

SEM - Tescan Mira3 II

Date: 2019-12-03

Tags: SEM 07/10/2019Synth TescanSC

Created by: James Bird

1 / 4

Goal : Obtain micrographs to investigate vacuum oven-dried film morphology

Procedure :

- Samples (see 'SEM stub preparation for film characterisation') loaded into SEM chamber and vacuum acquired
- 10 kV accelerating voltage set for electron beam
- WD between either roughly 5 or 9 mm (analytical working distance (AWD) is 15 mm)
- Everhart-Thornley secondary electron (SE) detector employed

Results :

Sample	Filename prefix
Vacuum oven-dried $\text{Ti}_3\text{C}_2\text{T}_z$ film	Ti3C2 vac dried film

Film morphology clearly imaged at various magnifications. Torn film section and edges clearly show layered microstructure. Improved command of brightness and contrast levels.

.tif files are micrographs, .hdr files are complementary data files for each micrograph.

Attached files

Ti3C2-vac-dried-film03-tif.hdr

sha256: 6ad360a29b54d8effb64dcf254d71676901ac9383a92c8ff3fbdea938db0c9f8

Ti3C2-vac-dried-film04-tif.hdr

sha256: 49f160b2ae8493b9200d1b4ec7fea36ef0929099591c0d94e44c8413bb8d25f4

Ti3C2-vac-dried-film05-tif.hdr

sha256: c86bb537702f944f4e90a70e7c38bb6110309158a71fd39f780fa18f04166fc5

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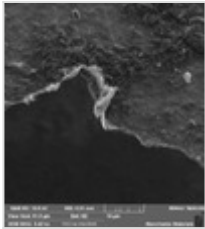
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2 / 4

Ti3C2-vac-dried-film05.tif

sha256: d38f821693128c285c4439ffd68fc541a09838f00fa68f767431ffe7c8b64548

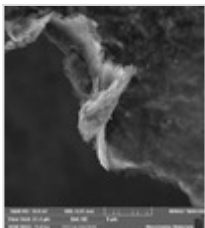


Ti3C2-vac-dried-film06.tif.hdr

sha256: 7ad765c6d9c7503ec8eb86f65b4f7ea3778b8624999819c82bfc9e5e4850b1a

Ti3C2-vac-dried-film06.tif

sha256: 8feee68f7736ab01b8ff0163fc676fe7866bb7dbda3c023b7eac40fe570f9fa9

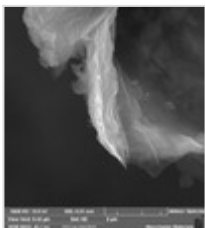


Ti3C2-vac-dried-film07.tif.hdr

sha256: 918e338f62601e689d15909d08474058fee1ecb908f0171eec2ef5216971eda5

Ti3C2-vac-dried-film07.tif

sha256: a35ef9c02e0126d01faee2102fd7be03348004390d6aa5e89daa16779429e5eb



Ti3C2-vac-dried-film08.tif.hdr

sha256: 0df2dd083a0502dded74c8e687e63aea3e9fa6d458d7a6253d9c3d9f71b3eb9f

Ti3C2-vac-dried-film08.tif

sha256: 3af1863e9a192f3edf43bd4340c2f59fb50b63b342d7c108ead03e88a8335852

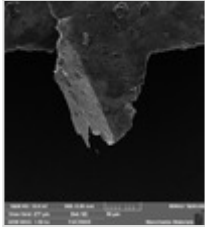
SEM - Tescan Mira3 II

Date: 2019-12-03

Tags: SEM 07/10/2019Synth TescanSC

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3 / 4

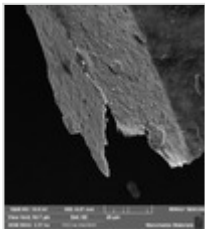


Ti3C2-vac-dried-film01-tif.hdr

sha256: 91ca9040e57ff5cfd63d0f27389d0514eb7c1fc2eb2780b1efffd1e017011699

Ti3C2-vac-dried-film01.tif

sha256: a260b075a6d9d960981d3e023d48eb9e2b15403facaf0d7fed34252f814c6ae7

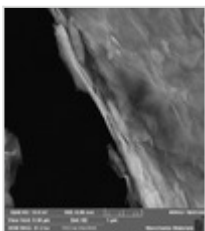


Ti3C2-vac-dried-film02-tif.hdr

sha256: 317c5af340be1eda88fb9792e28986c5f8ddf00e088a90c0a638a00c7972ec35

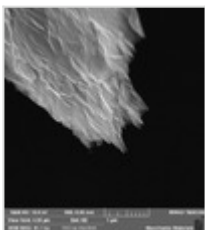
Ti3C2-vac-dried-film02.tif

sha256: 7f033b913c5540563e78ae18010f7b03225973864c4a17dff9090b47e33a705



Ti3C2-vac-dried-film03.tif

sha256: 4c3c2c78bdc588612e96ea83e0323abf8f4b3541c12044baa795146fc5332de9



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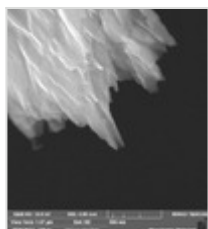
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4 / 4

Ti3C2-vac-dried-film04.tif

sha256: 7da7e86b1df77ce77a080ce3f5a239c7b96a4e6a32de39a2cb5799e0b373814a



Unique eLabID: 20221012-92da85224ec180f94910a1958e756b0524d52985

Link: <https://frankel-elab.manchester.ac.uk/experiments.php?mode=view&id=32>