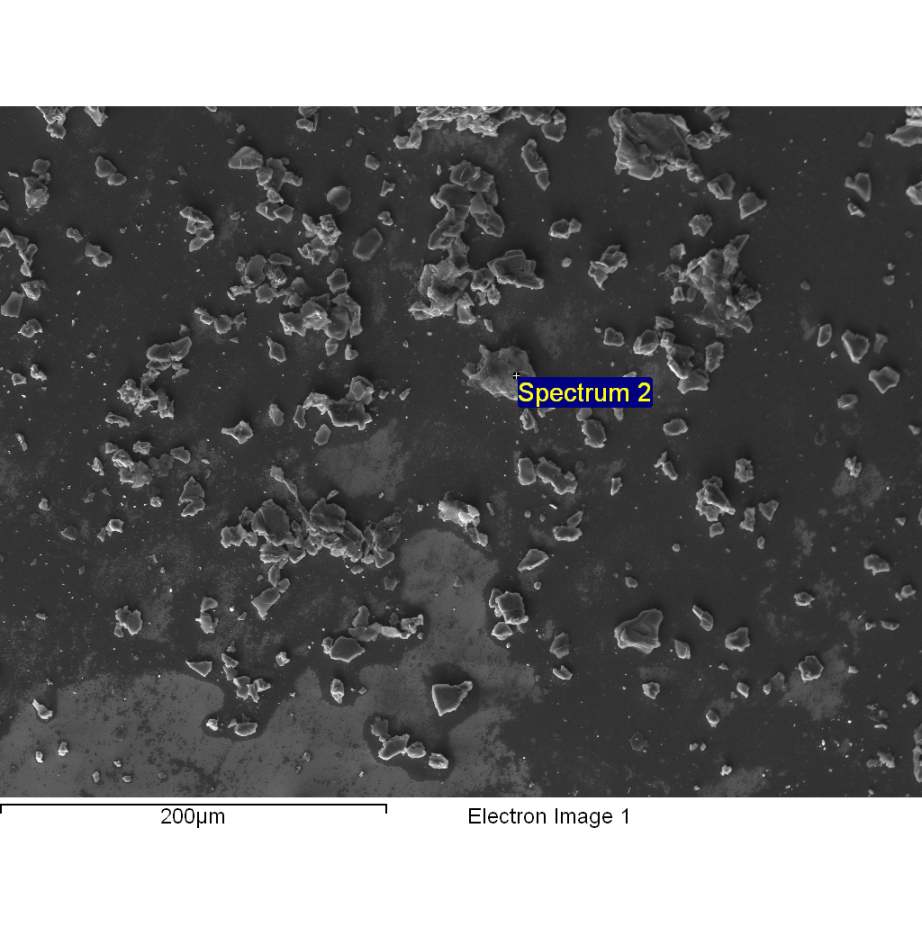
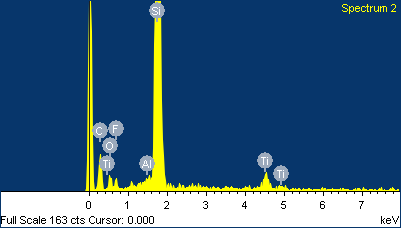
|  |  |  |  |
| --- | --- | --- | --- |
| Element | Weight% | Atomic% |  |
|  |  |  |  |
| C K | 41.97 | 60.48 |  |
| O K | 3.80 | 4.11 |  |
| F K | 23.53 | 21.44 |  |
| Al K | 2.28 | 1.46 |  |
| Si K | 8.76 | 5.40 |  |
| Ti K | 19.67 | 7.11 |  |
|  |  |  |  |
| Totals | 100.00 |  |  |

Comment:

Small map atop particle gives Ti/Al stochiometry 4.9:1

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Project 1



Spectrum processing :

No peaks omitted

Processing option : All elements analyzed (Normalised)

Number of iterations = 6

Standard :

C CaCO3 1-Jun-1999 12:00 AM

O SiO2 1-Jun-1999 12:00 AM

F MgF2 1-Jun-1999 12:00 AM

Al Al2O3 1-Jun-1999 12:00 AM

Si SiO2 1-Jun-1999 12:00 AM

Ti Ti 1-Jun-1999 12:00 AM

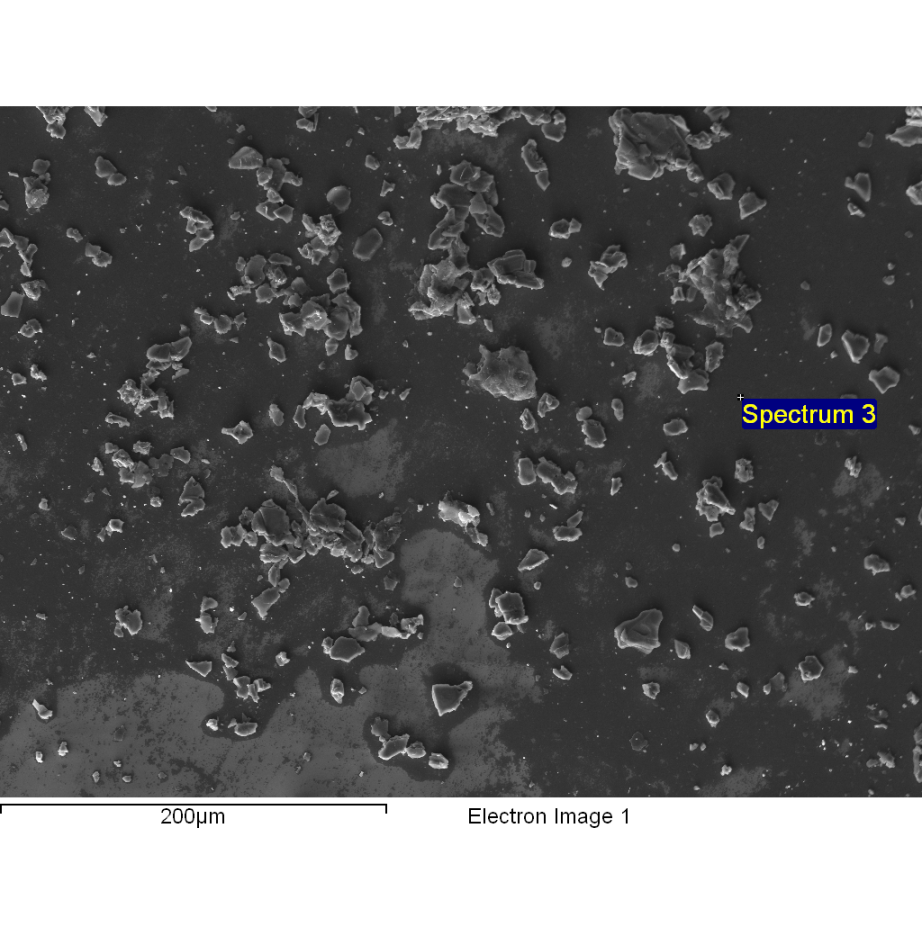
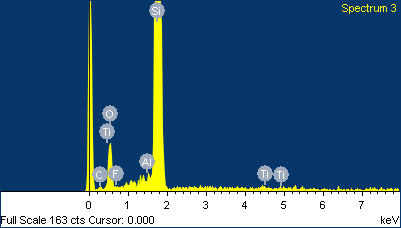
|  |  |  |  |
| --- | --- | --- | --- |
| Element | Weight% | Atomic% |  |
|  |  |  |  |
| C K | 40.47 | 58.66 |  |
| O K | 8.53 | 9.28 |  |
| F K | 3.18 | 2.91 |  |
| Al K | 0.10 | 0.06 |  |
| Si K | 45.80 | 28.39 |  |
| Ti K | 1.93 | 0.70 |  |
|  |  |  |  |
| Totals | 100.00 |  |  |

Comment:

Point scan on particle gives Ti/Al stoichiometry 11.6

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Project 1



Spectrum processing :

No peaks omitted

Processing option : All elements analyzed (Normalised)

Number of iterations = 5

Standard :

C CaCO3 1-Jun-1999 12:00 AM

O SiO2 1-Jun-1999 12:00 AM

F MgF2 1-Jun-1999 12:00 AM

Al Al2O3 1-Jun-1999 12:00 AM

Si SiO2 1-Jun-1999 12:00 AM

Ti Ti 1-Jun-1999 12:00 AM

|  |  |  |  |
| --- | --- | --- | --- |
| Element | Weight% | Atomic% |  |
|  |  |  |  |
| C K | 7.42 | 13.71 |  |
| O K | 21.97 | 30.49 |  |
| F K | -0.05 | -0.06 |  |
| Al K | -0.07 | -0.06 |  |
| Si K | 70.68 | 55.89 |  |
| Ti K | 0.05 | 0.02 |  |
|  |  |  |  |
| Totals | 100.00 |  |  |

Comment:

Point scan aimed at continuous MXene region sees negligible Ti.

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Project 1

Project: Project 1

Owner: Admin1

Site: Site of Interest 1

Sample: Sample 1

Type: Default

ID: JB-Ti3AlC2-003

Processing option : All elements analysed (Normalised)

All results in **weight%**

Spectrum In stats. C O F Al Si Ti Total

Spectrum 1 Yes 41.97 3.80 23.53 2.28 8.76 19.67 100.00

Spectrum 2 Yes 40.47 8.53 3.18 0.10 45.80 1.93 100.00

Spectrum 3 Yes 7.42 21.97 -0.05 -0.07 70.68 0.05 100.00

Spectrum 4 Yes 3.91 21.96 -0.32 -0.01 74.35 0.11 100.00

Spectrum 5 Yes 13.68 11.05 1.53 11.56 0.84 61.34 100.00

Spectrum 6 Yes 27.57 16.54 2.50 0.41 50.58 2.40 100.00

Mean 22.50 13.97 5.06 2.38 41.84 14.25 100.00

Std. deviation 16.60 7.43 9.15 4.58 30.84 24.25

Max. 41.97 21.97 23.53 11.56 74.35 61.34

Min. 3.91 3.80 -0.32 -0.07 0.84 0.05

Project: Project 1

Owner: Admin1

Site: Site of Interest 1

Sample: Sample 1

Type: Default

ID: JB-Ti3AlC2-003

Processing option : All elements analysed (Normalised)

All results in **atomic%**

Spectrum In stats. C O F Al Si Ti

Spectrum 1 Yes 60.48 4.11 21.44 1.46 5.40 7.11

Spectrum 2 Yes 58.66 9.28 2.91 0.06 28.39 0.70

Spectrum 3 Yes 13.71 30.49 -0.06 -0.06 55.89 0.02

Spectrum 4 Yes 7.52 31.69 -0.39 -0.01 61.13 0.05

Spectrum 5 Yes 31.21 18.93 2.20 11.74 0.82 35.10

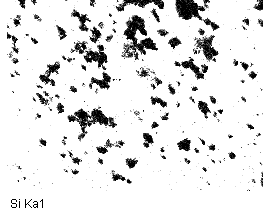
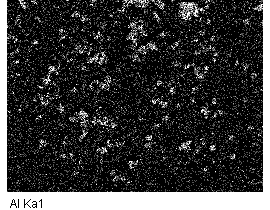
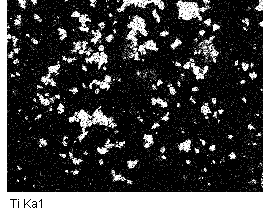
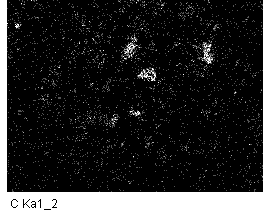
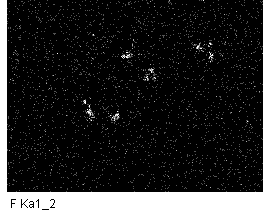
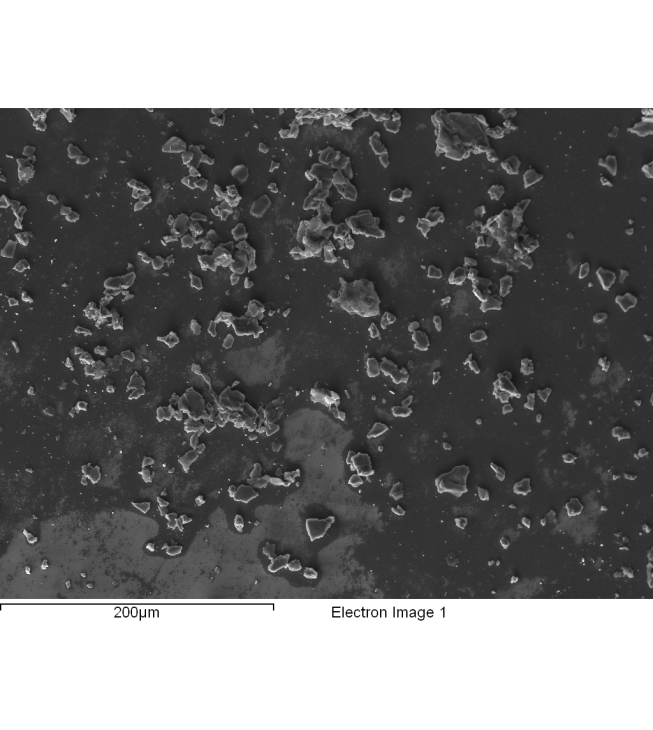
Spectrum 6 Yes 43.09 19.41 2.47 0.29 33.81 0.94

Mean 35.78 18.98 4.76 2.25 30.91 7.32

Std. deviation 22.33 11.04 8.28 4.69 24.93 13.87

Max. 60.48 31.69 21.44 11.74 61.13 35.10

Min. 7.52 4.11 -0.39 -0.06 0.82 0.02



Comment:

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Project 1