

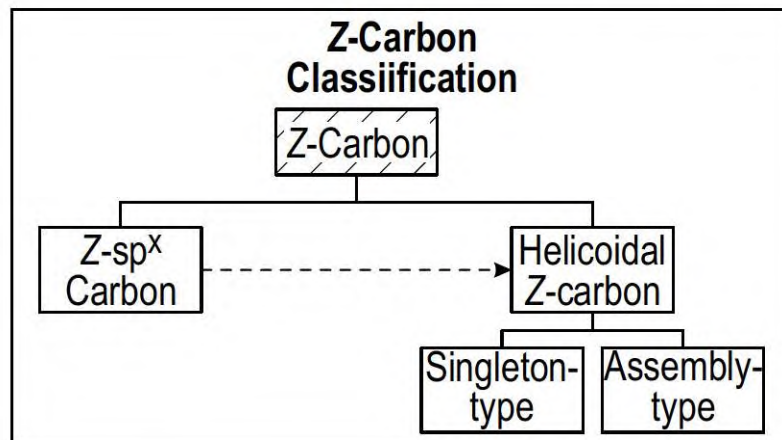
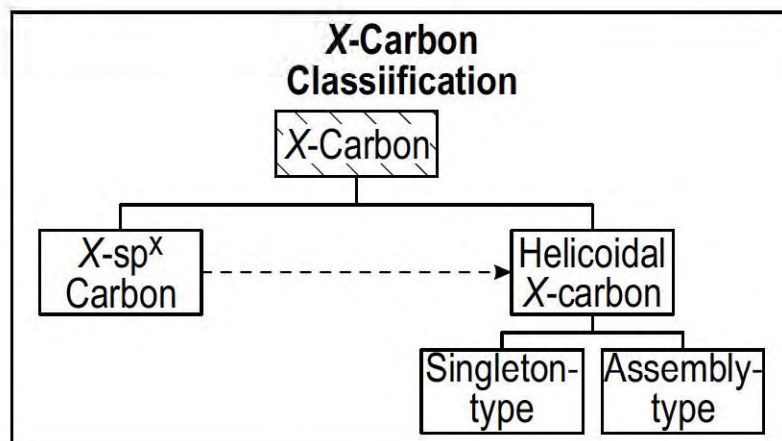
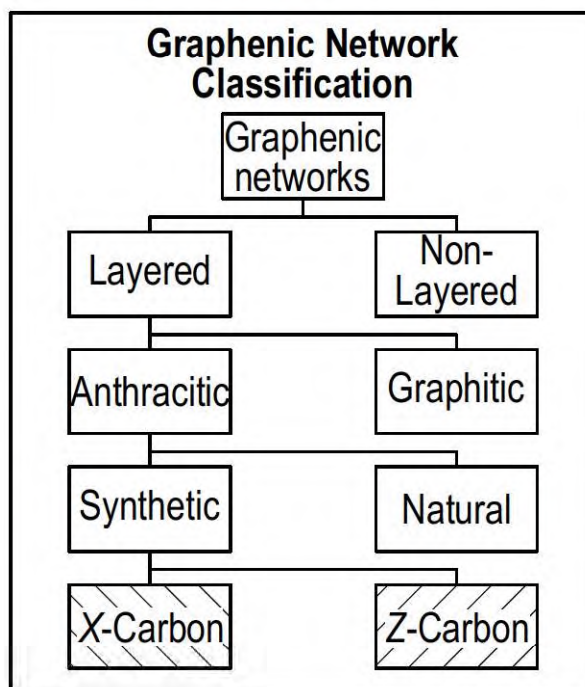


FIG. 1

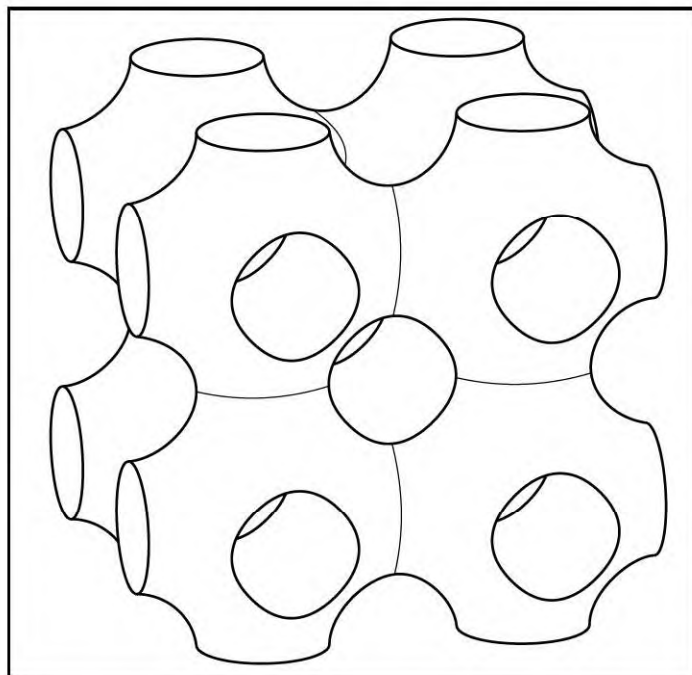
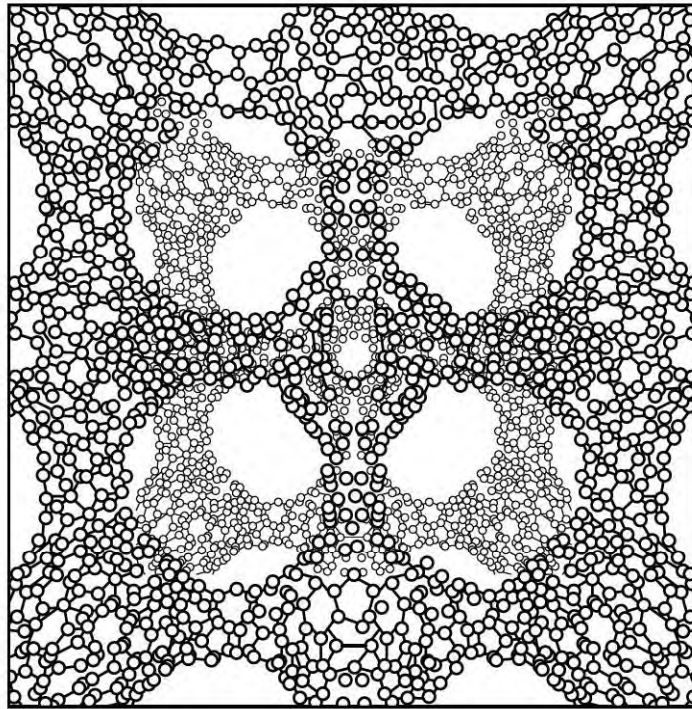


FIG. 2

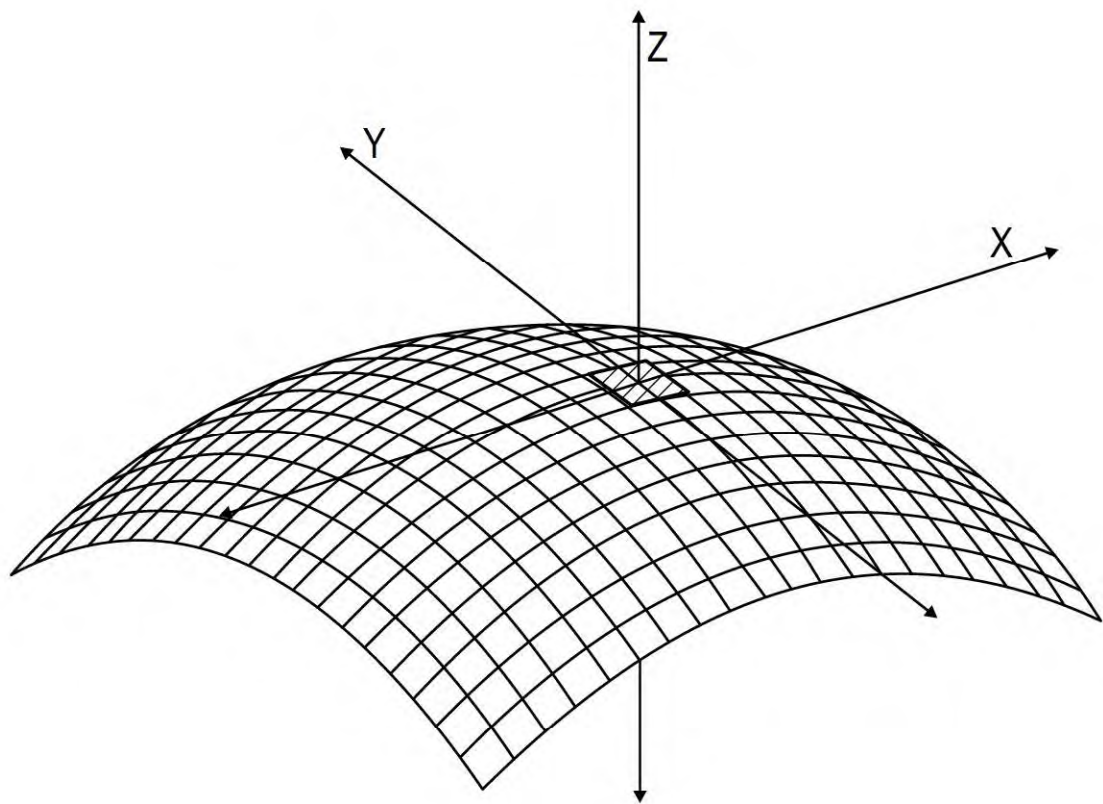


FIG. 3

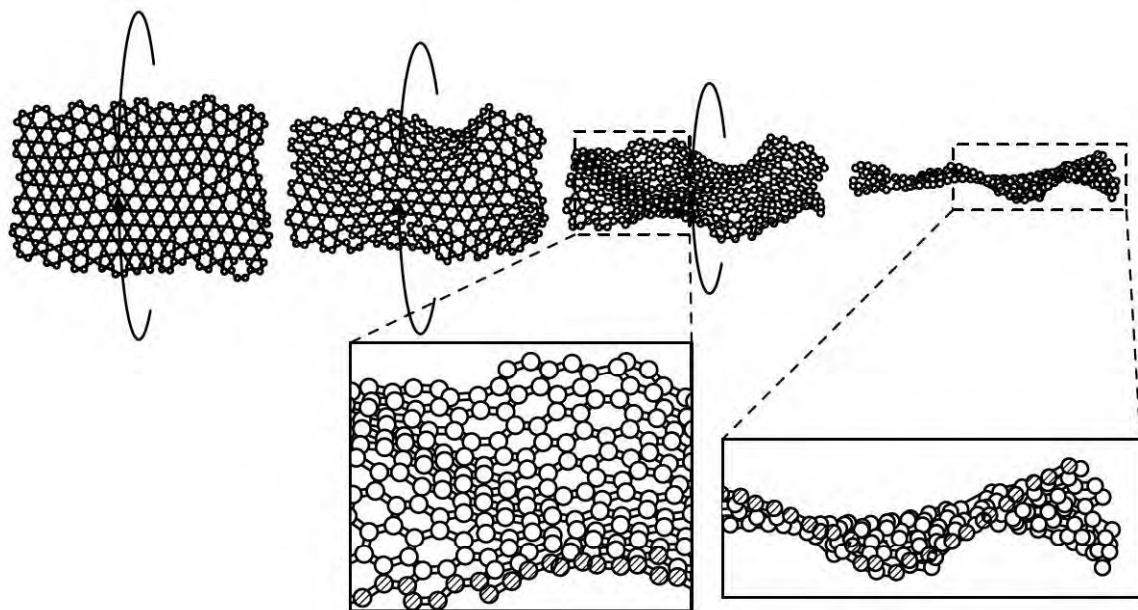


FIG. 4

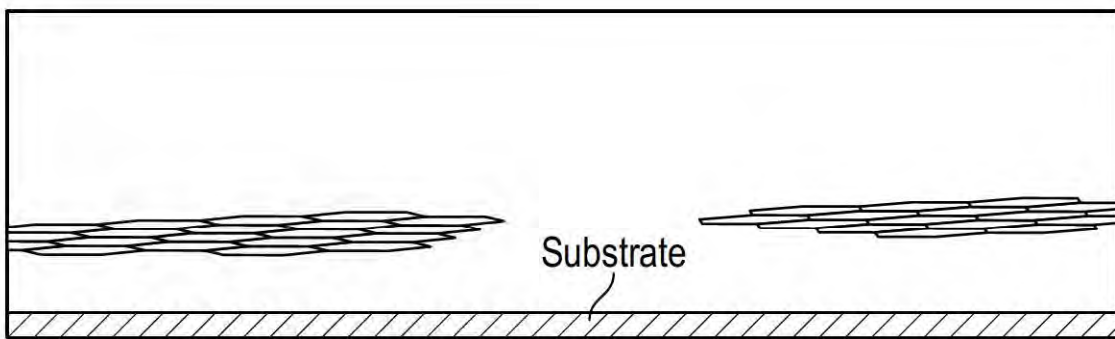


FIG. 5A

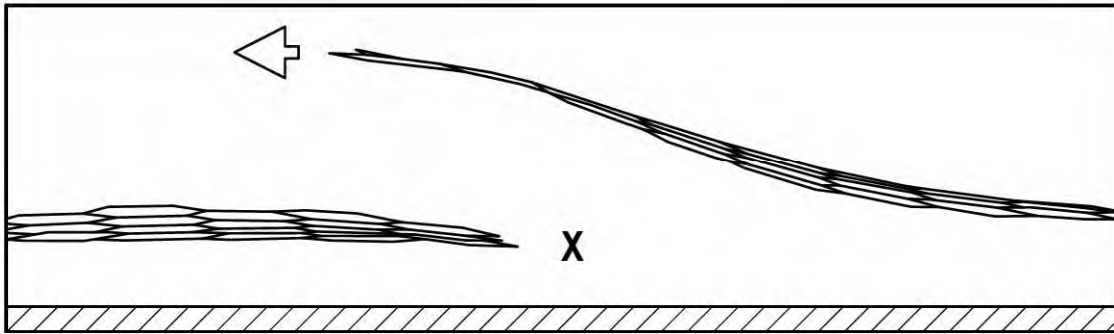


FIG. 5B

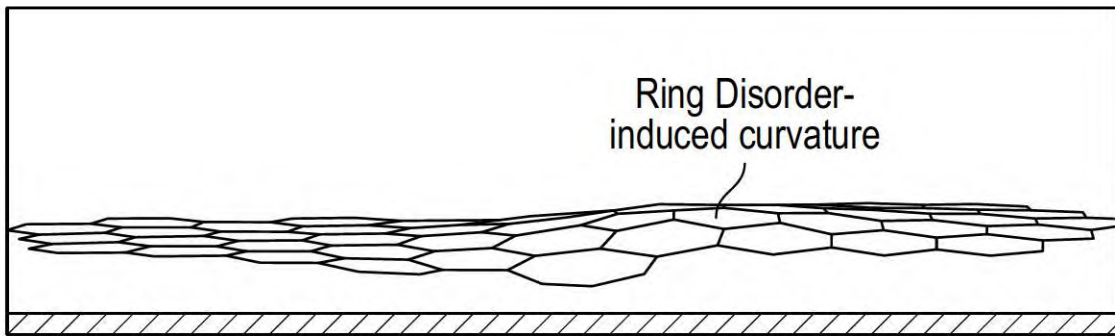


FIG. 5C

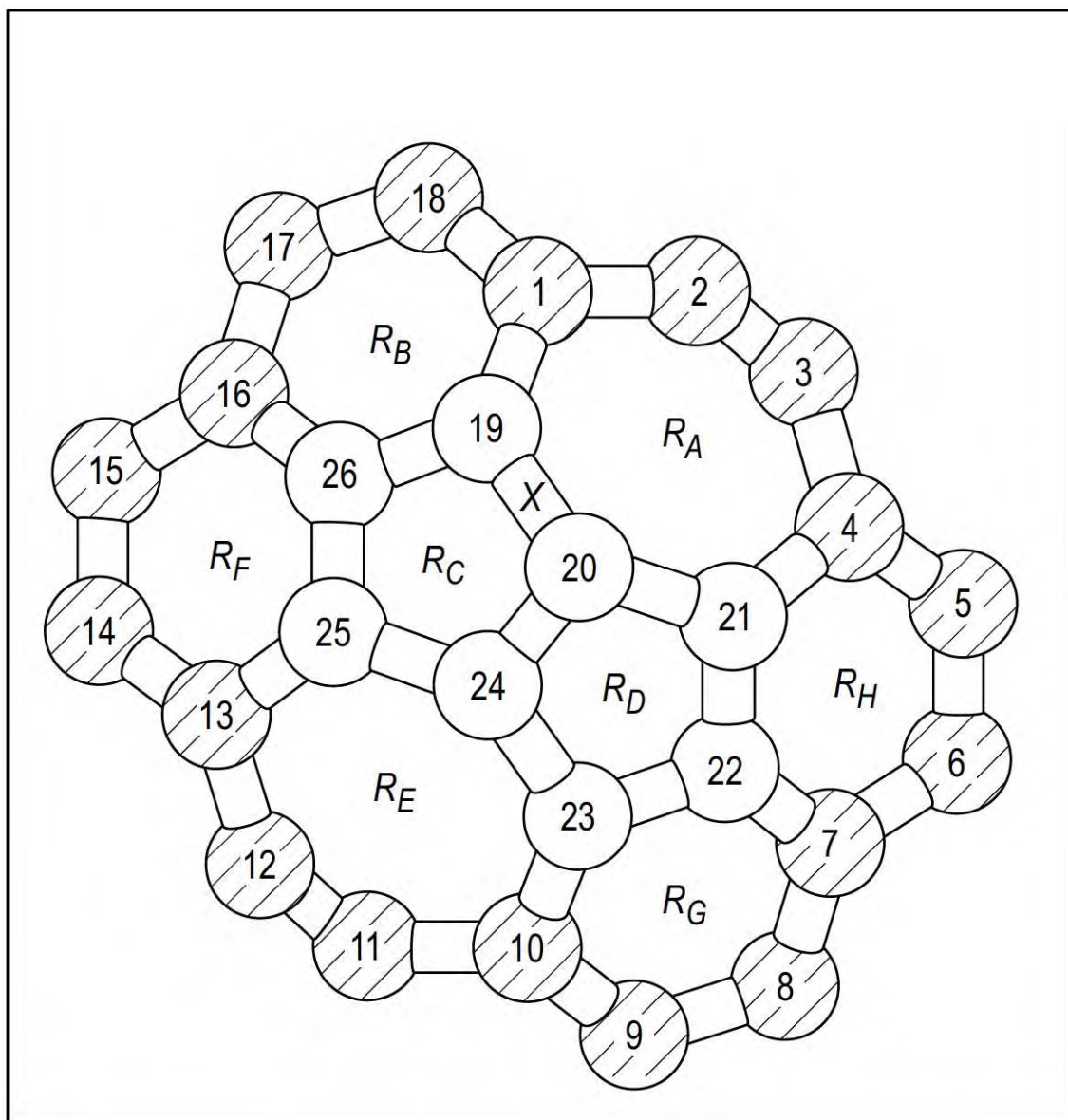


FIG. 6A

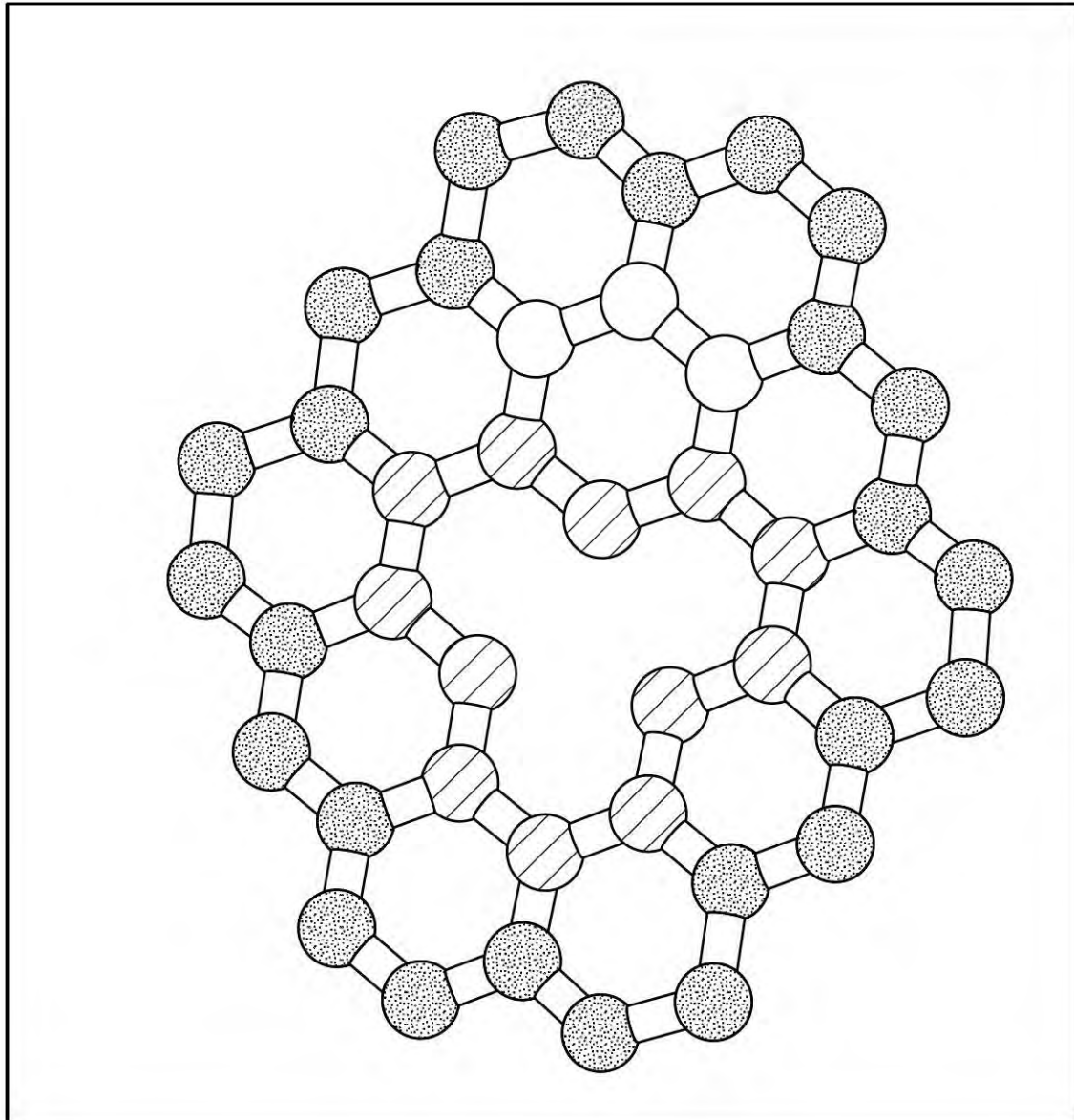


FIG. 6B

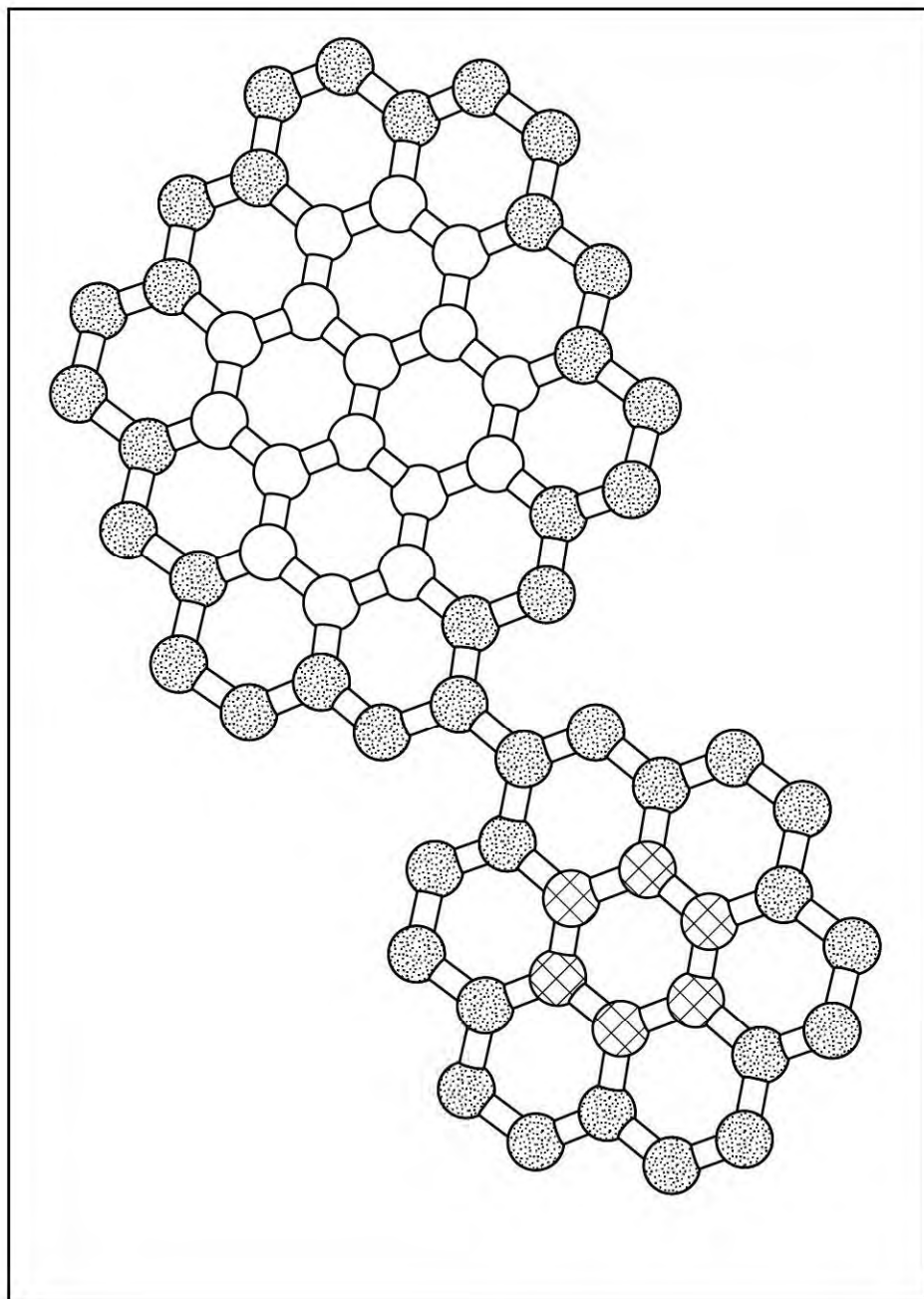


FIG. 6C

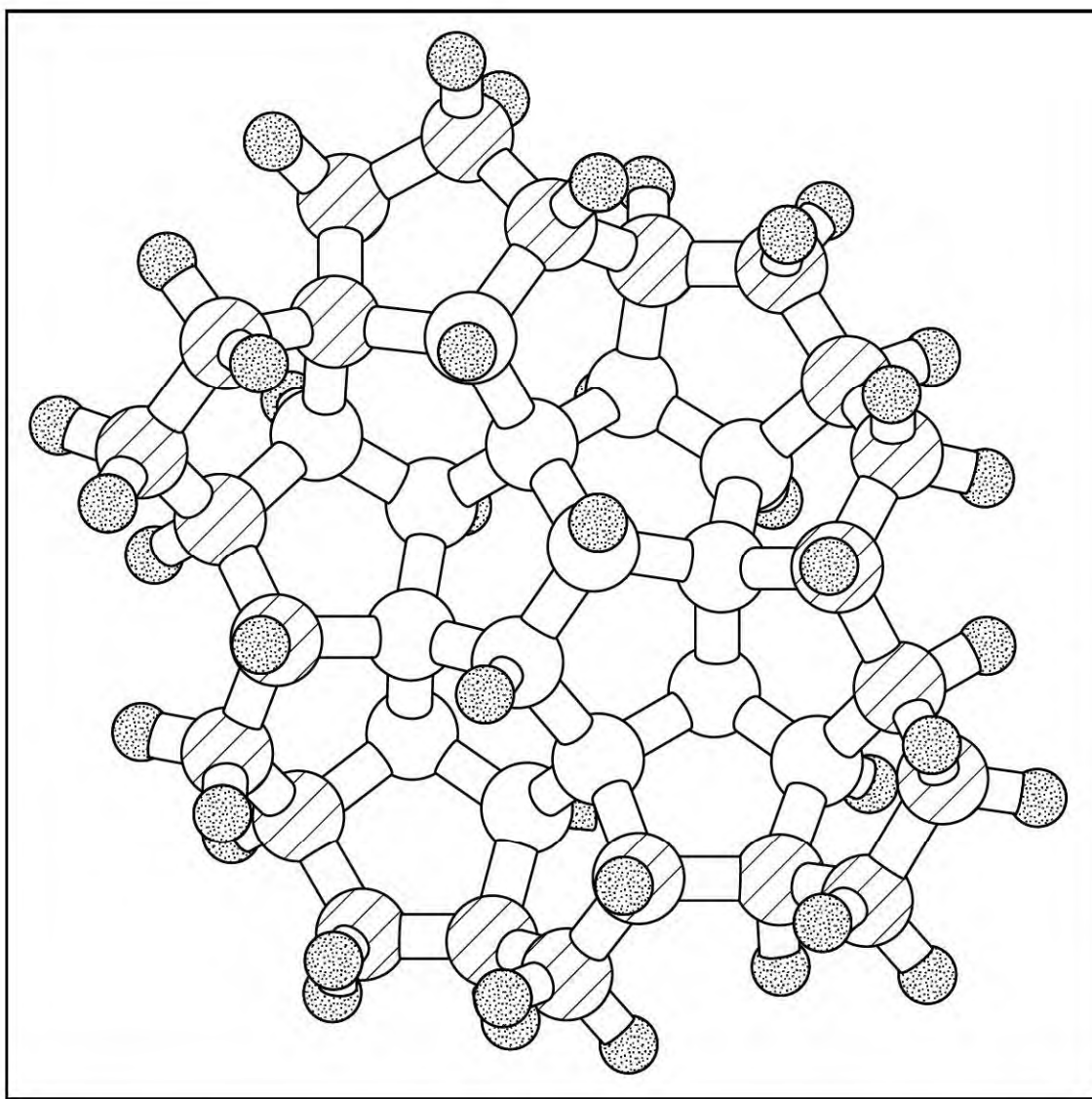


FIG. 6D

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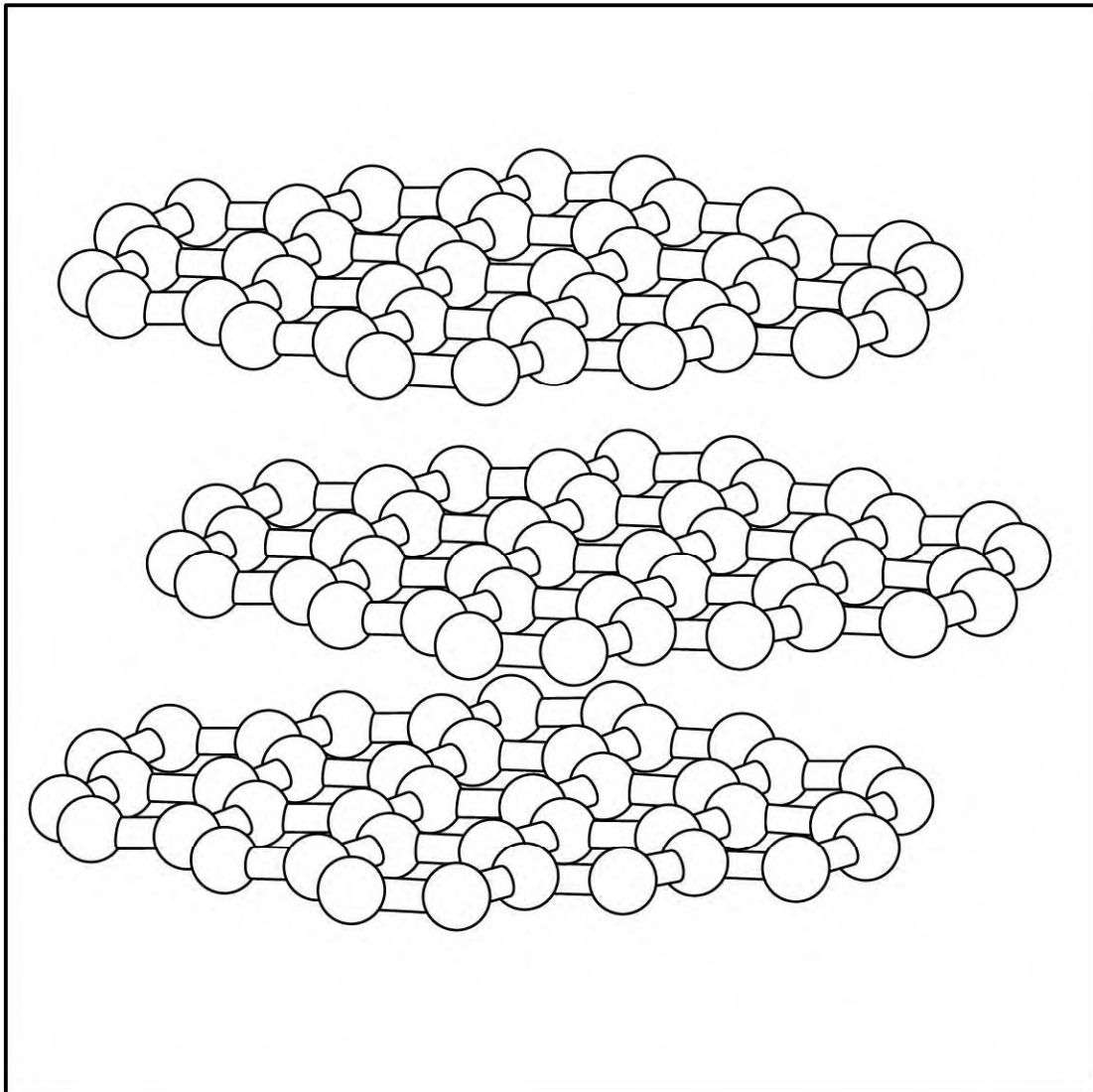


FIG. 6E

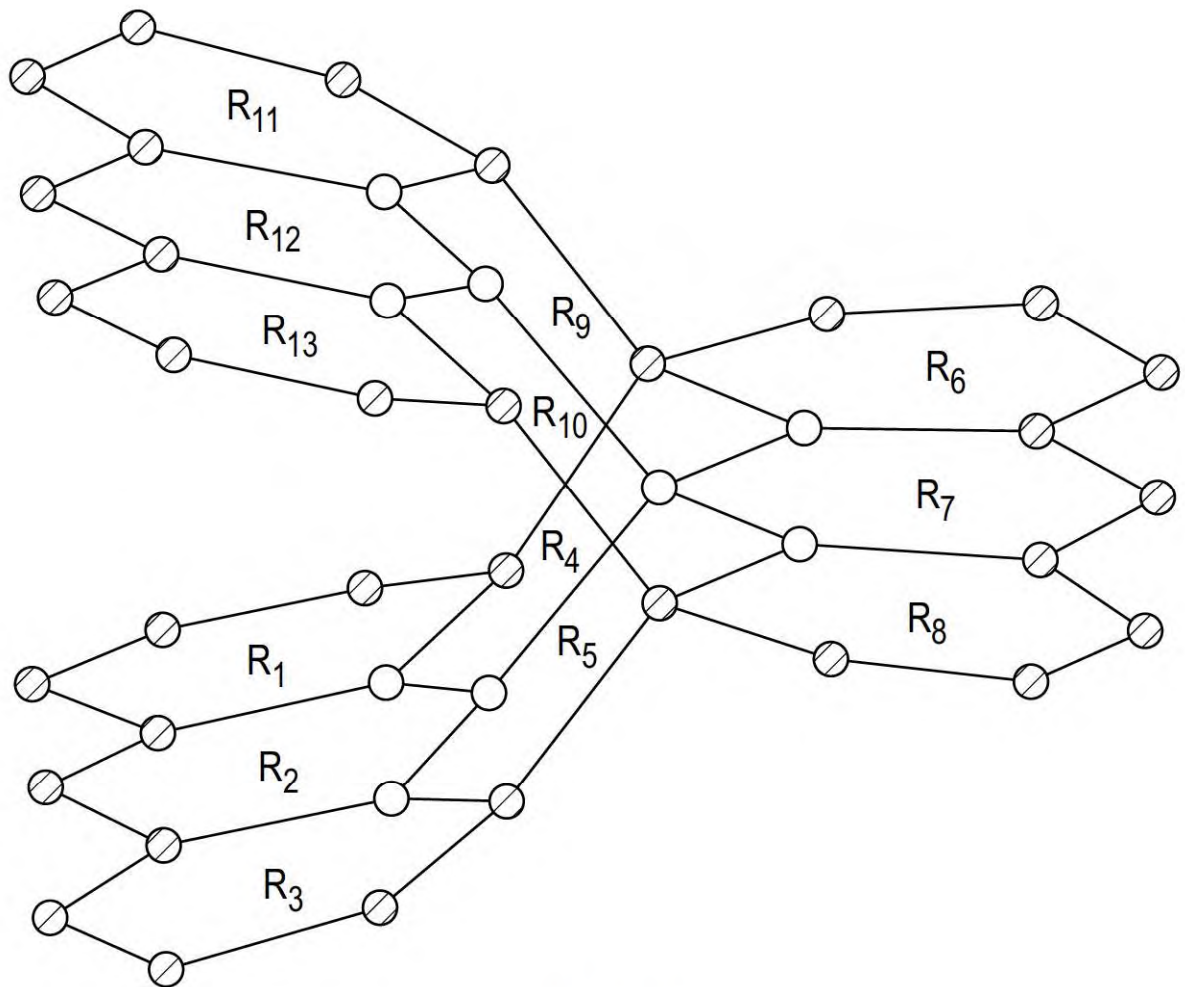


FIG. 7A

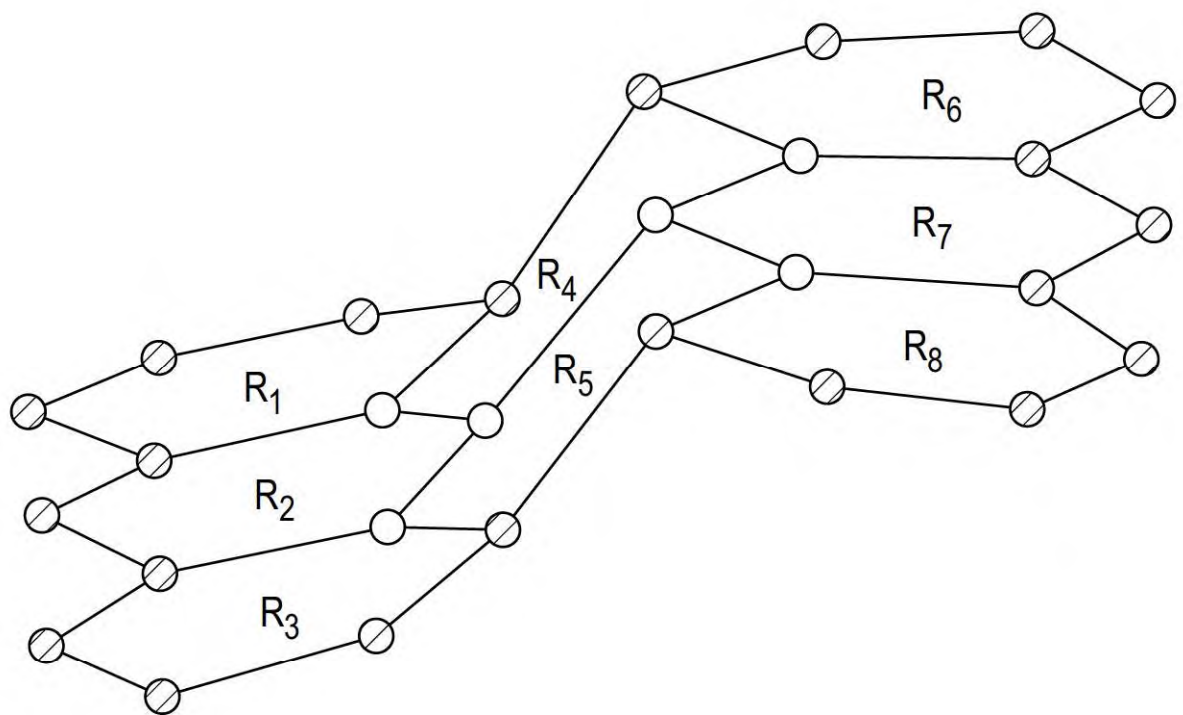


FIG. 7B

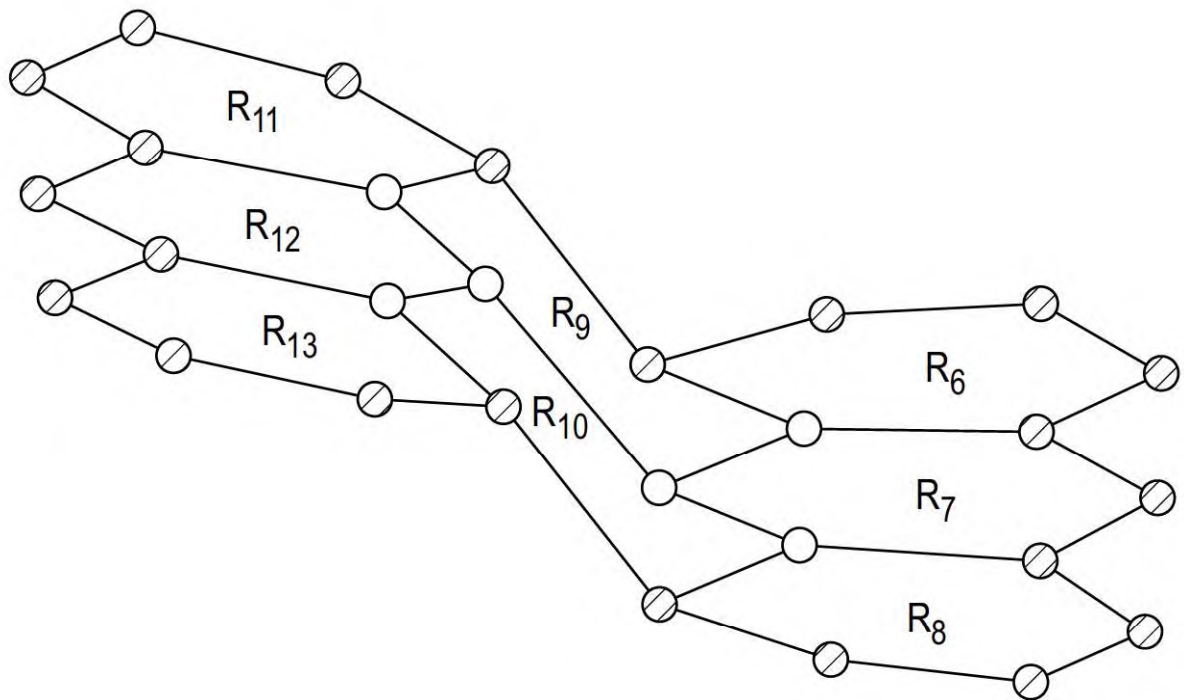


FIG. 7C

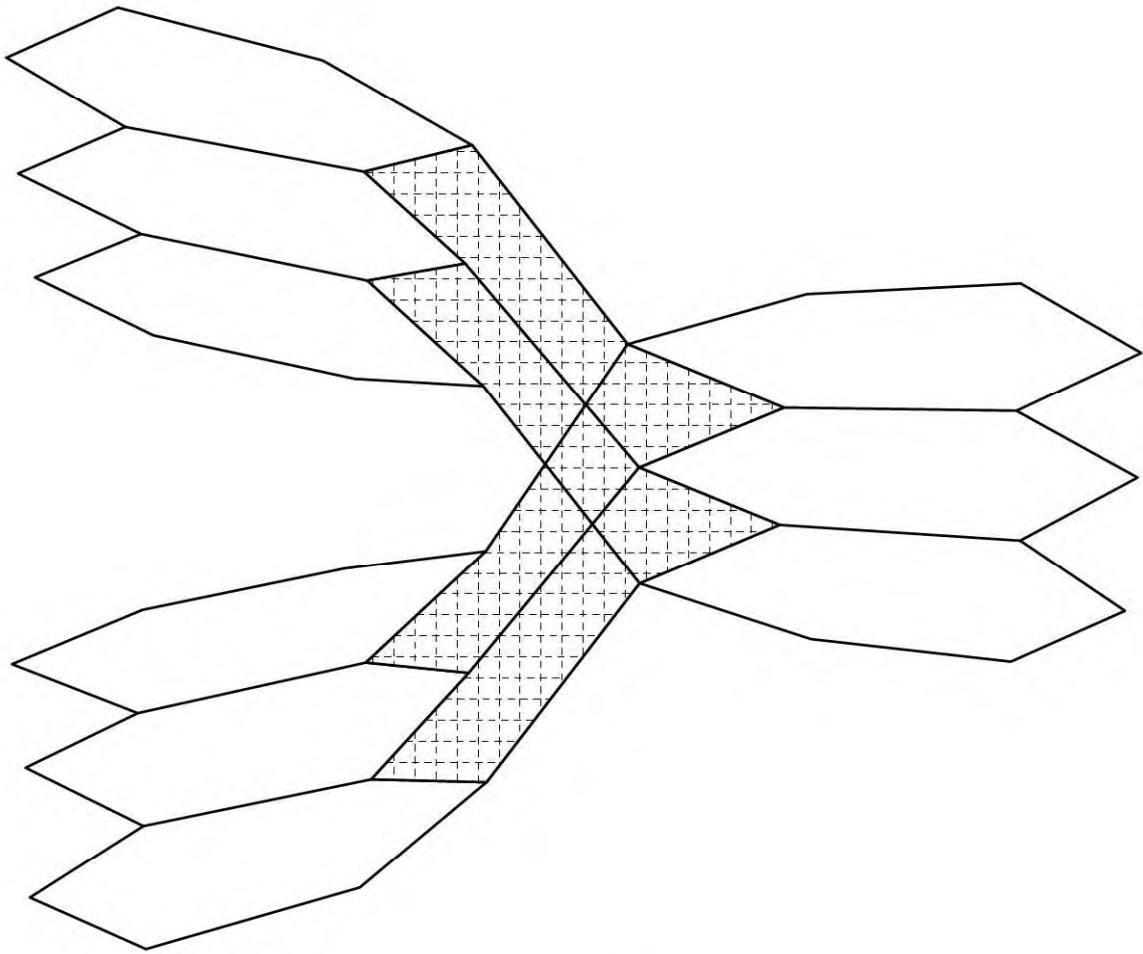
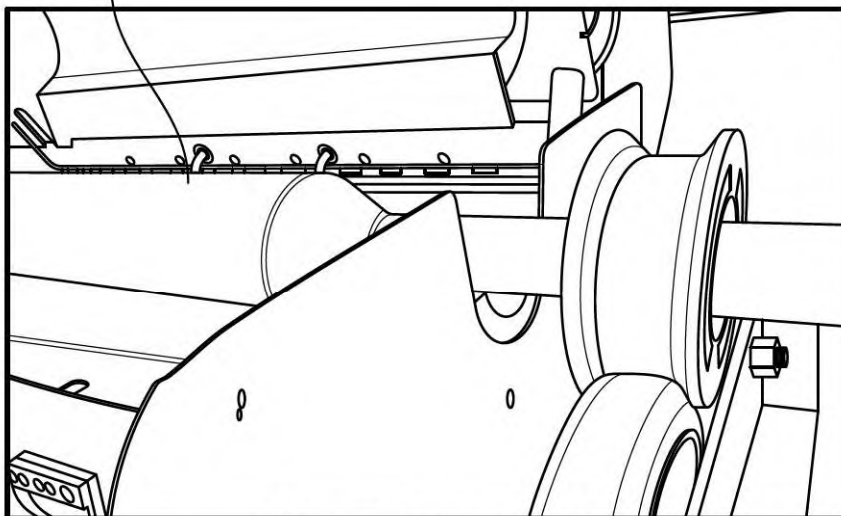


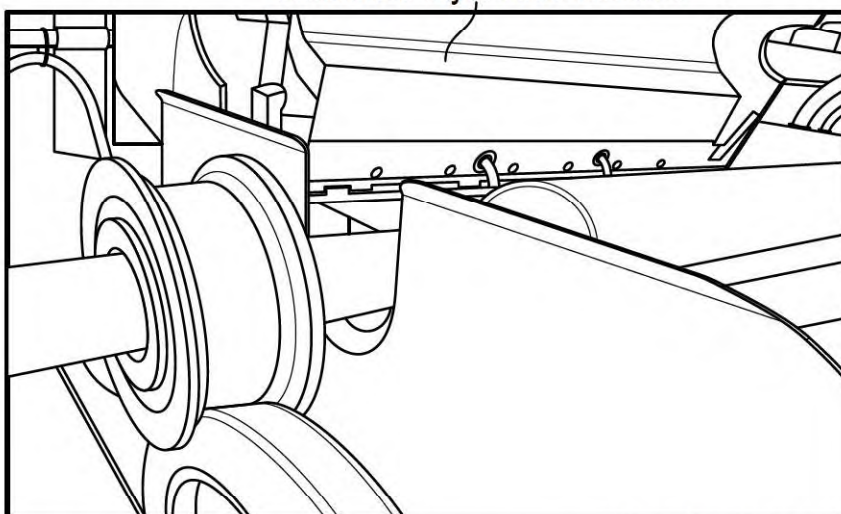
FIG. 7D

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100 mm section of quartz tube



Clamshell-style tube furnace



Gas feed assembly

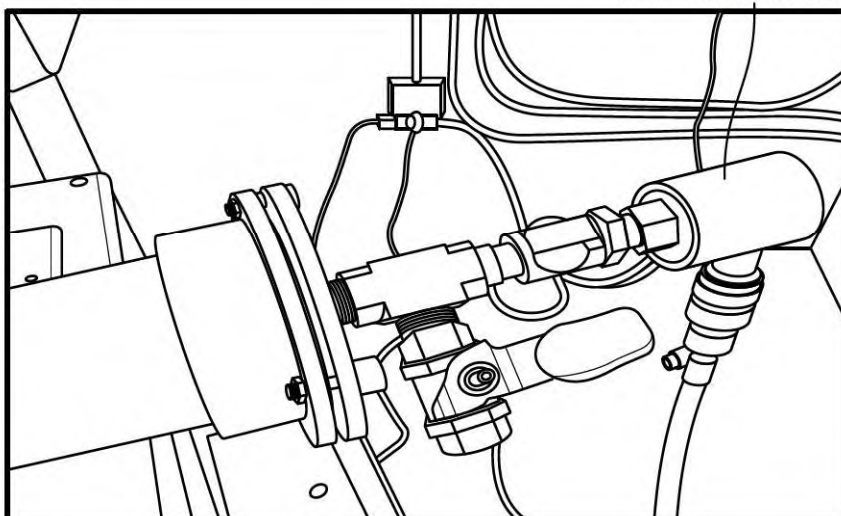
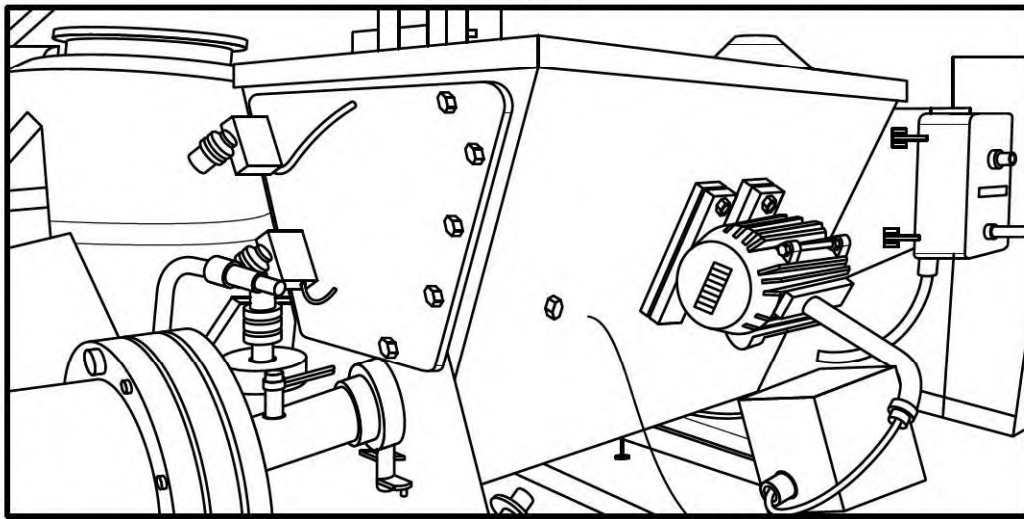
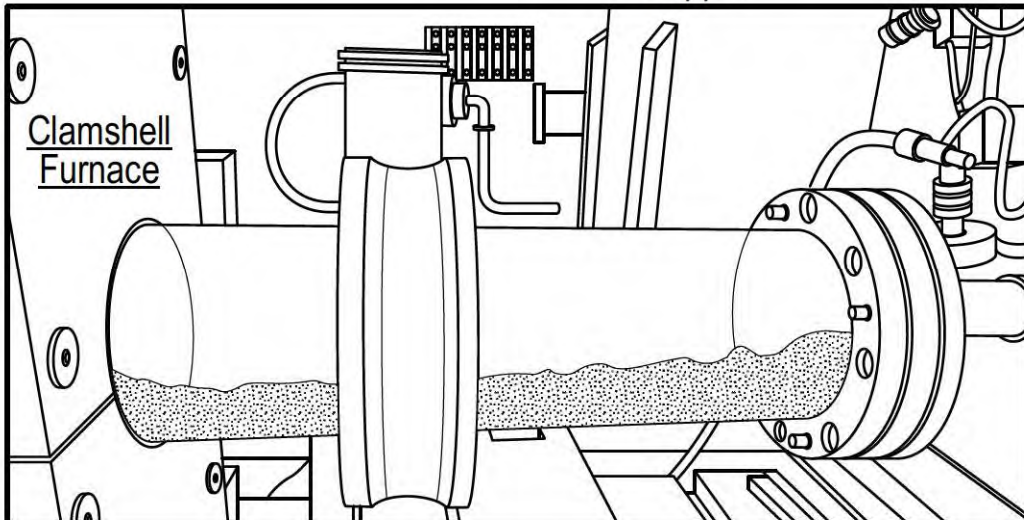


FIG. 8A

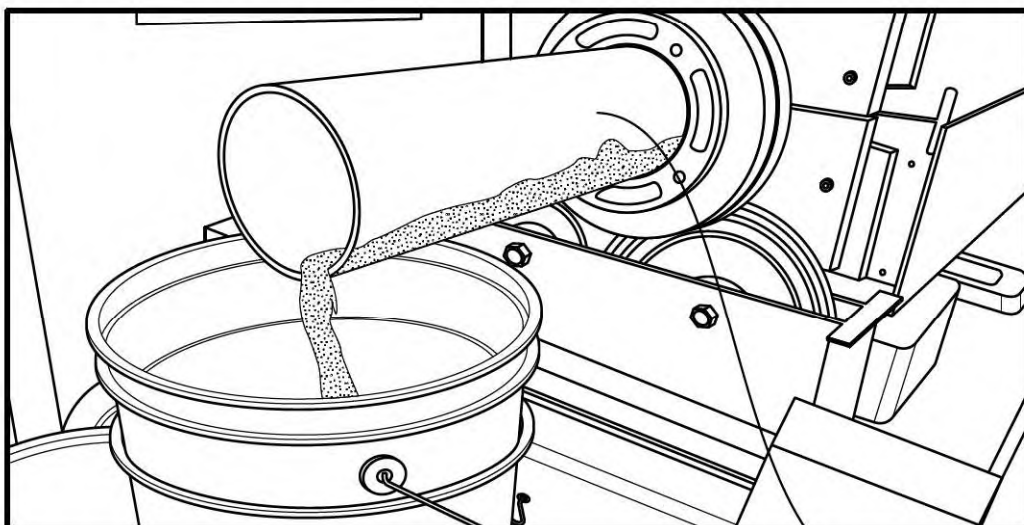
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Hopper



Clamshell
Furnace



Rotating 6" quartz tube
(downstream)

FIG. 8B

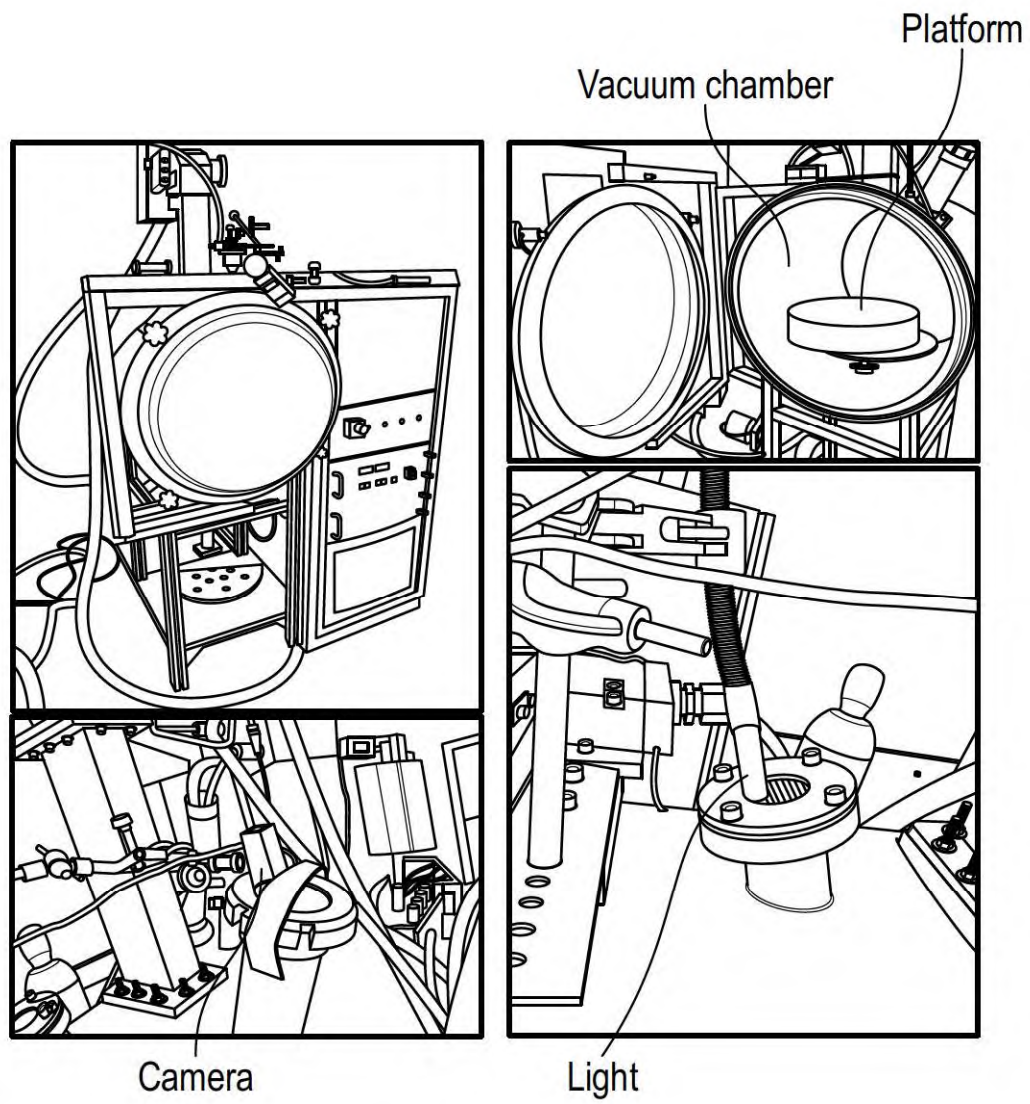


FIG. 8C

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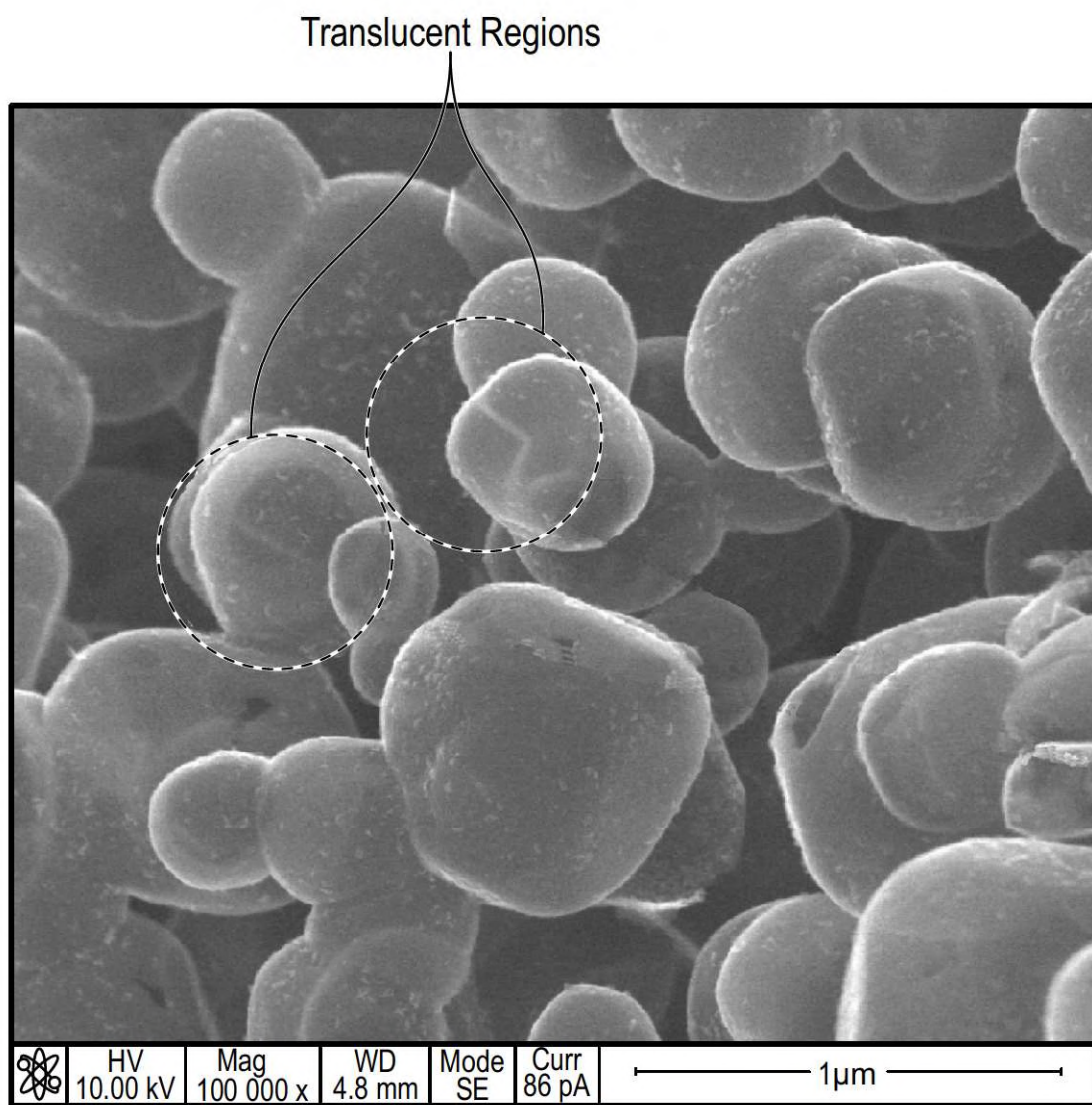


FIG. 9

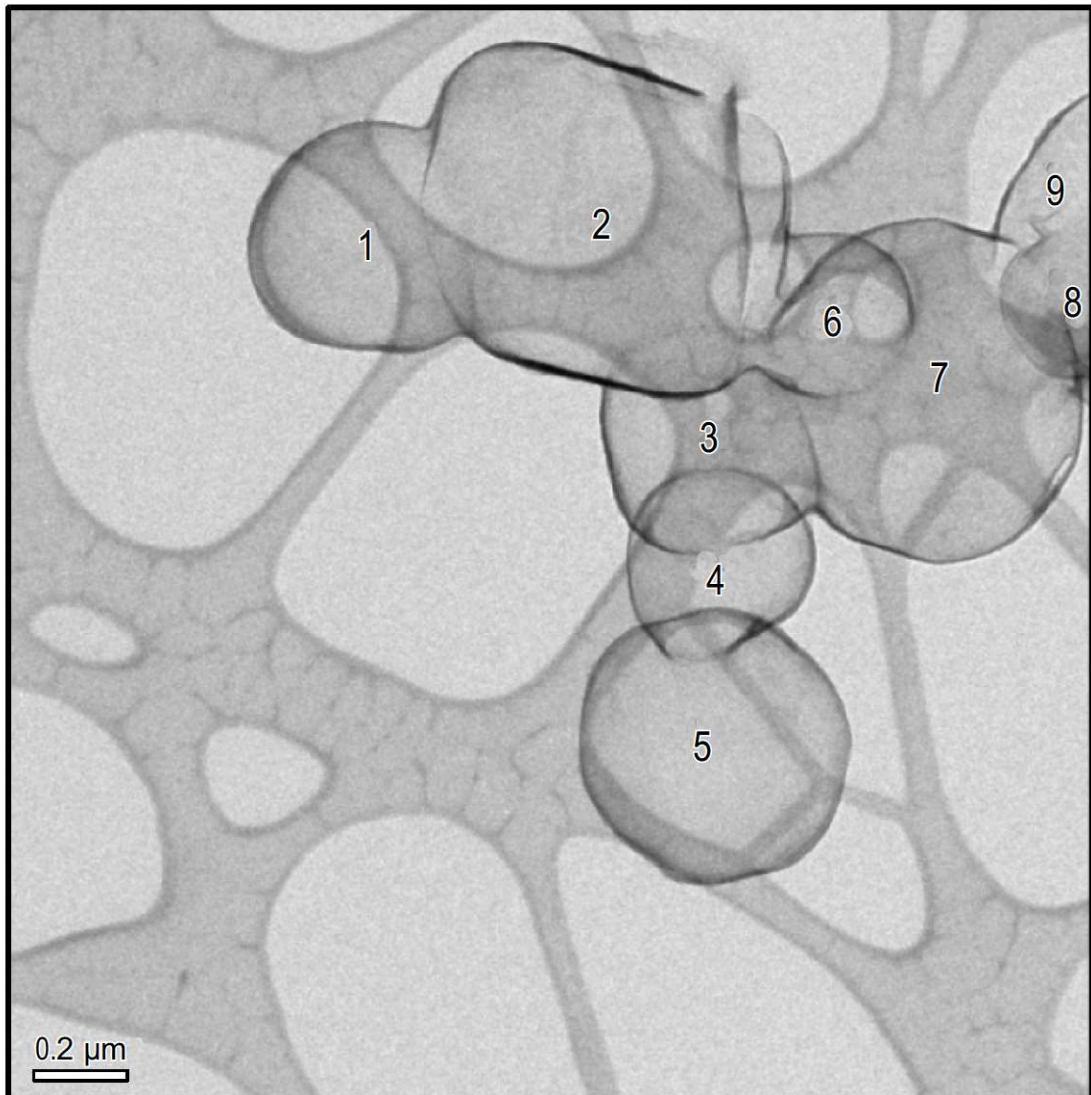


FIG. 10A

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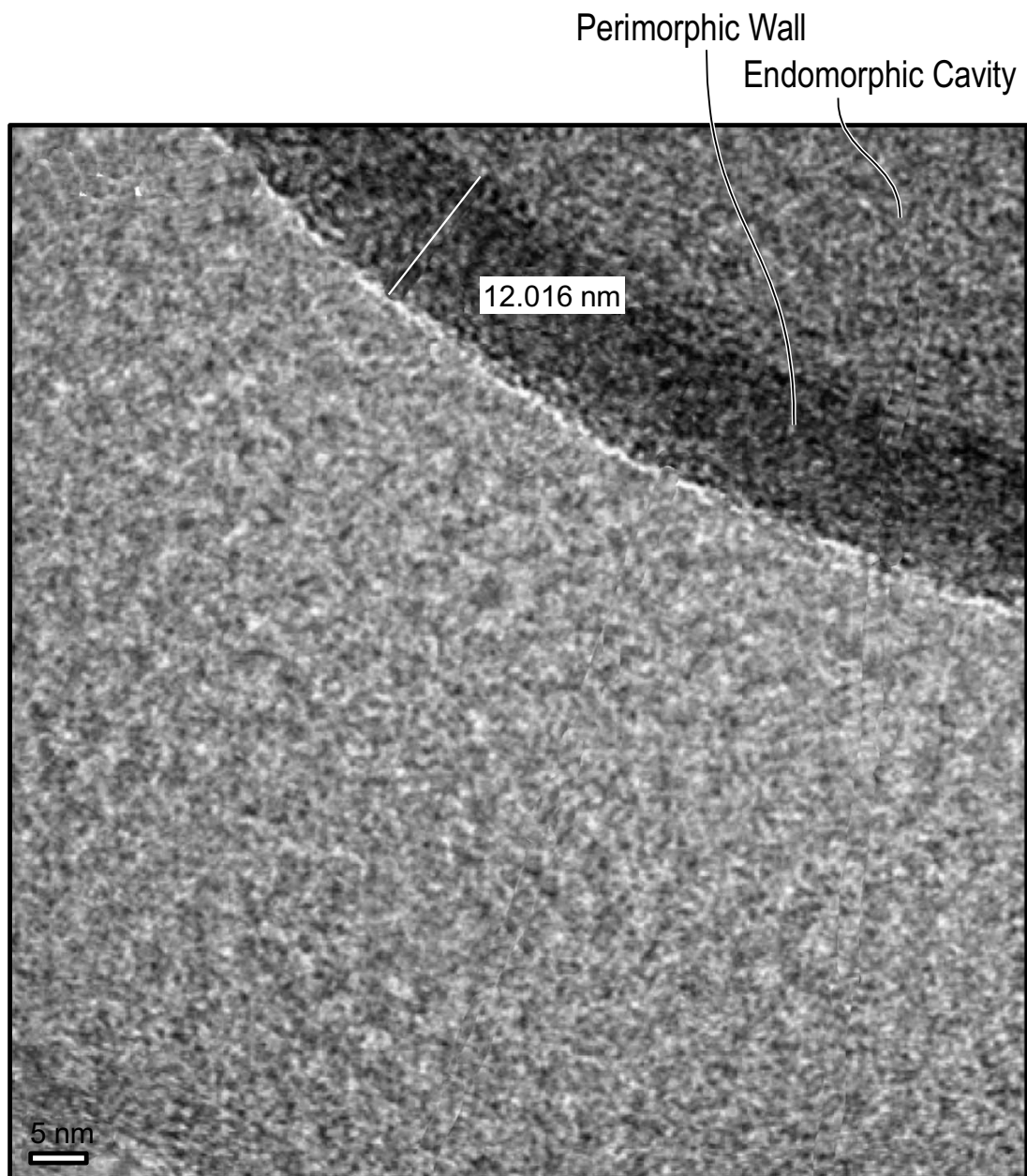


FIG. 10B

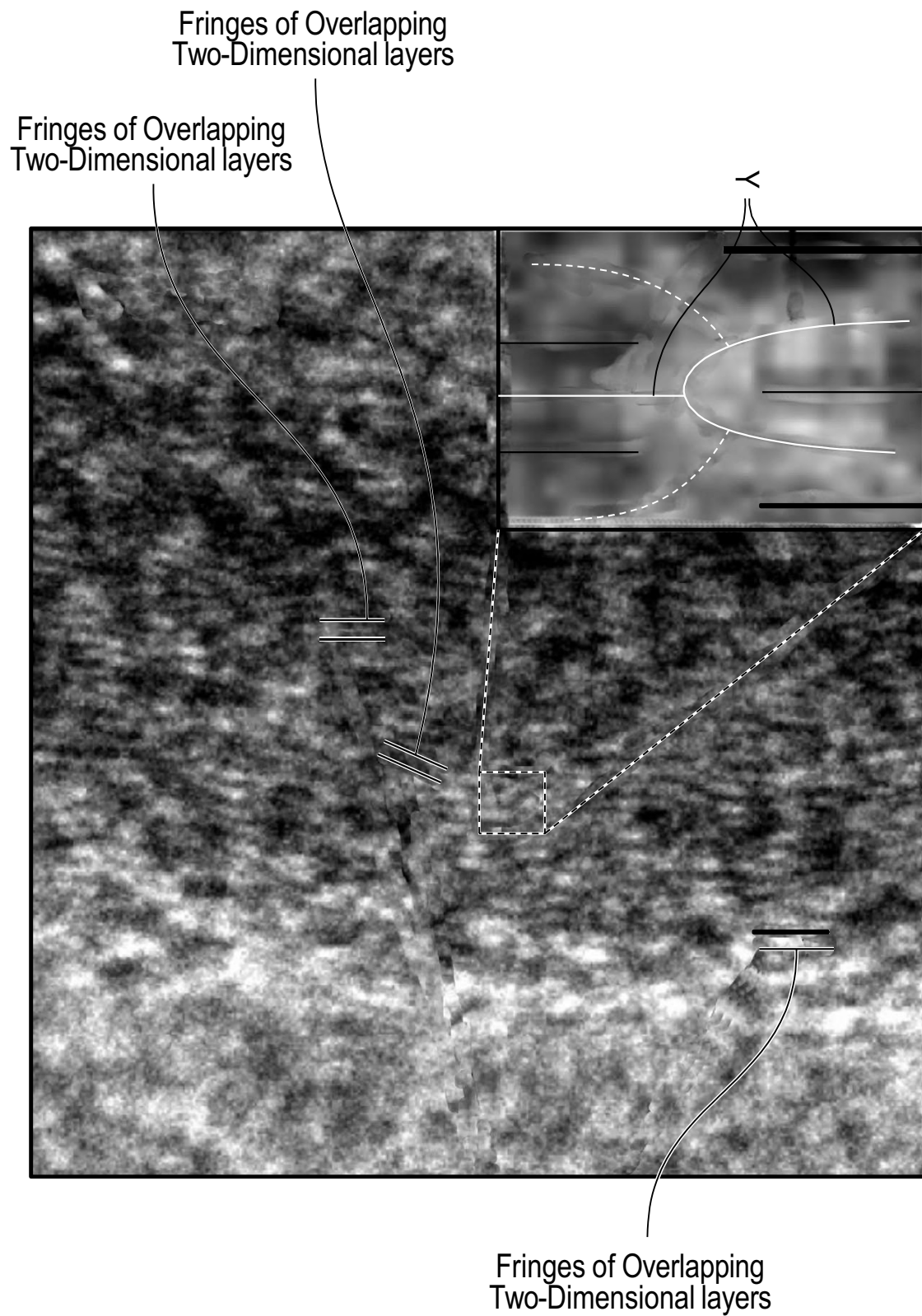


FIG. 10C

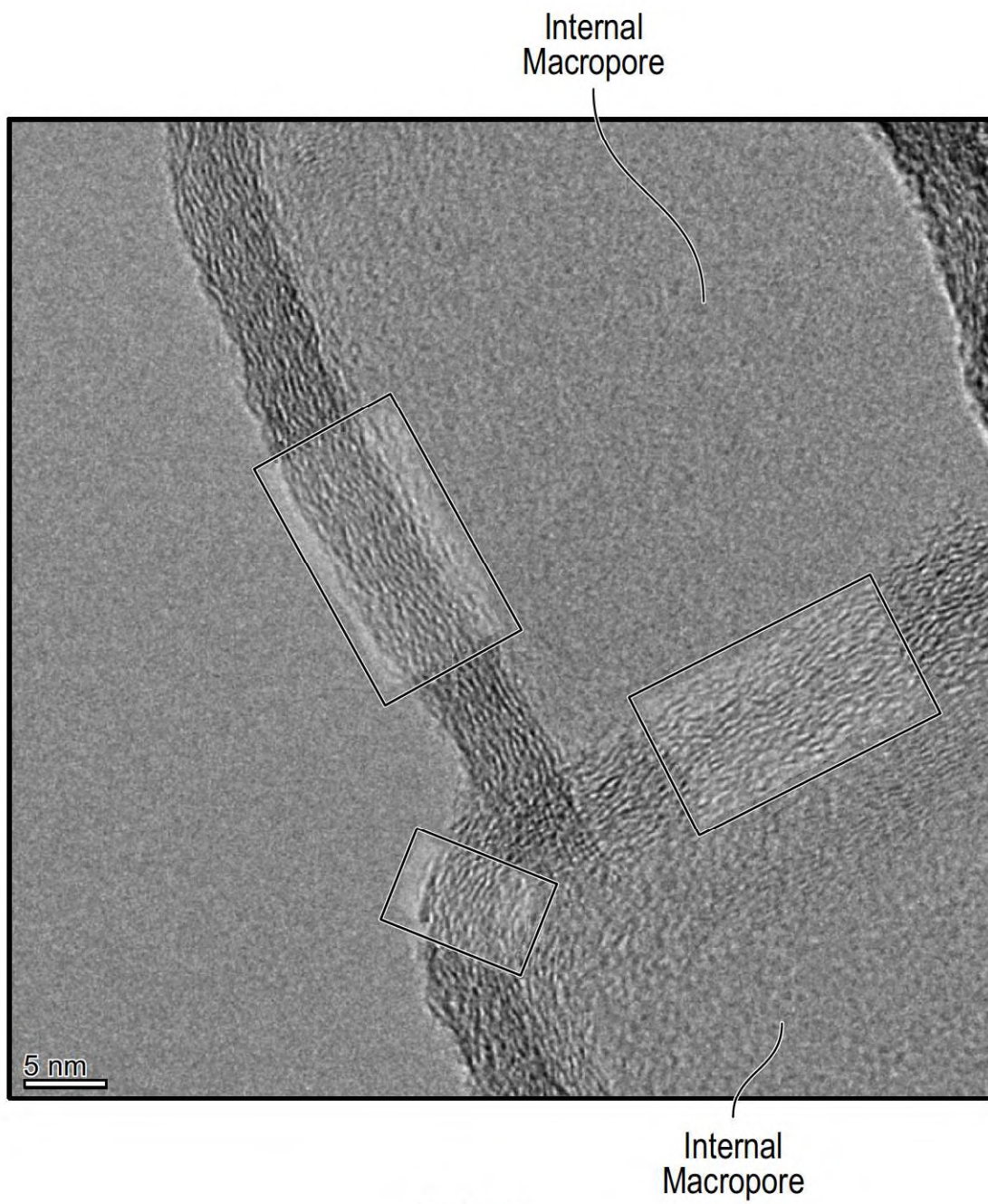


FIG. 11

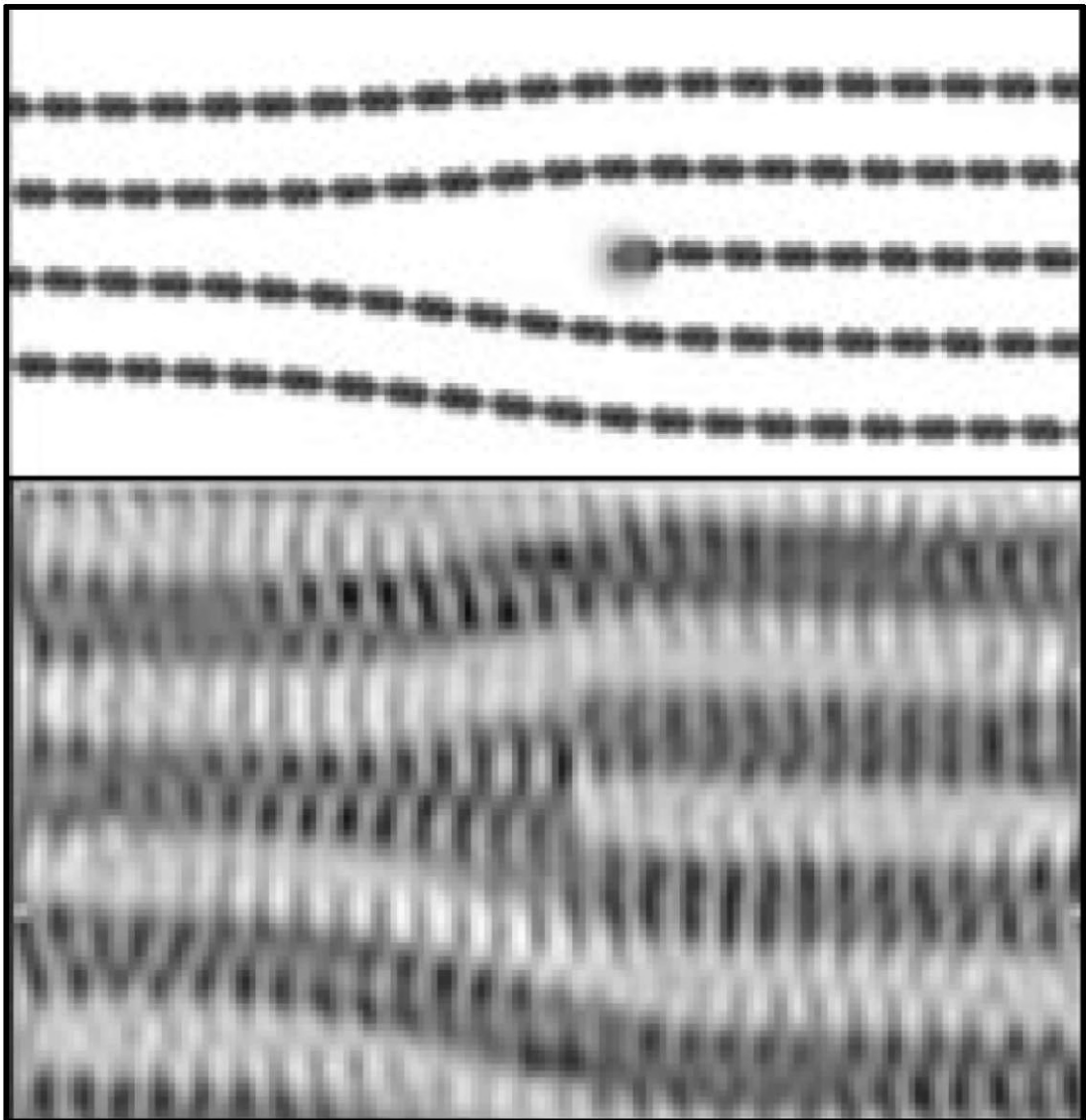


FIG. 12A

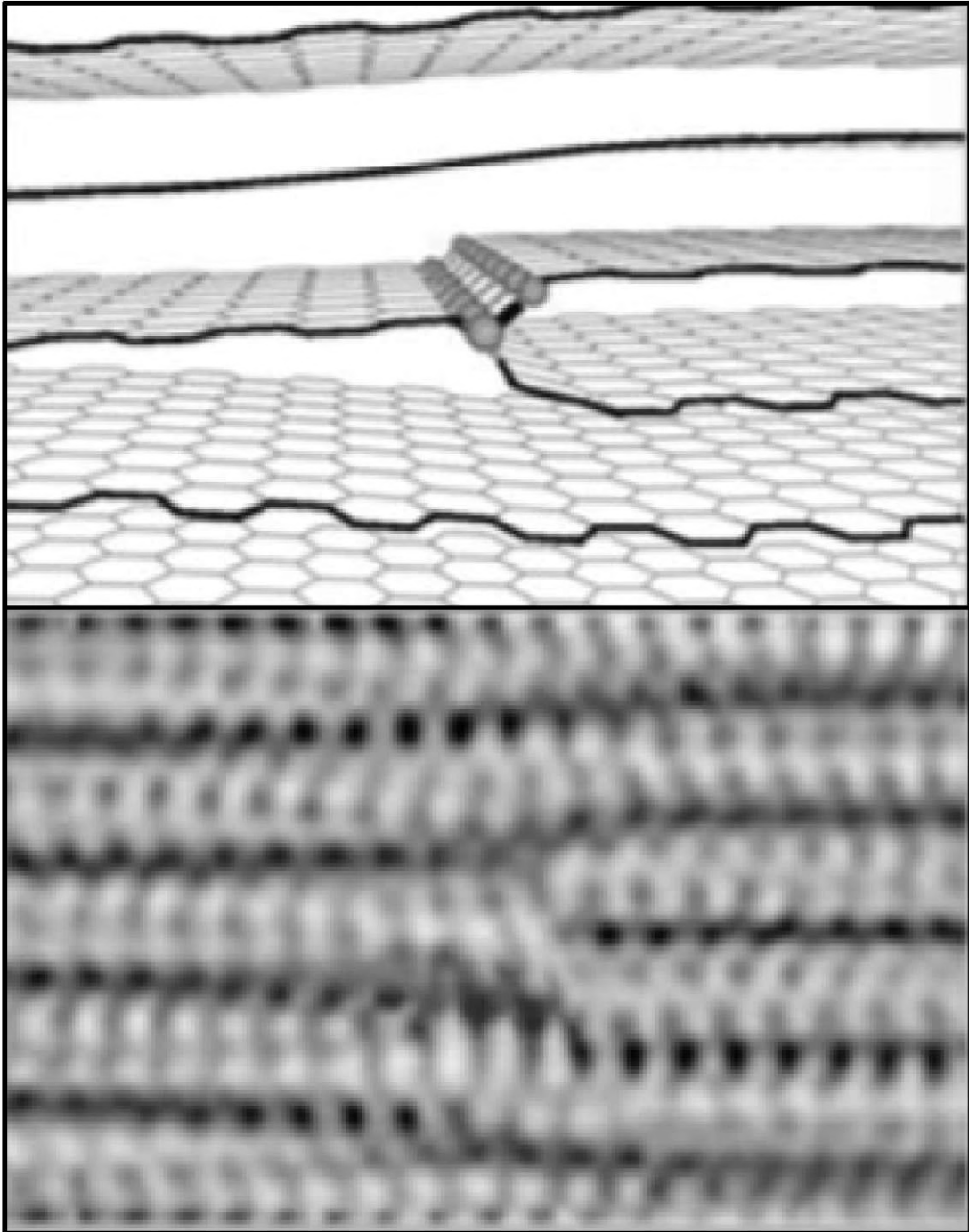


FIG. 12B

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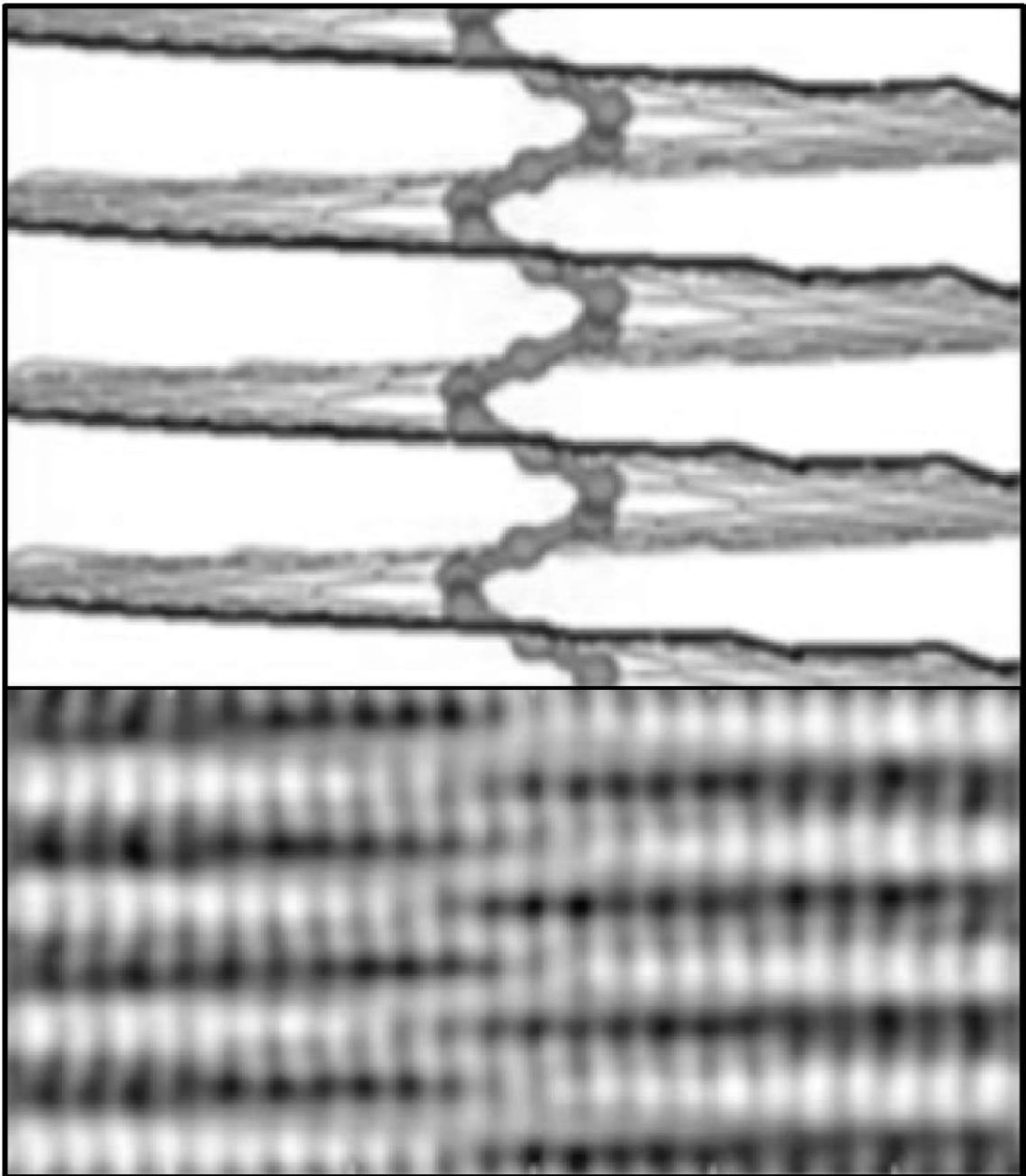


FIG. 12C

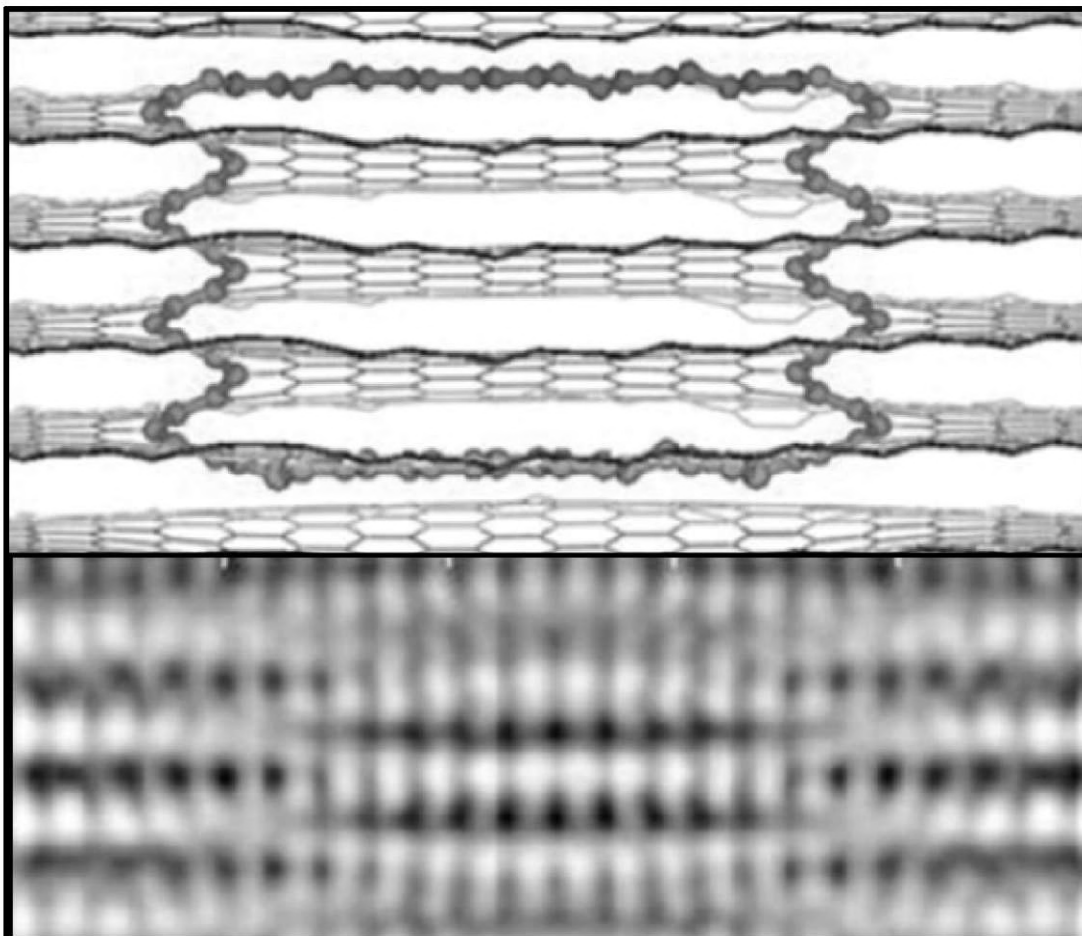


FIG. 12D

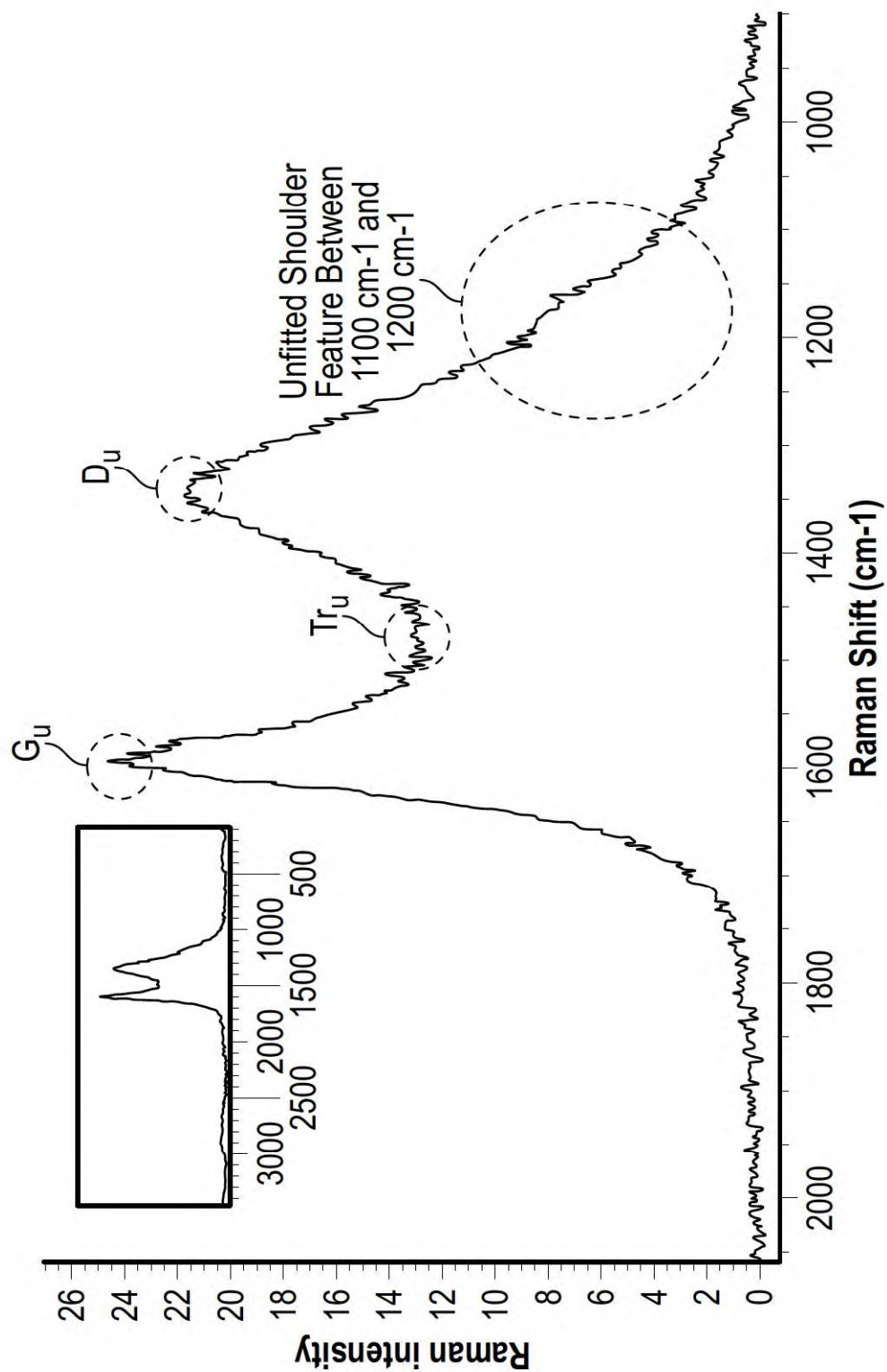


FIG. 13

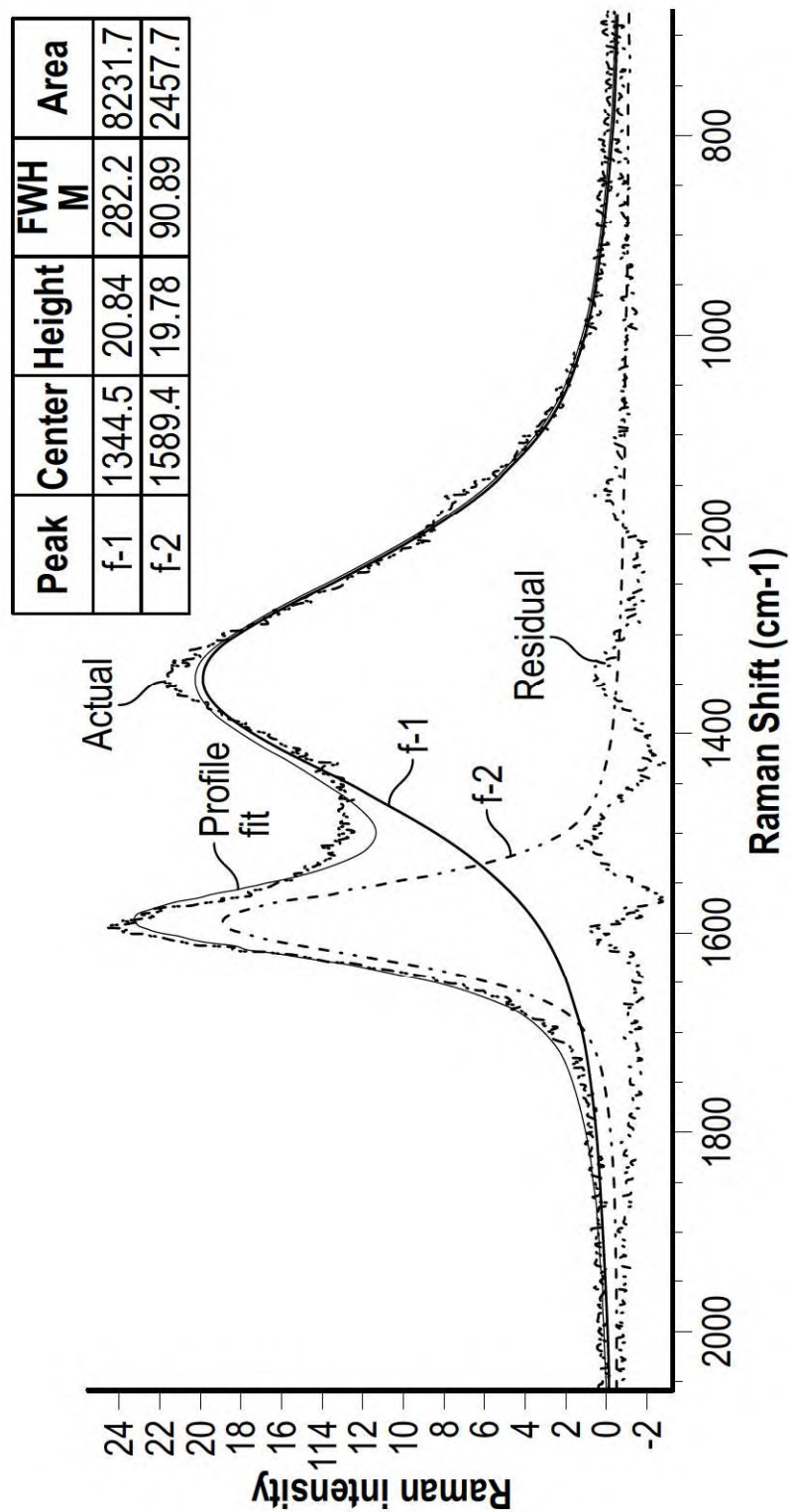


FIG. 14

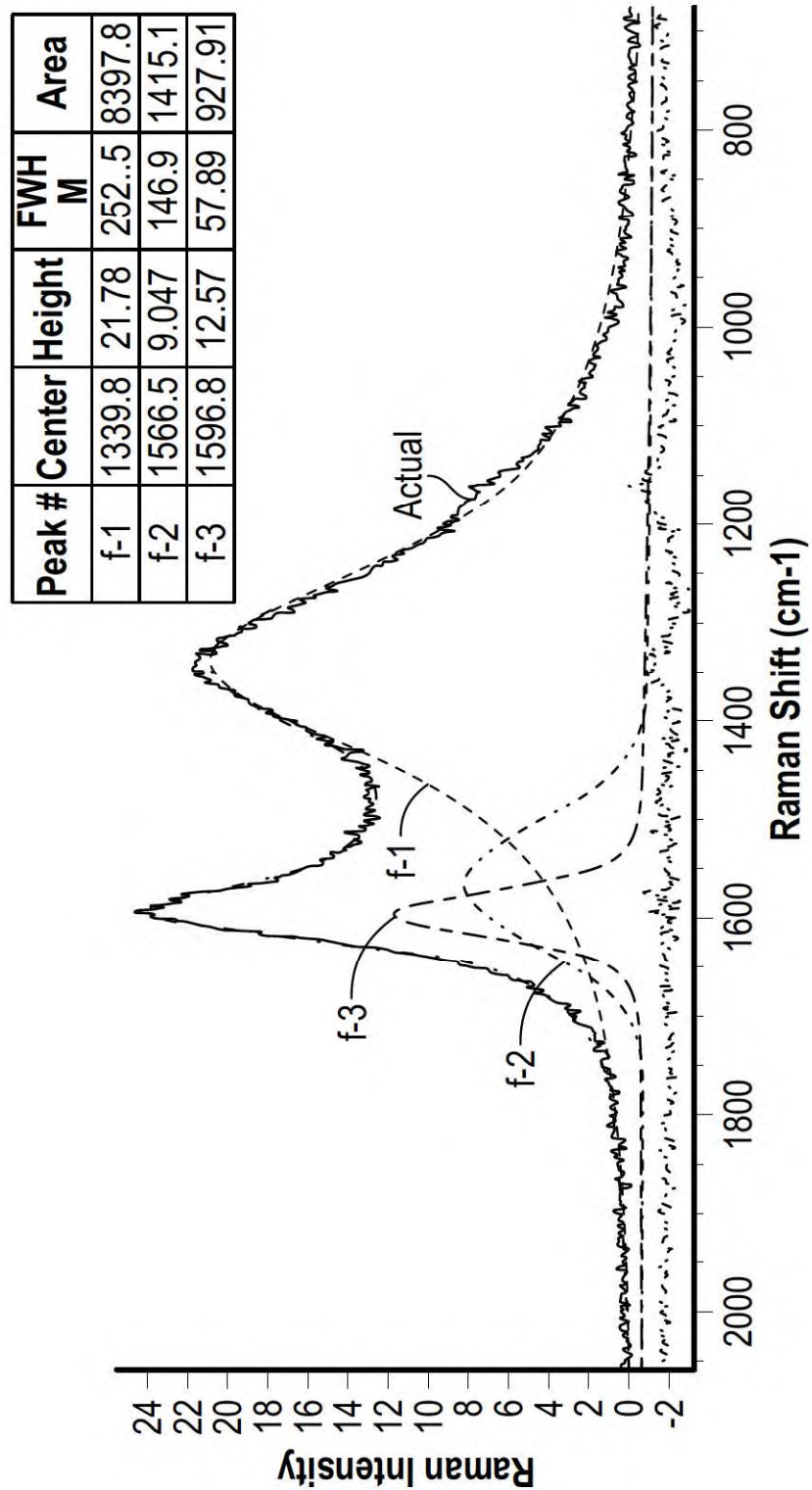


FIG. 15

Peak #	Center	Height	FWH M	Gauss	Area
f-1	1185	6.35	180.0	.720	1375
f-2	1343	19.33	167.2	.999	3440
f-3	1514	8.99	153.8	.889	1548
f-4	1596	19.51	77.1	.118	2266

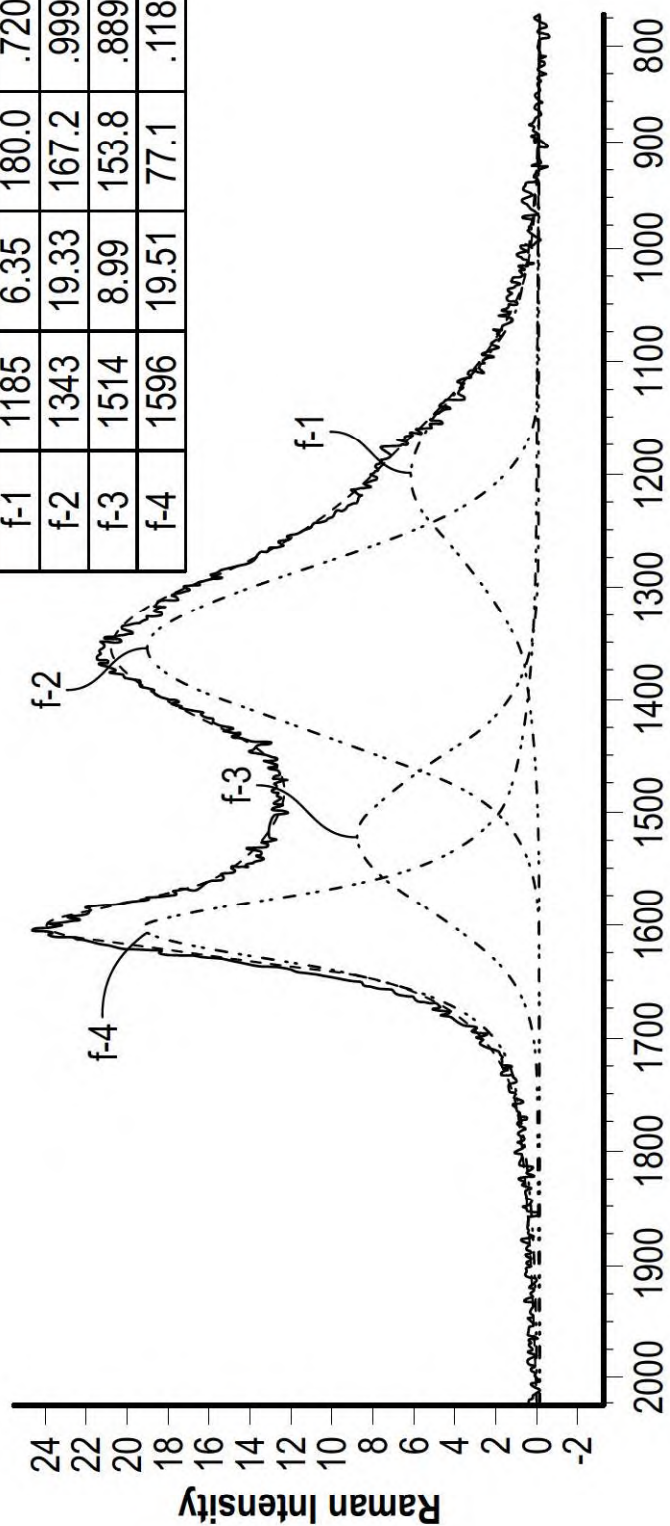


FIG. 16

Peak #	Center	Height	FWH M	Gauss	Area
f-1	1180	1.29	167.1	.606	272
f-2	1349	4.76	154.3	.639	914
f-3	1482	2.41	153.4	.552	477
f-4	1596	5.29	99.5	.409	717

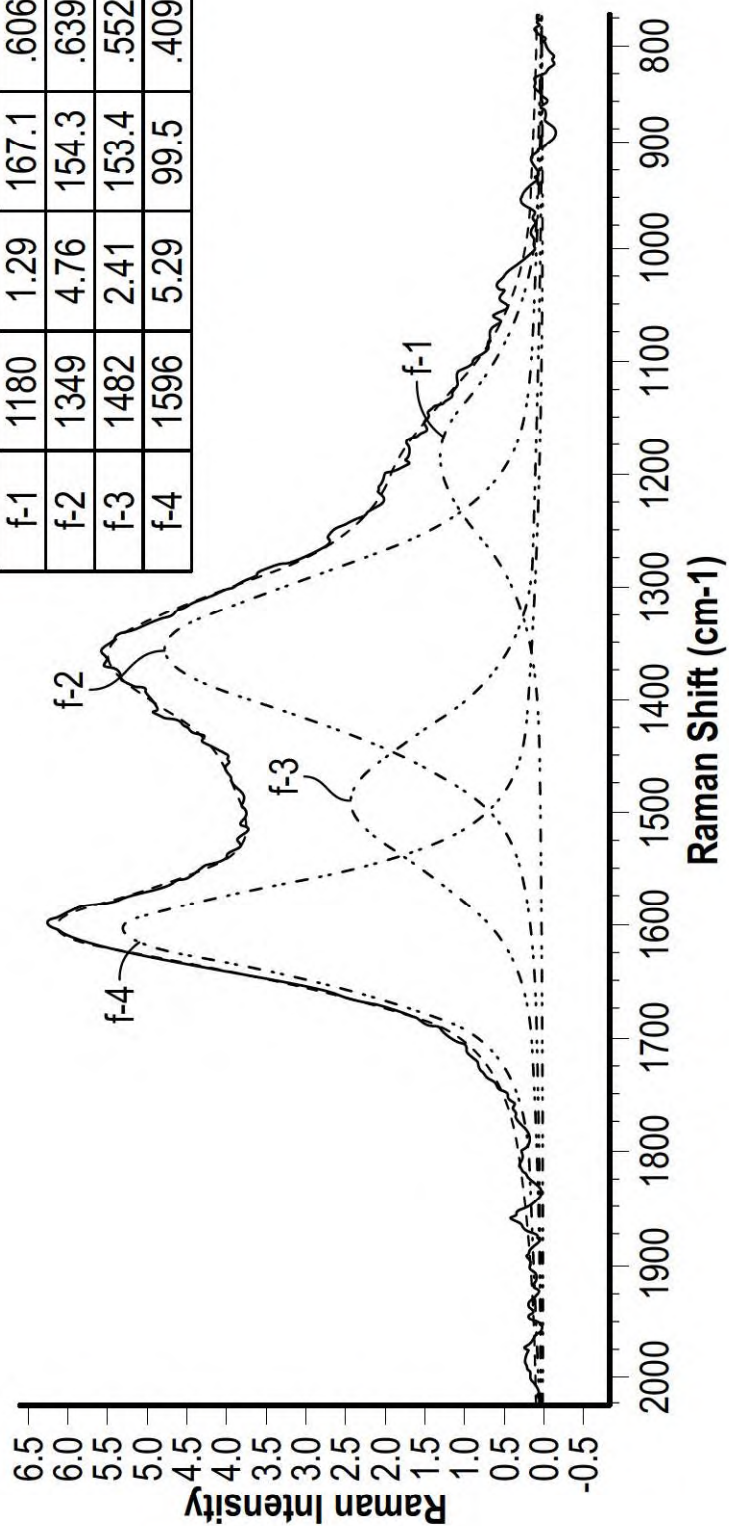


FIG. 17

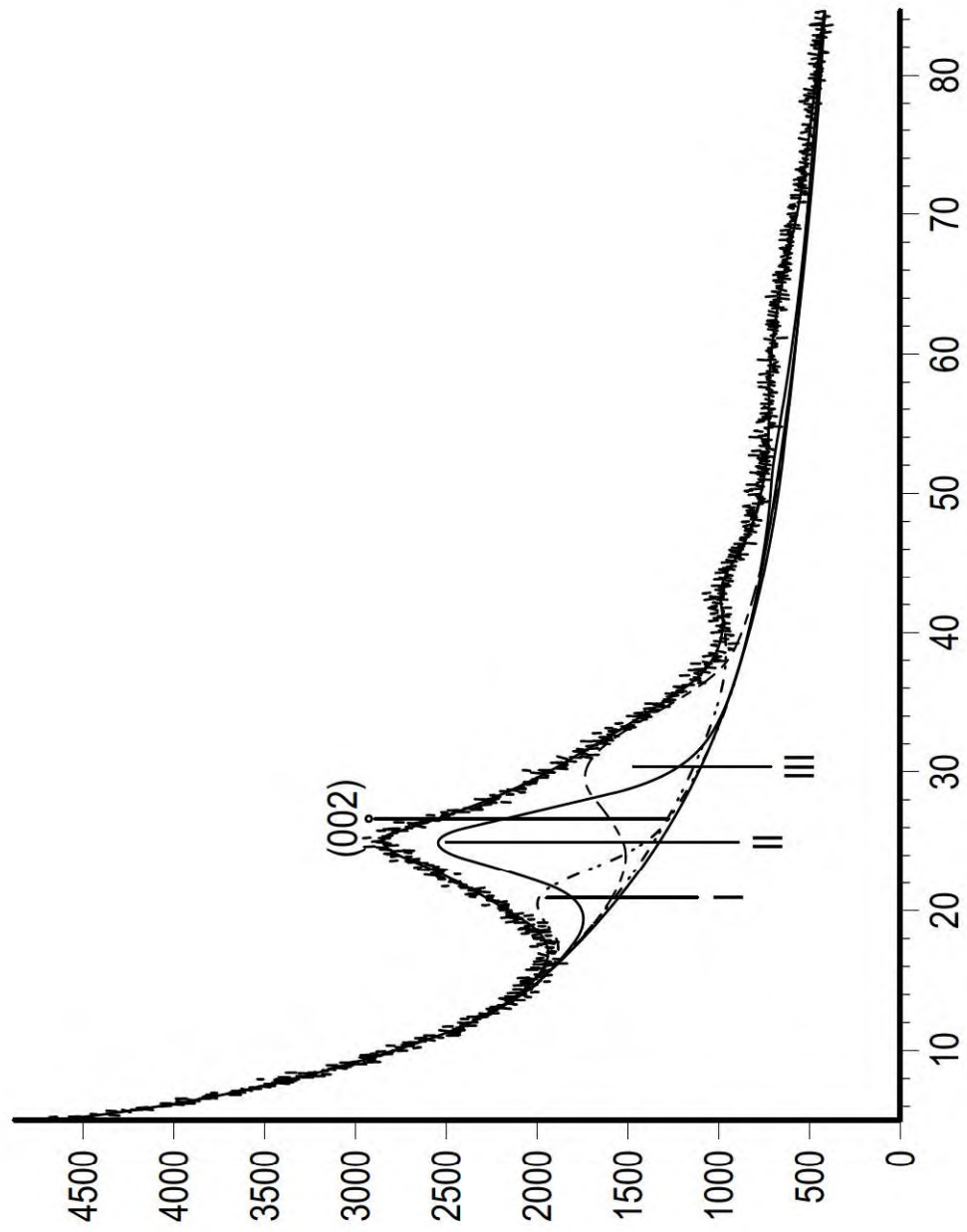


FIG. 18

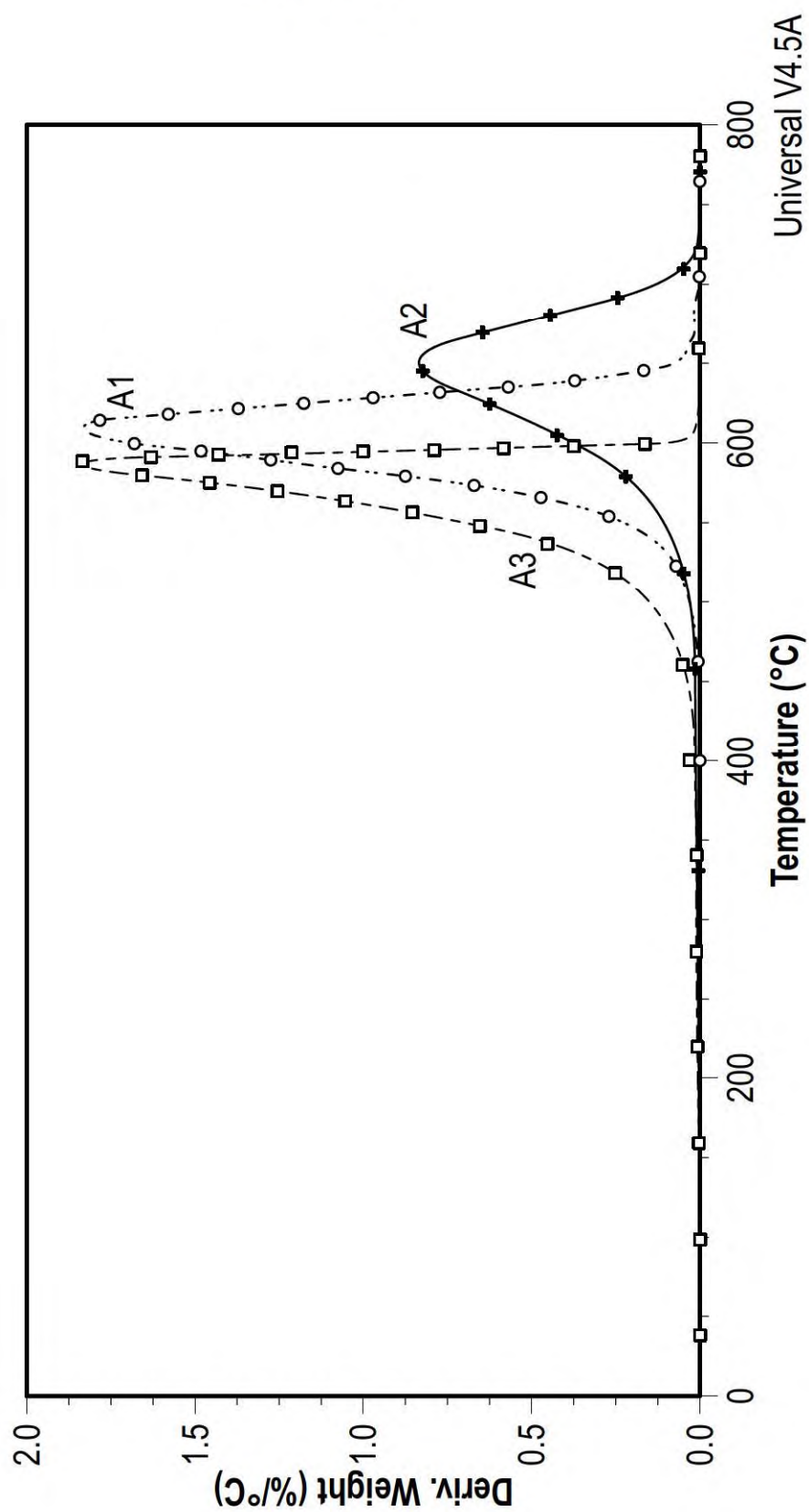


FIG. 19

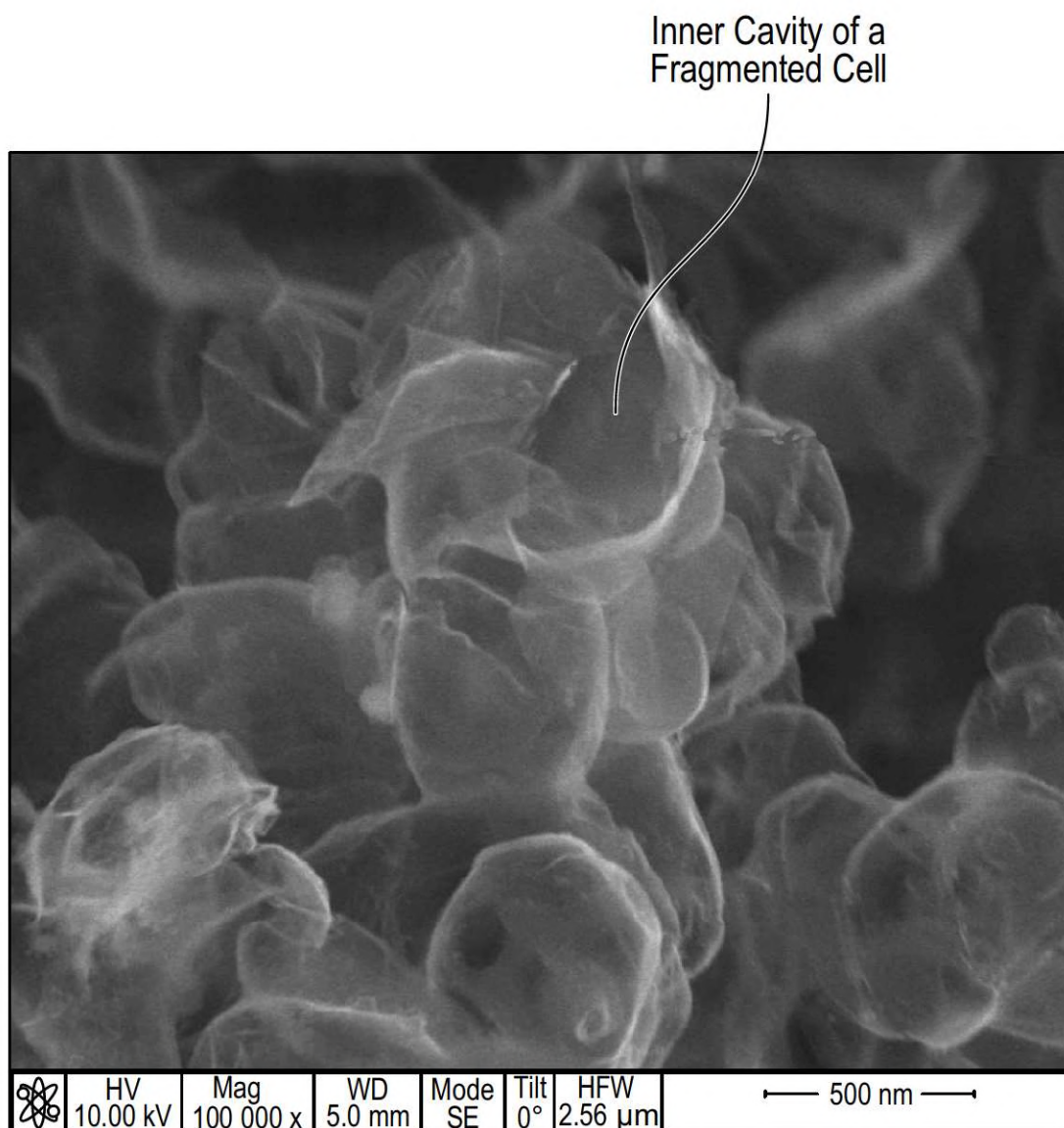


FIG. 20

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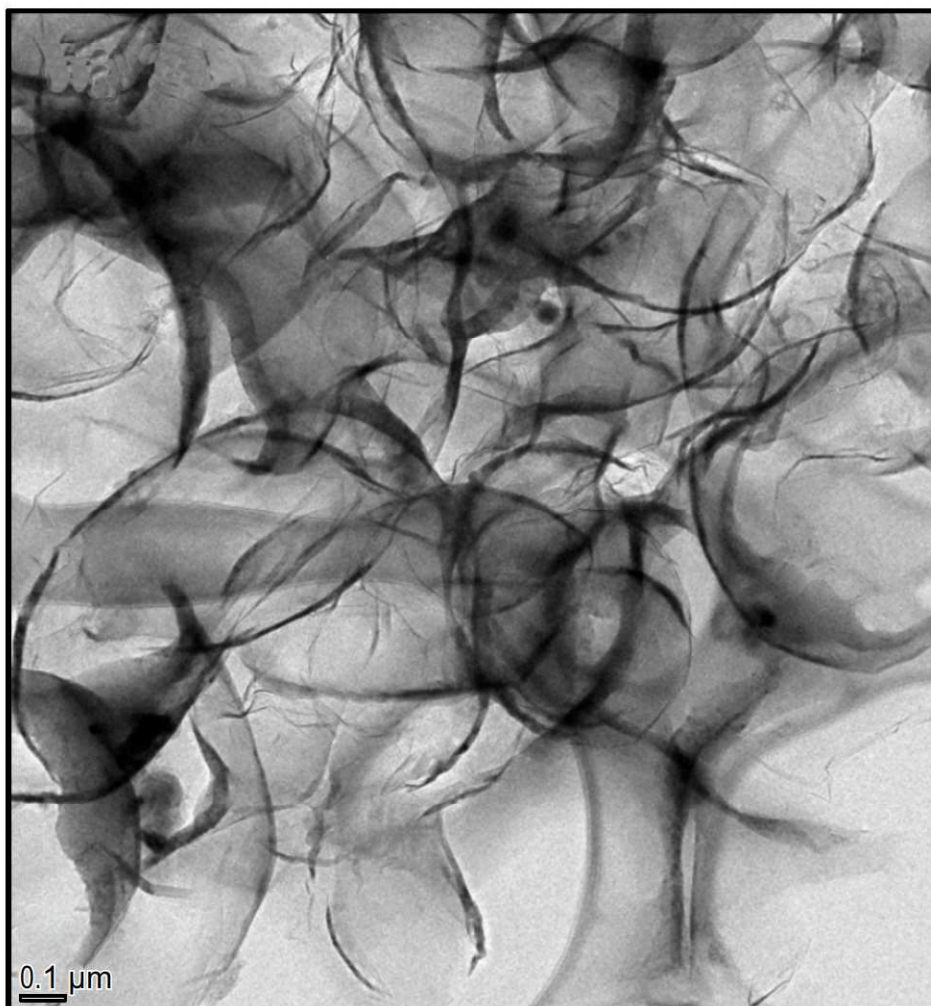


FIG. 21A

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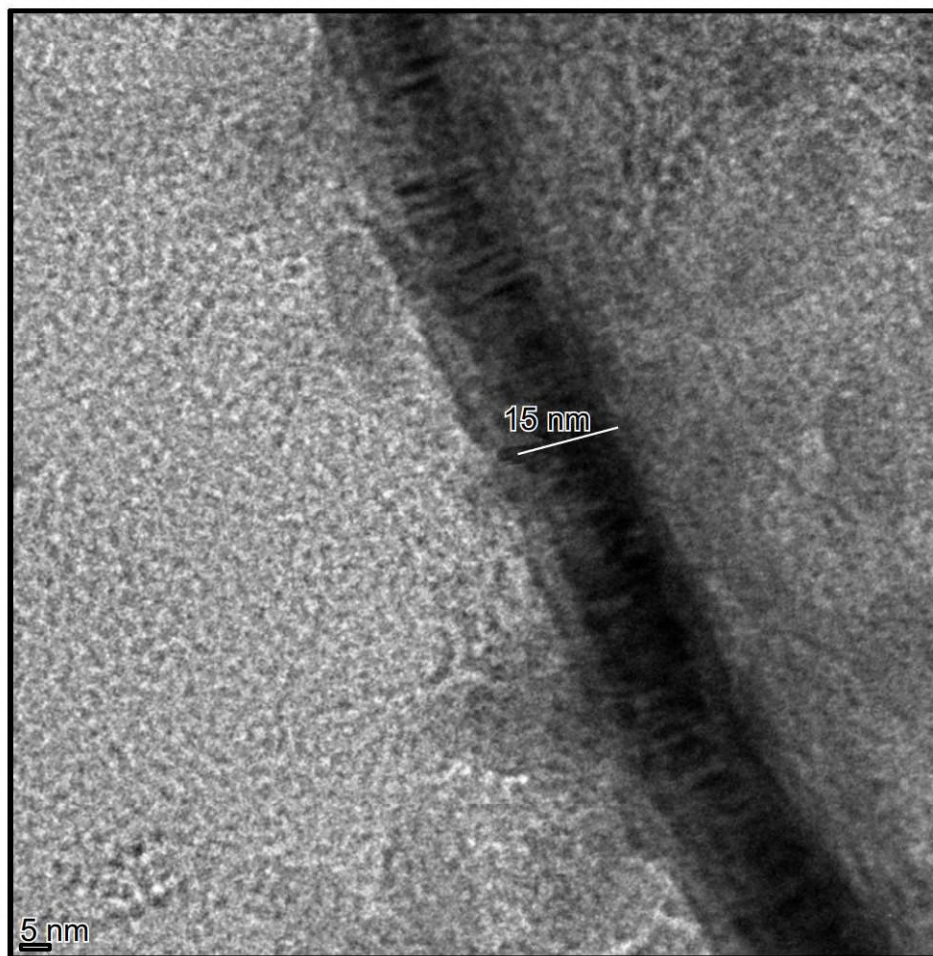


FIG. 21B

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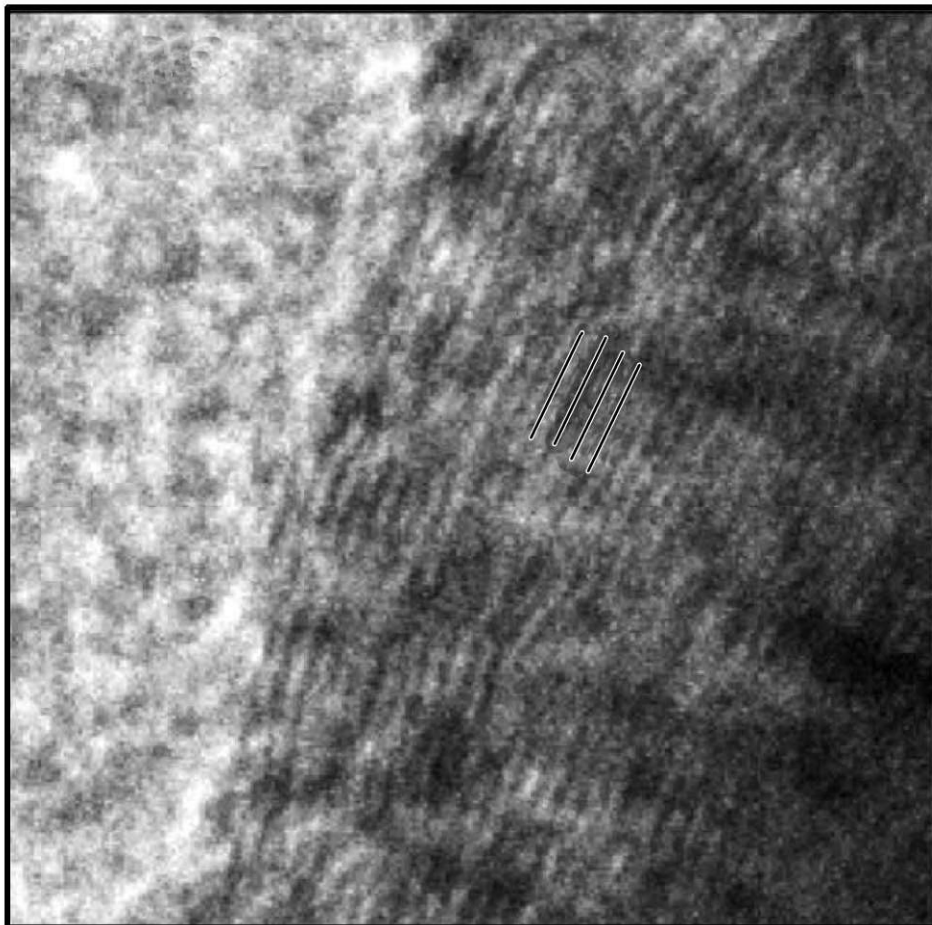


FIG. 21C

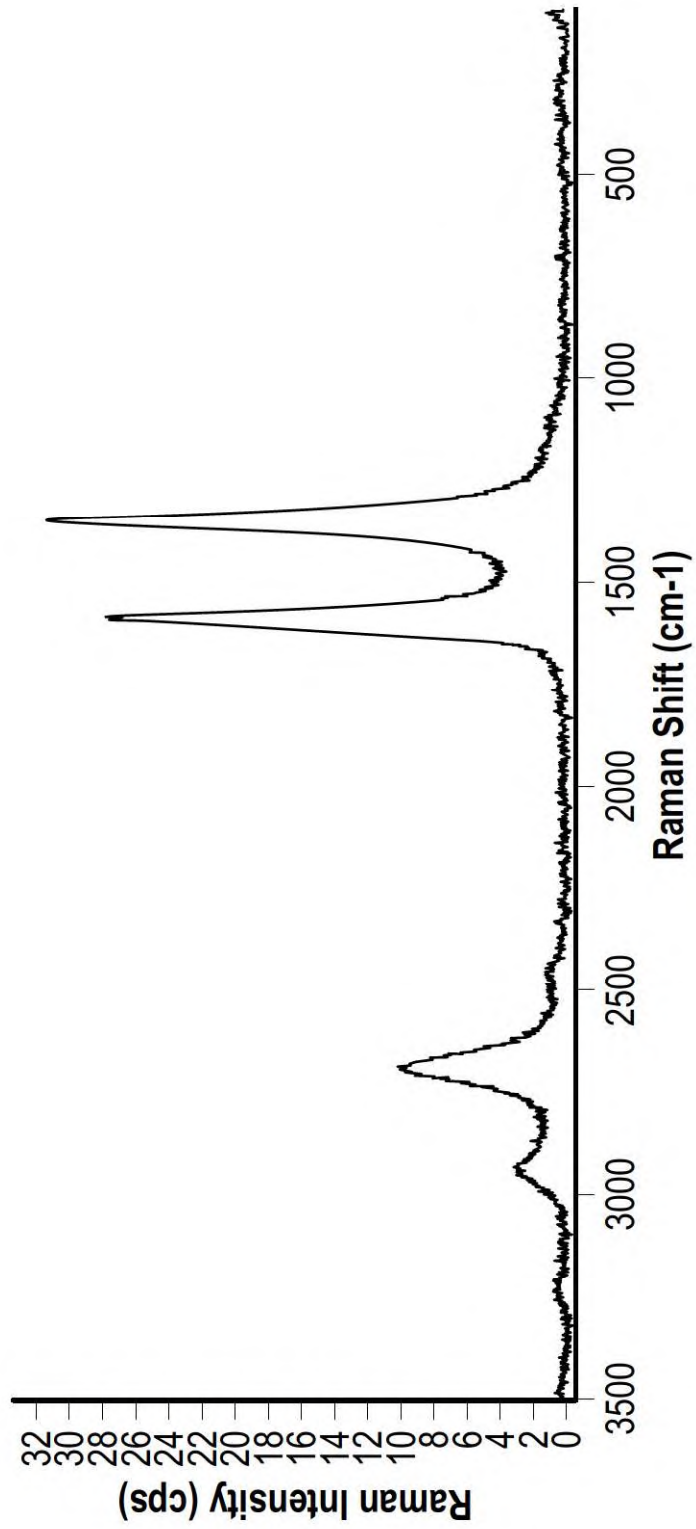


FIG. 22

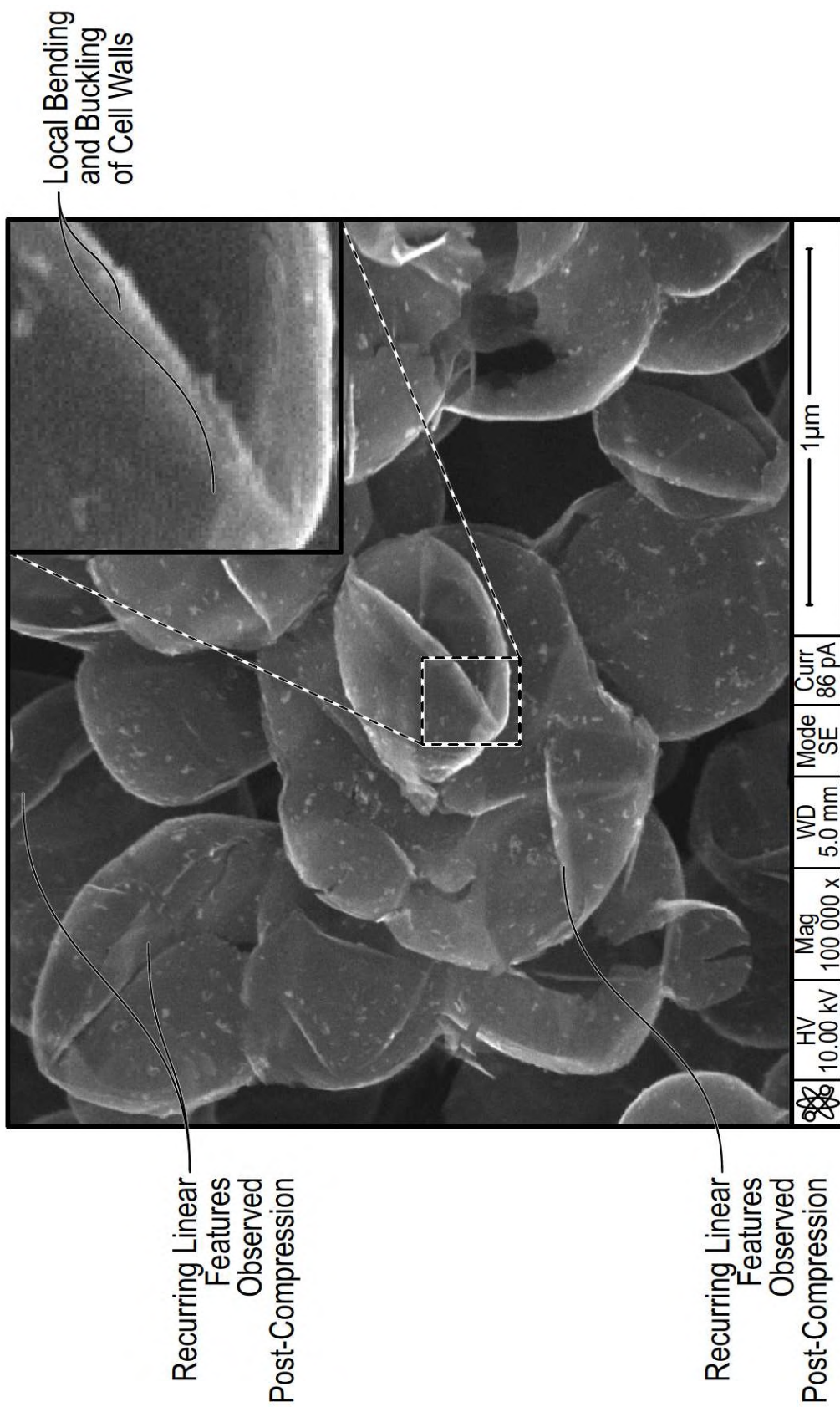


FIG. 23

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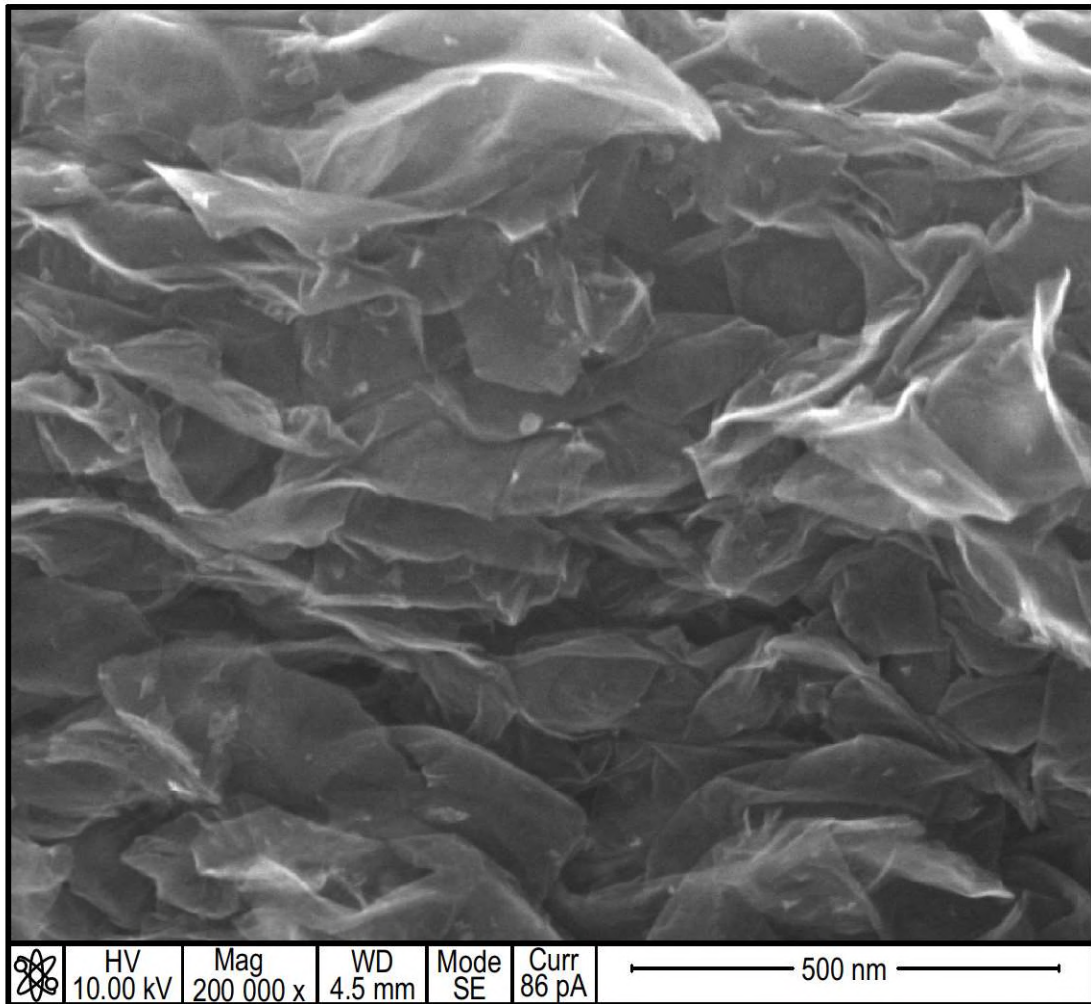


FIG. 24

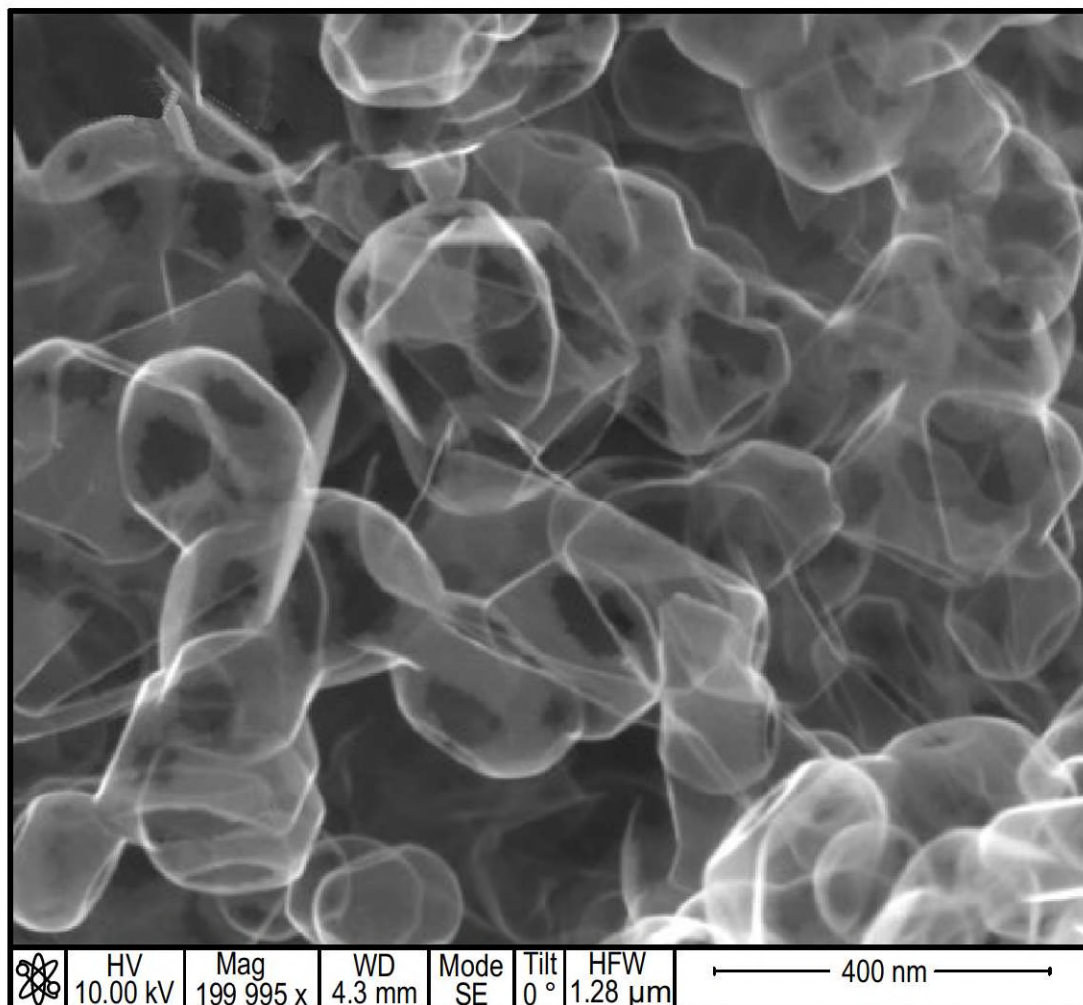


FIG. 25A

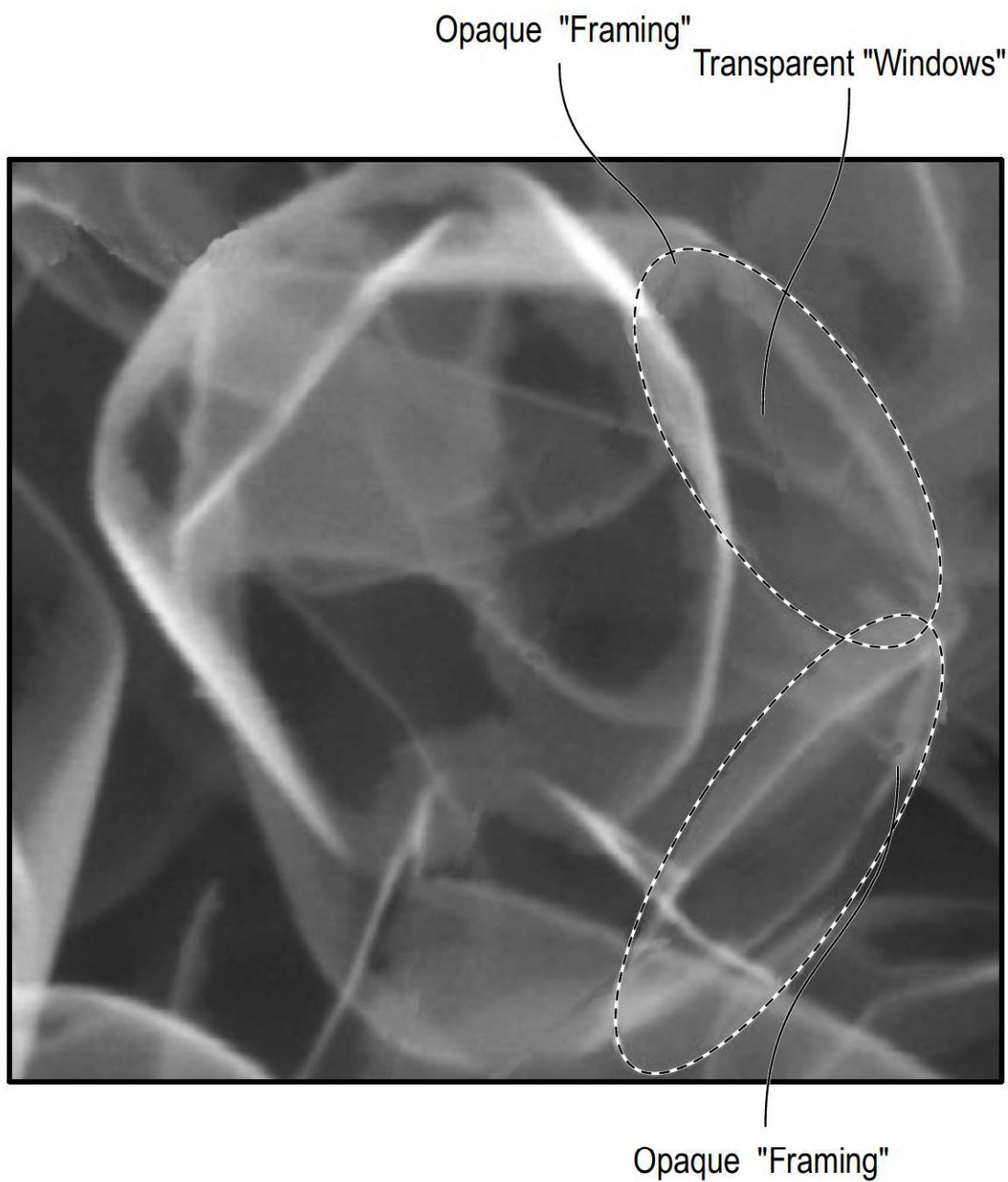
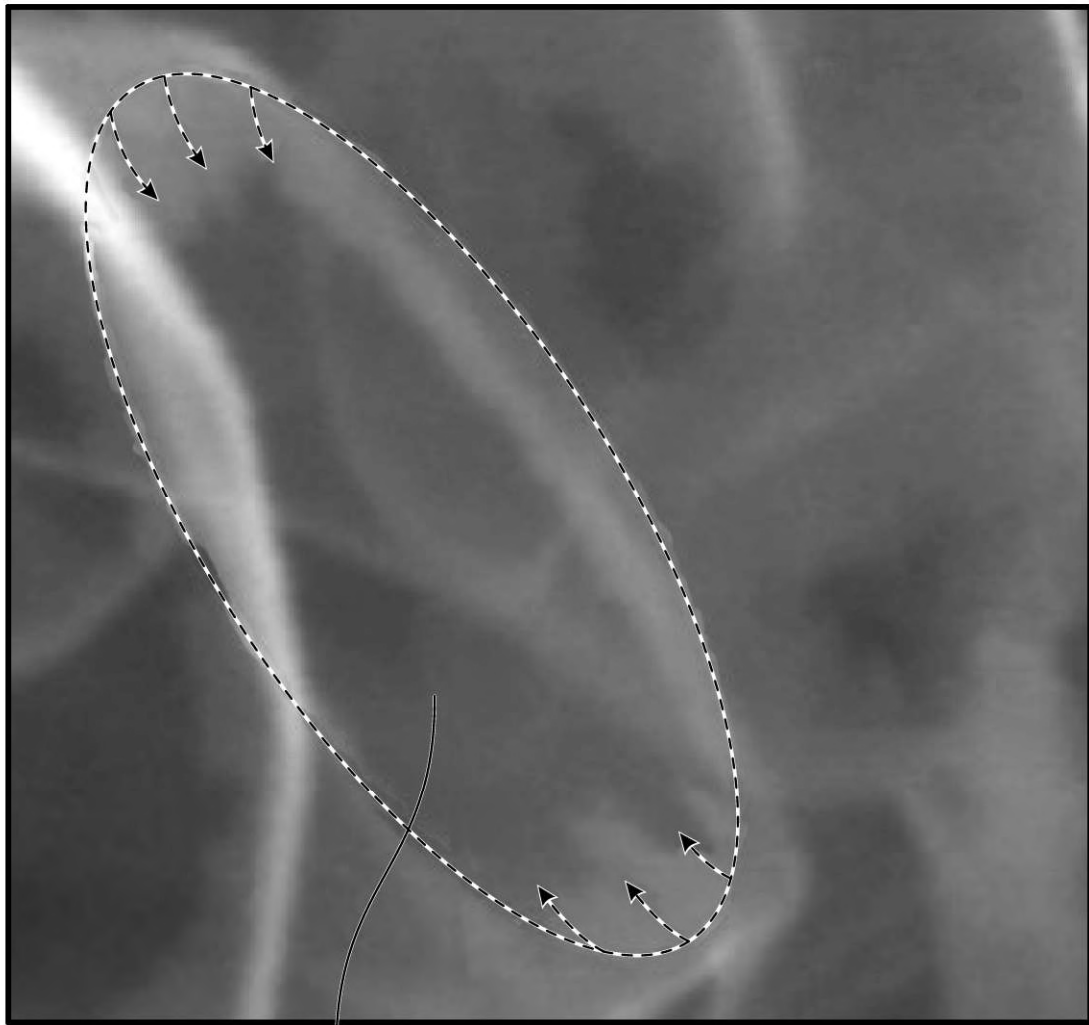


FIG. 25B



Concave surface
extending across facet

FIG. 25C

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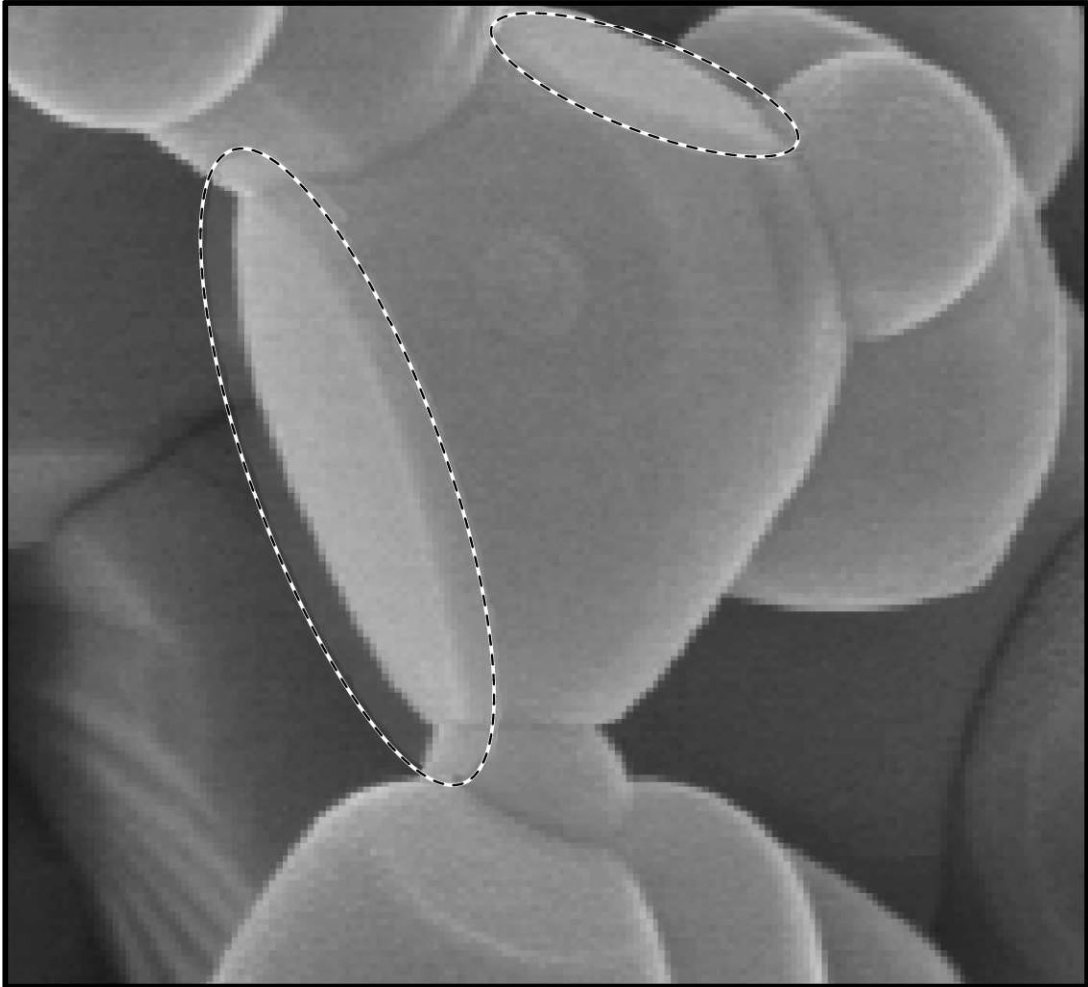


FIG. 26

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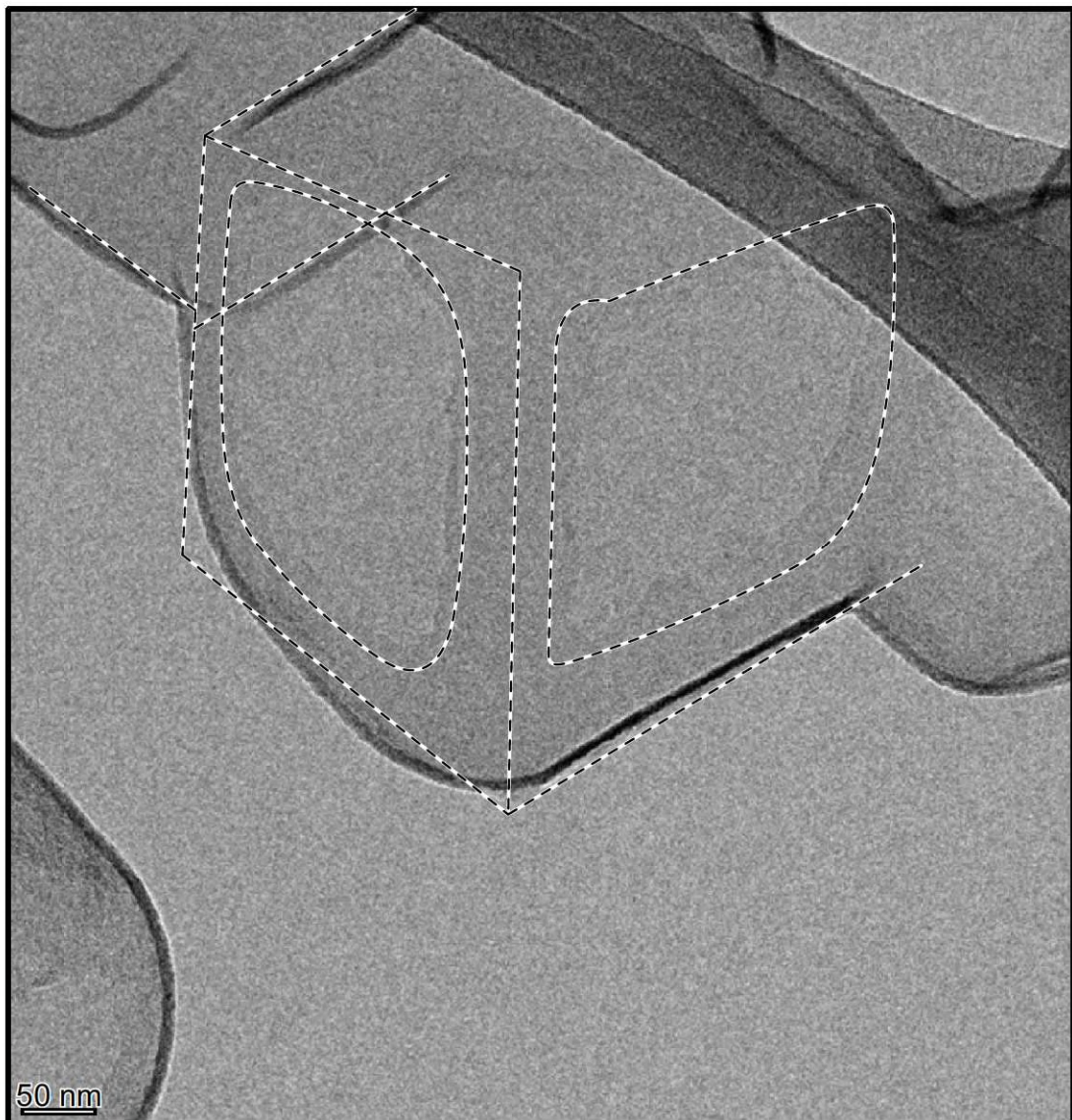


FIG. 27A

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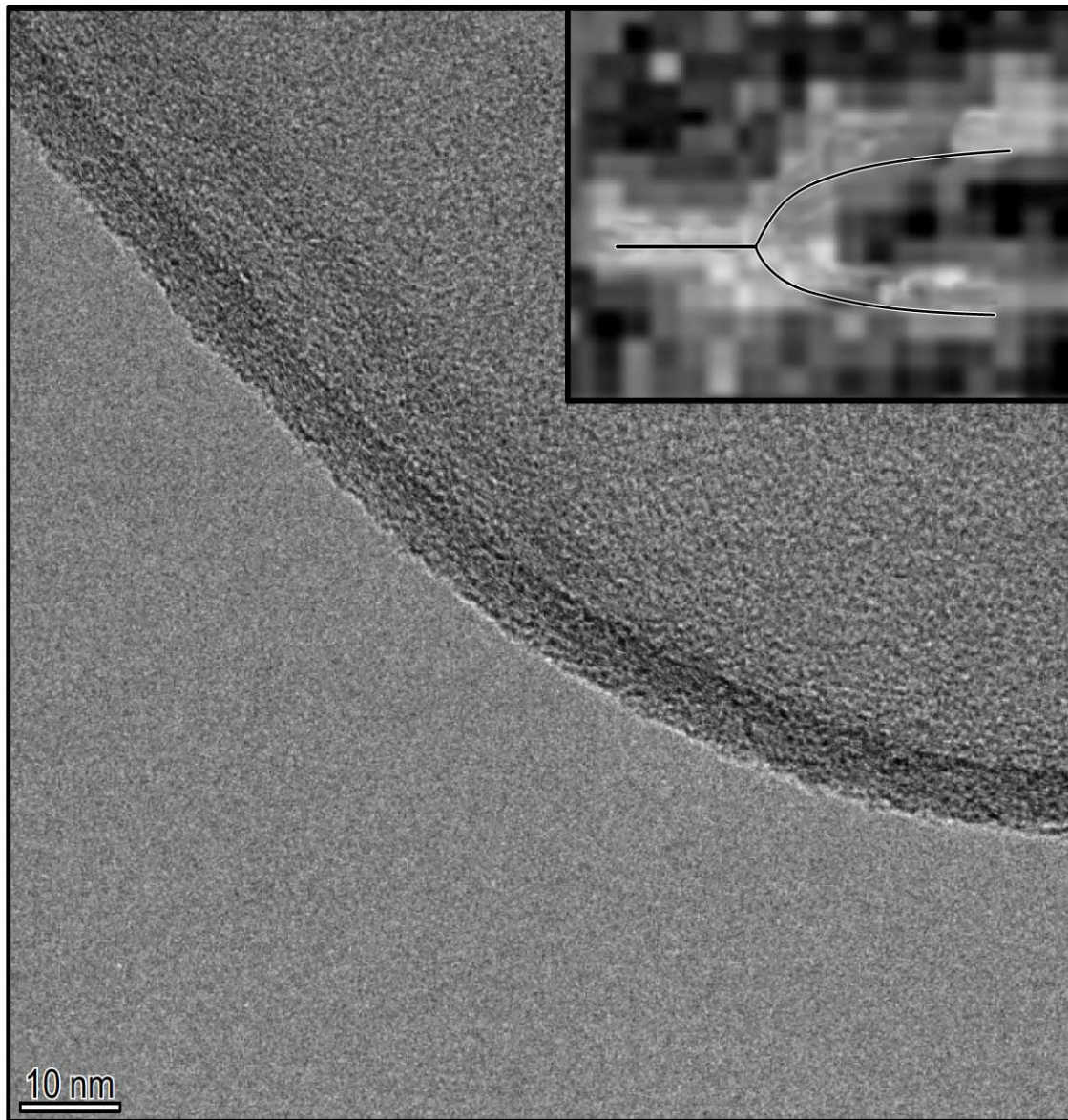


FIG. 27B

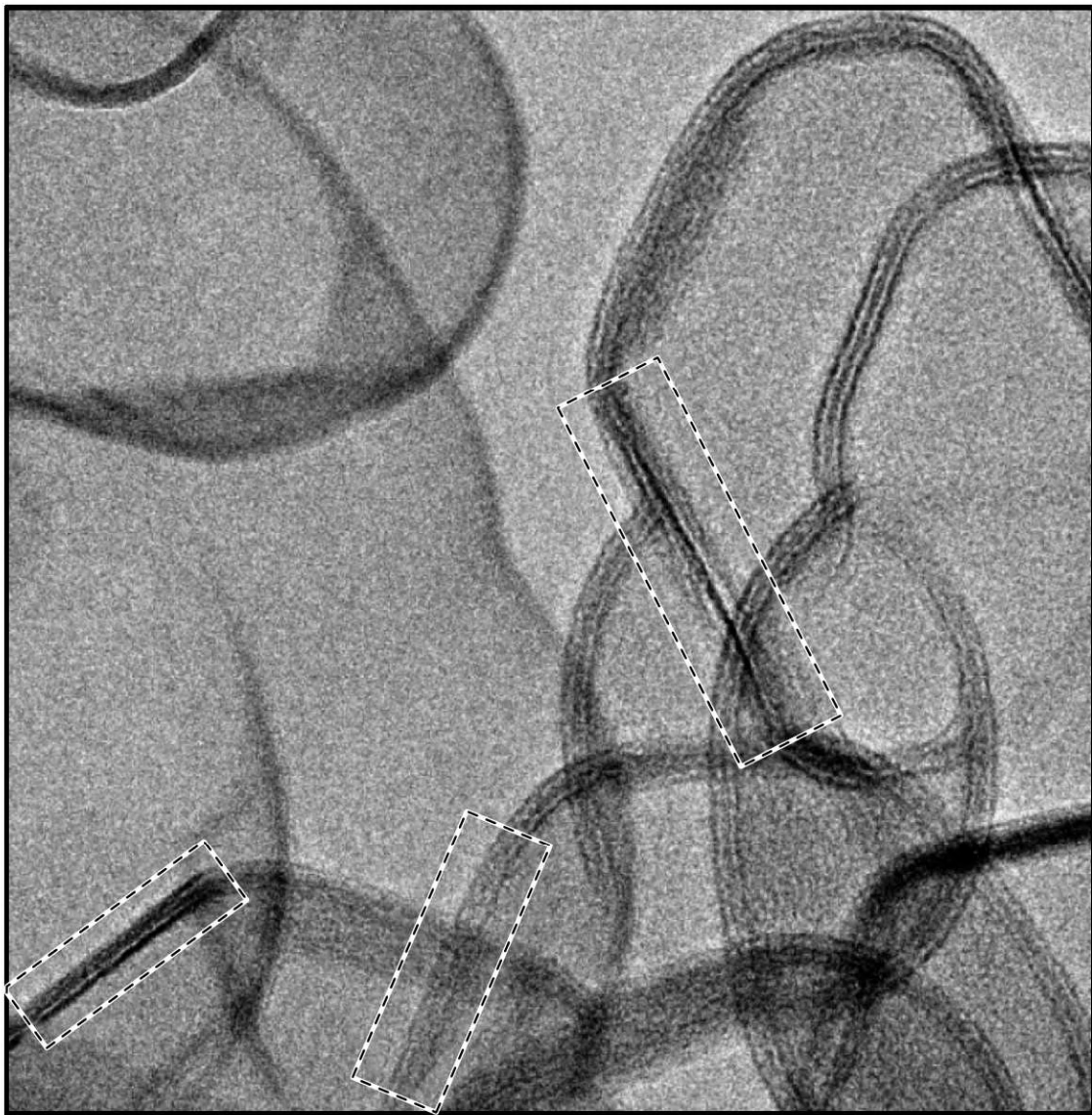


FIG. 27C

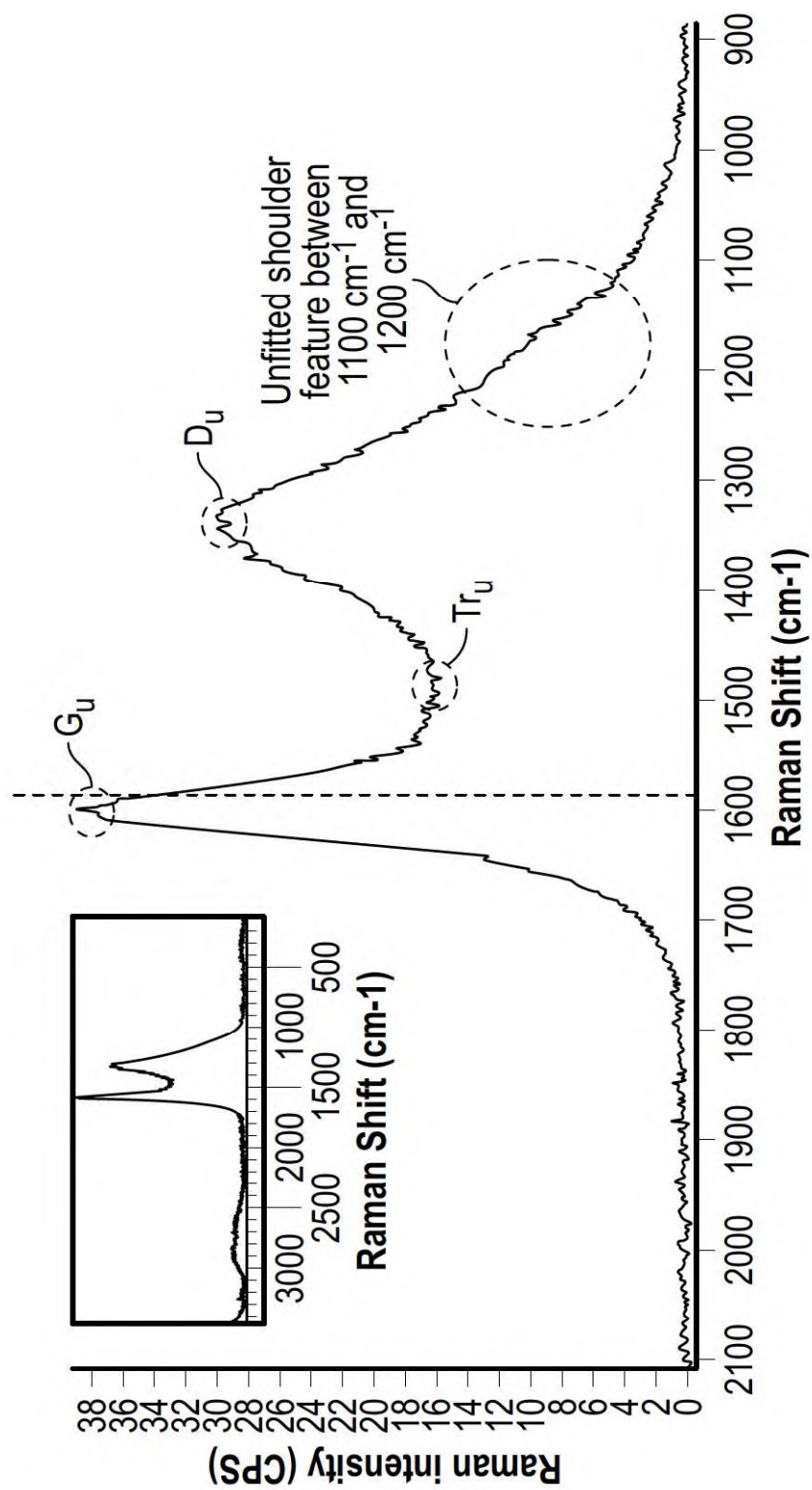


FIG. 28

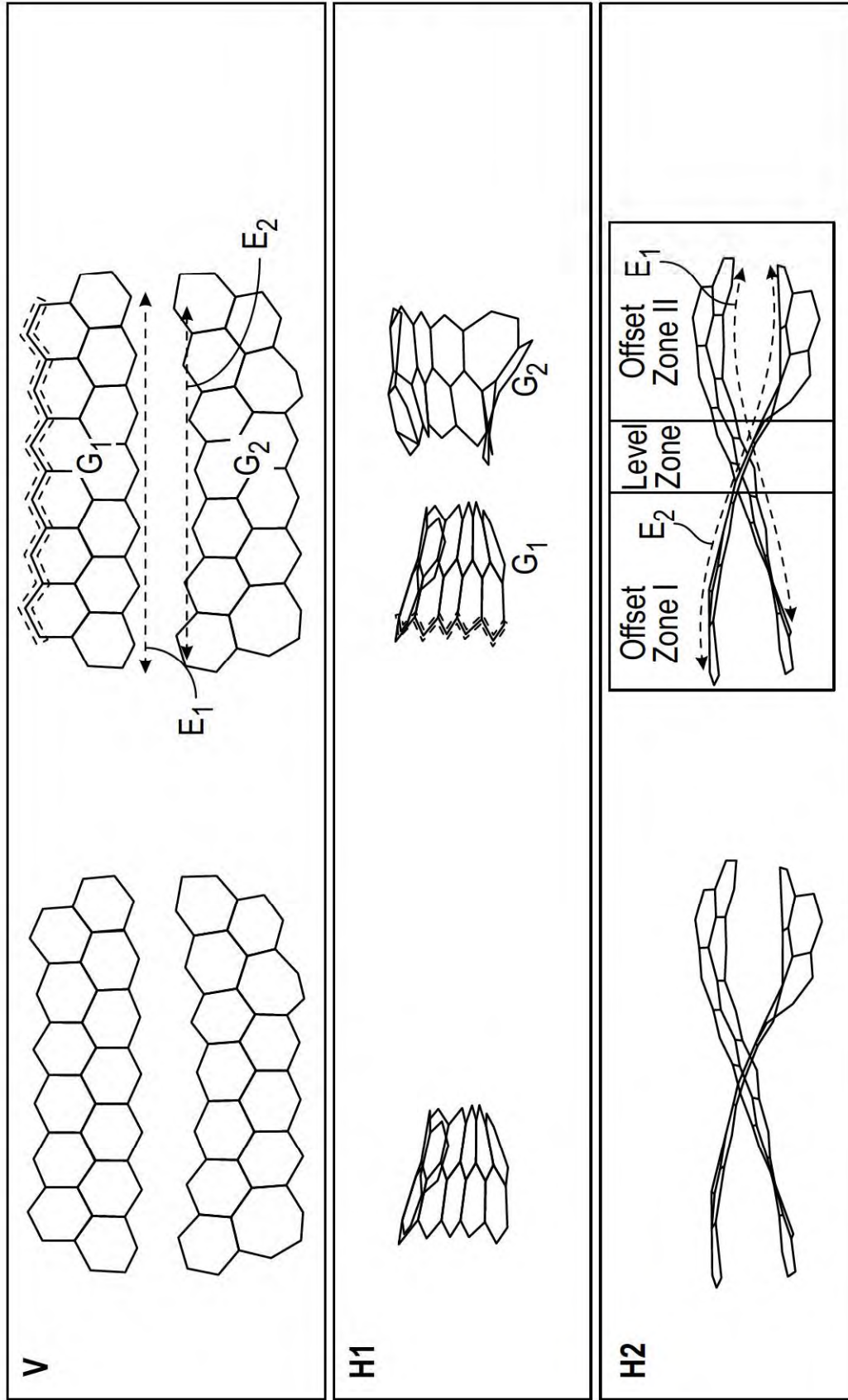


FIG. 29

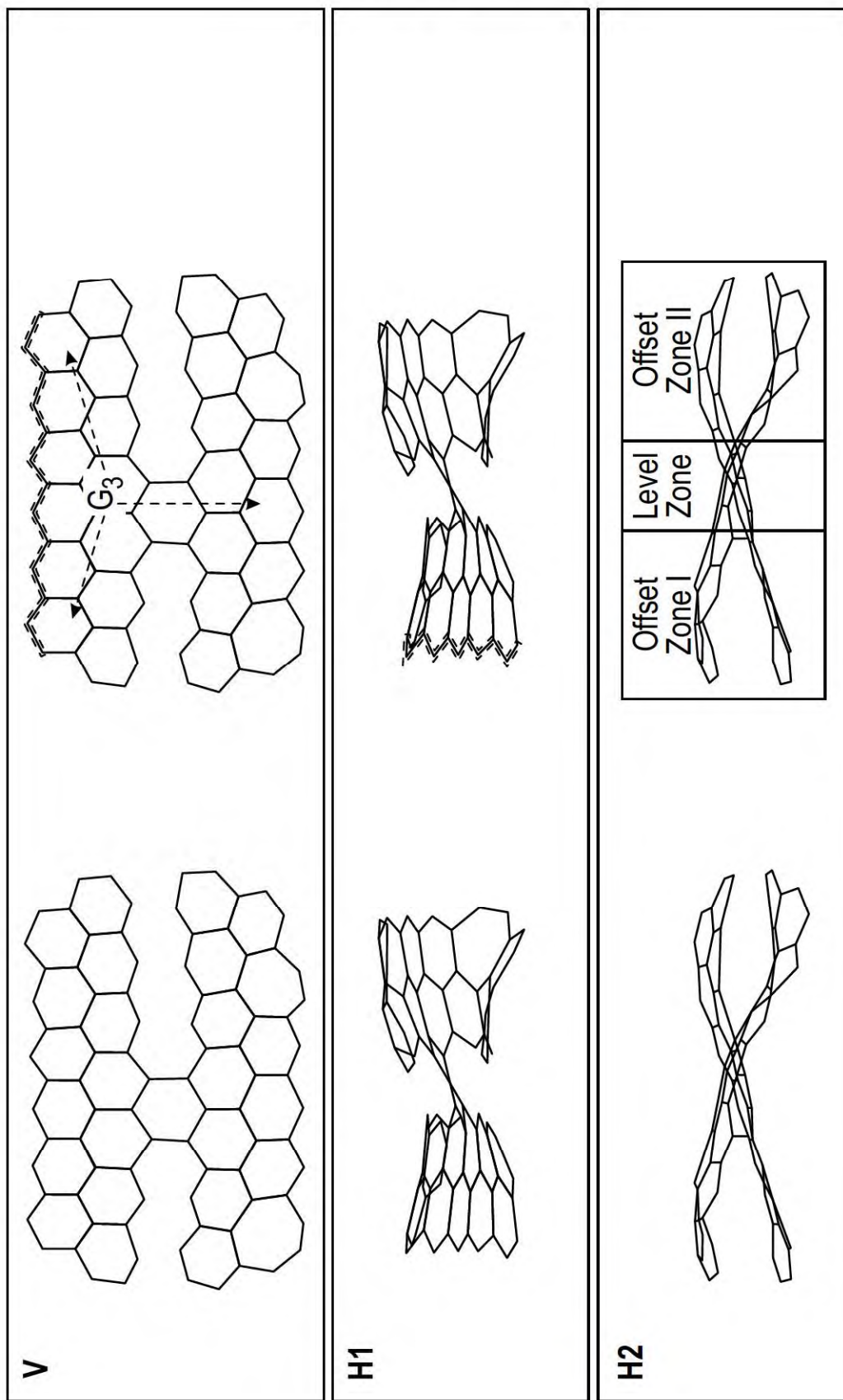
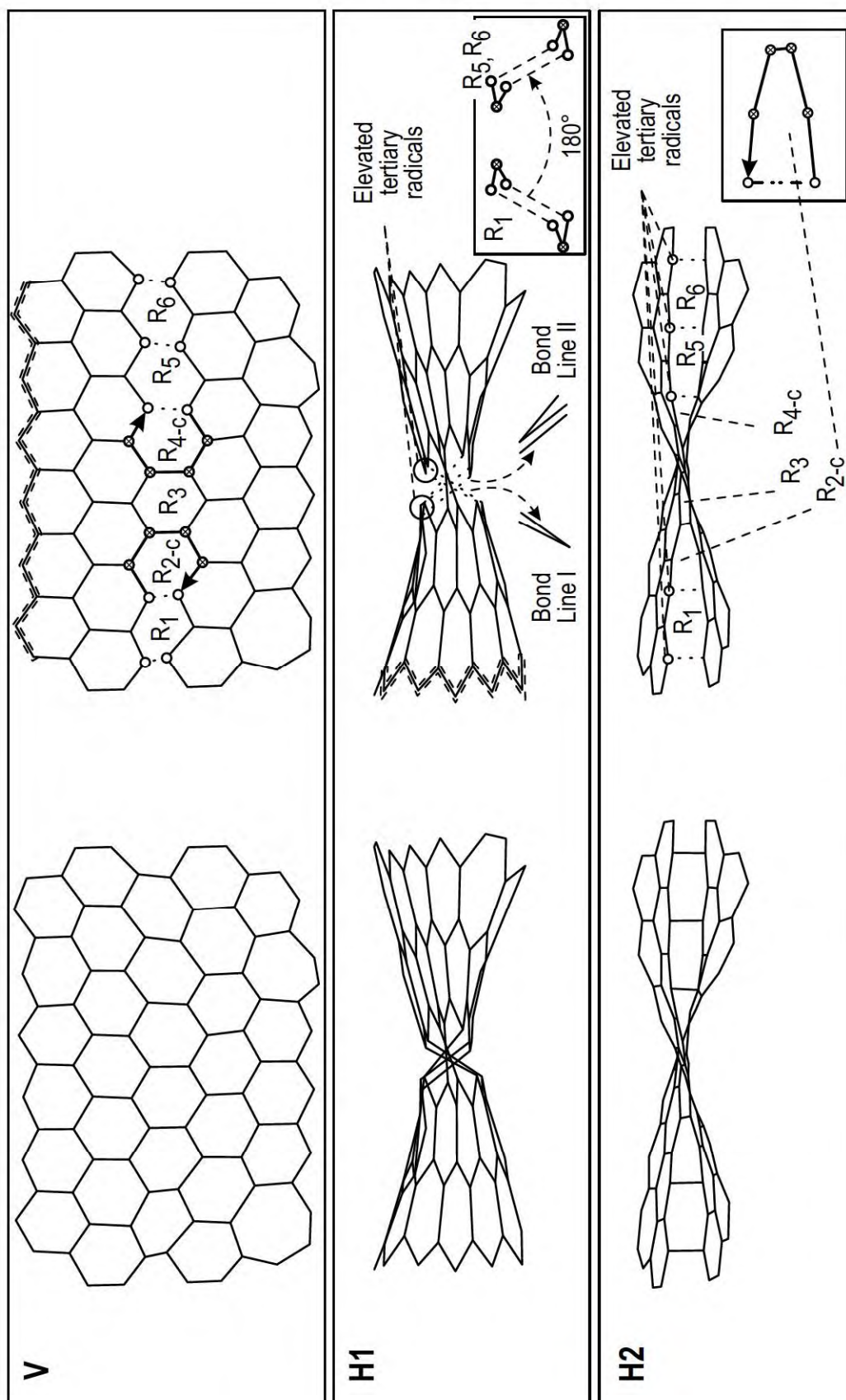


FIG. 30



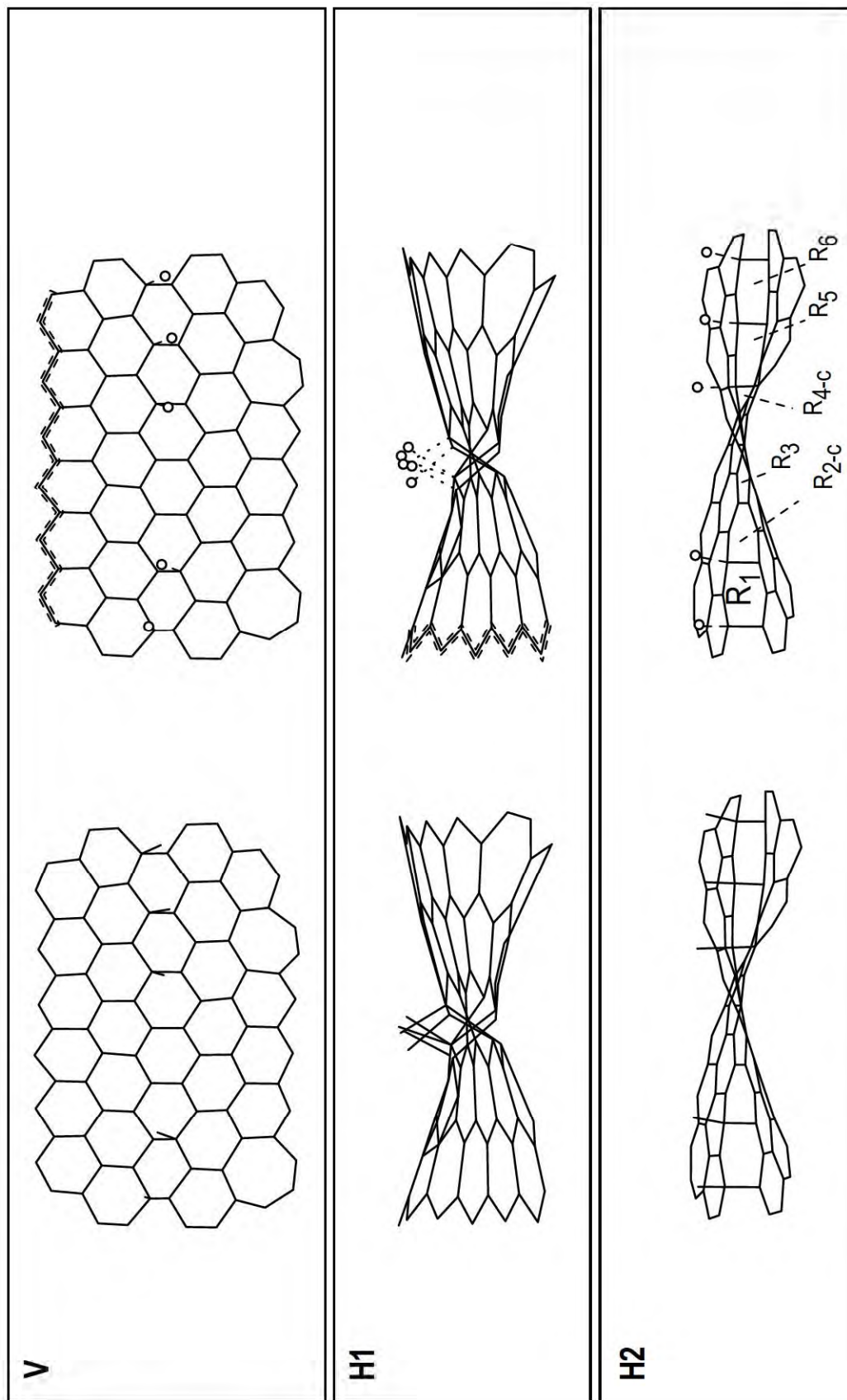


FIG. 32

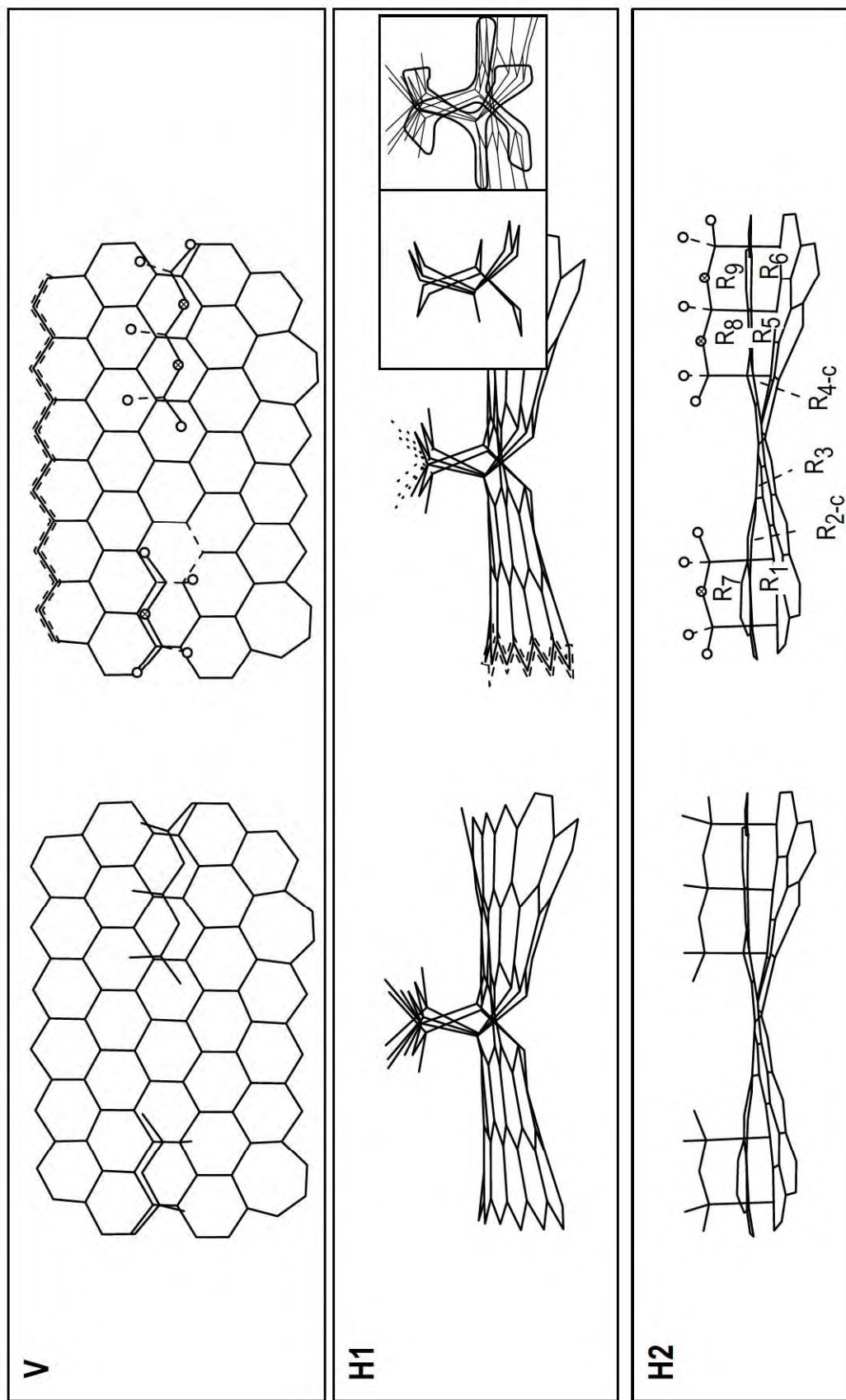
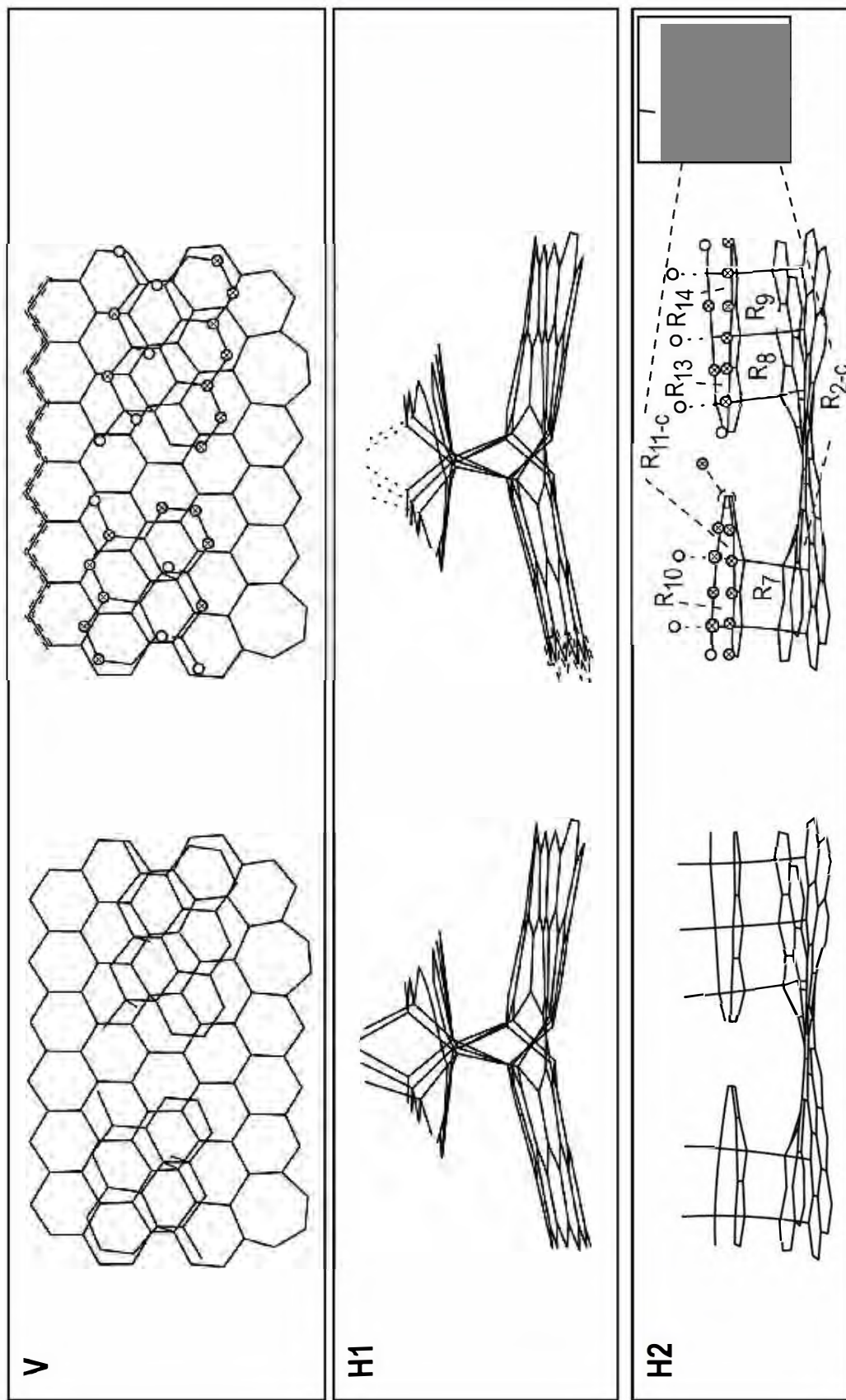
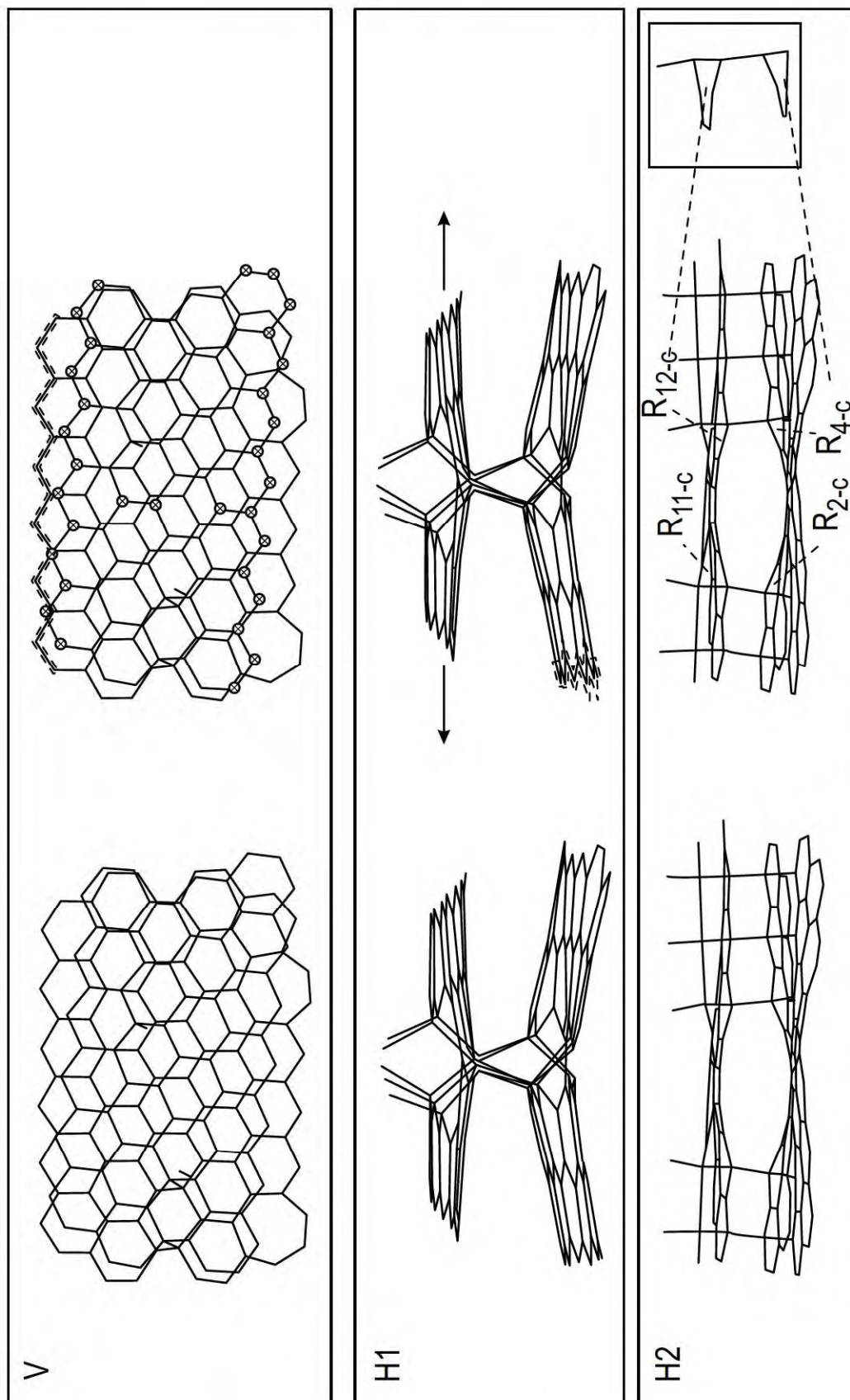
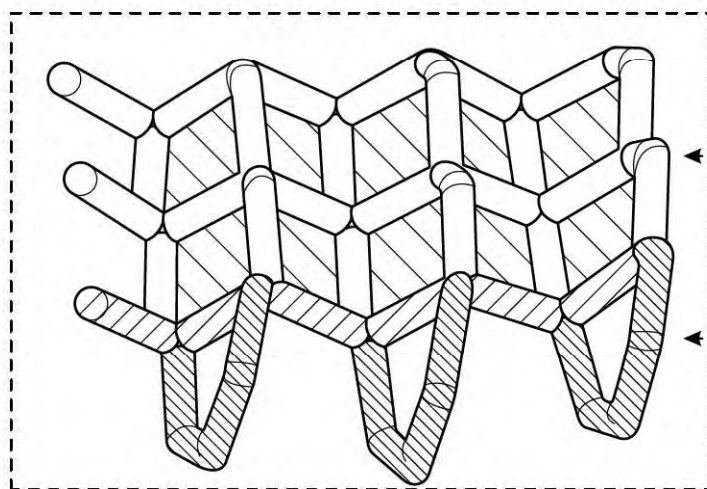


FIG. 33





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Chiral Diamondlike
Column Seam

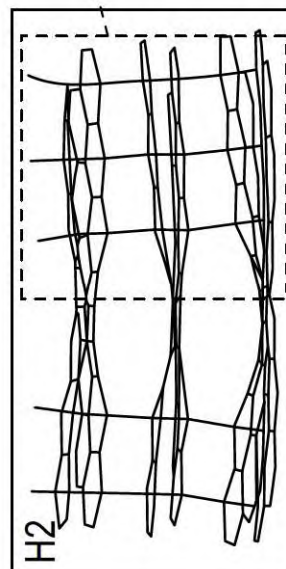
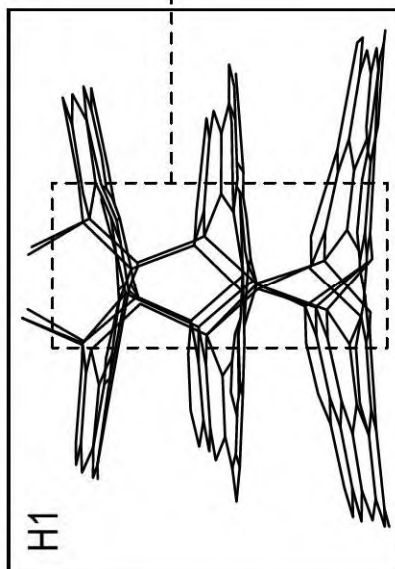
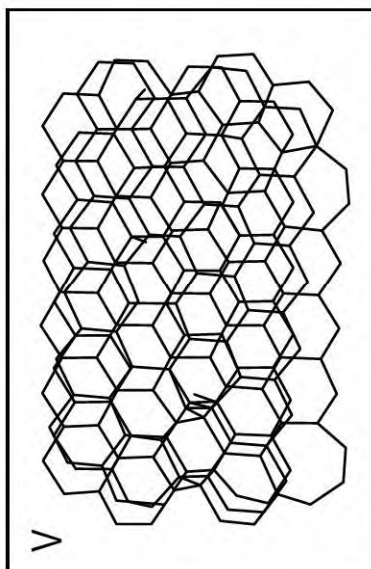
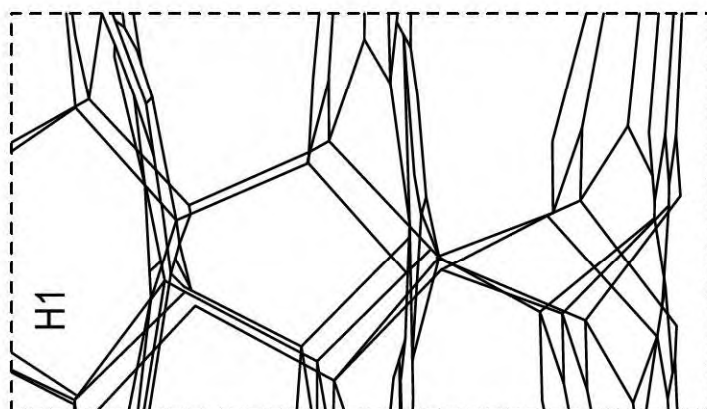


FIG. 36

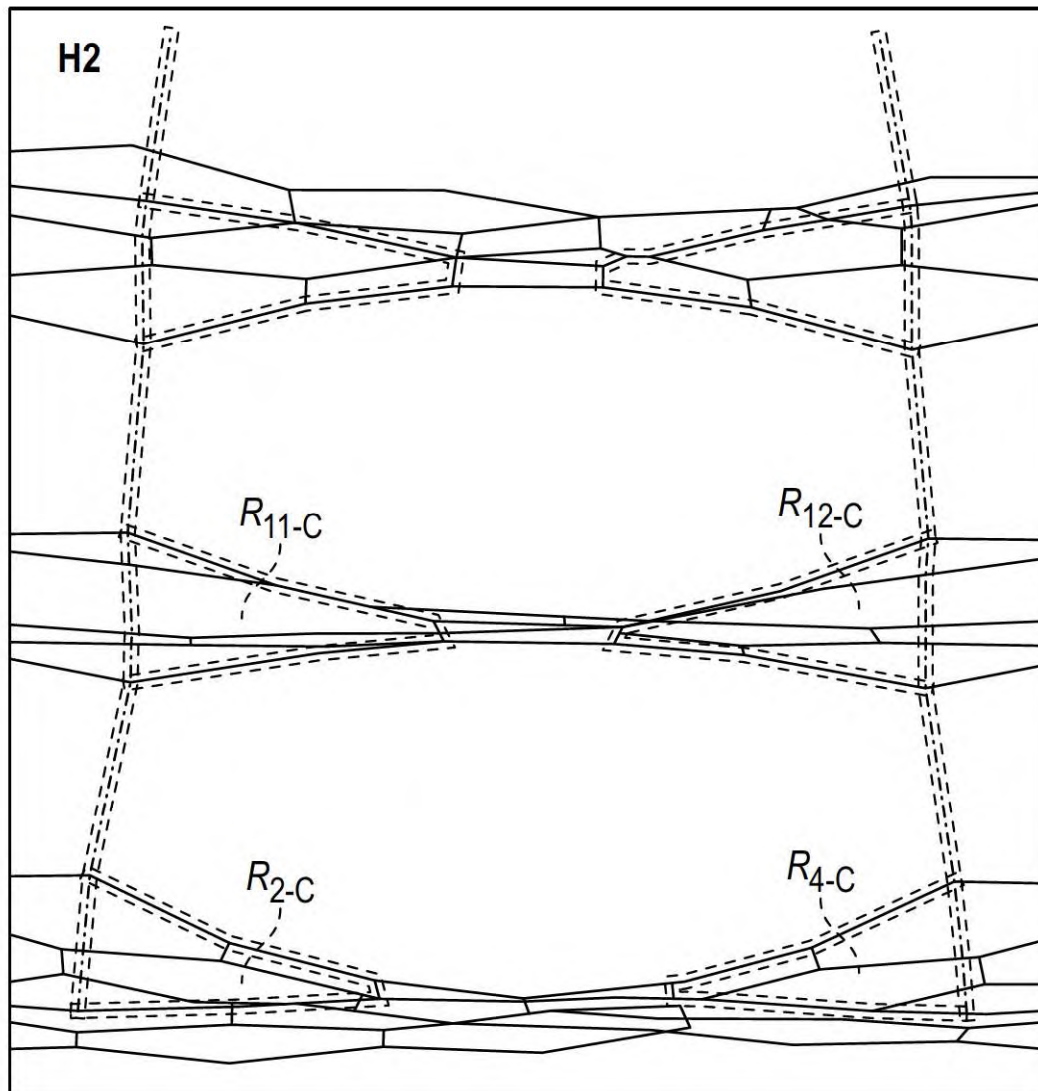


FIG. 37A

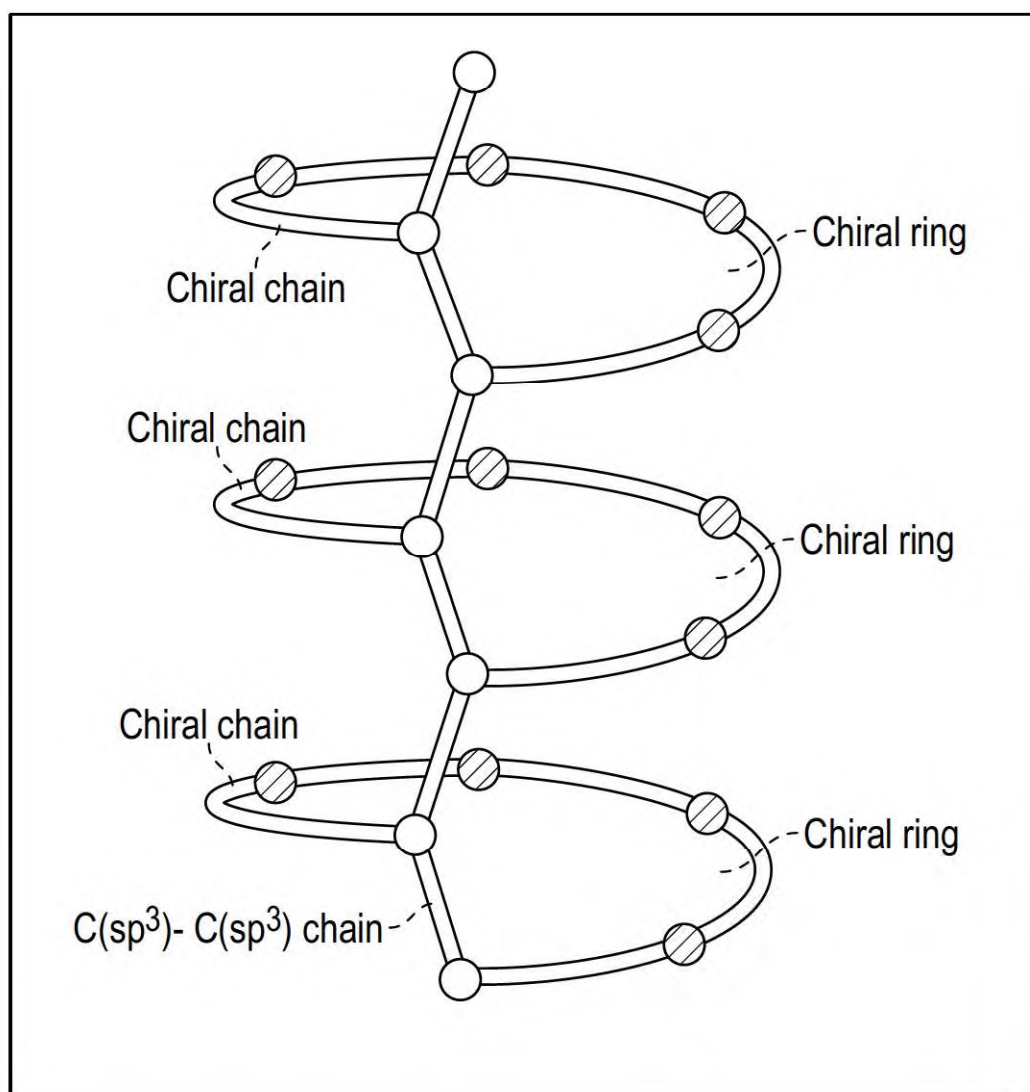


FIG. 37B

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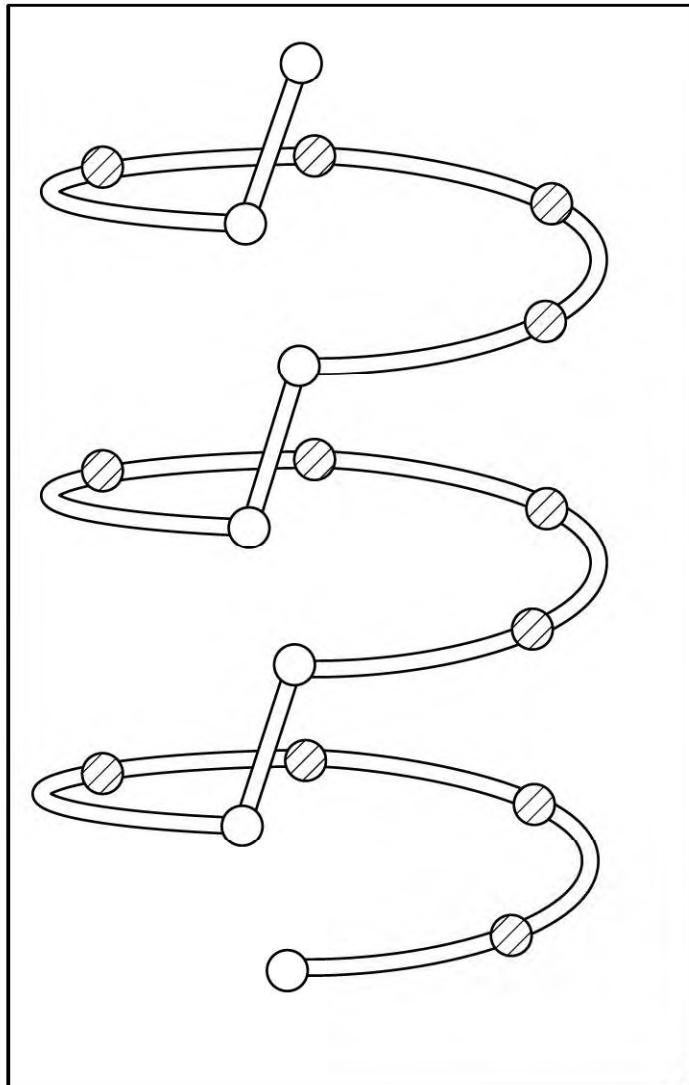


FIG. 37C

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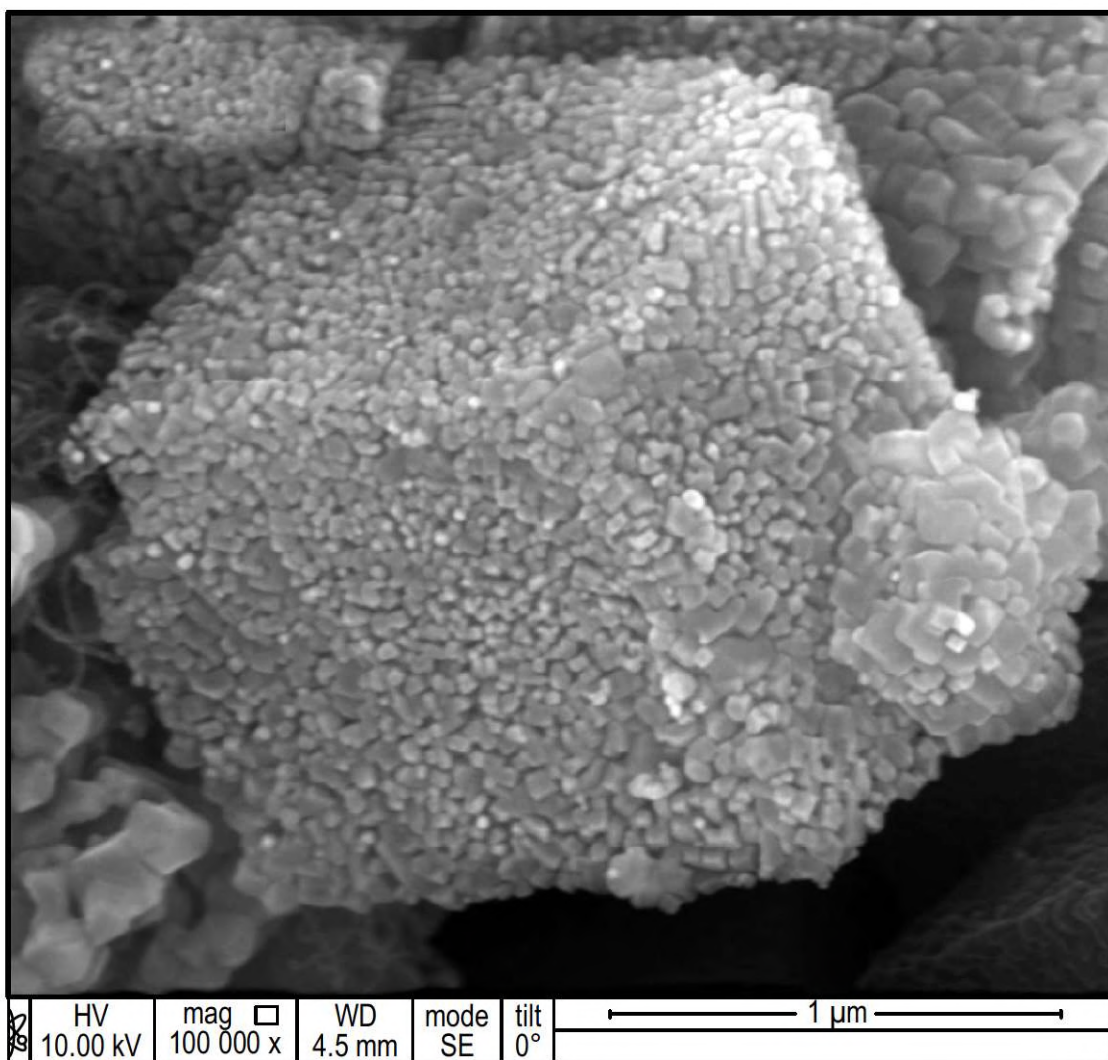


FIG. 38A

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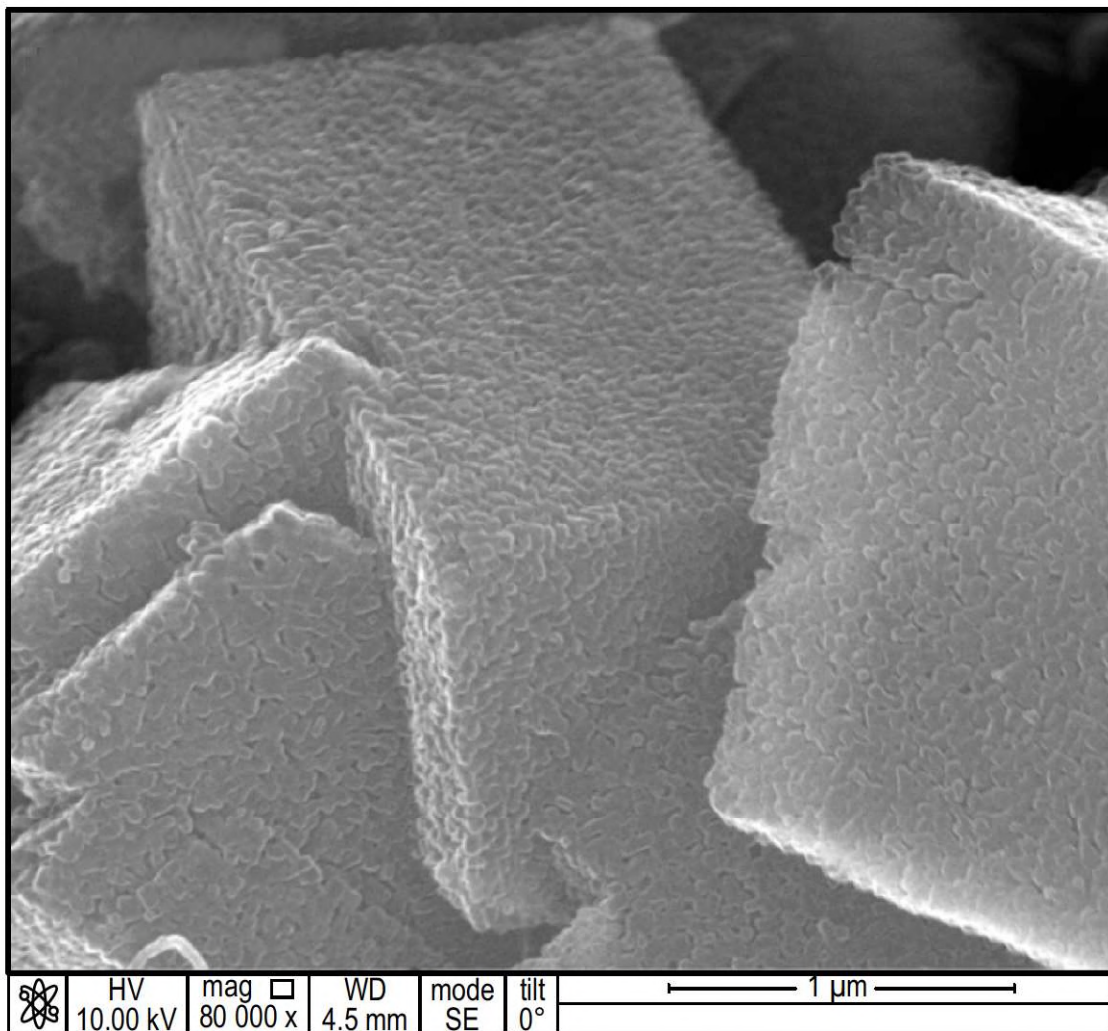


FIG. 38B

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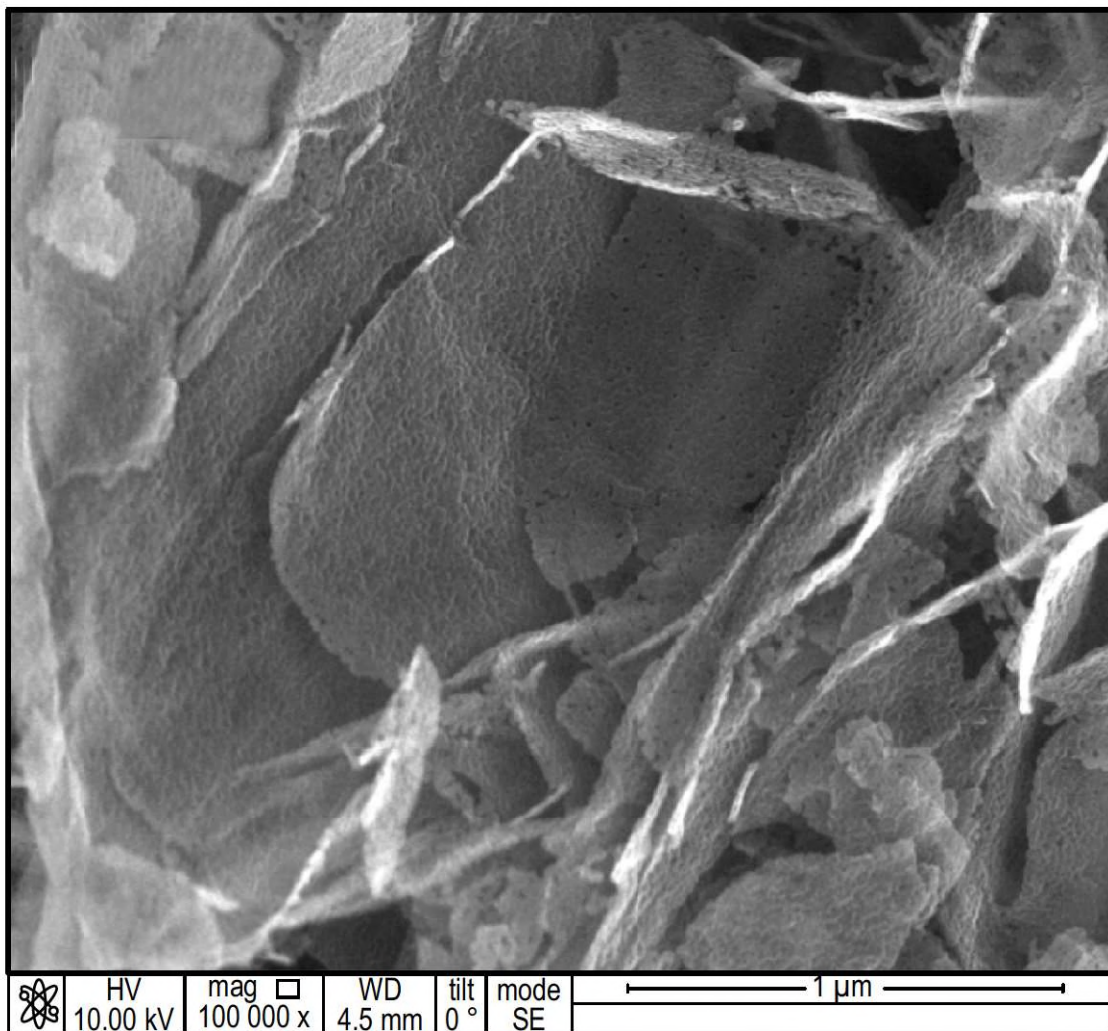


FIG. 38C

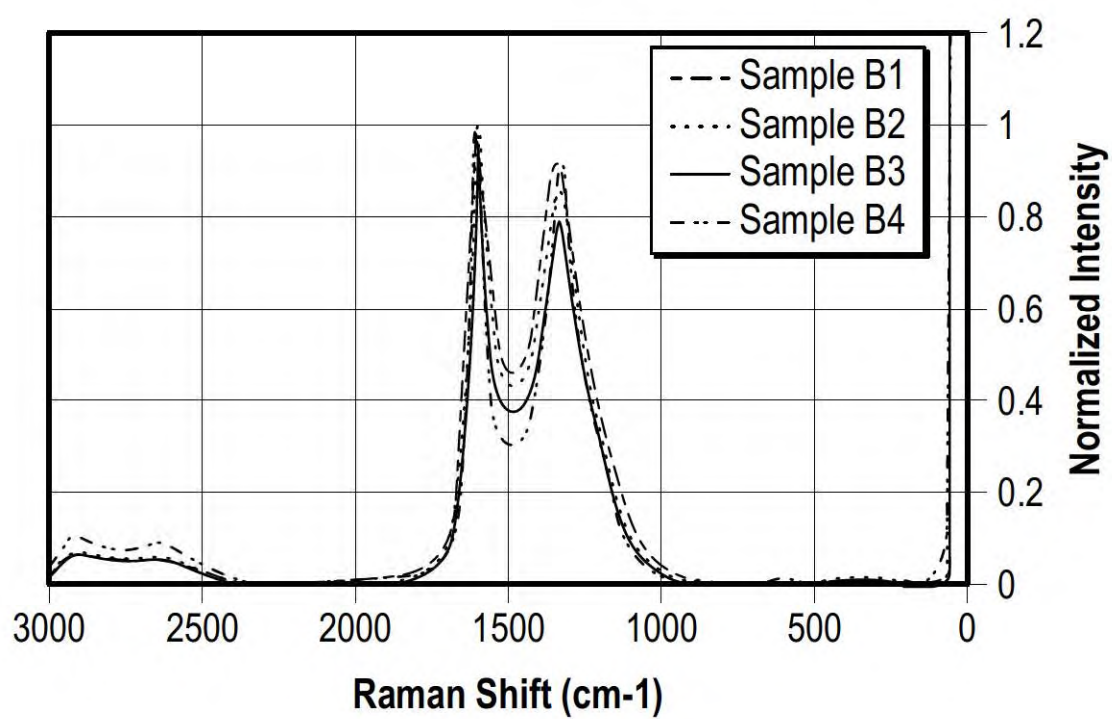


FIG. 39A

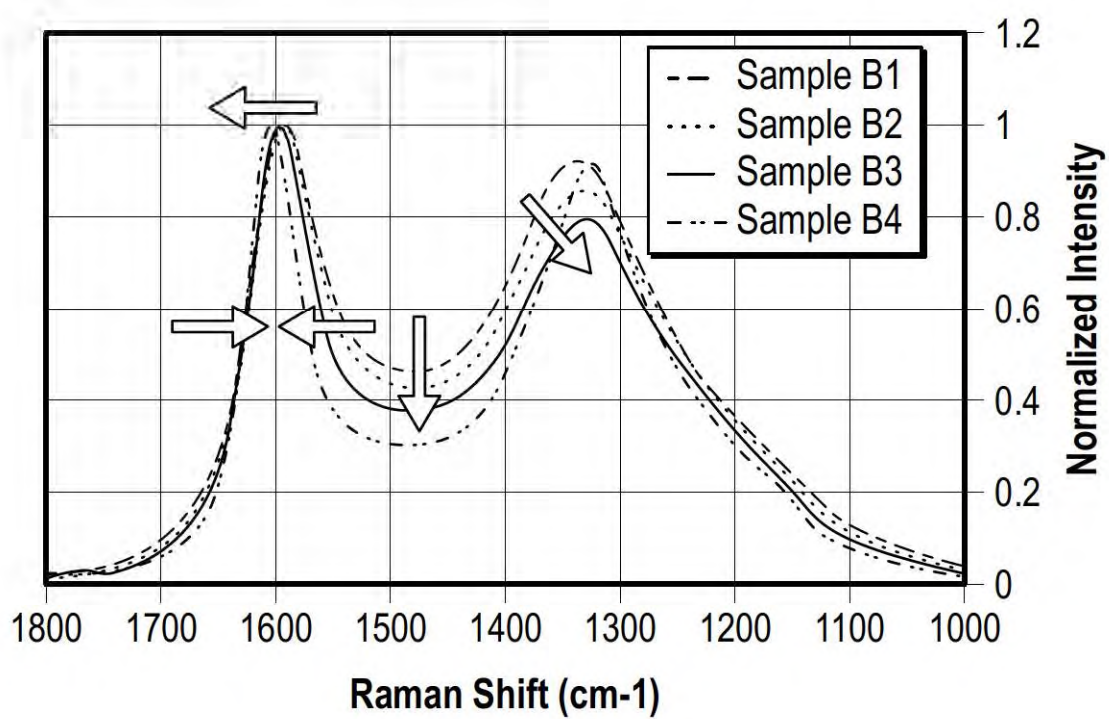


FIG. 39B

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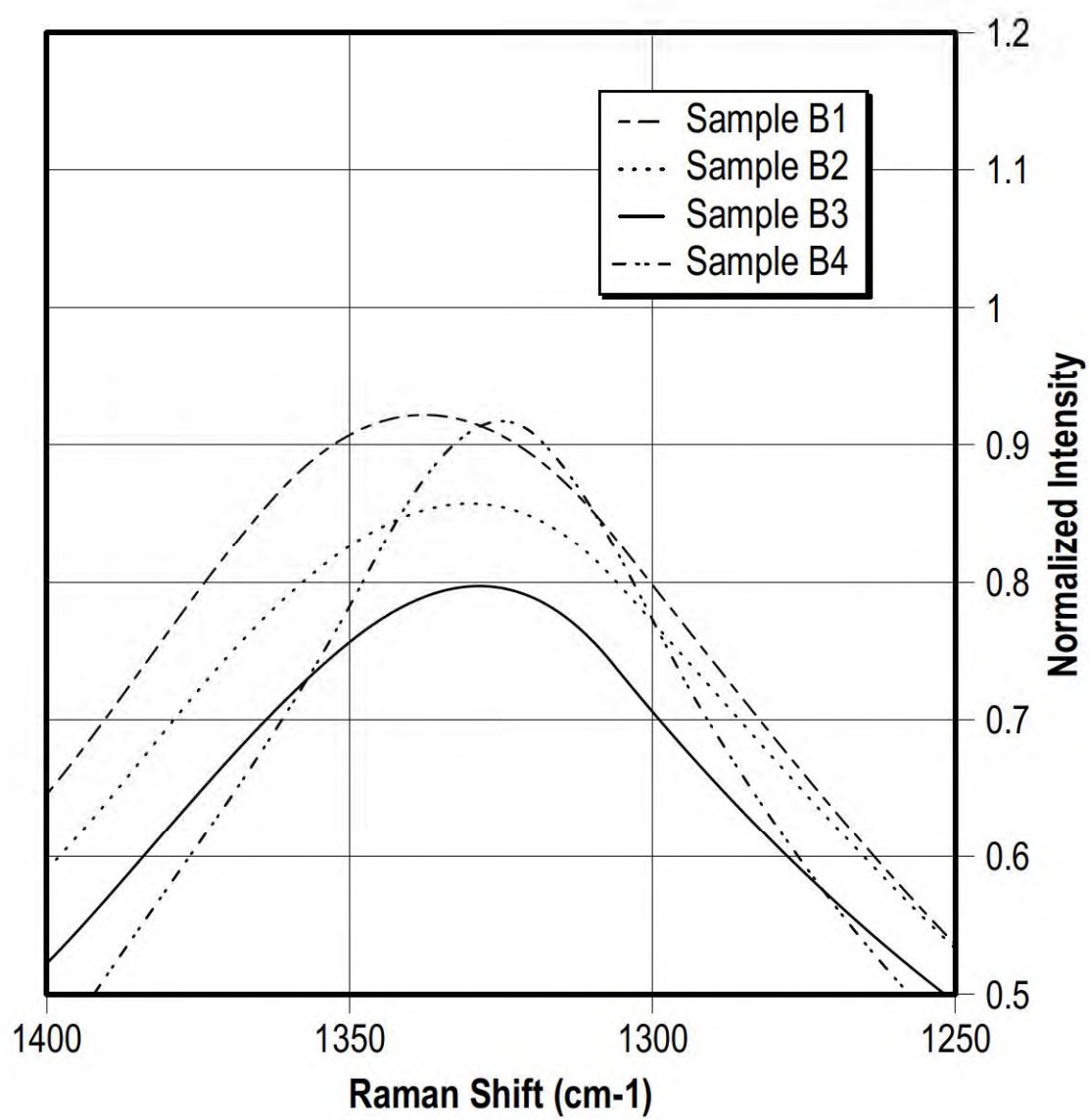


FIG. 39C

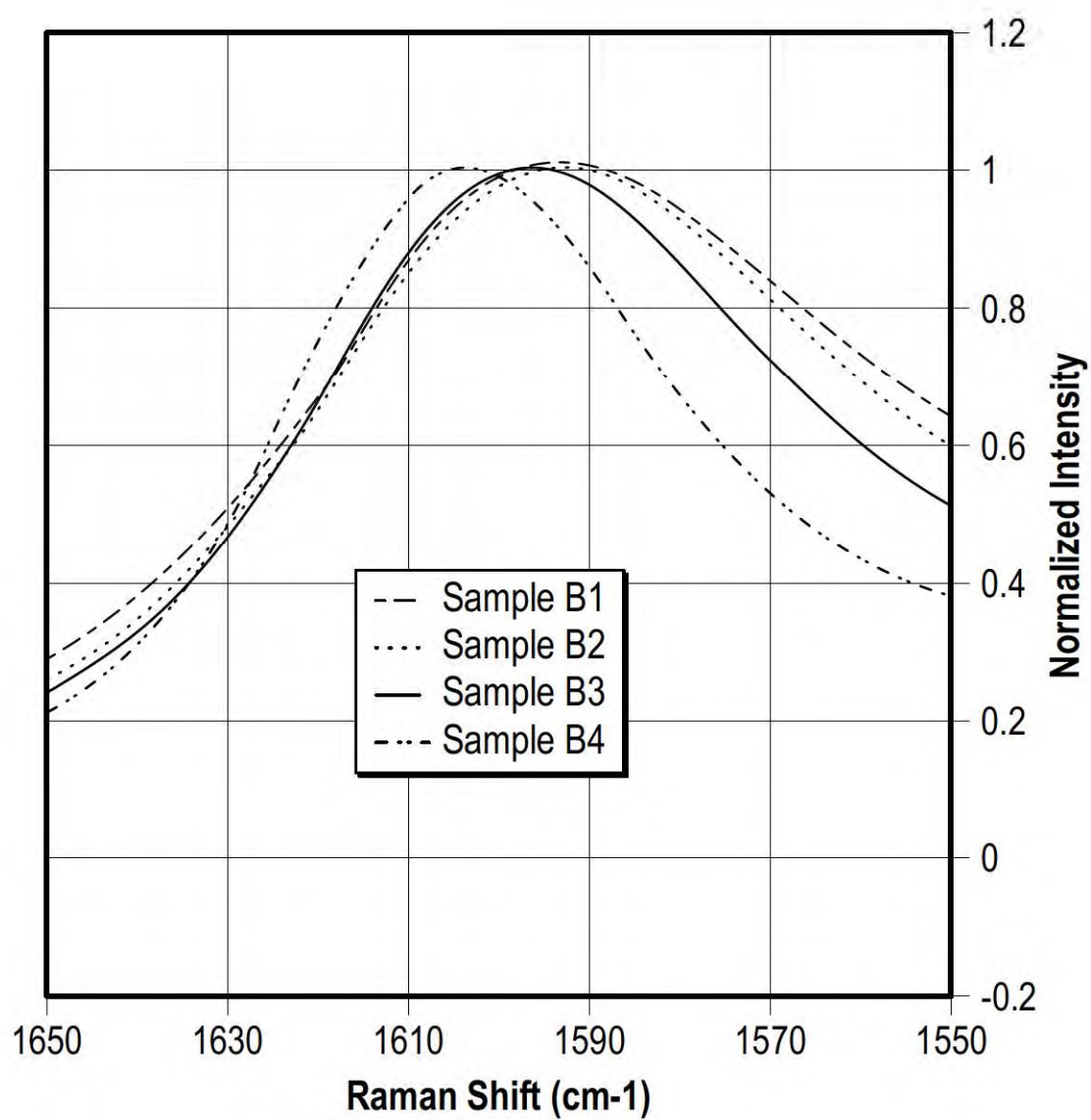


FIG. 39D

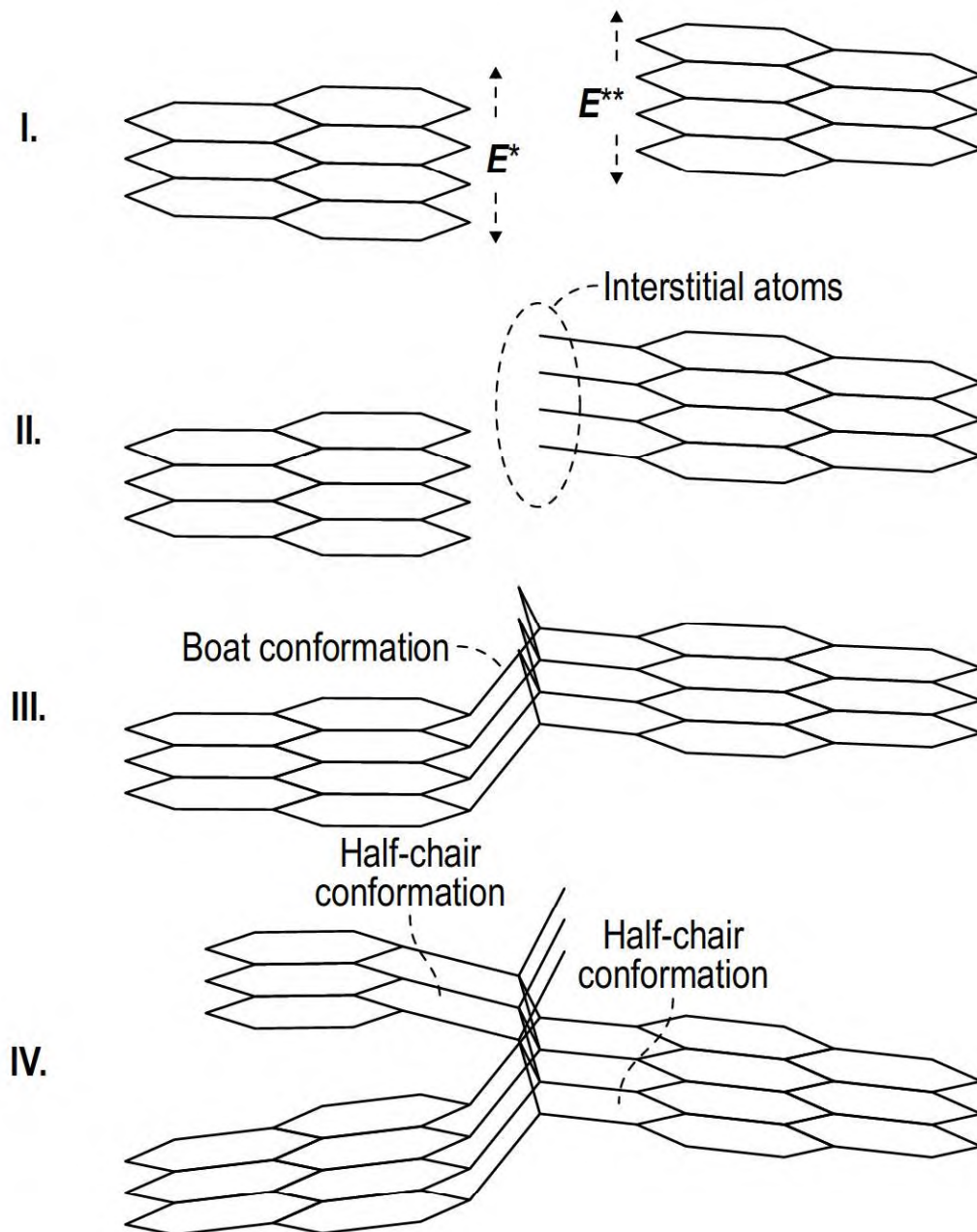


FIG. 40

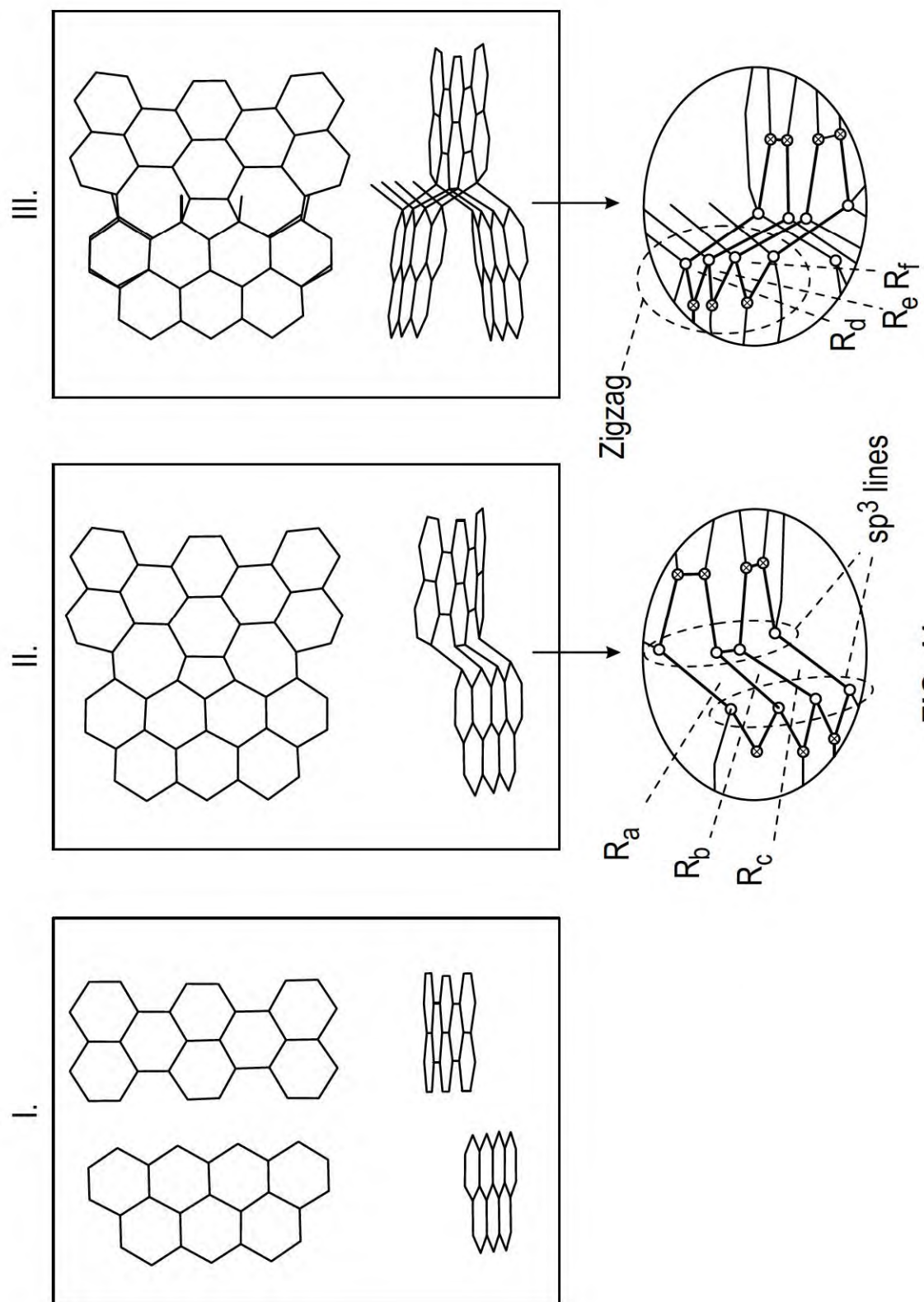
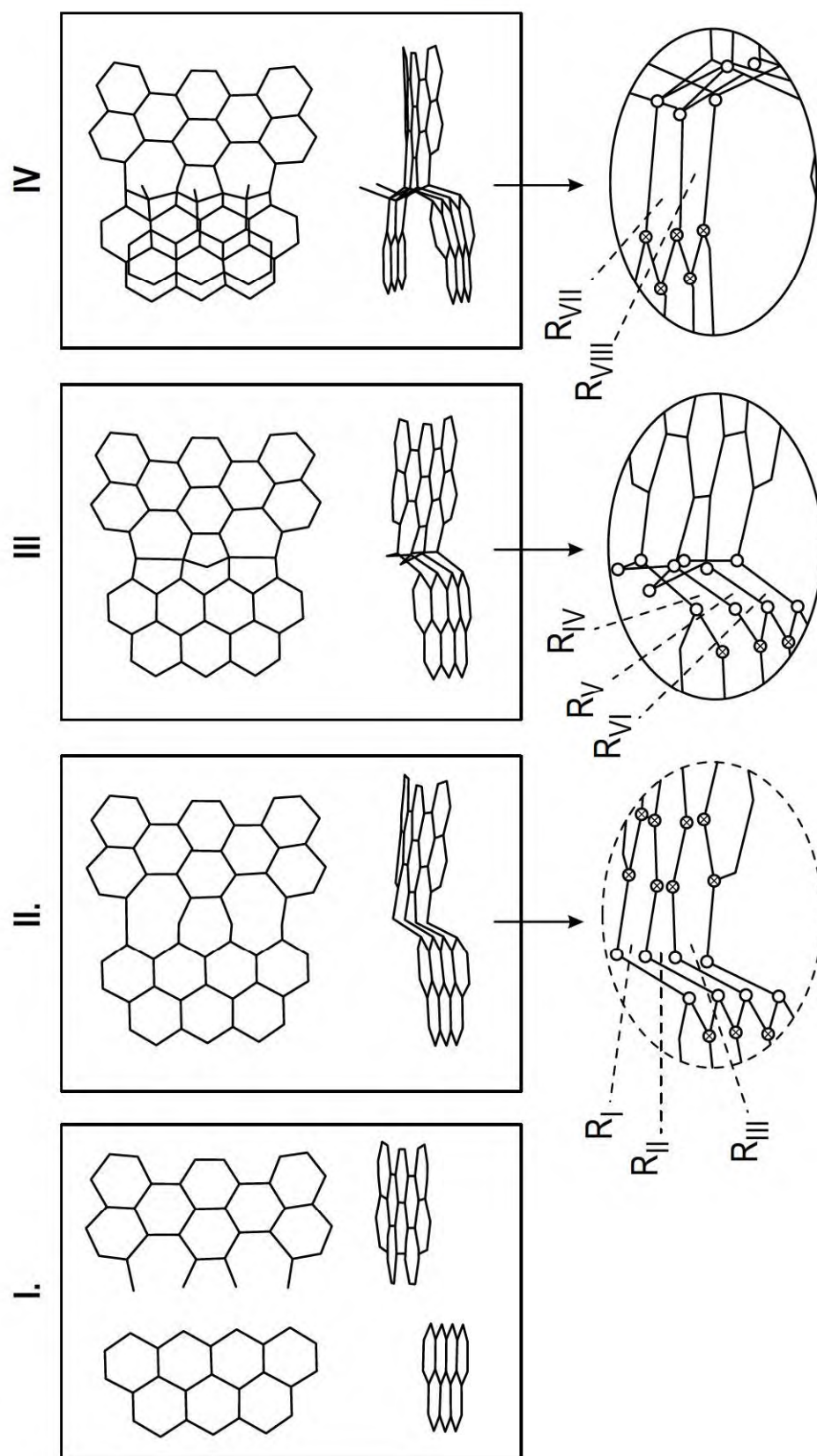


FIG. 41



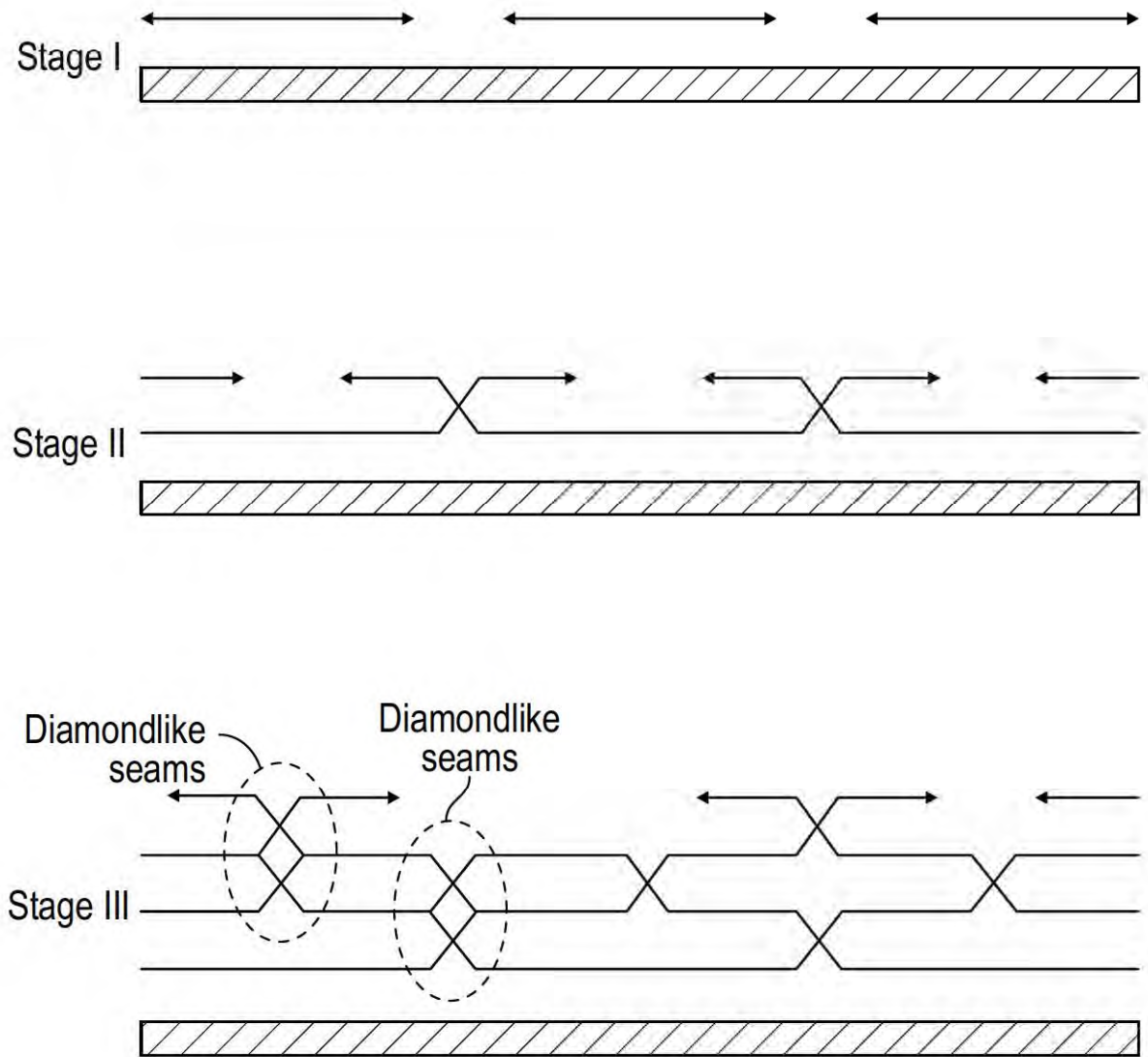


FIG. 43

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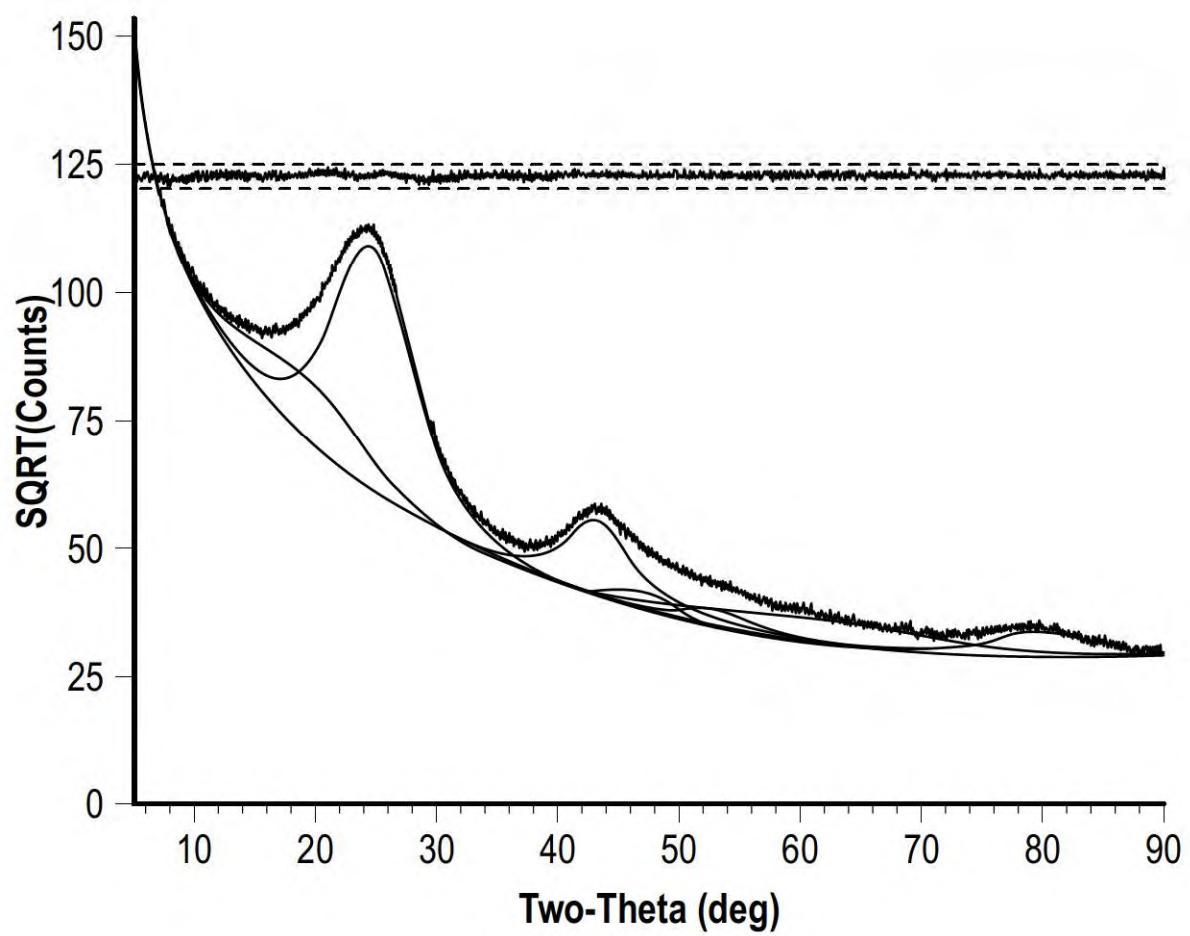
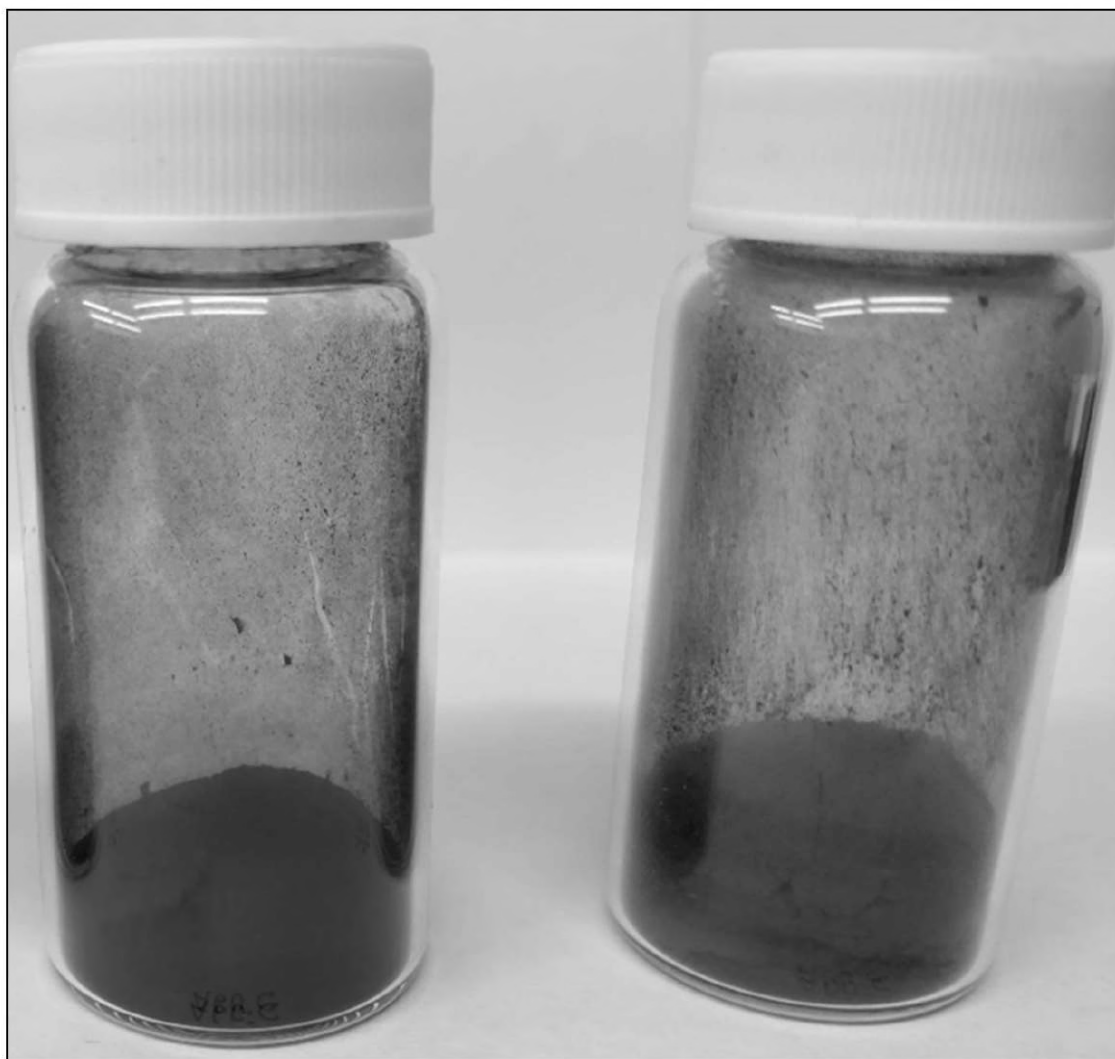


FIG. 44

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460°C

400°C

FIG. 45

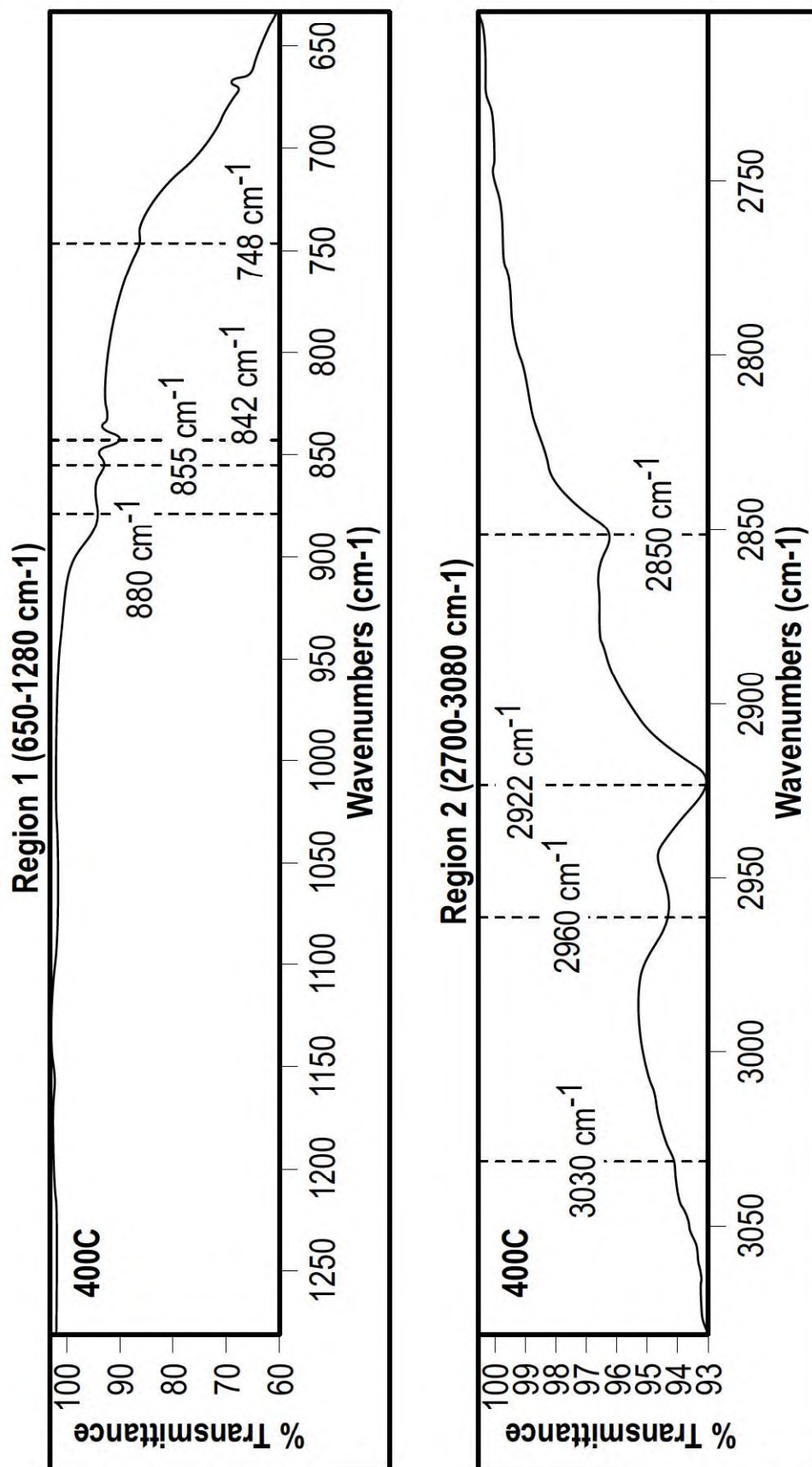


FIG. 46A

Peak pos. (cm ⁻¹)	Region 1				Region 2			
	880	855	842	748	3030	2960	2922	2850
	X	X	X	X	X	X	X	X
Peak Assignment	geminal disub alkene			mono/orthodi -sub aromatic	sp2 C-H stretch	sp3 C-H stretch		
	sp2 CH bend for aromatics							
	sp2 CH bend for alkenes							

FIG. 46B

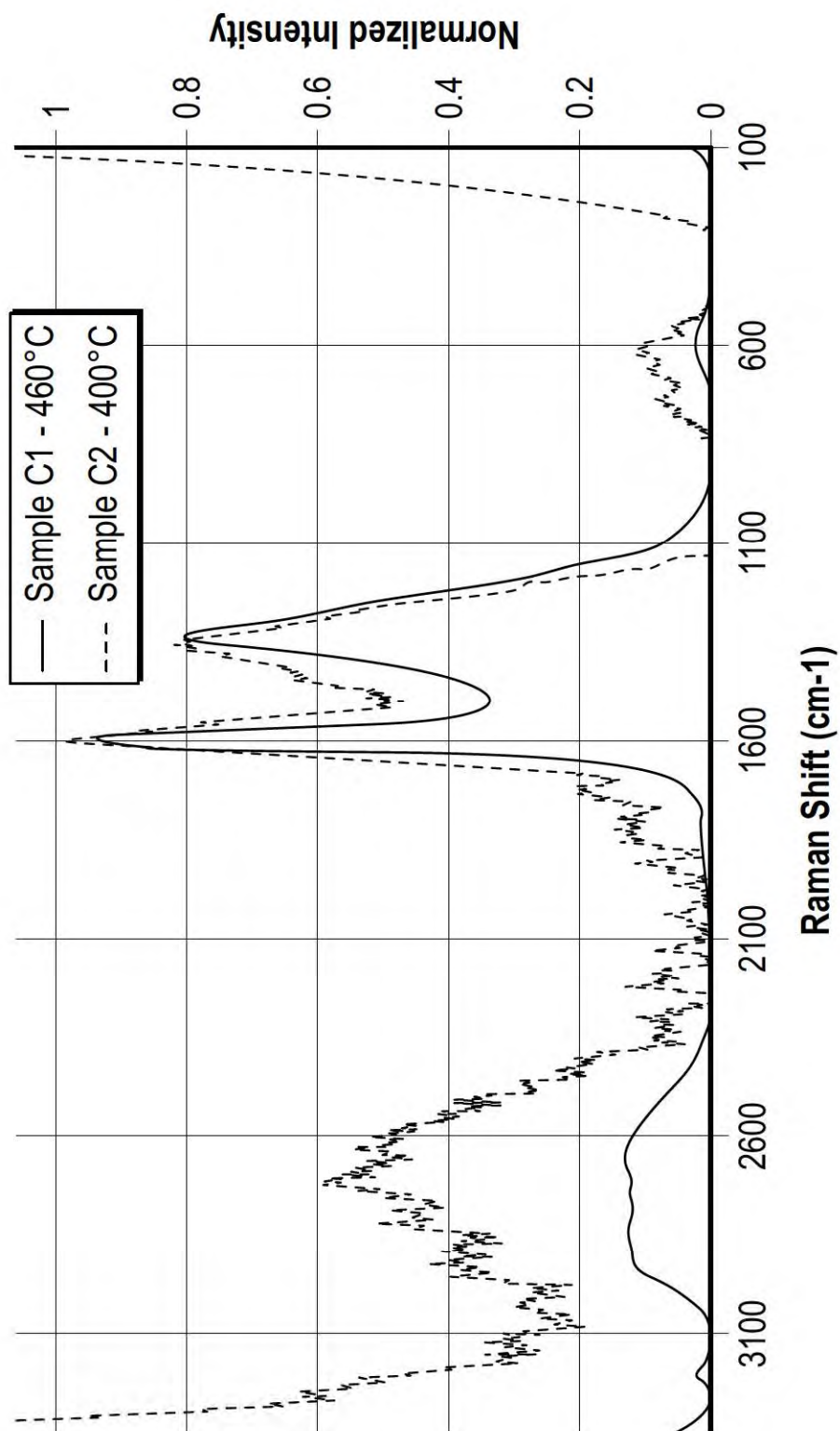


FIG. 47

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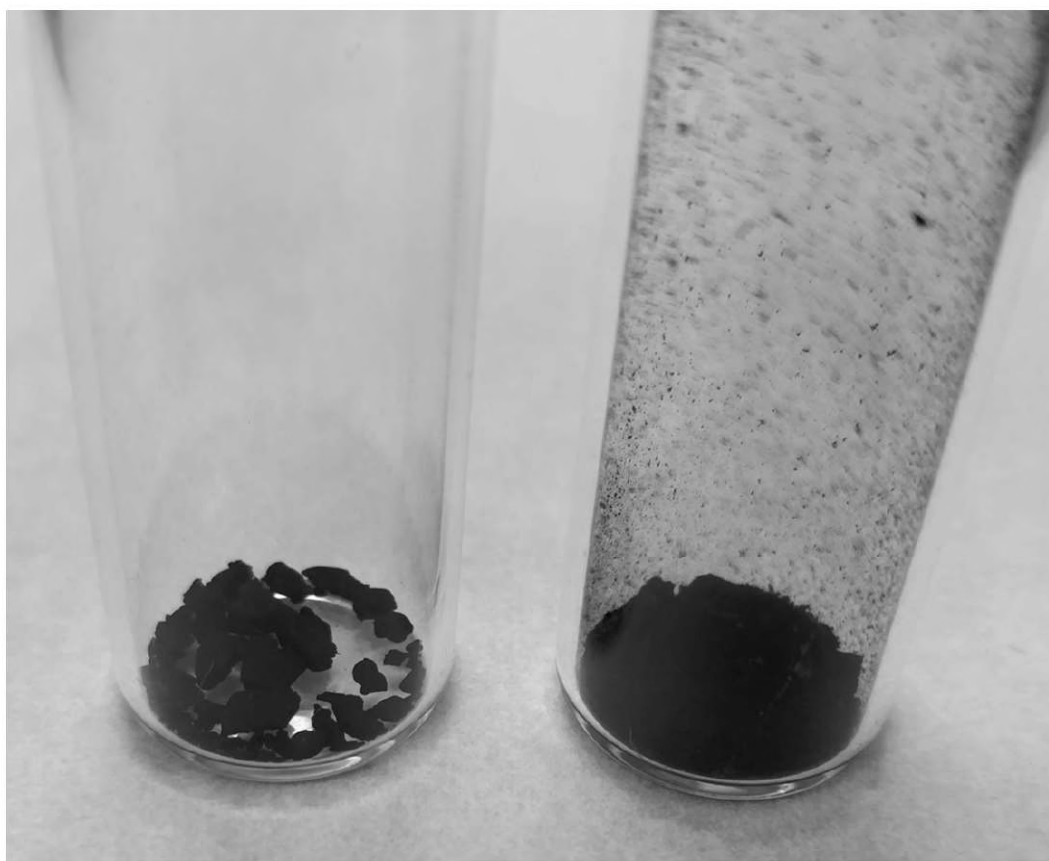
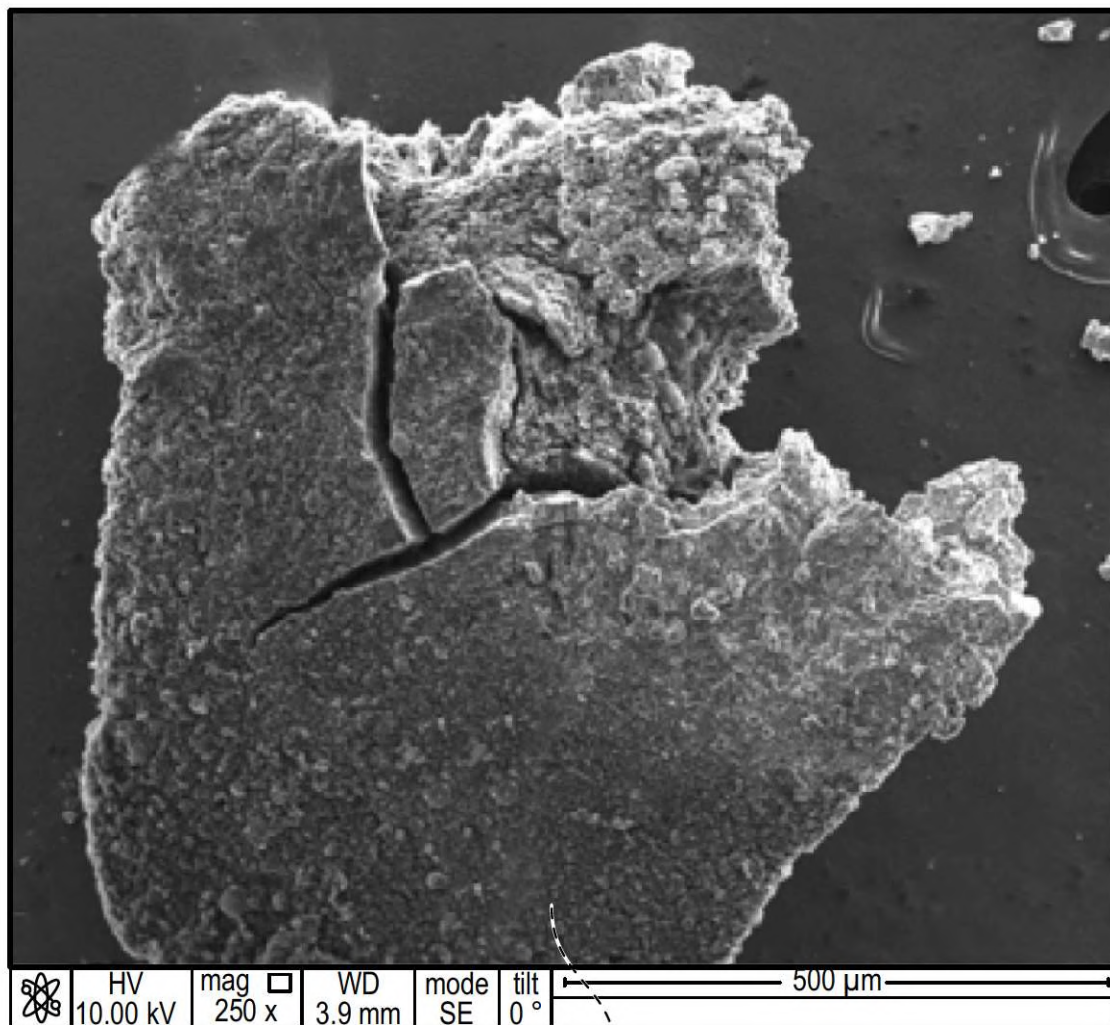


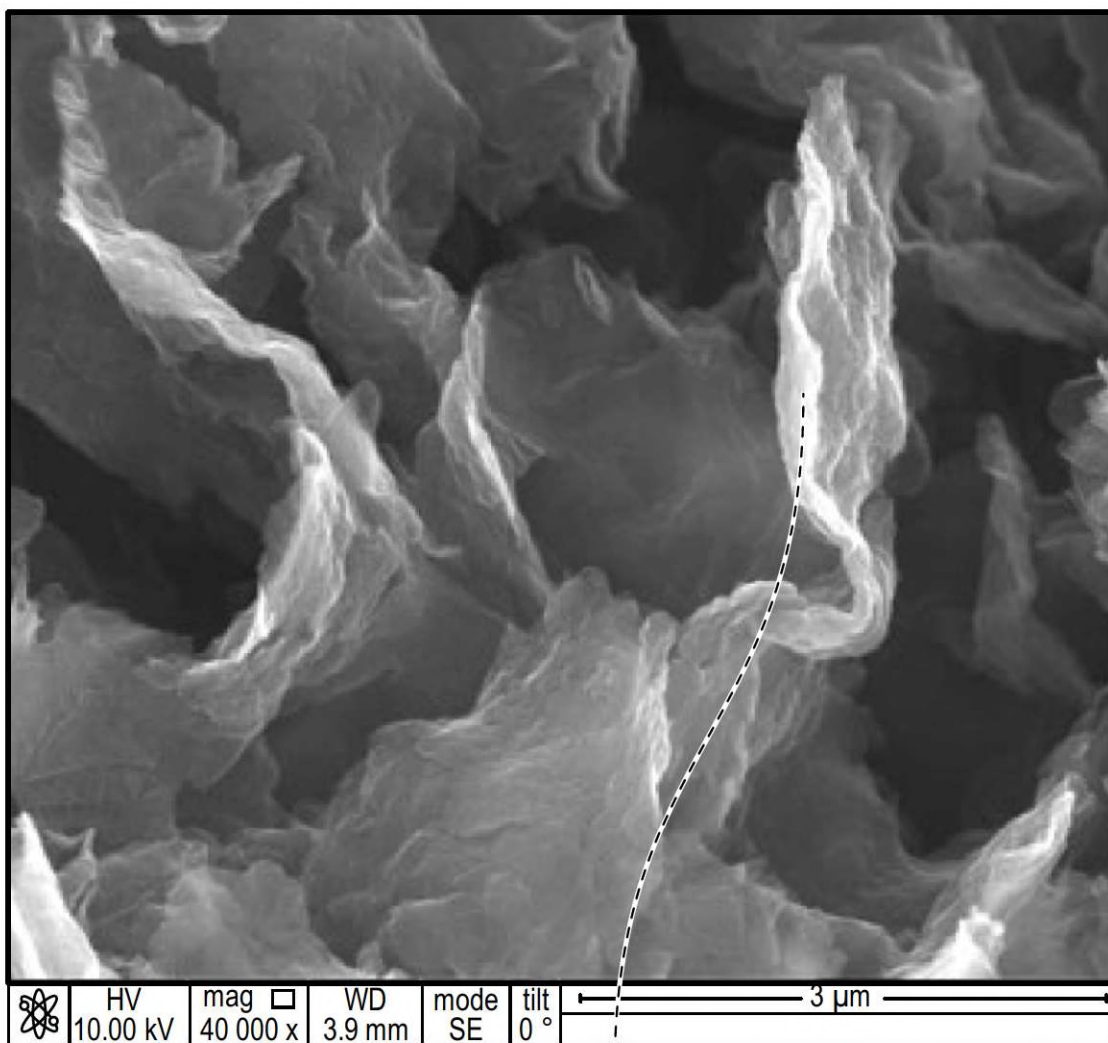
FIG. 48

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Dense, macroscopic granules

FIG. 49A



Curved, tissue-like sheets-of-cells

FIG. 49B

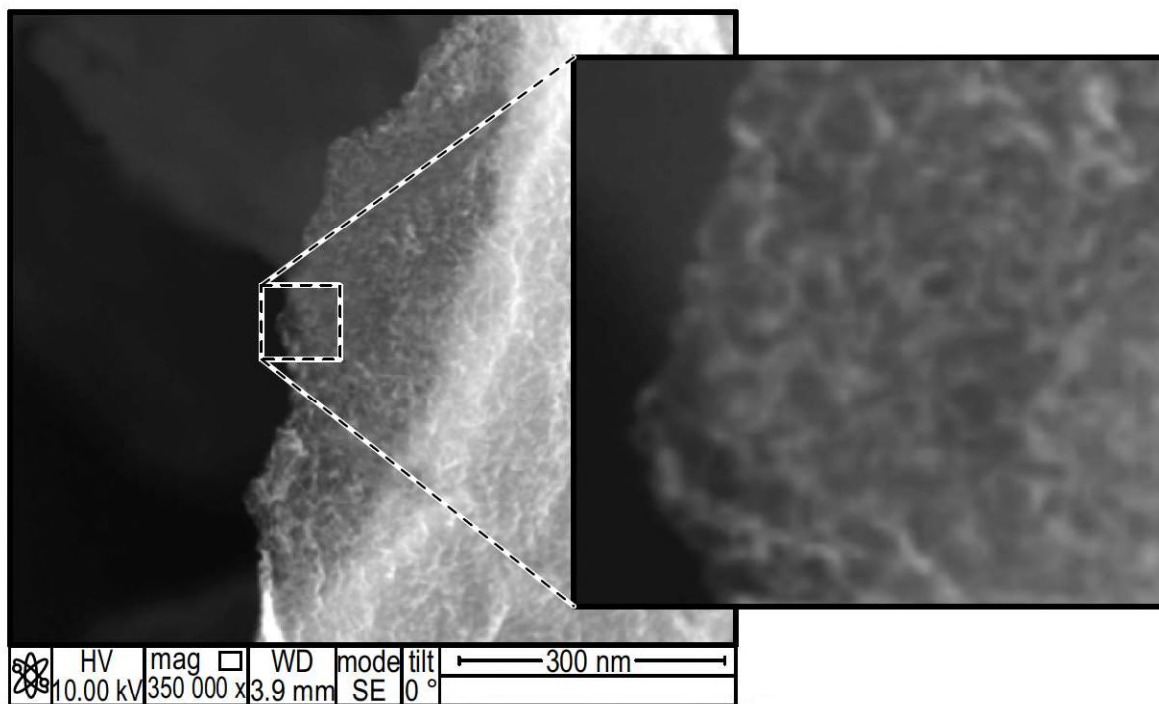
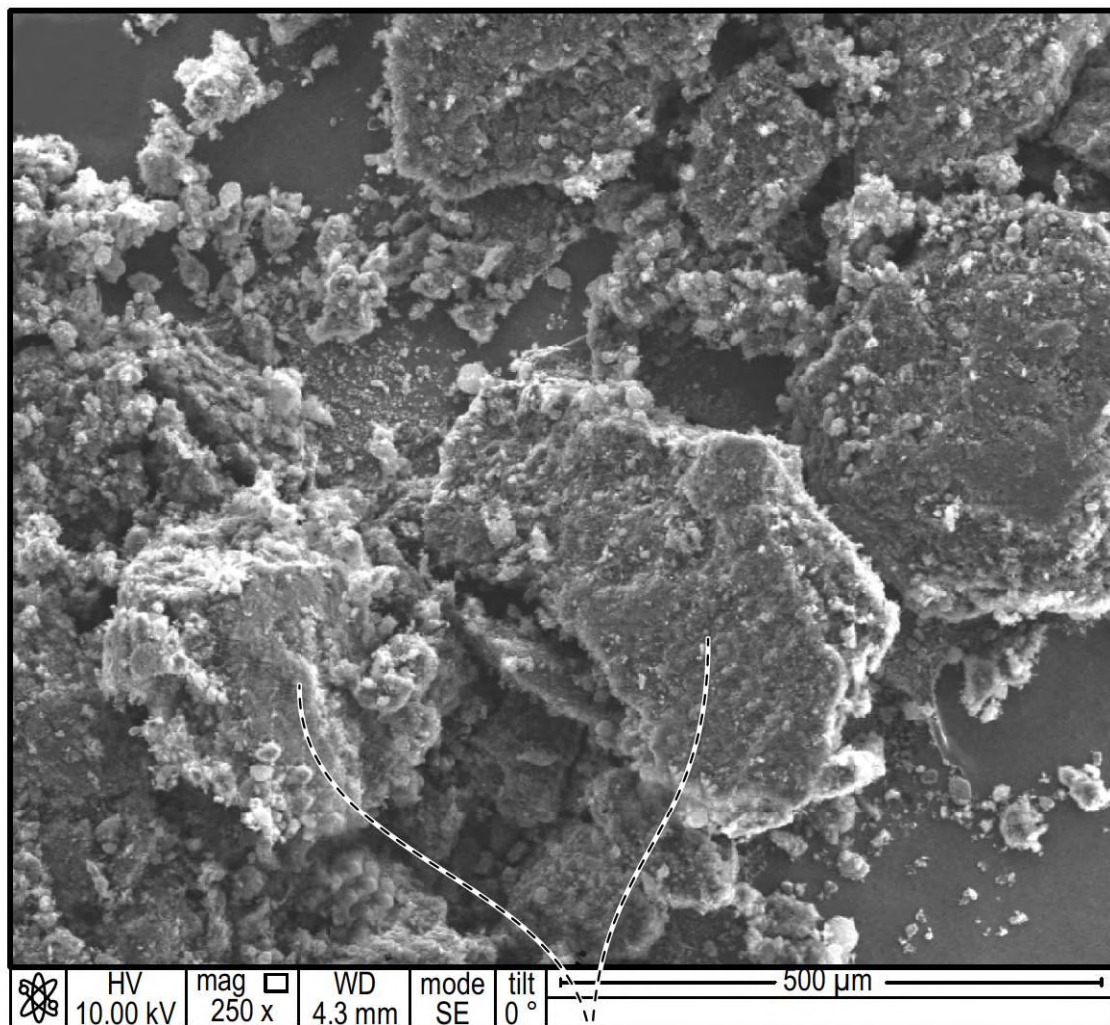


FIG. 49C

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Smaller agglomerates

FIG. 49D

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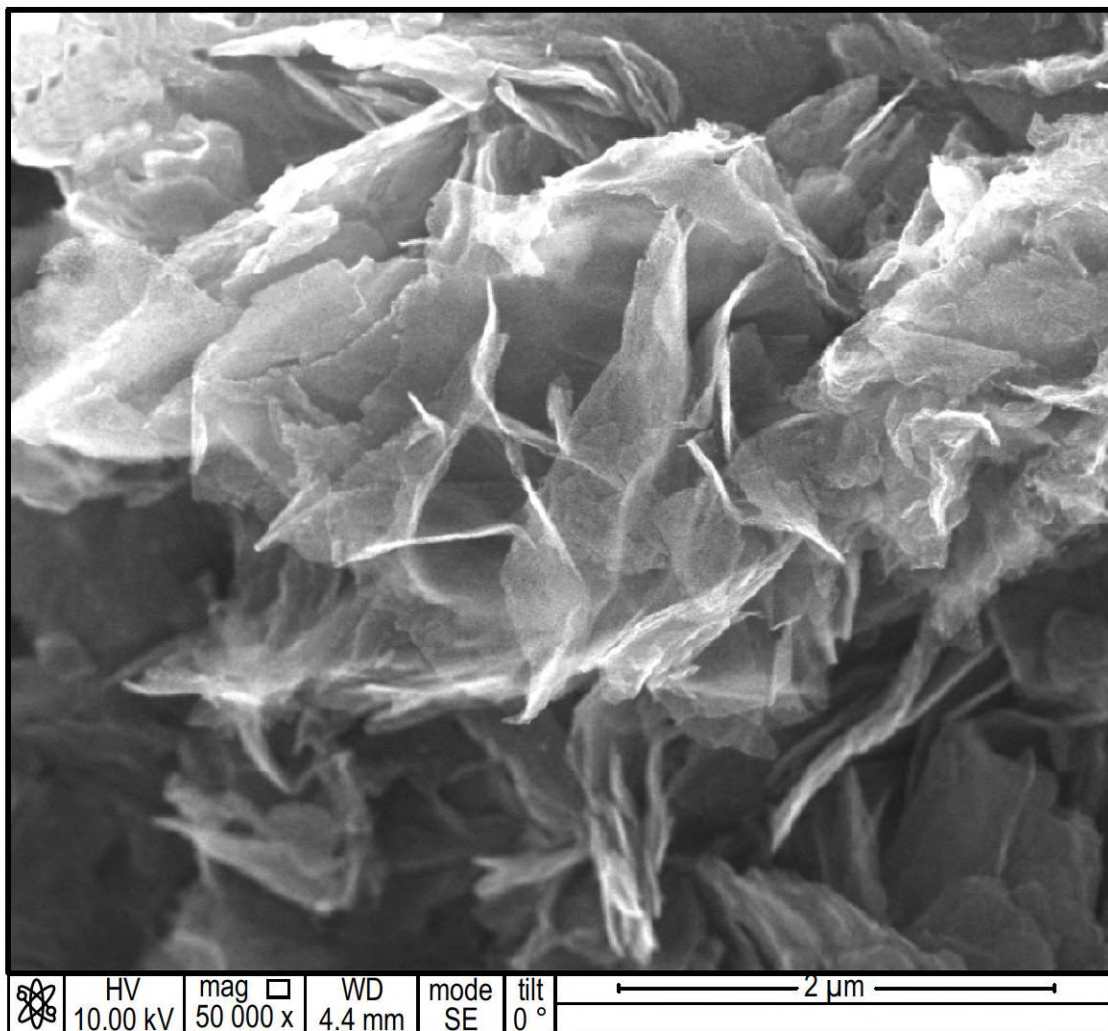


FIG. 49E

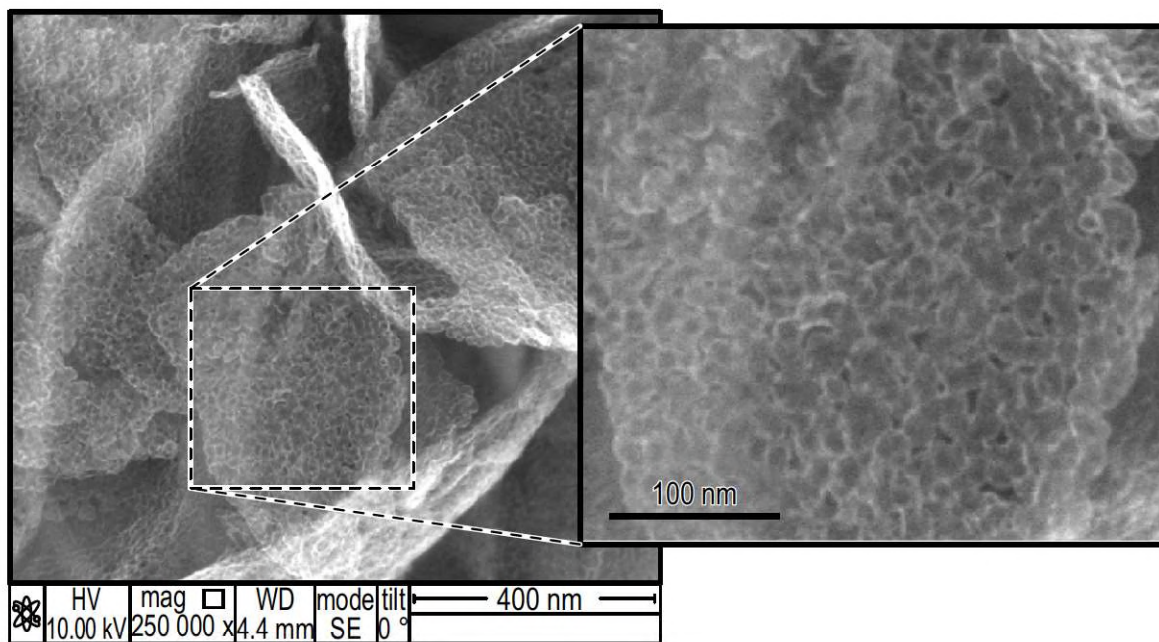


FIG. 49F

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Dense,
macroscopic
granules

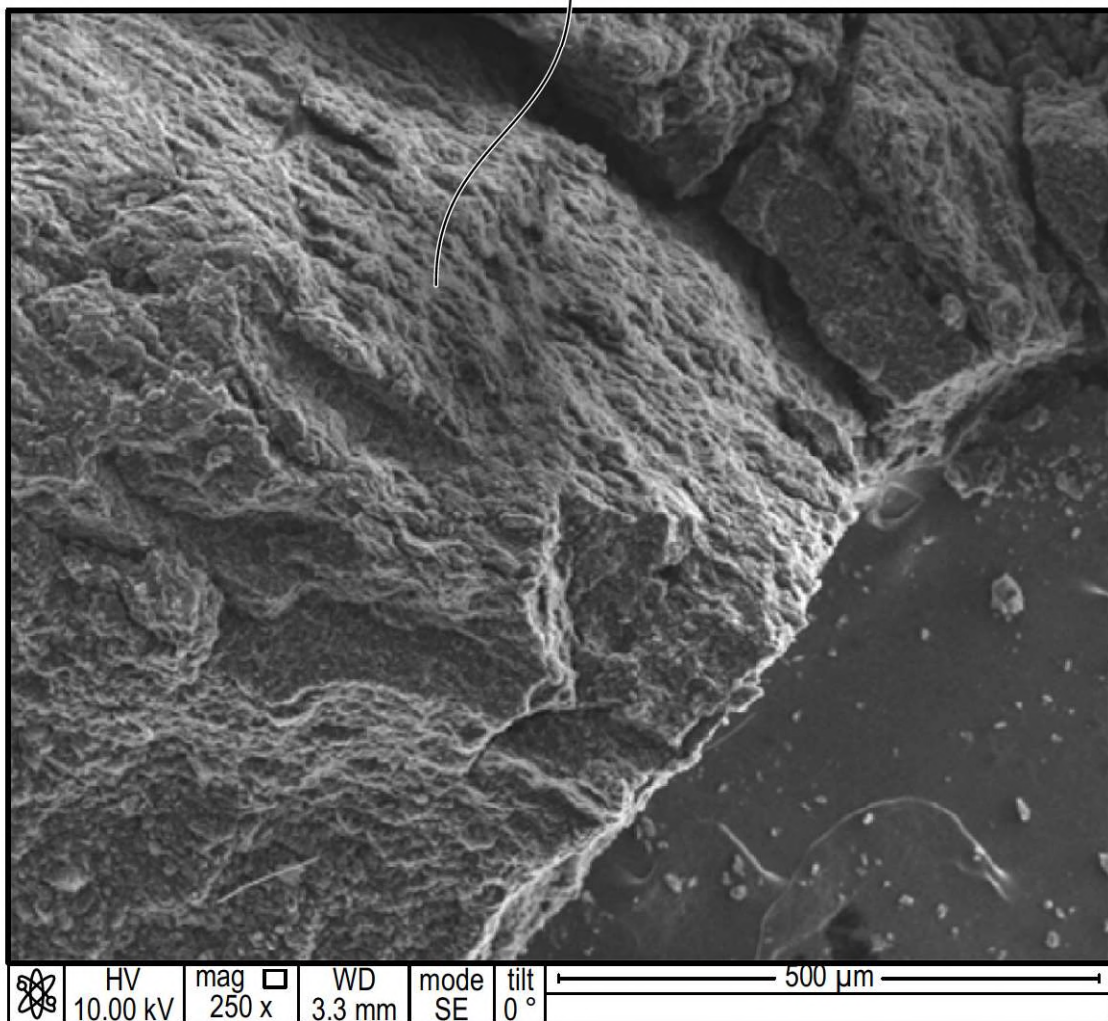


FIG. 50A

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Curved, tissue-like
sheets of cells

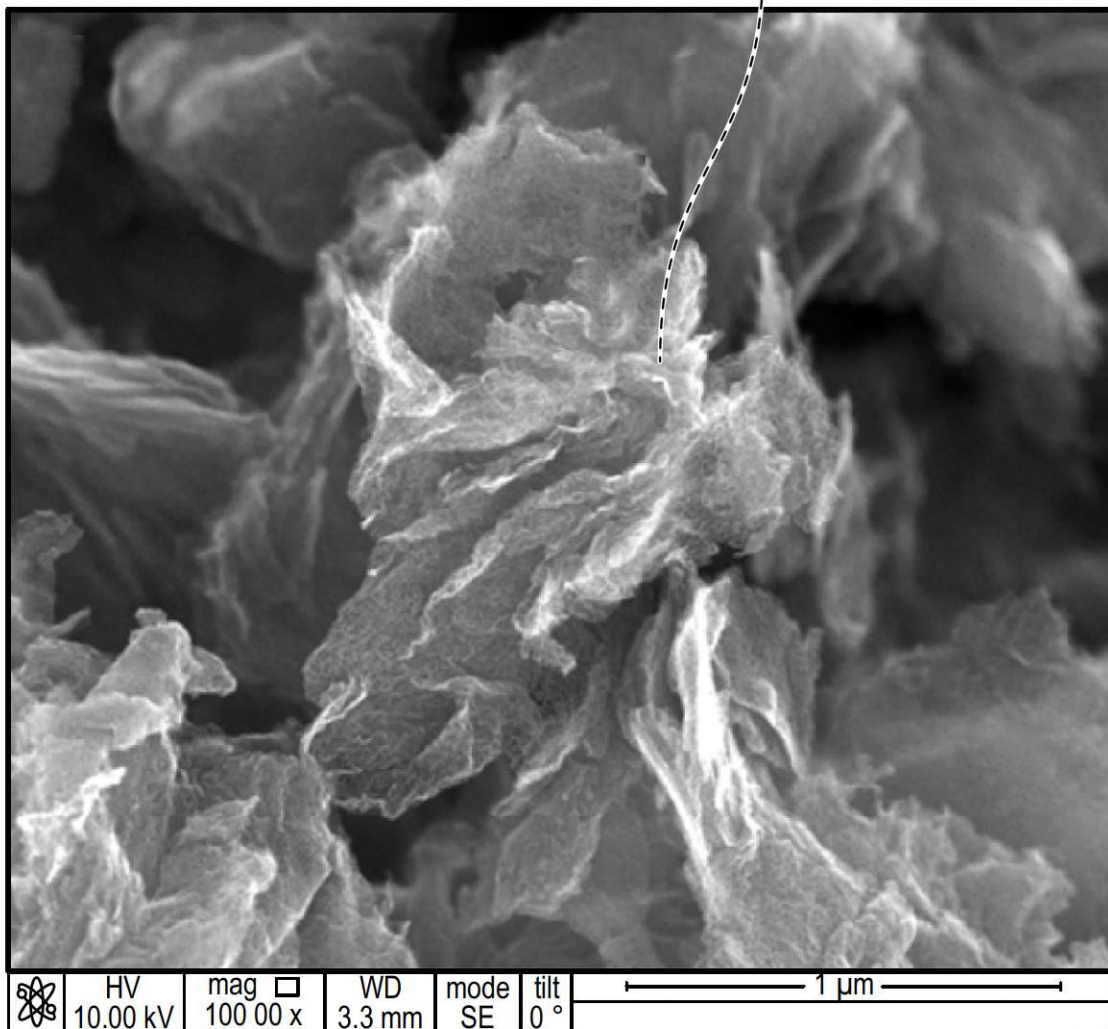


FIG. 50B

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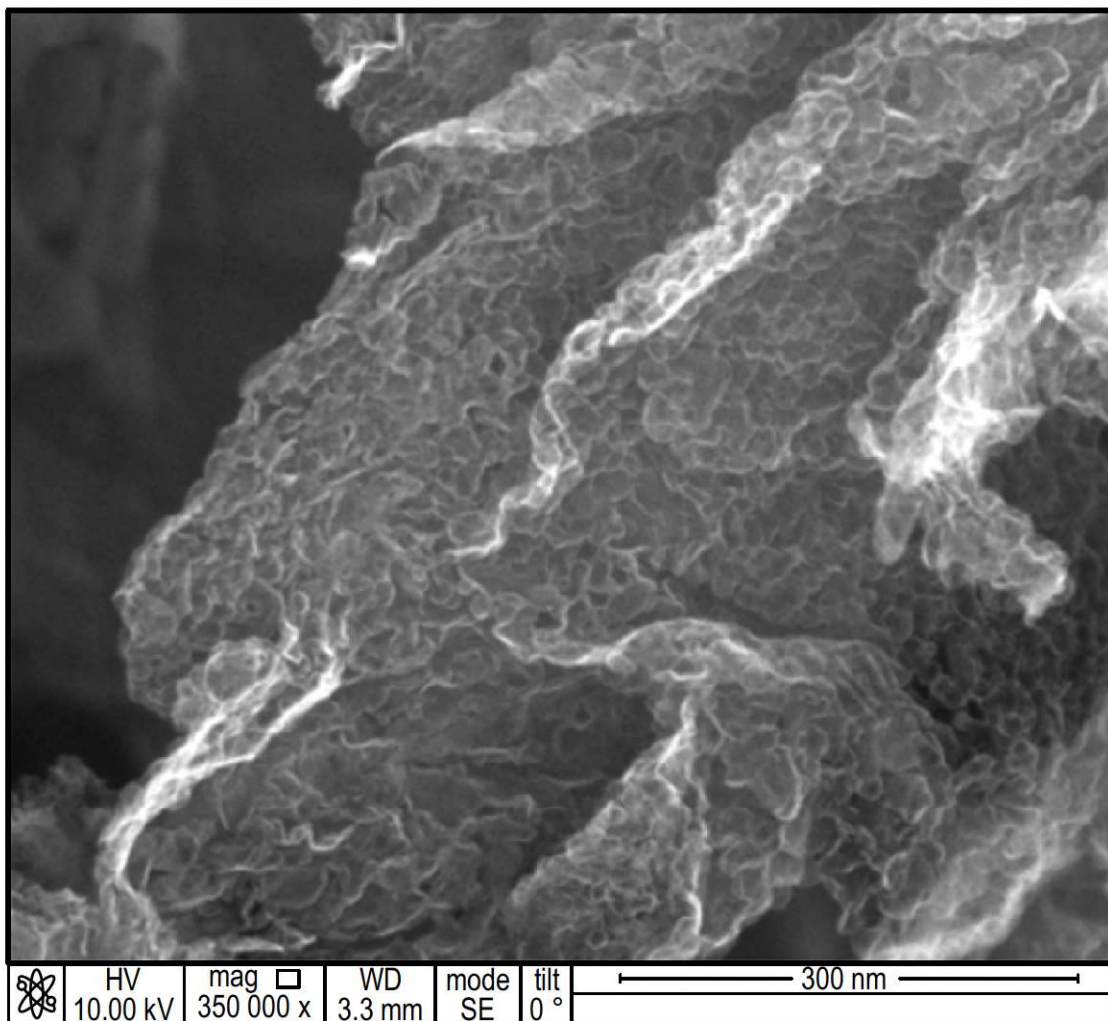


FIG. 50C

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Soft, microscopic
agglomerates

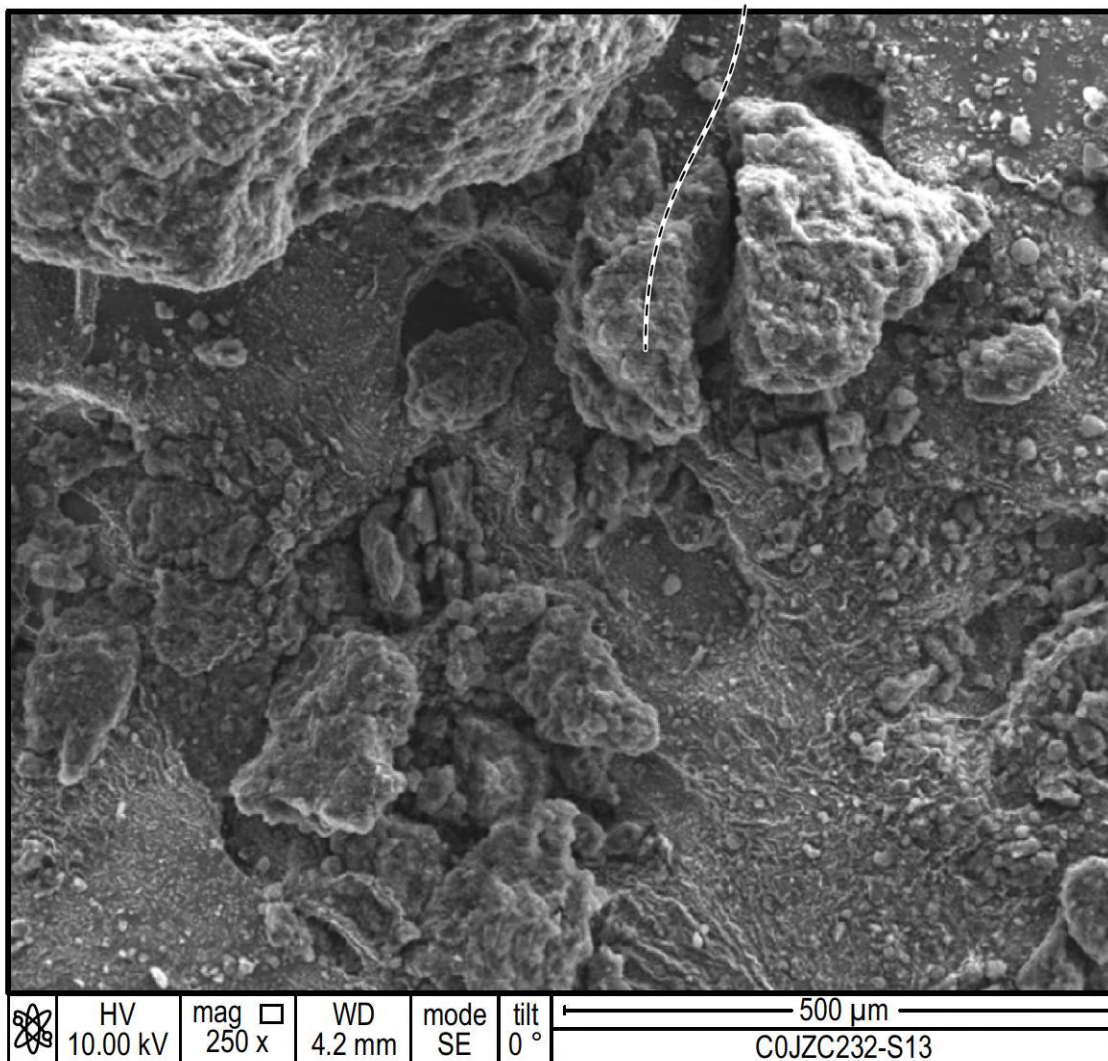


FIG. 50D

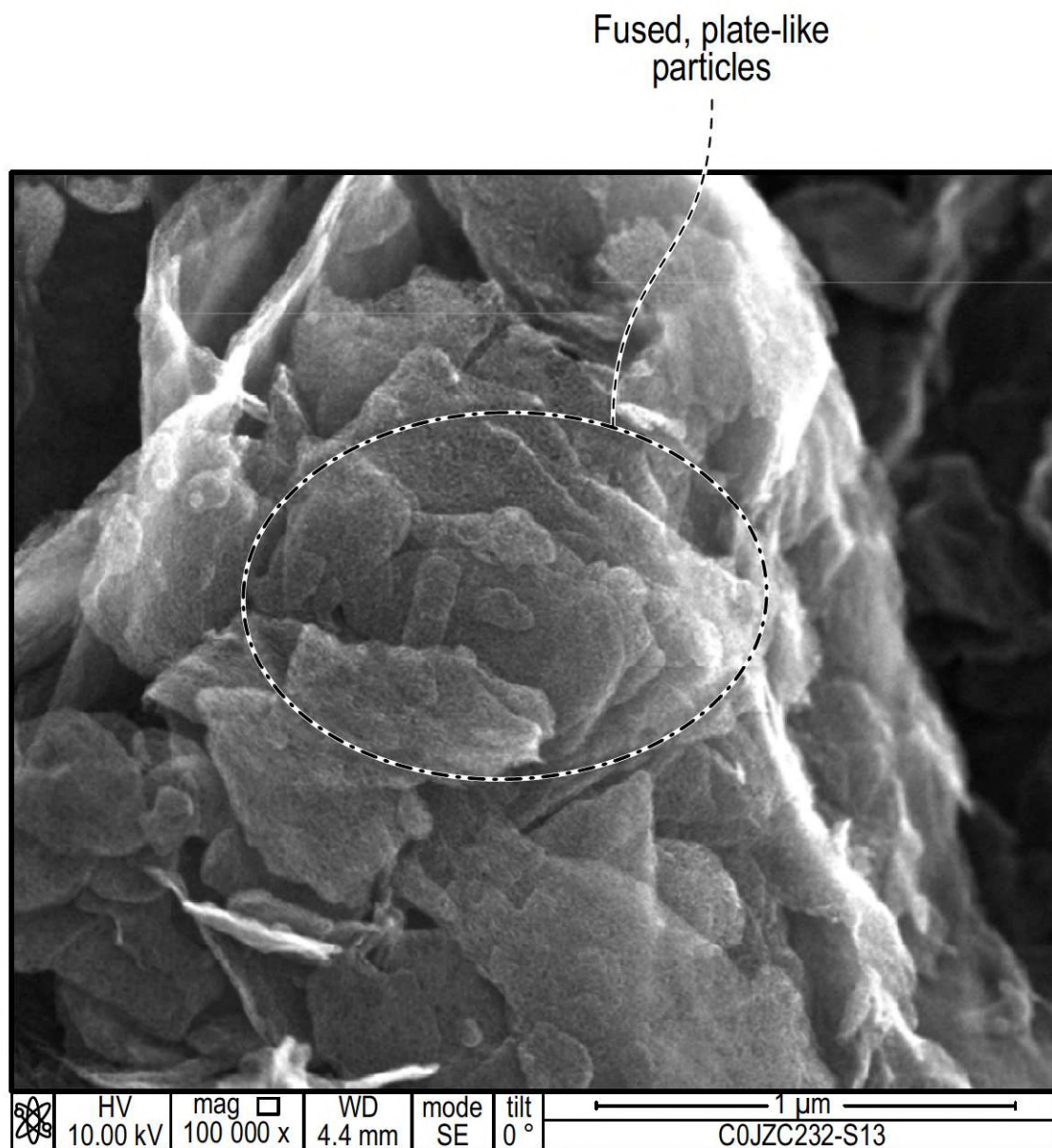


FIG. 50E

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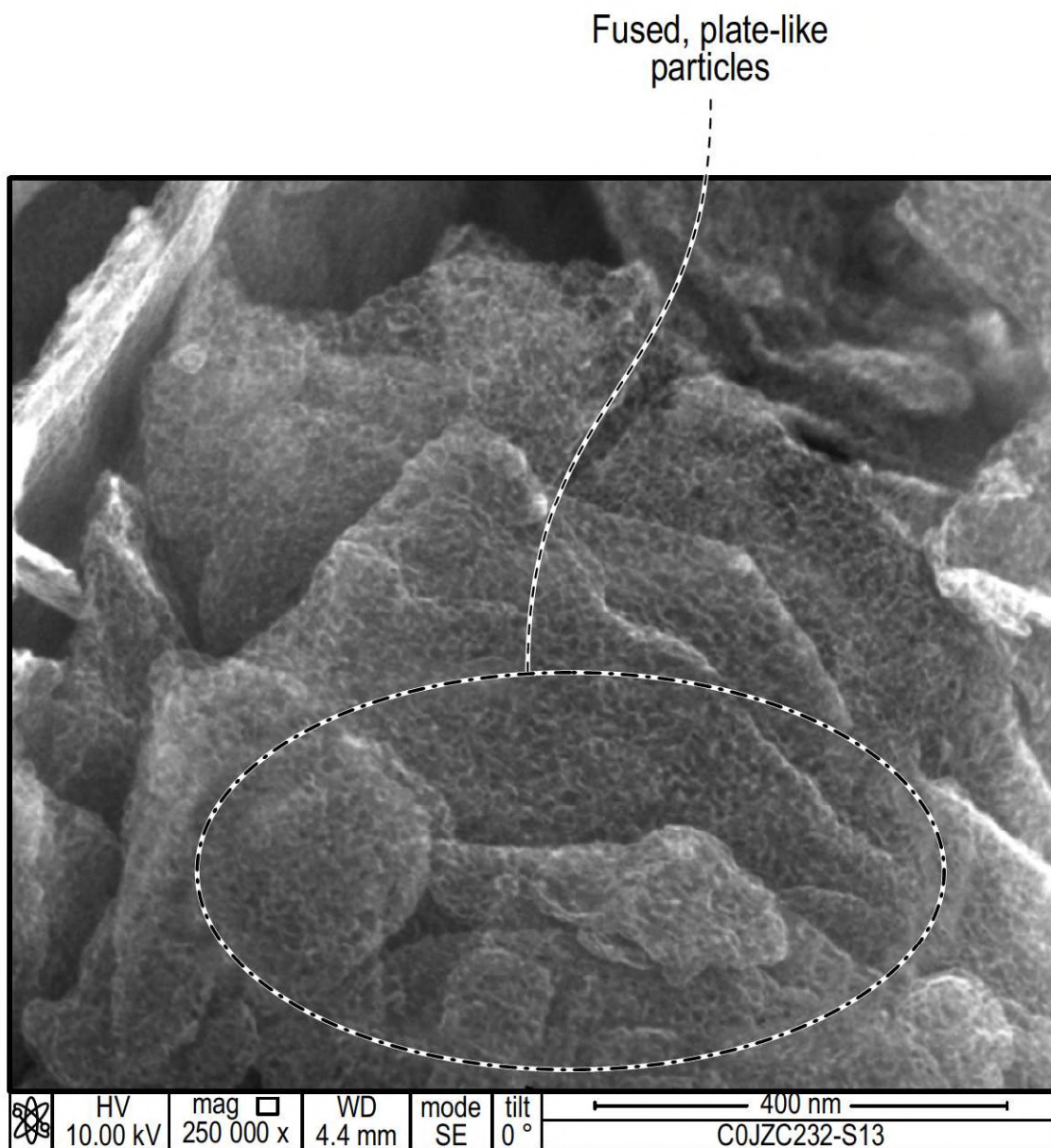


FIG. 50F

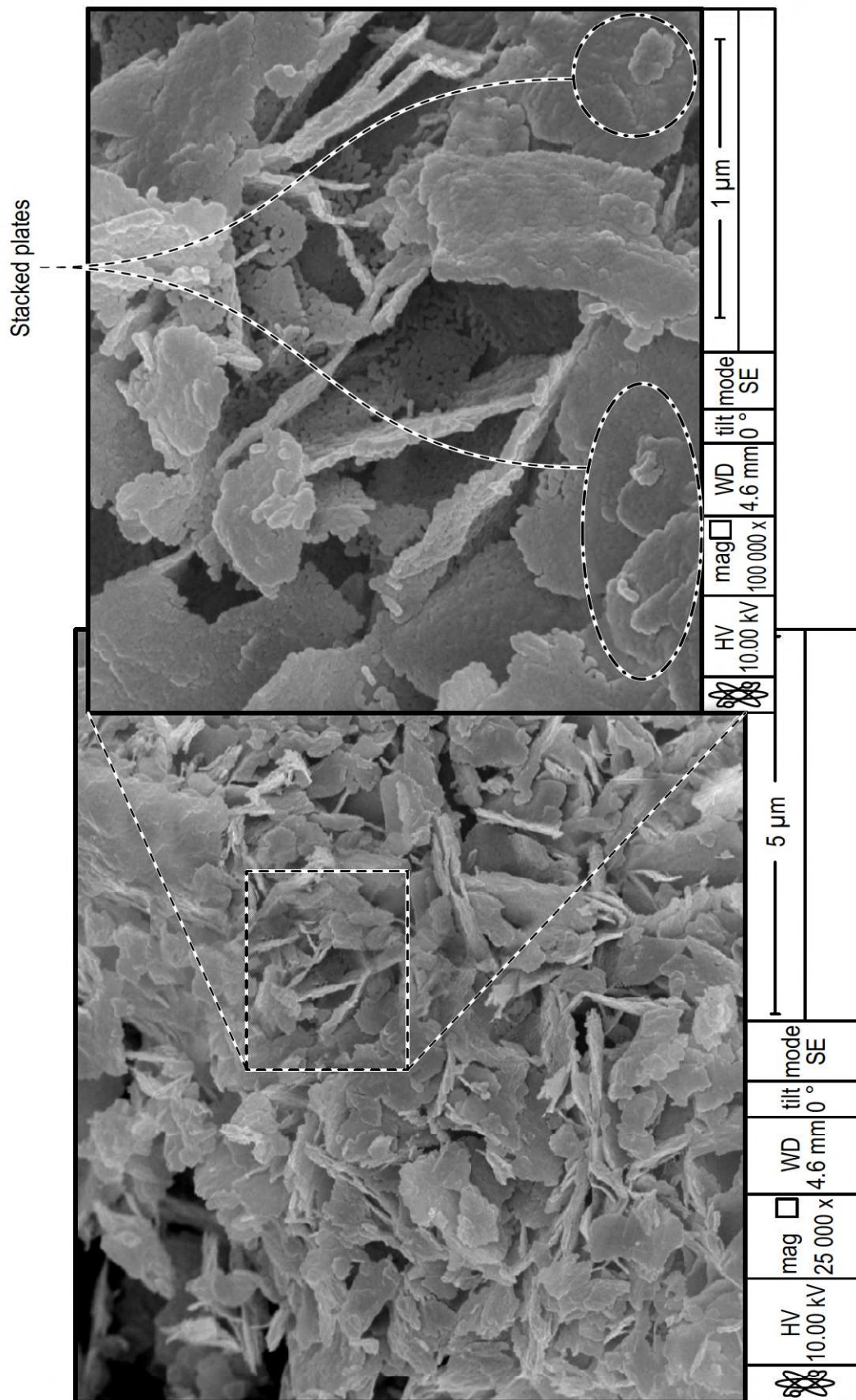


FIG. 51

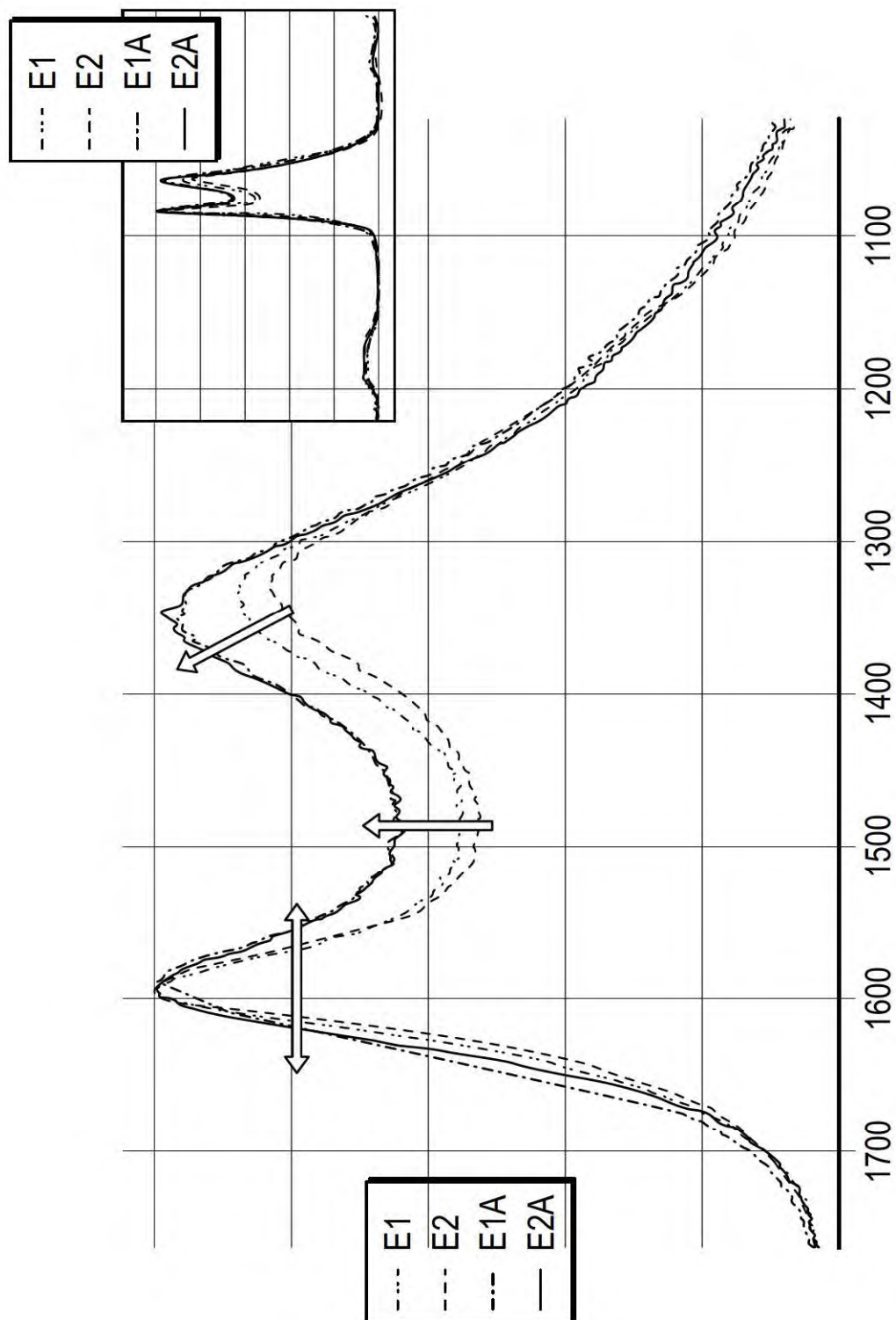


FIG. 52

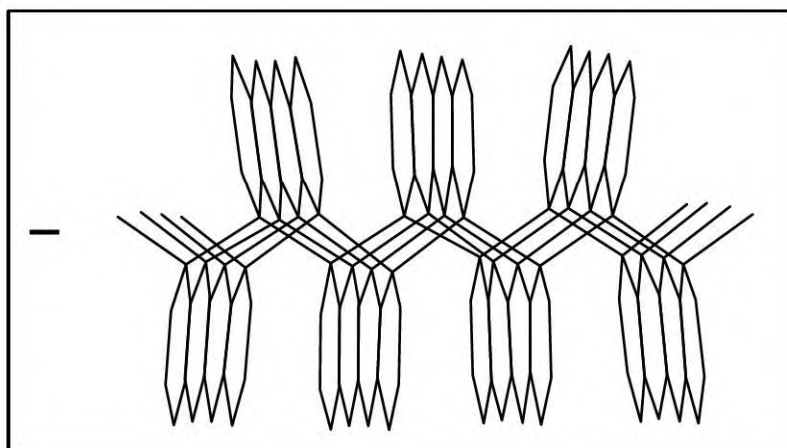
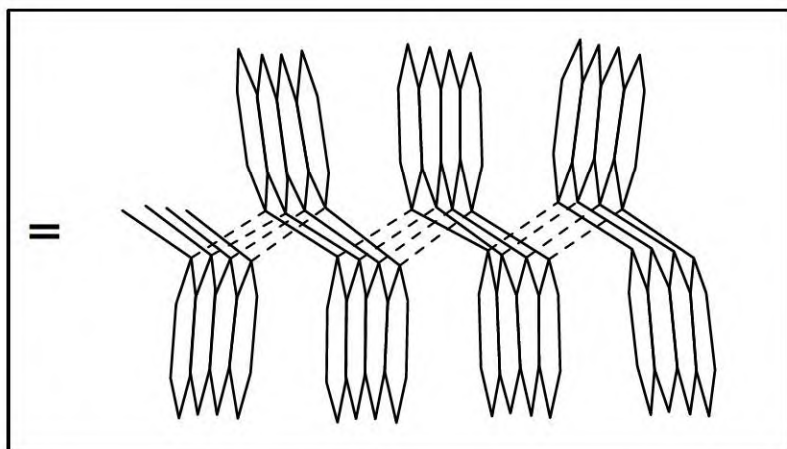
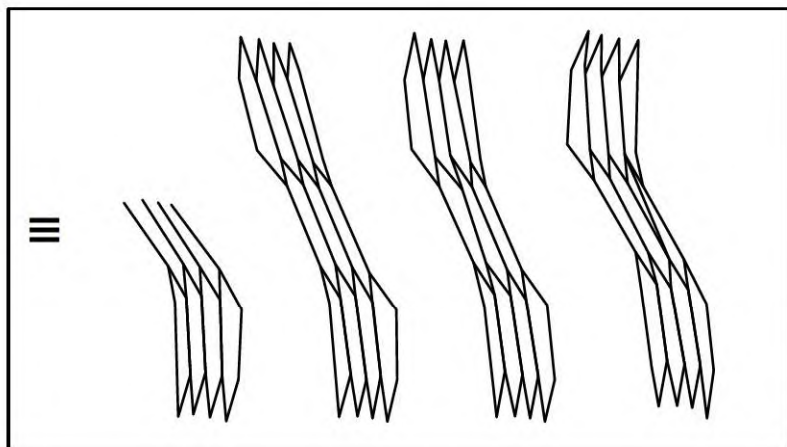


FIG. 53

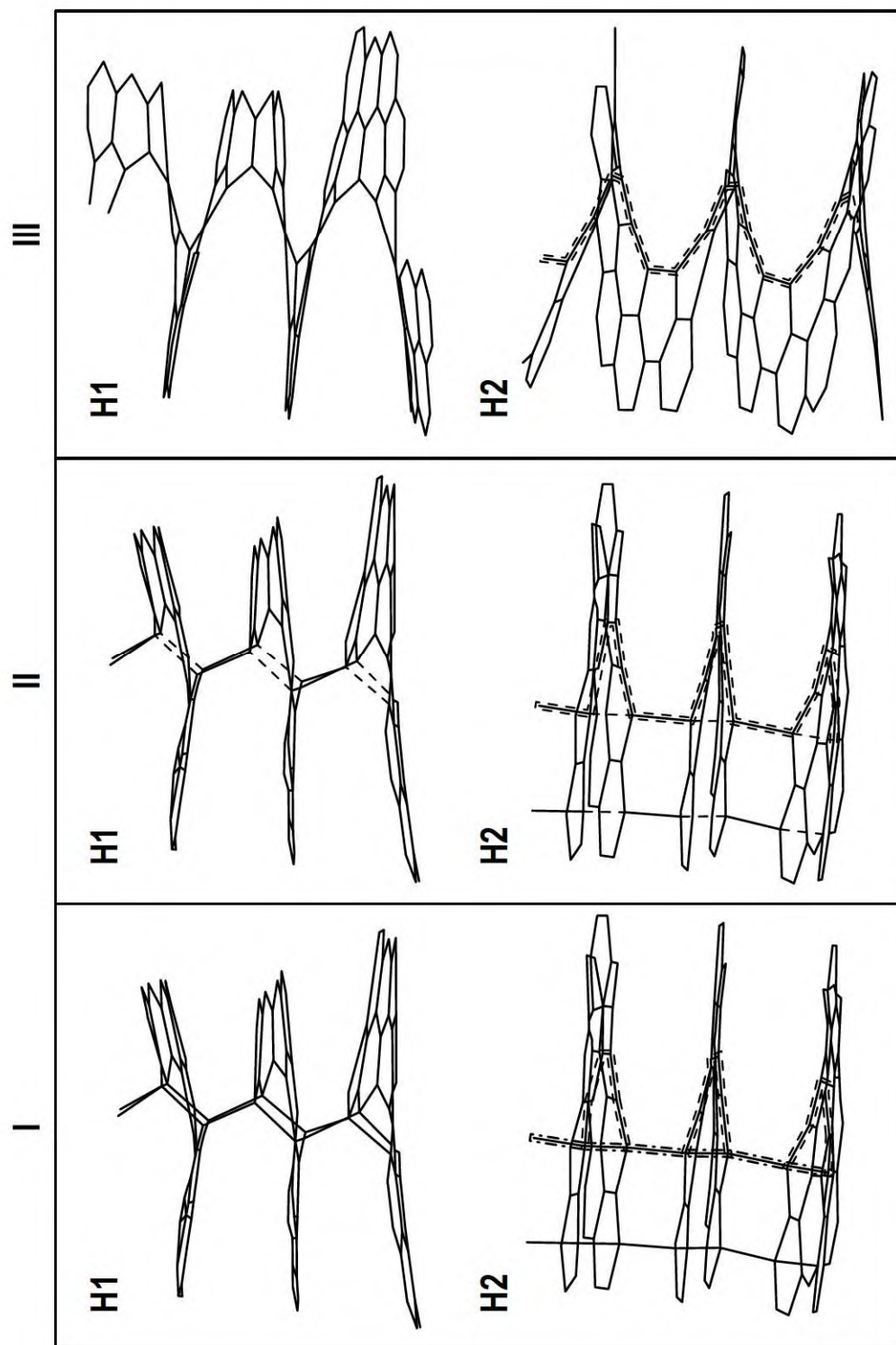


FIG. 54

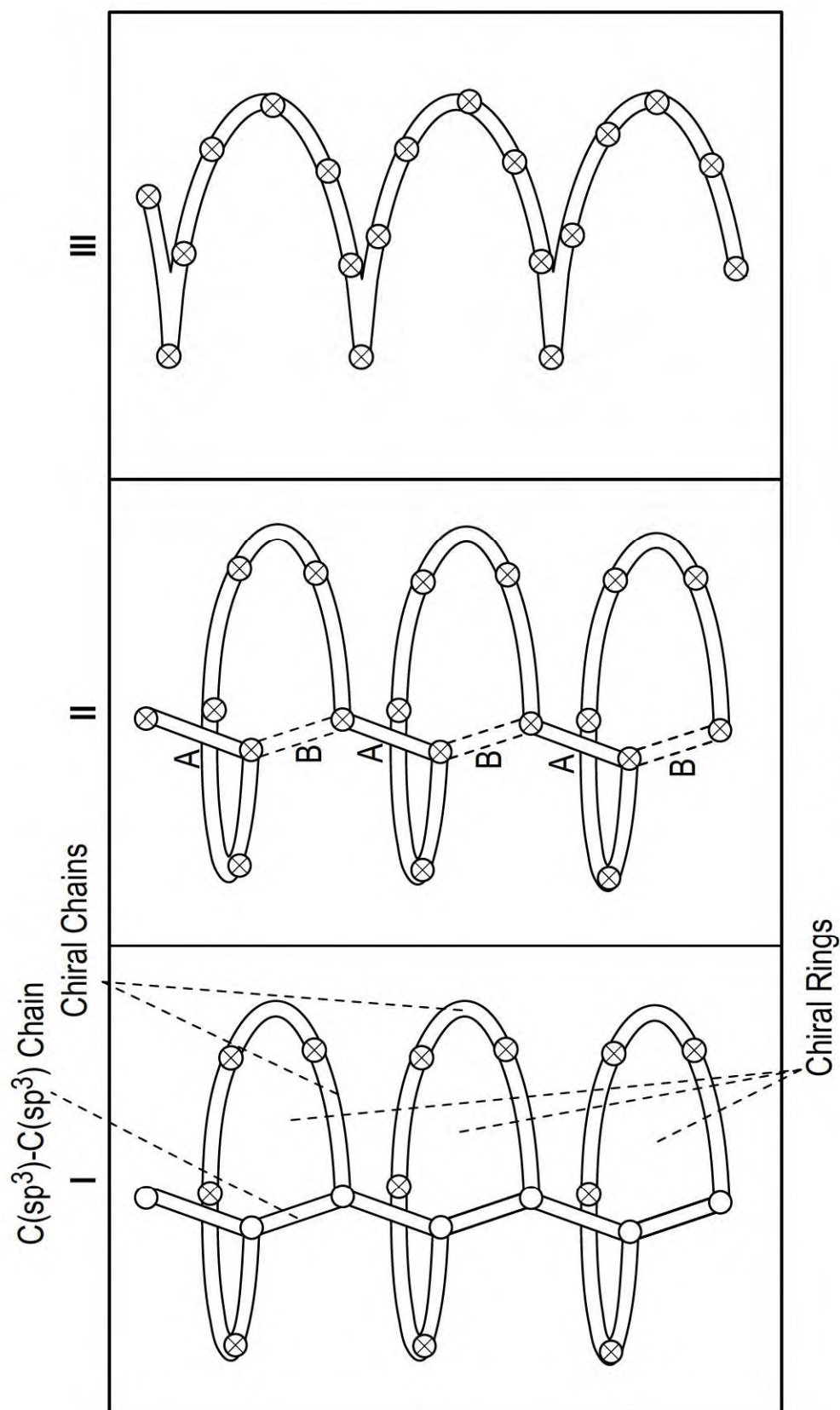


FIG. 55

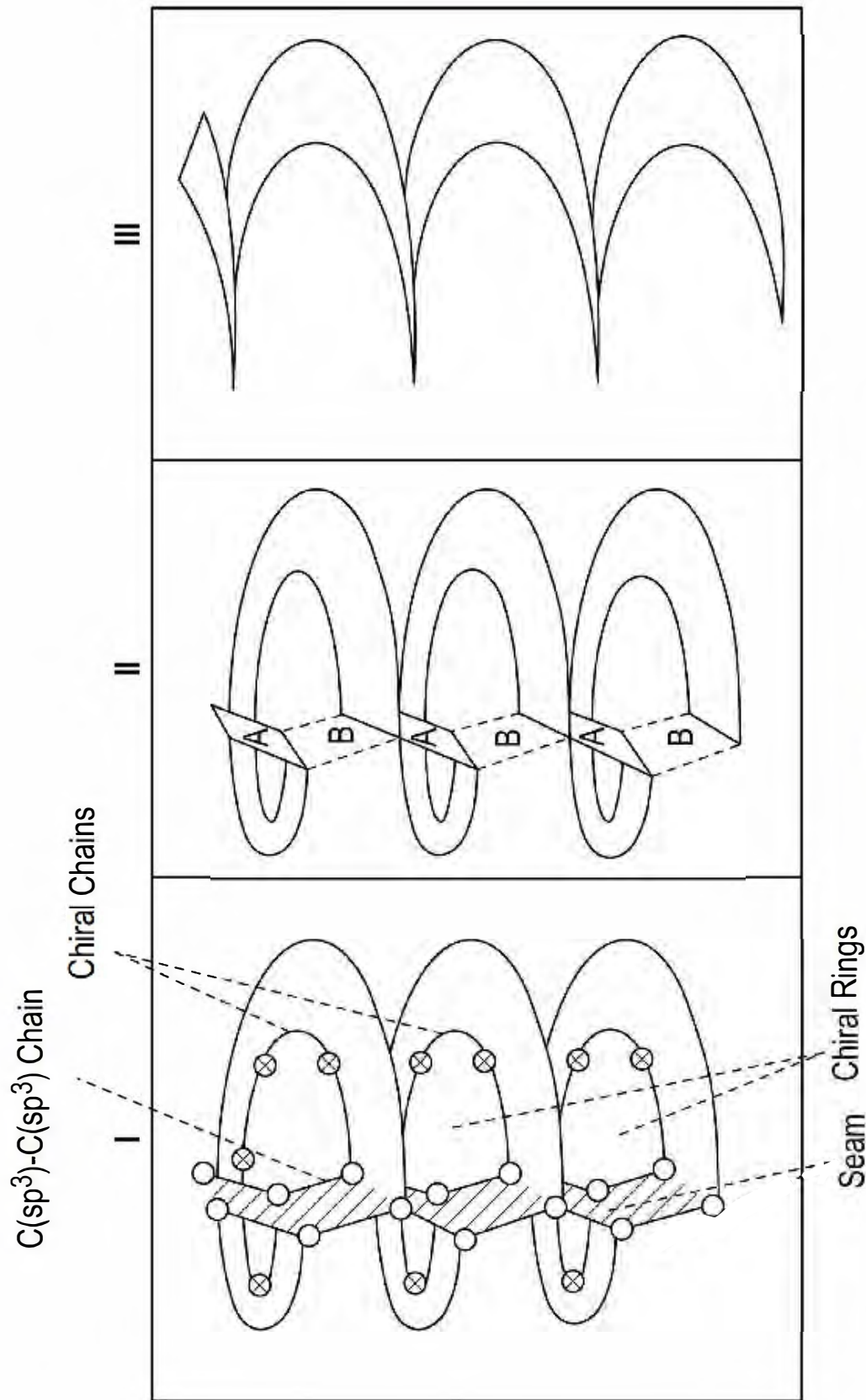


FIG. 56

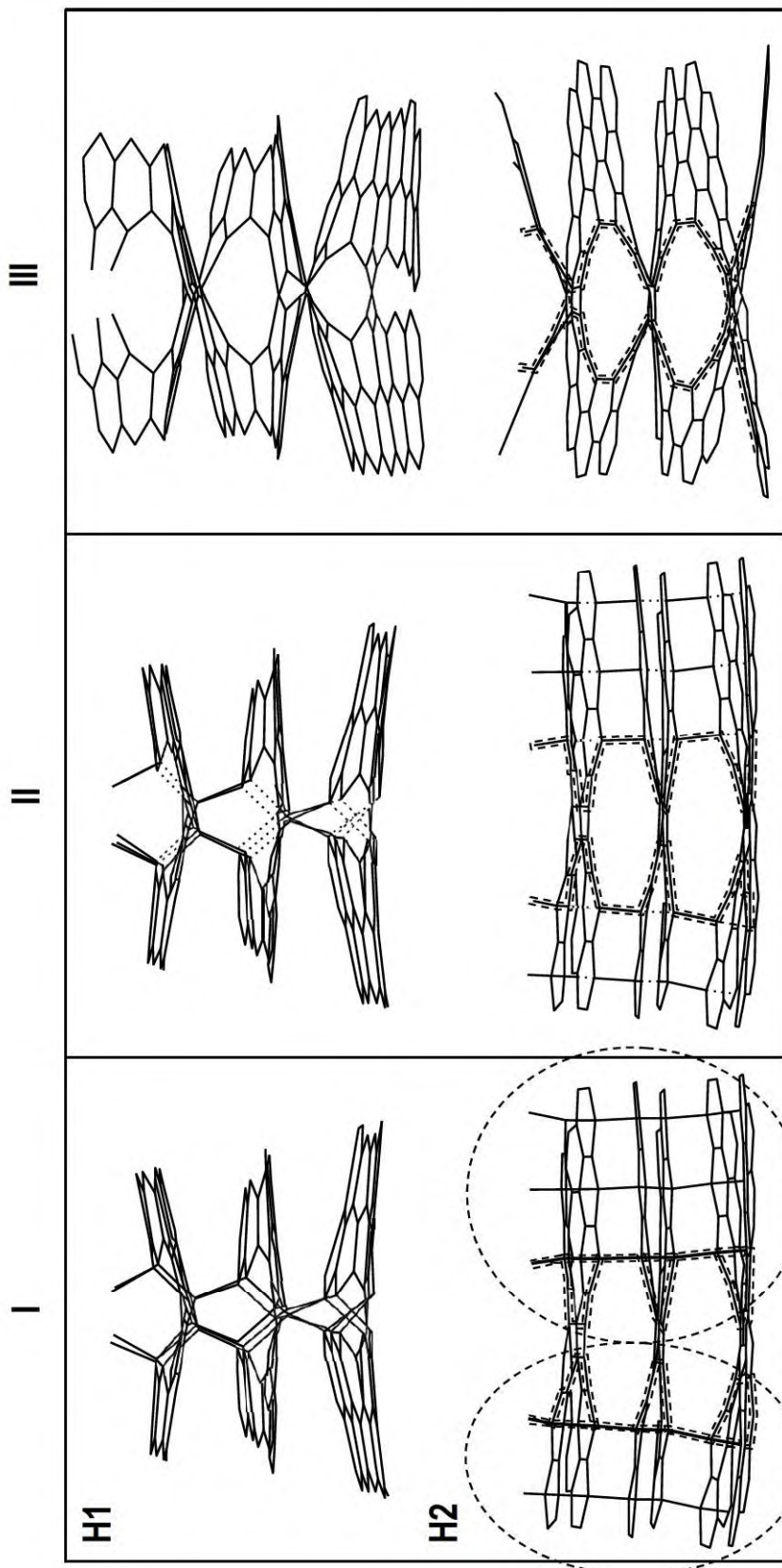


FIG. 57

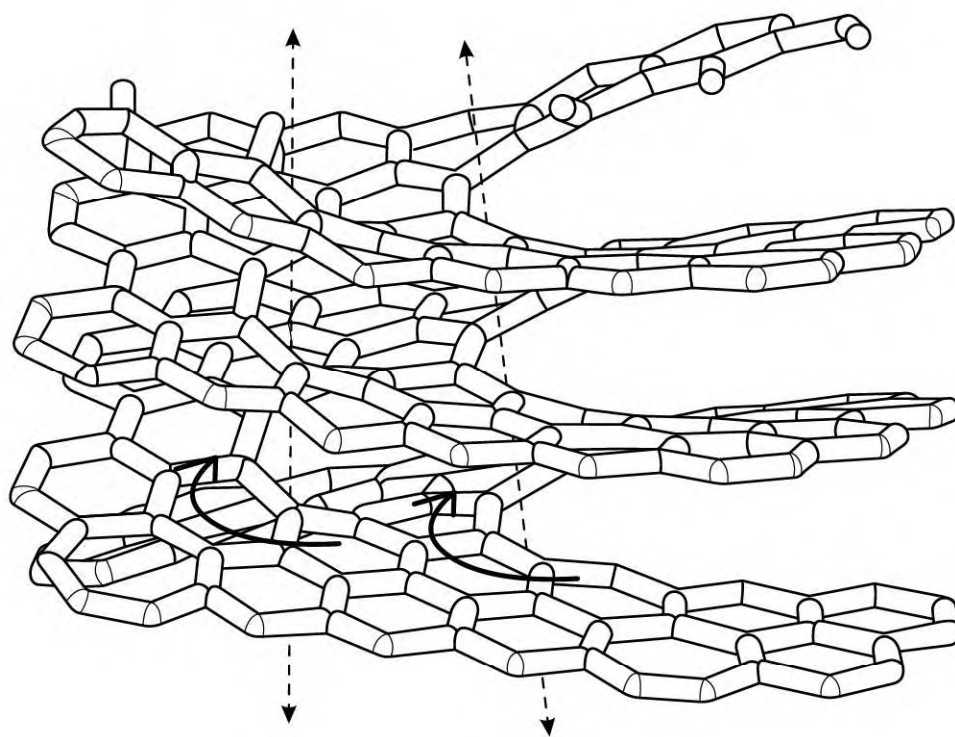


FIG. 58

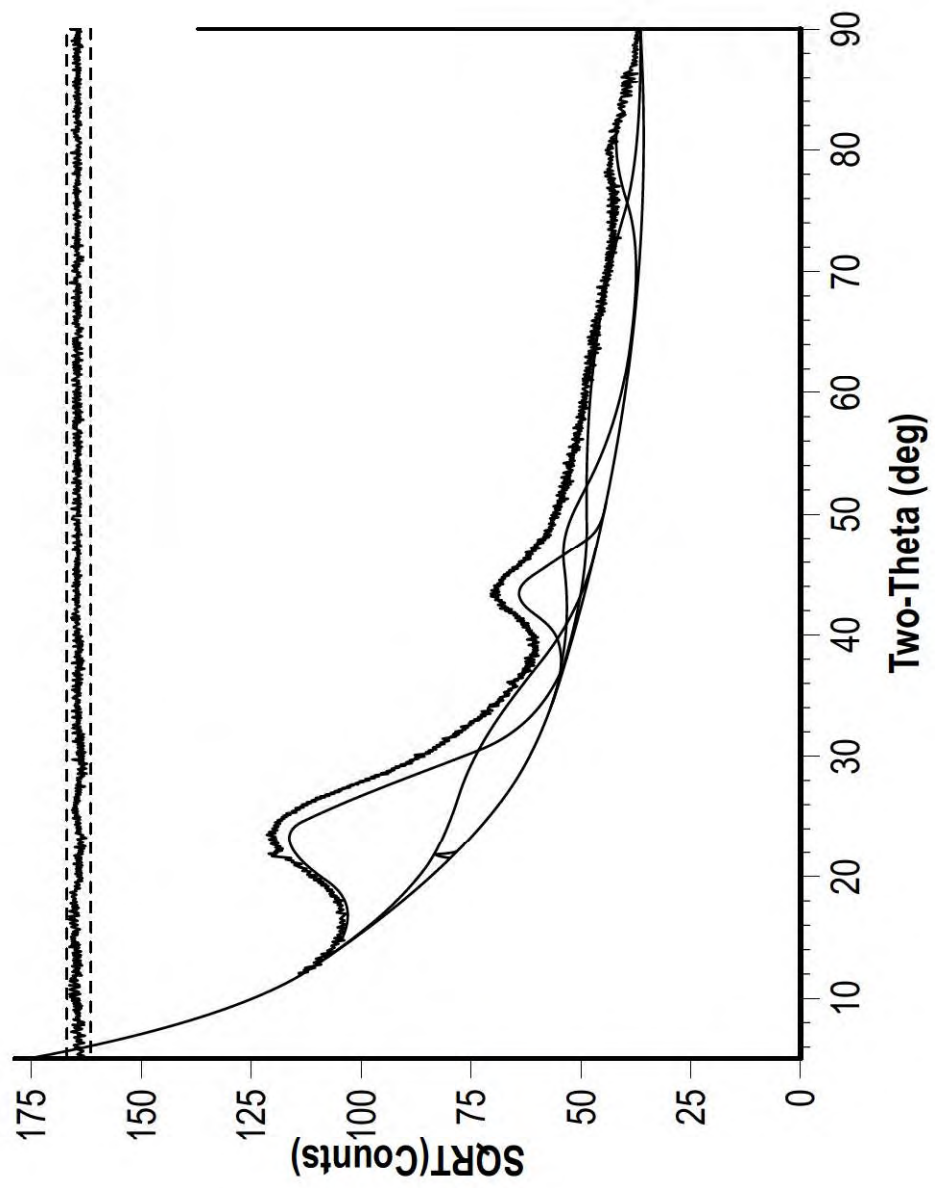


FIG. 59

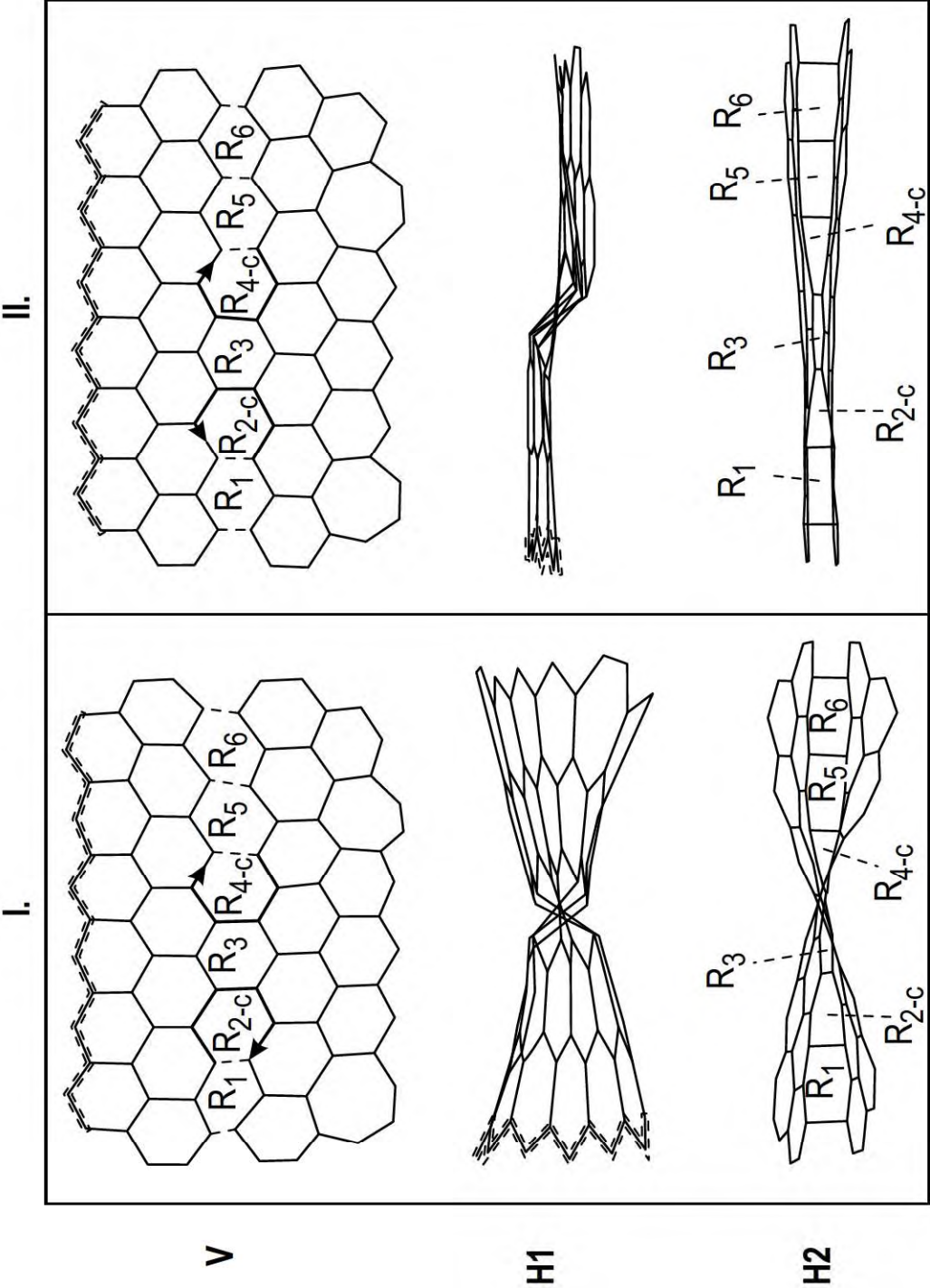


FIG. 60

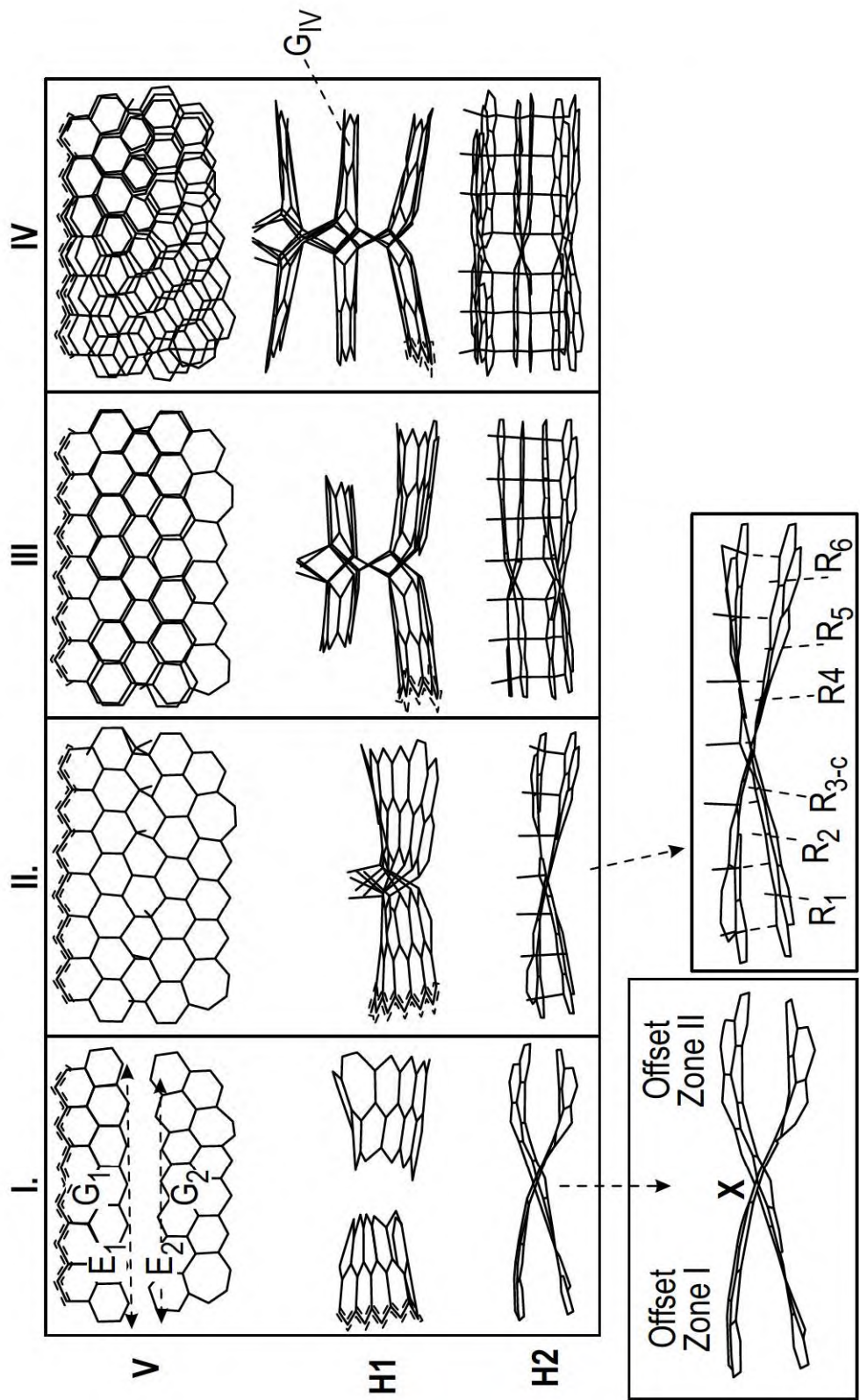


FIG. 61

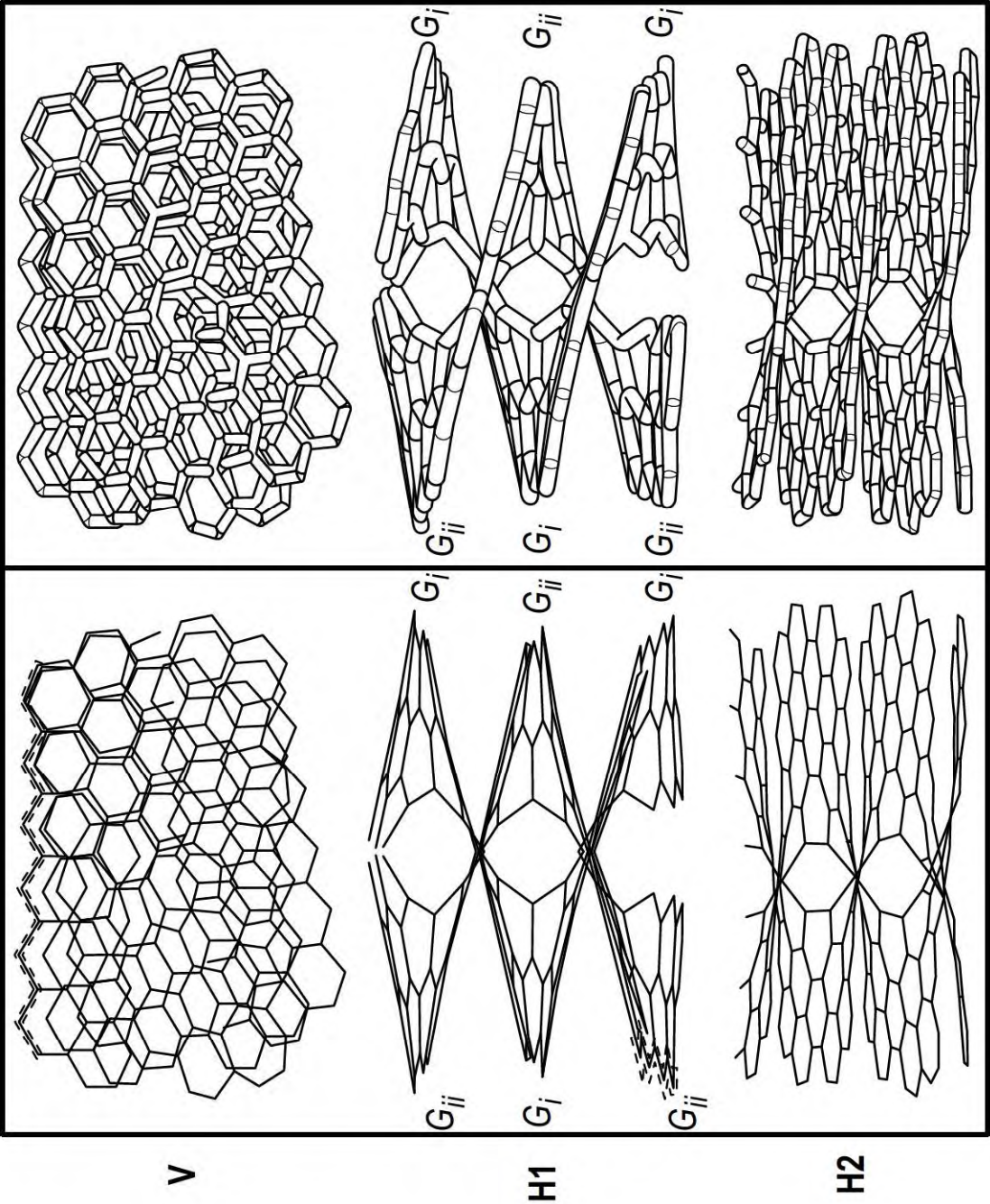
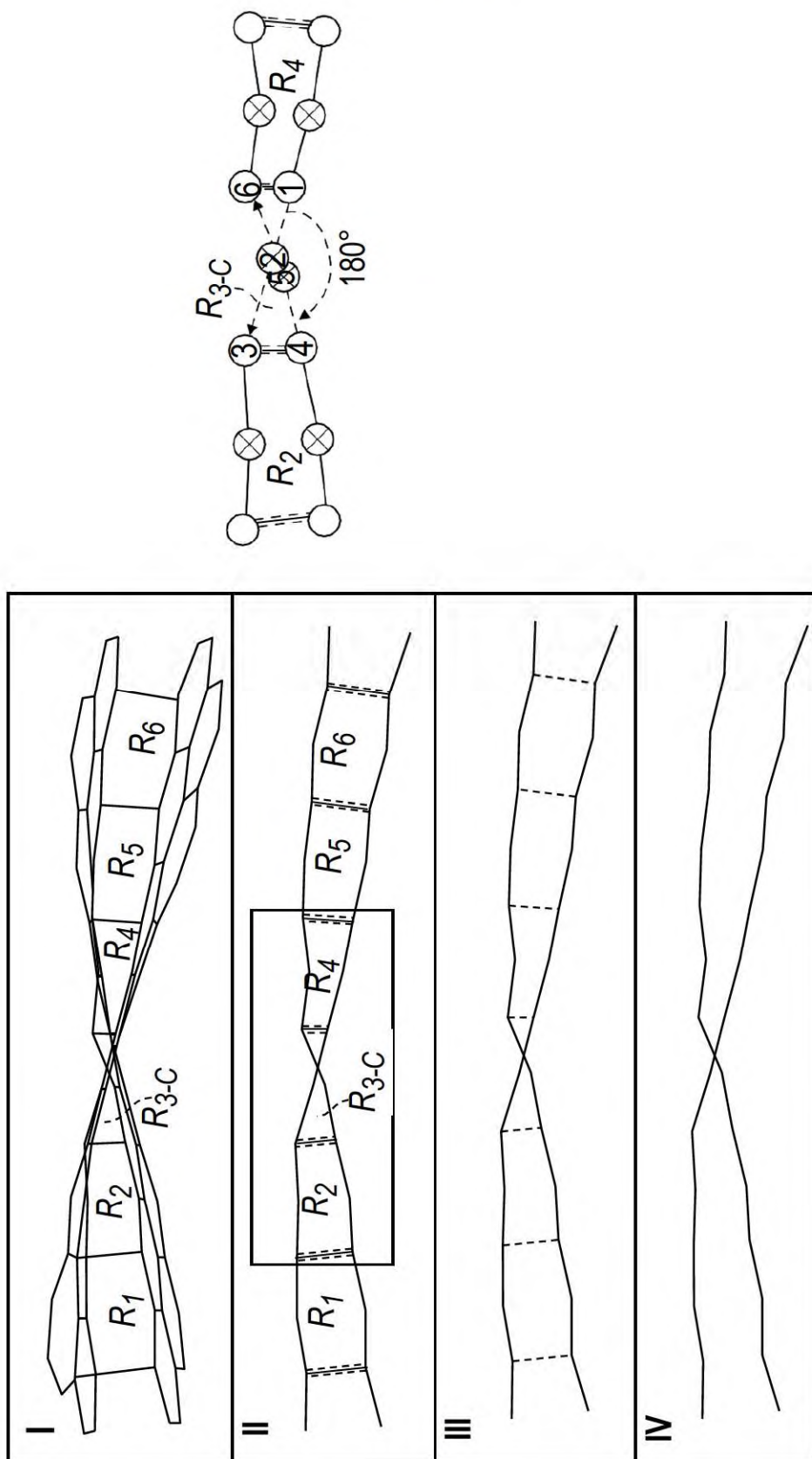


FIG. 62



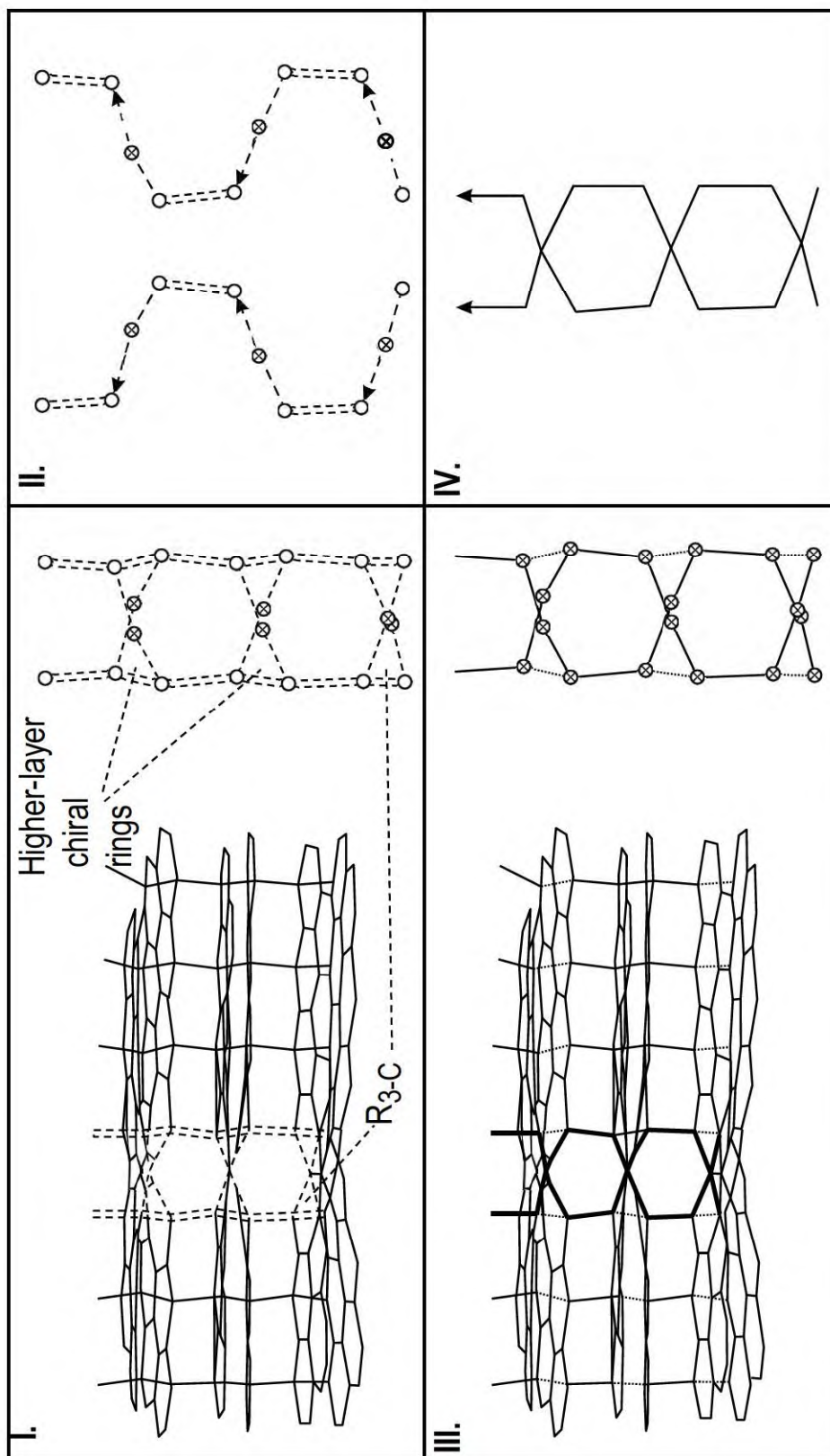


FIG. 64

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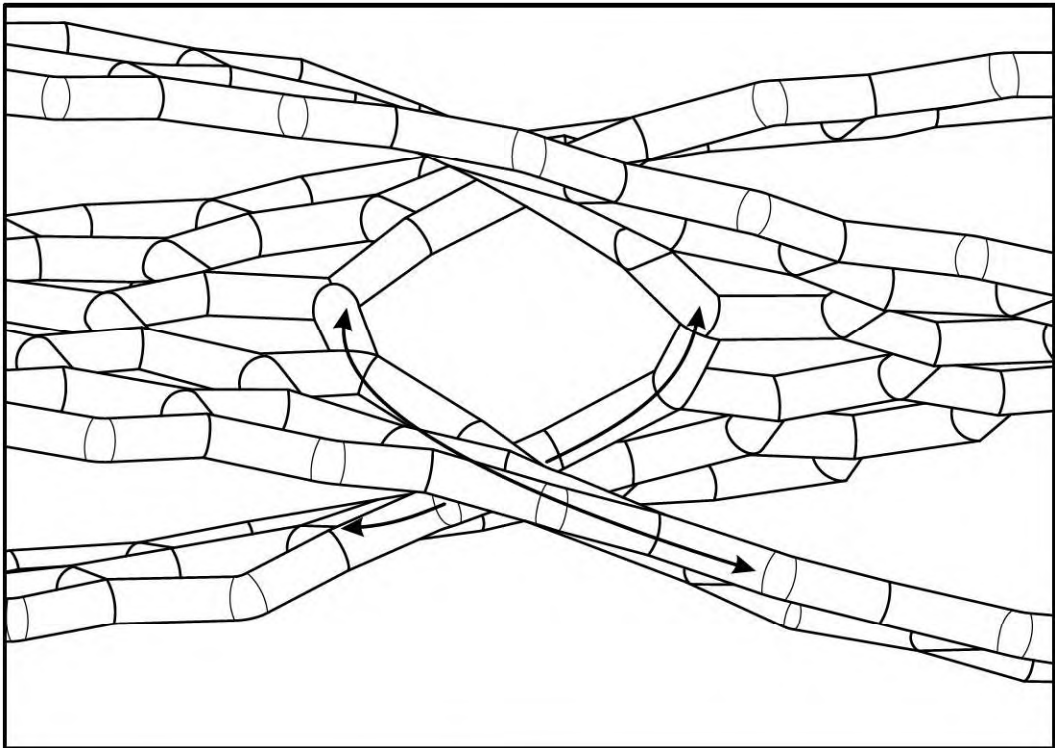


FIG. 65A

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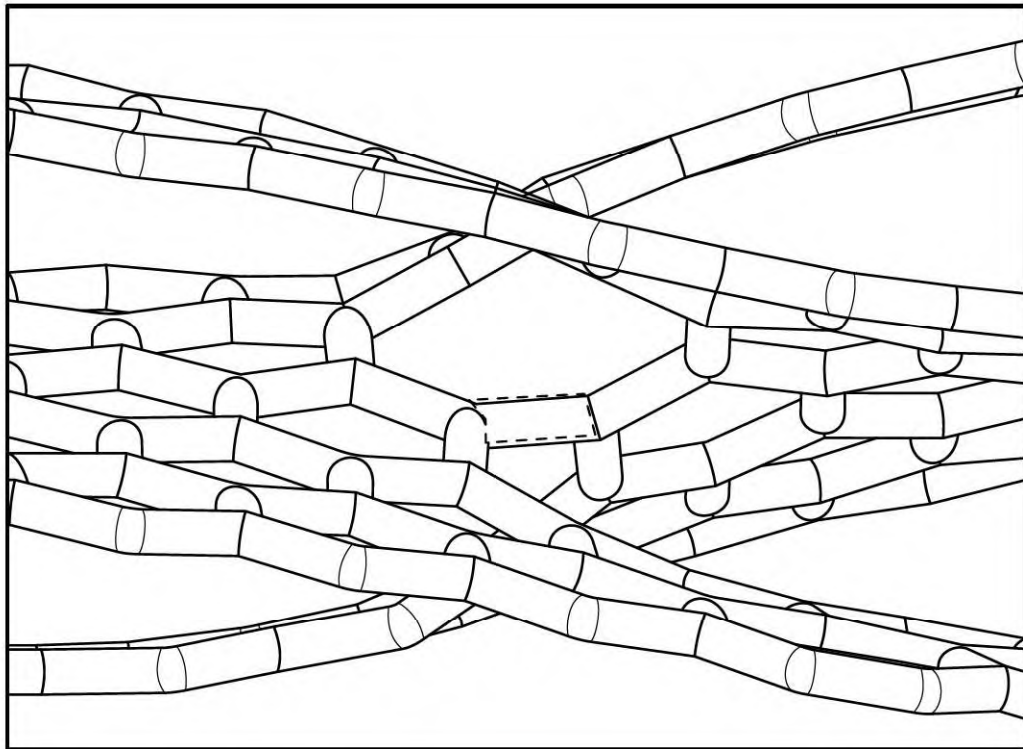


FIG. 65B

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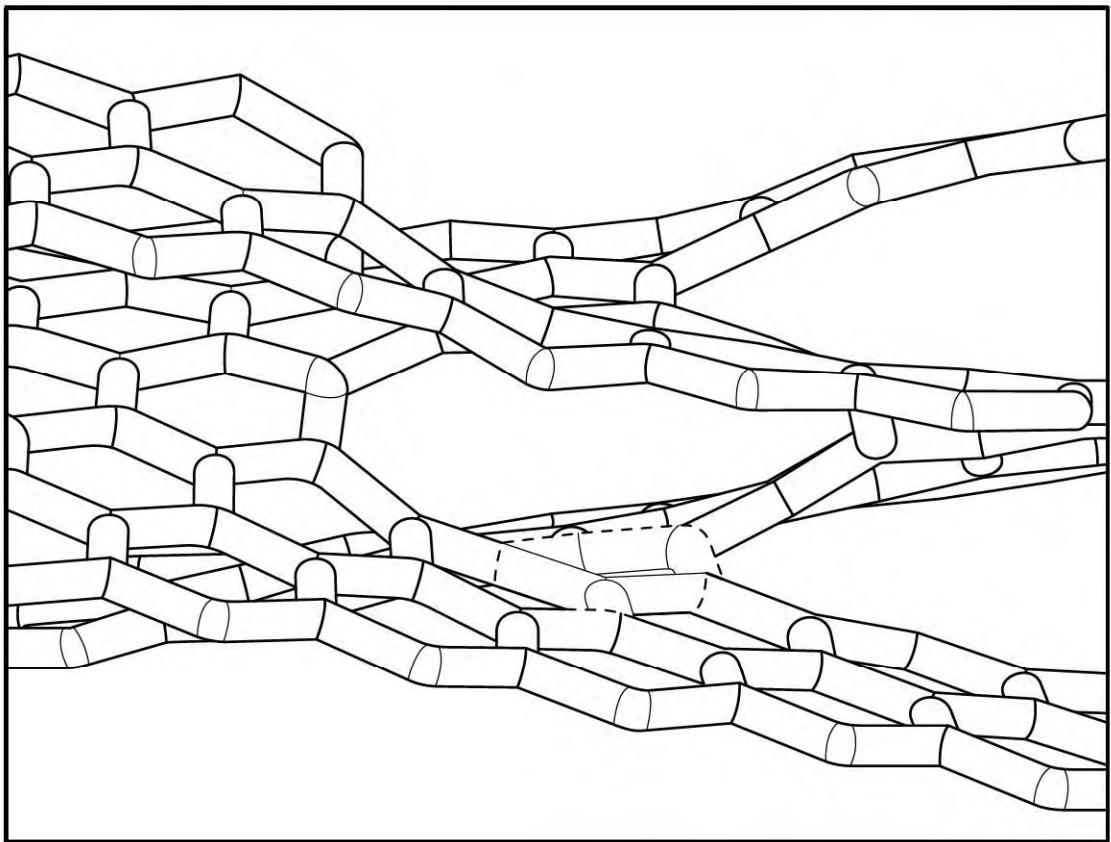


FIG. 65C

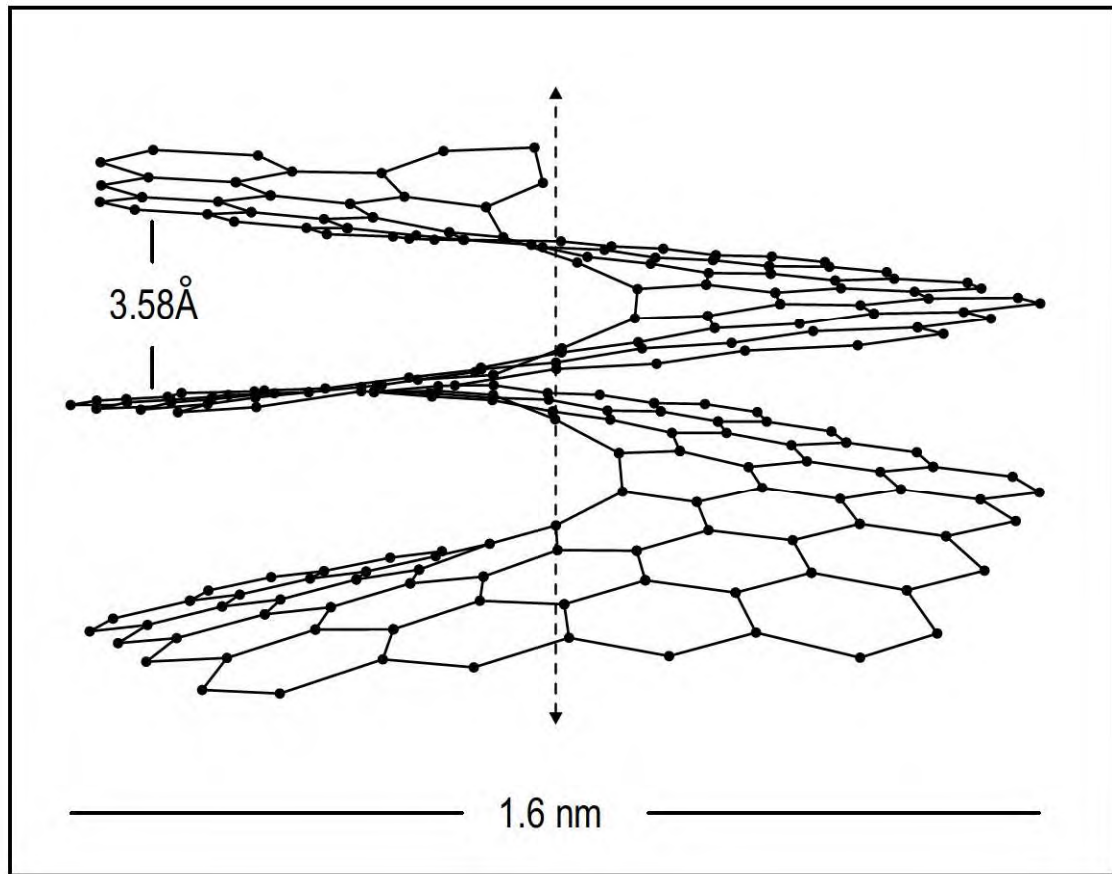


FIG. 66A

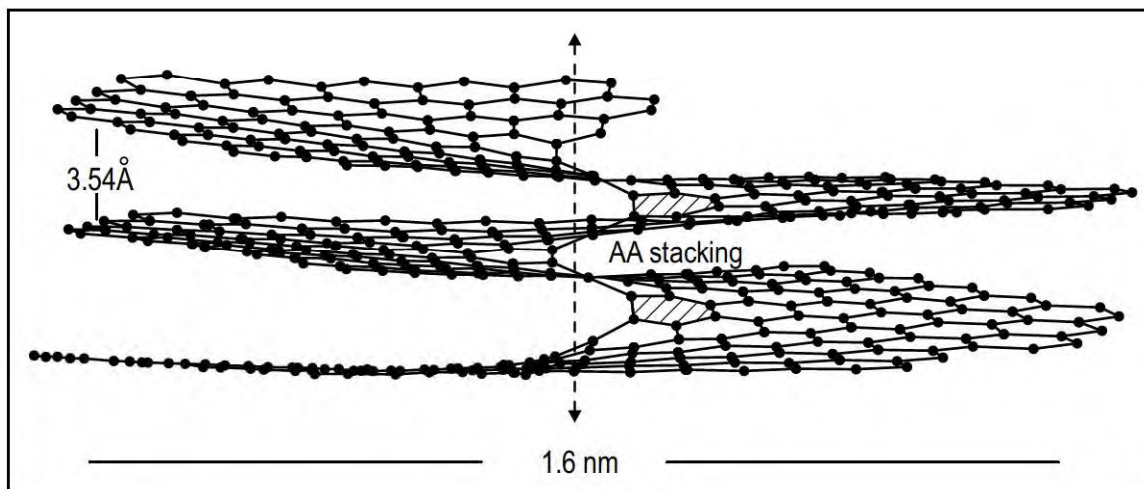


FIG. 66B

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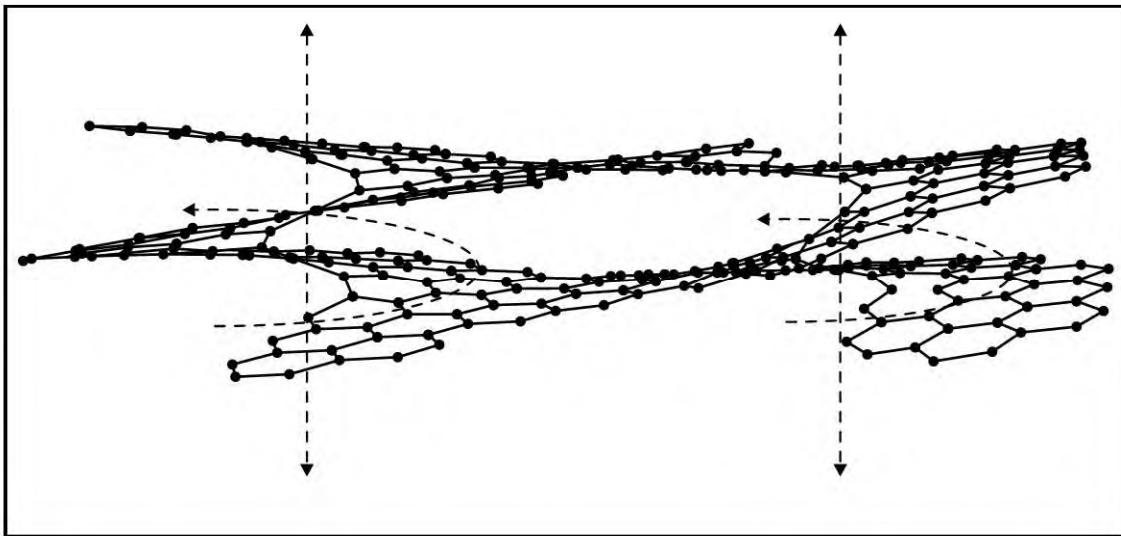


FIG. 66C

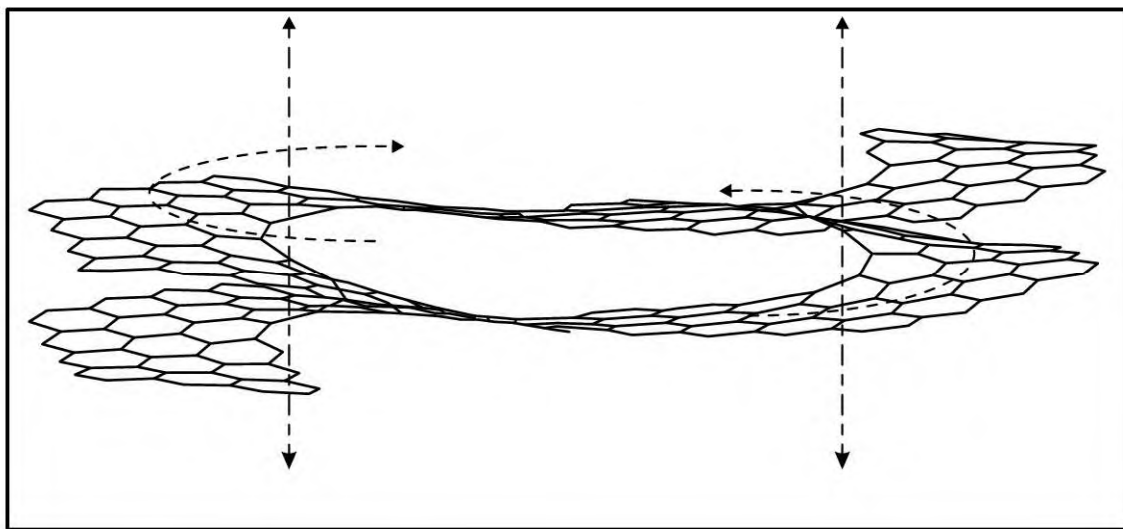


FIG. 66D

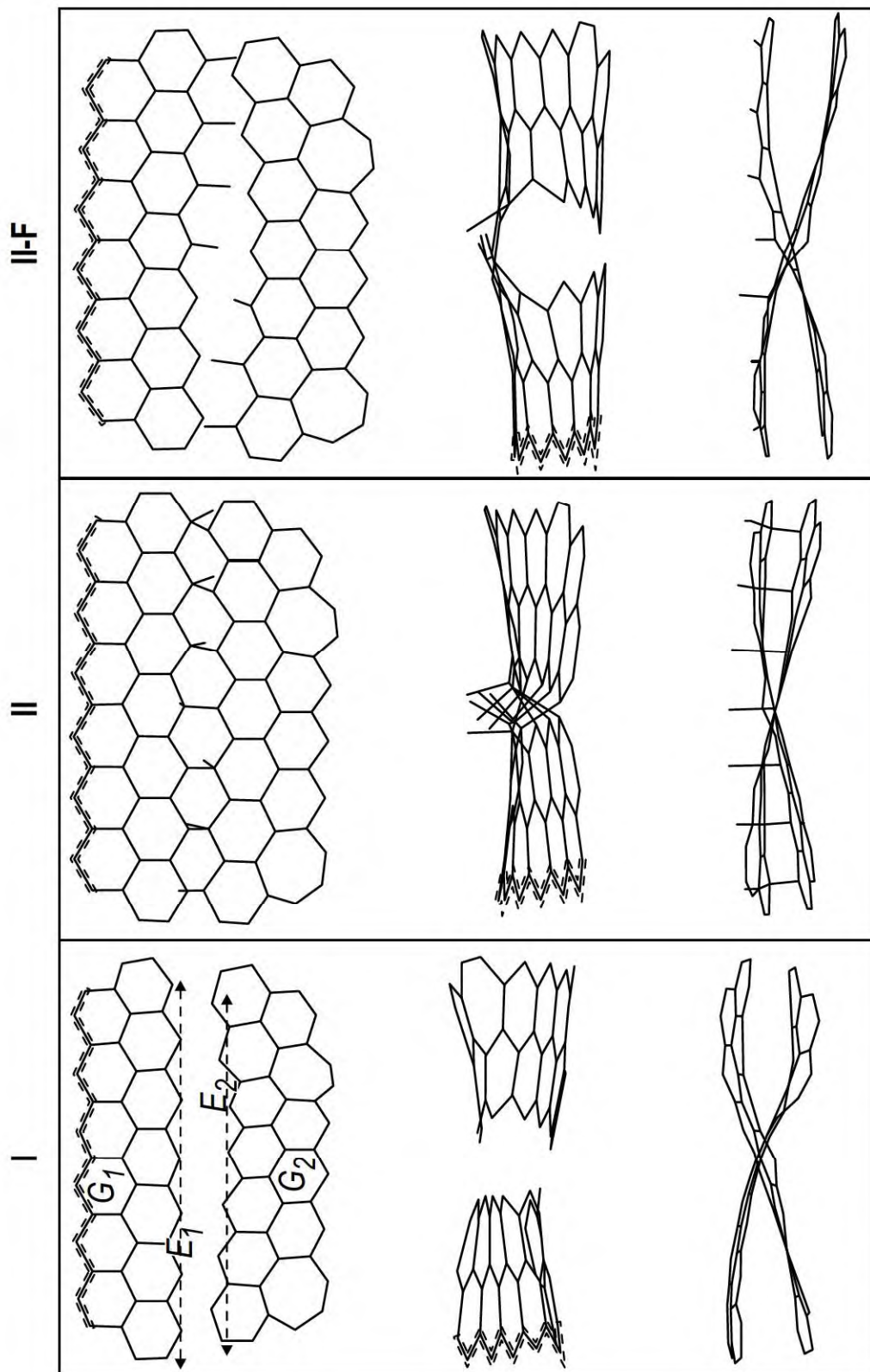


FIG. 67

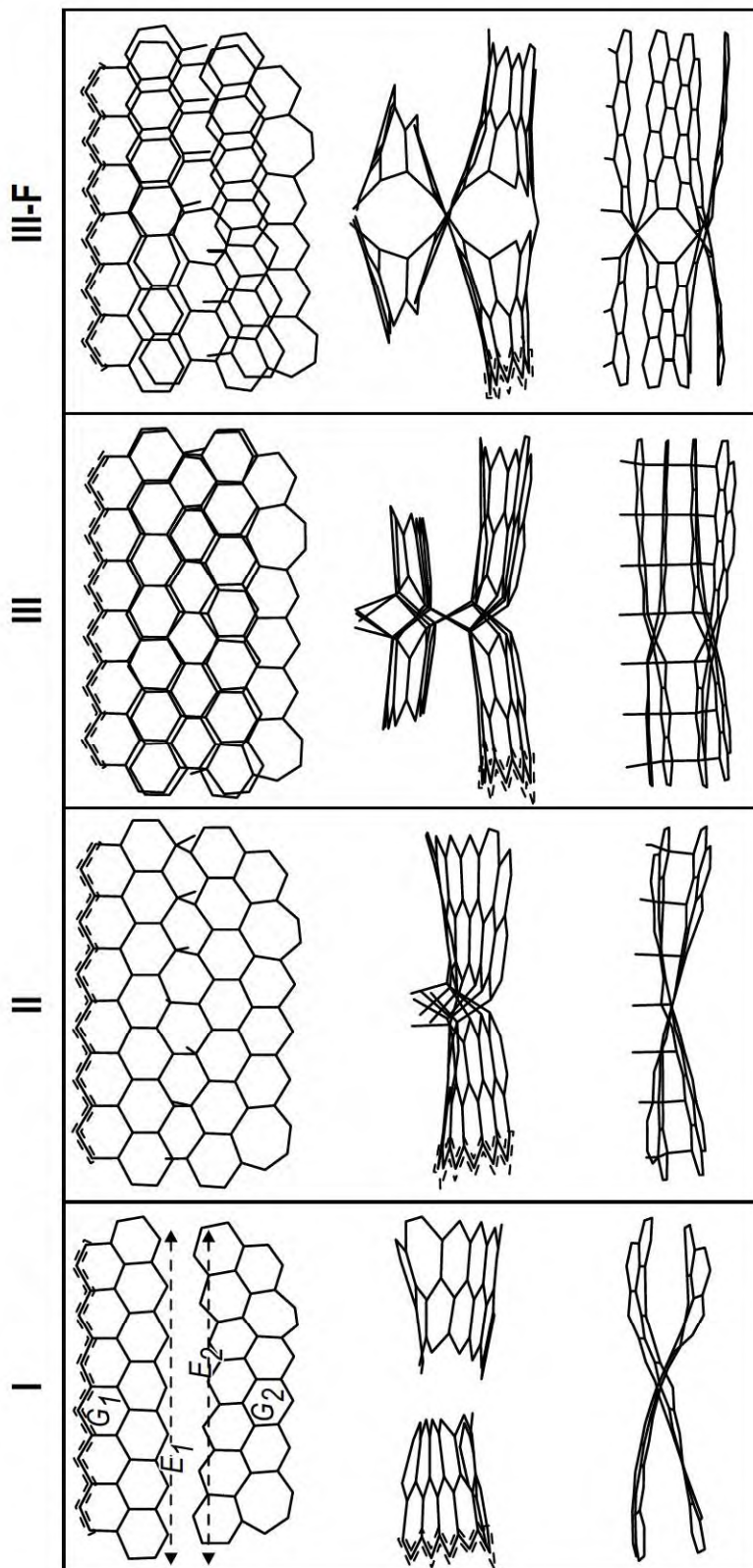


FIG. 68

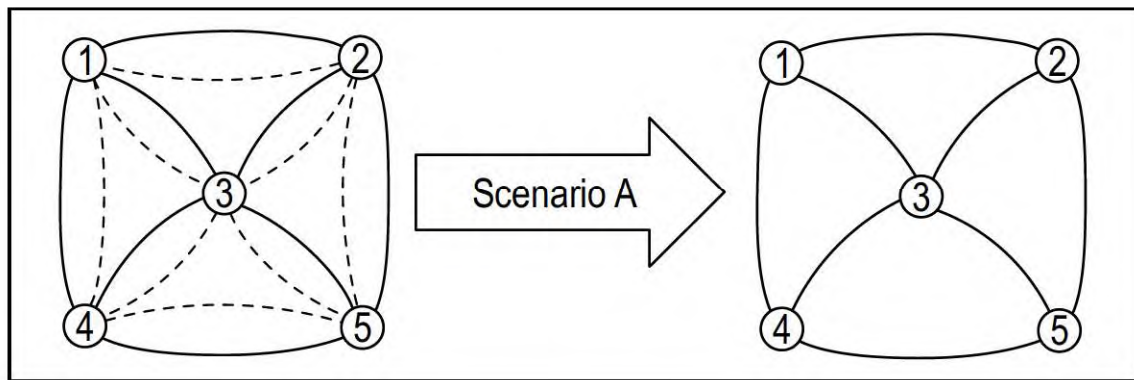


FIG. 69A

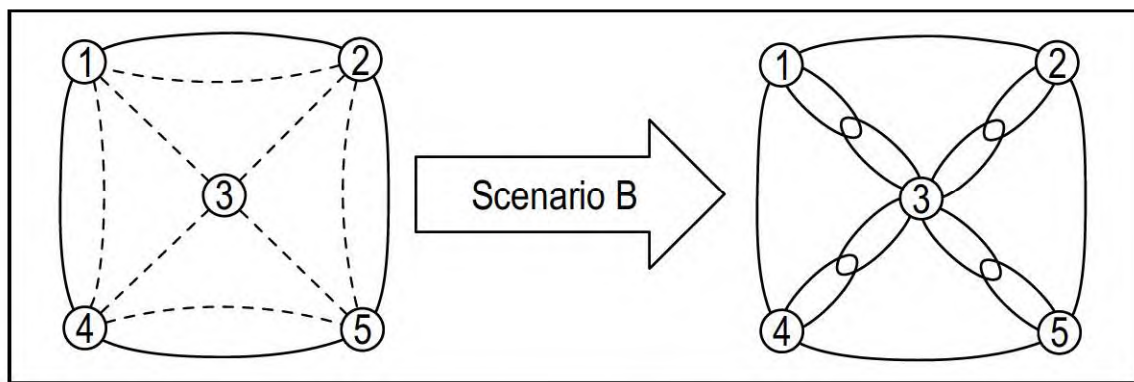


FIG. 69B

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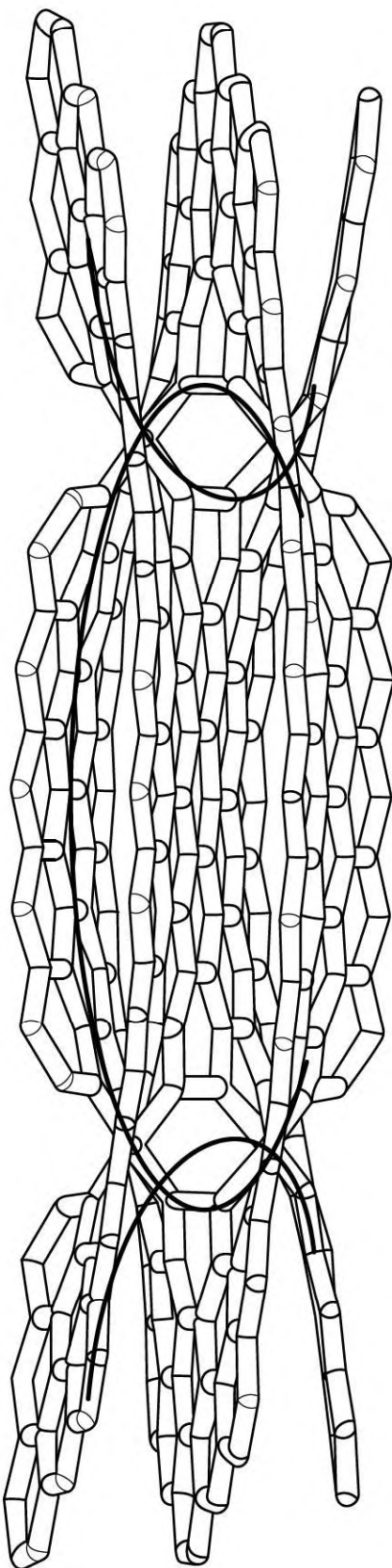


FIG. 70

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FIG. 71A

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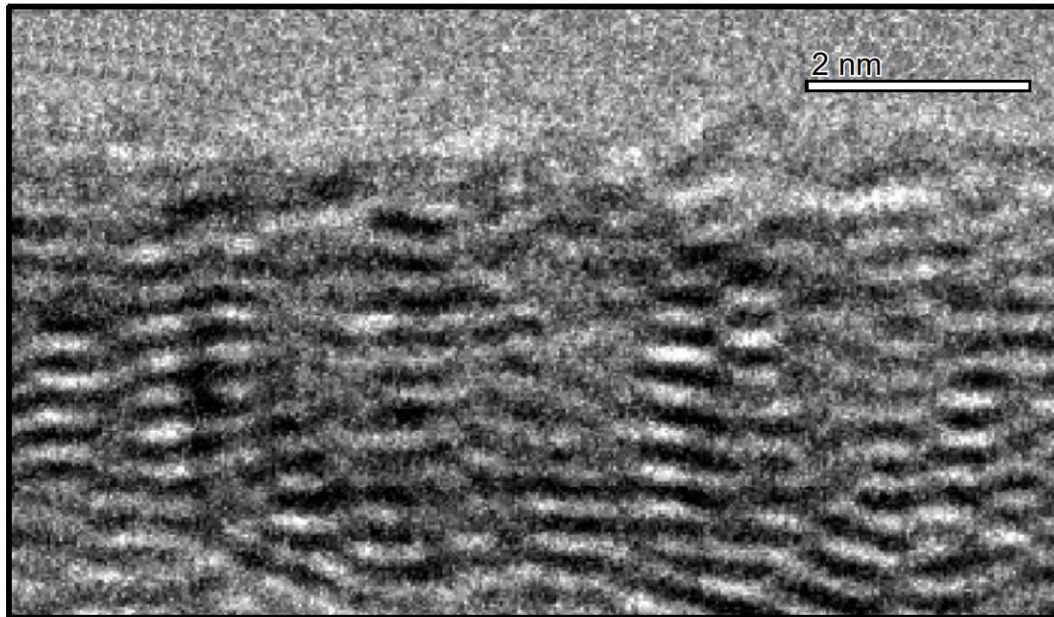


FIG. 71B

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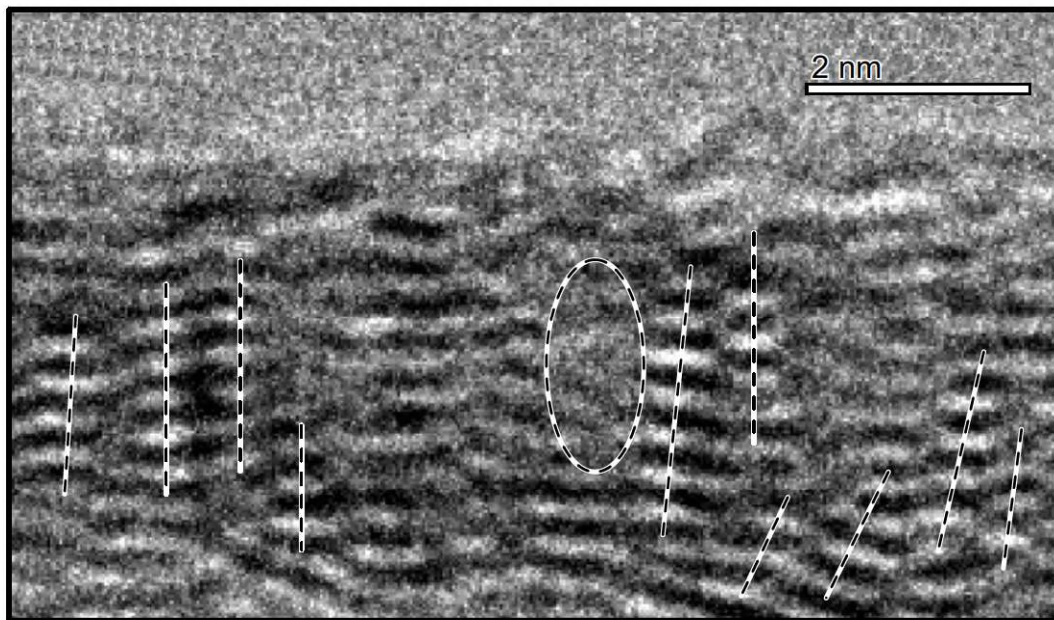


FIG. 71C

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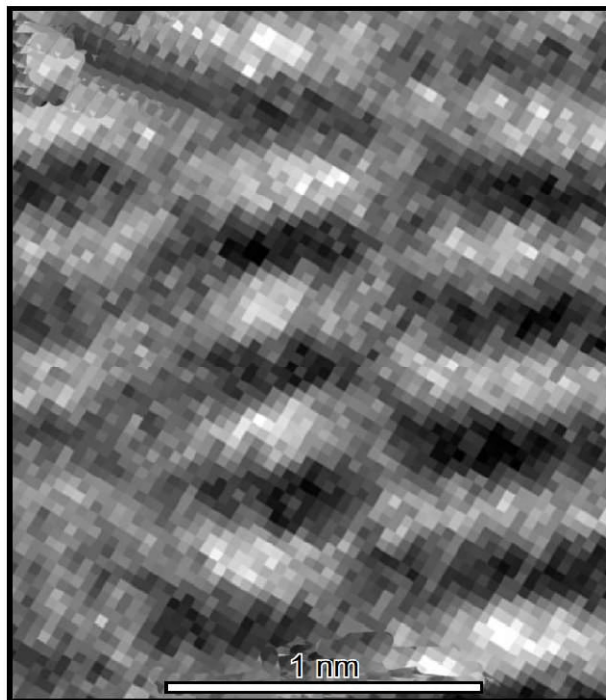


FIG. 71D

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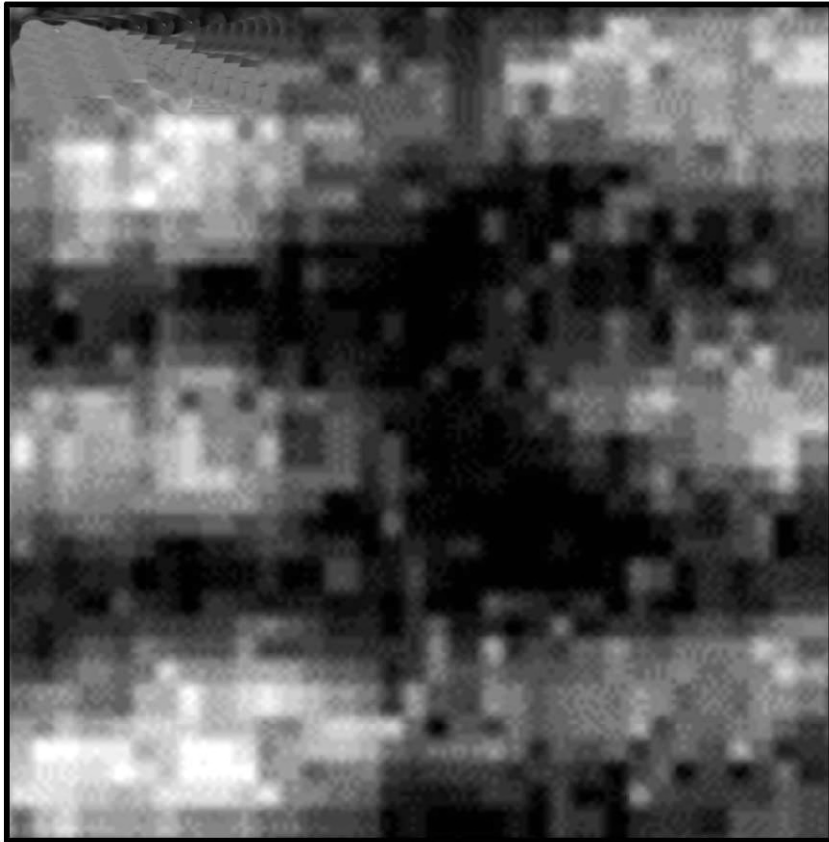


FIG. 71E

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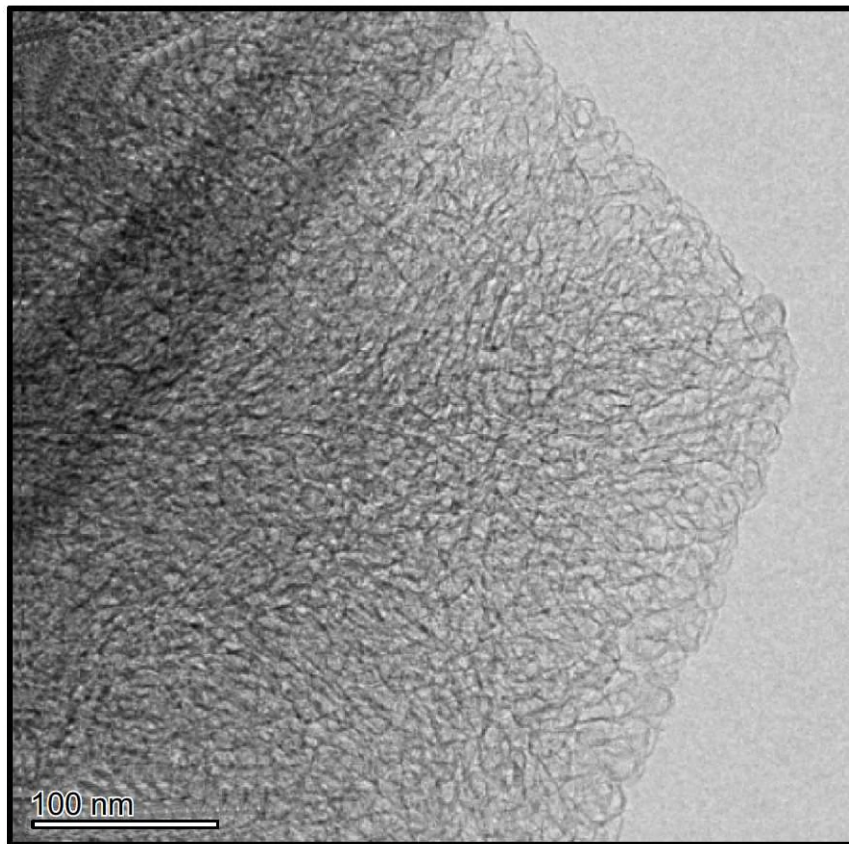


FIG. 72A

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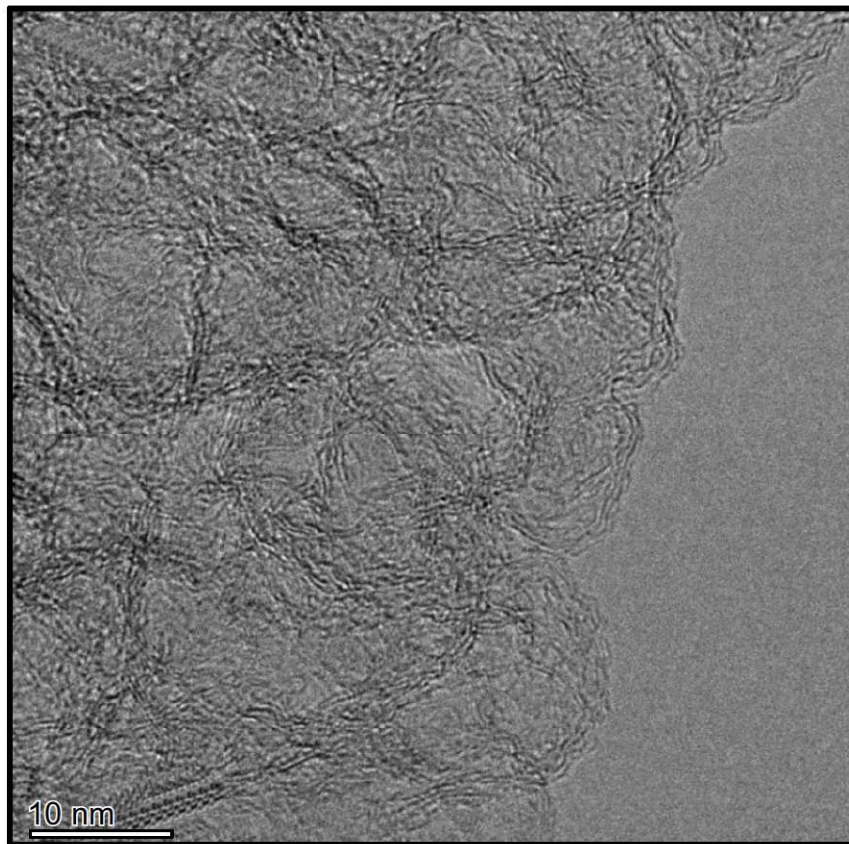


FIG. 72B

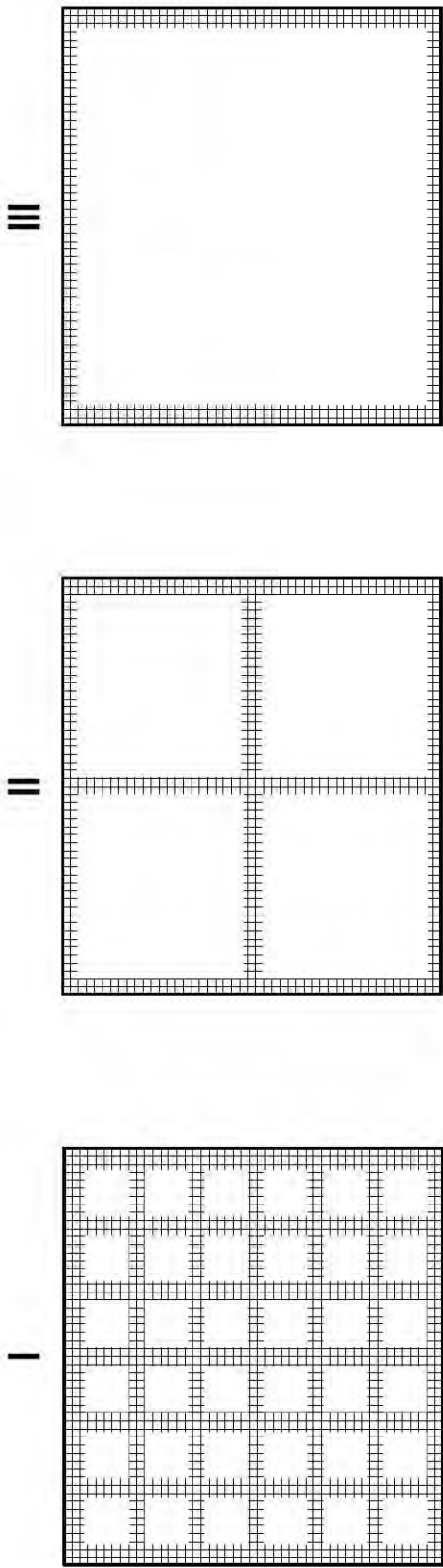


FIG. 73

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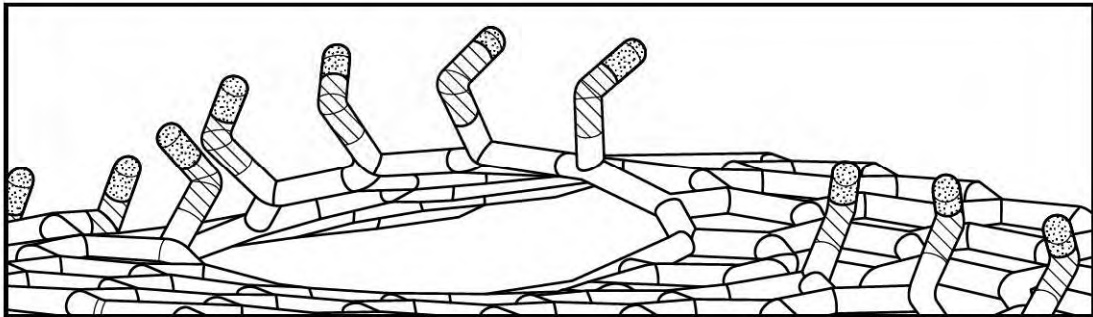


FIG. 74A

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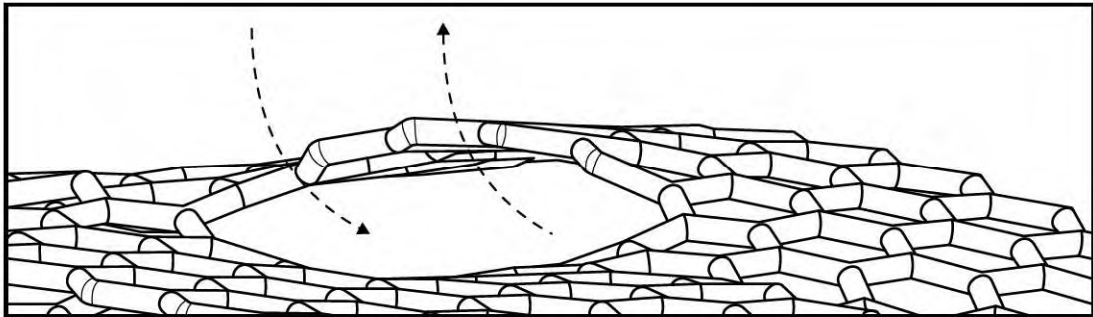


FIG. 74B

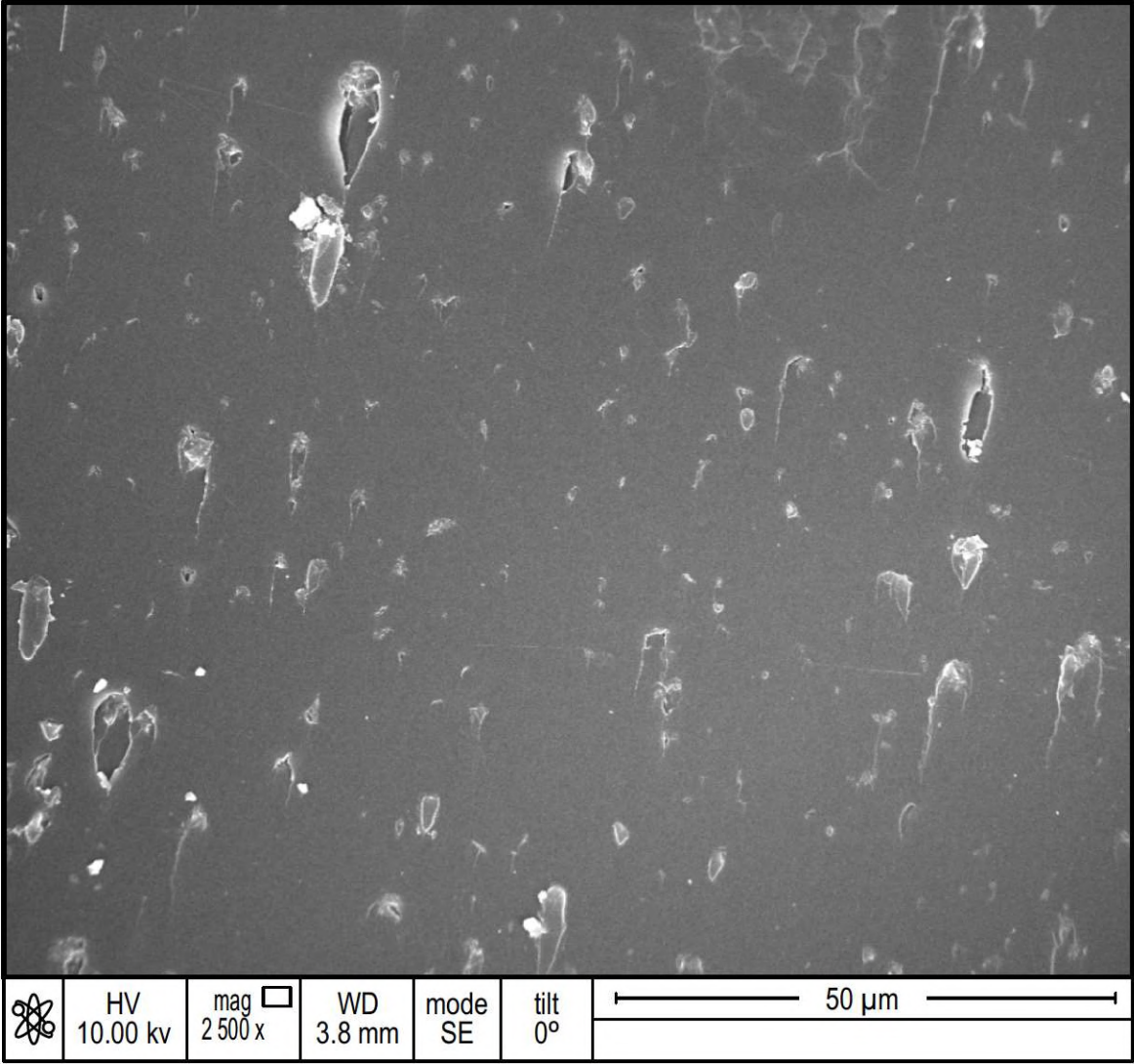


FIG. 75A

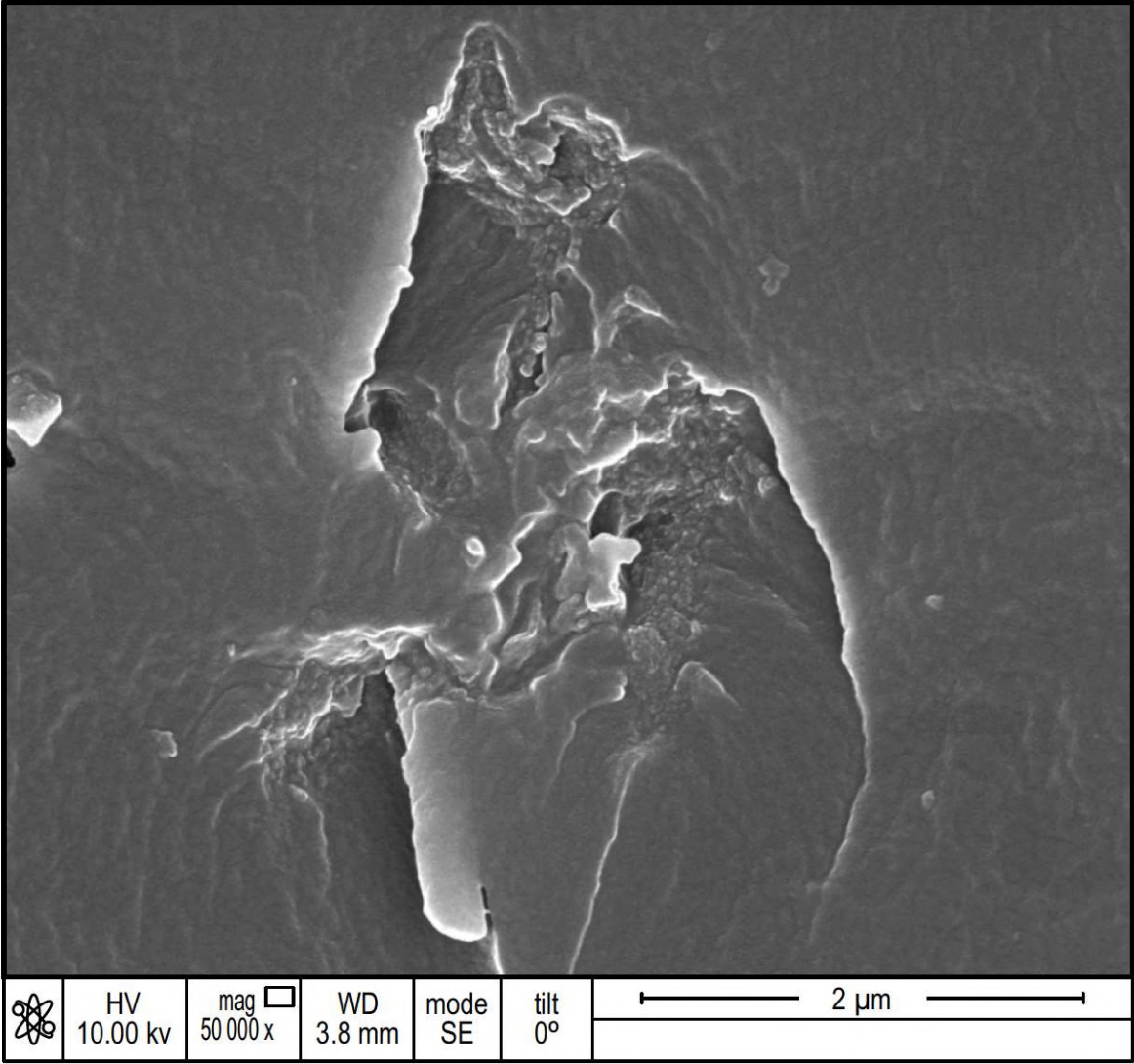


FIG. 75B

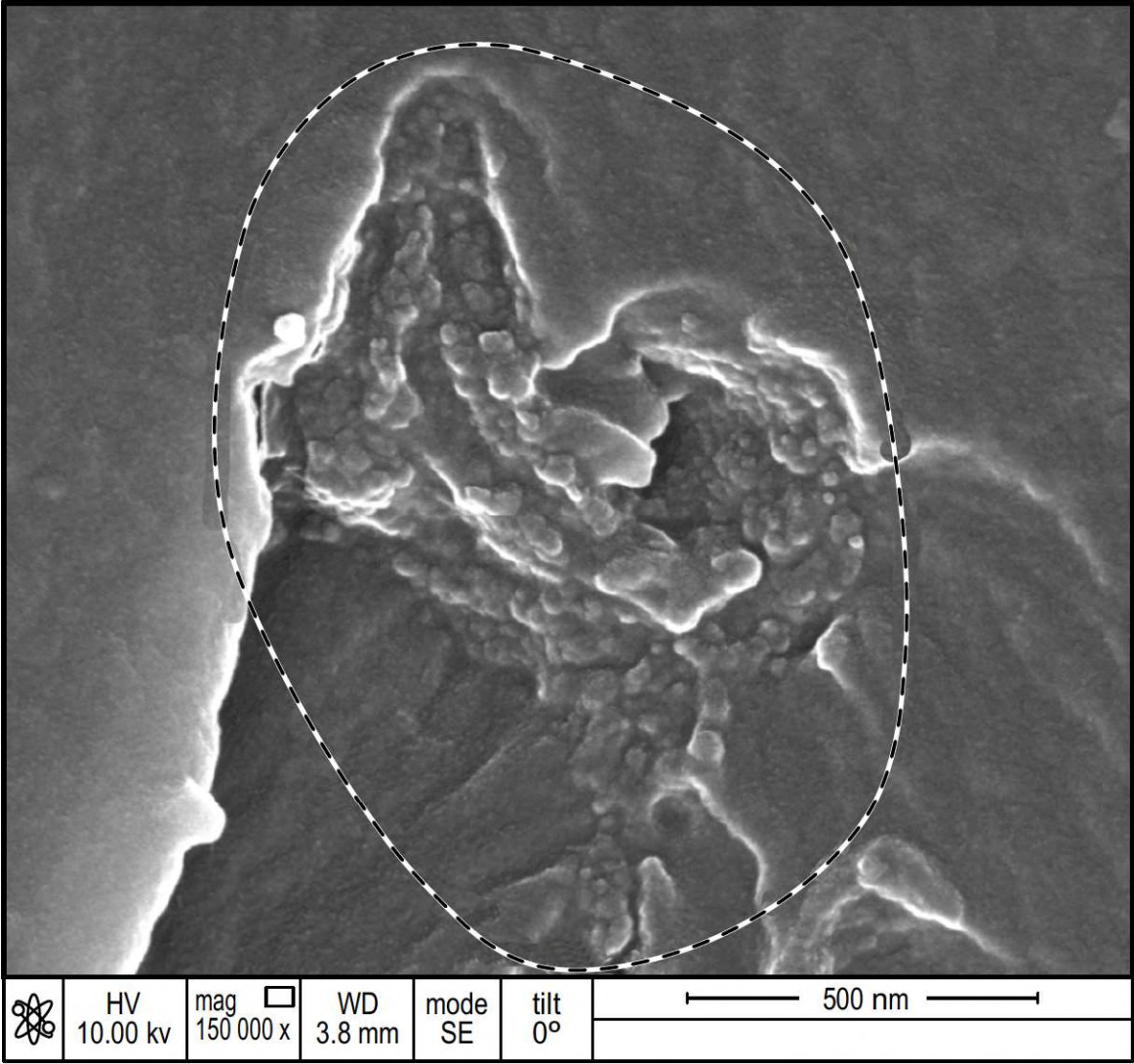


FIG. 75C

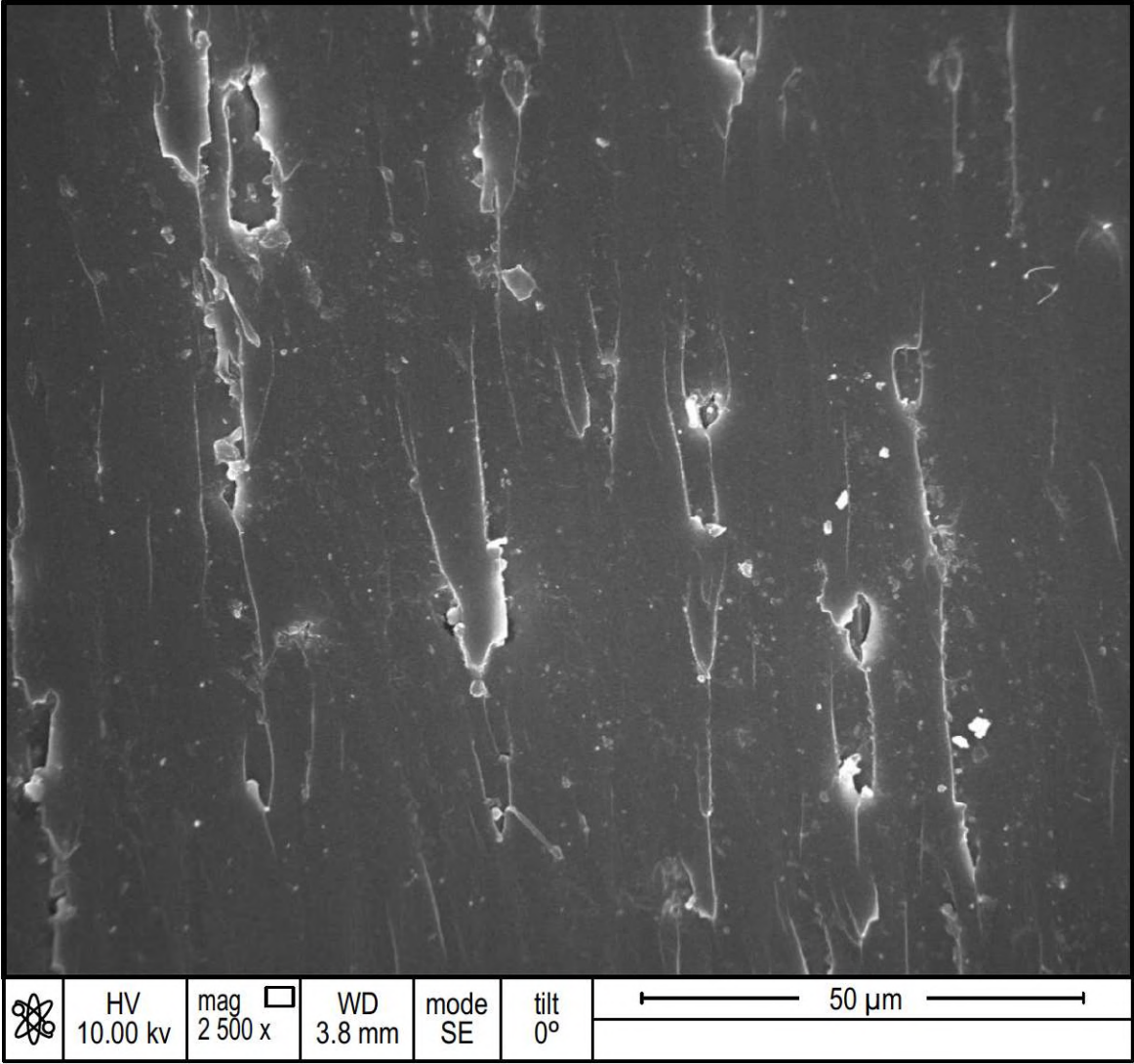


FIG. 76A

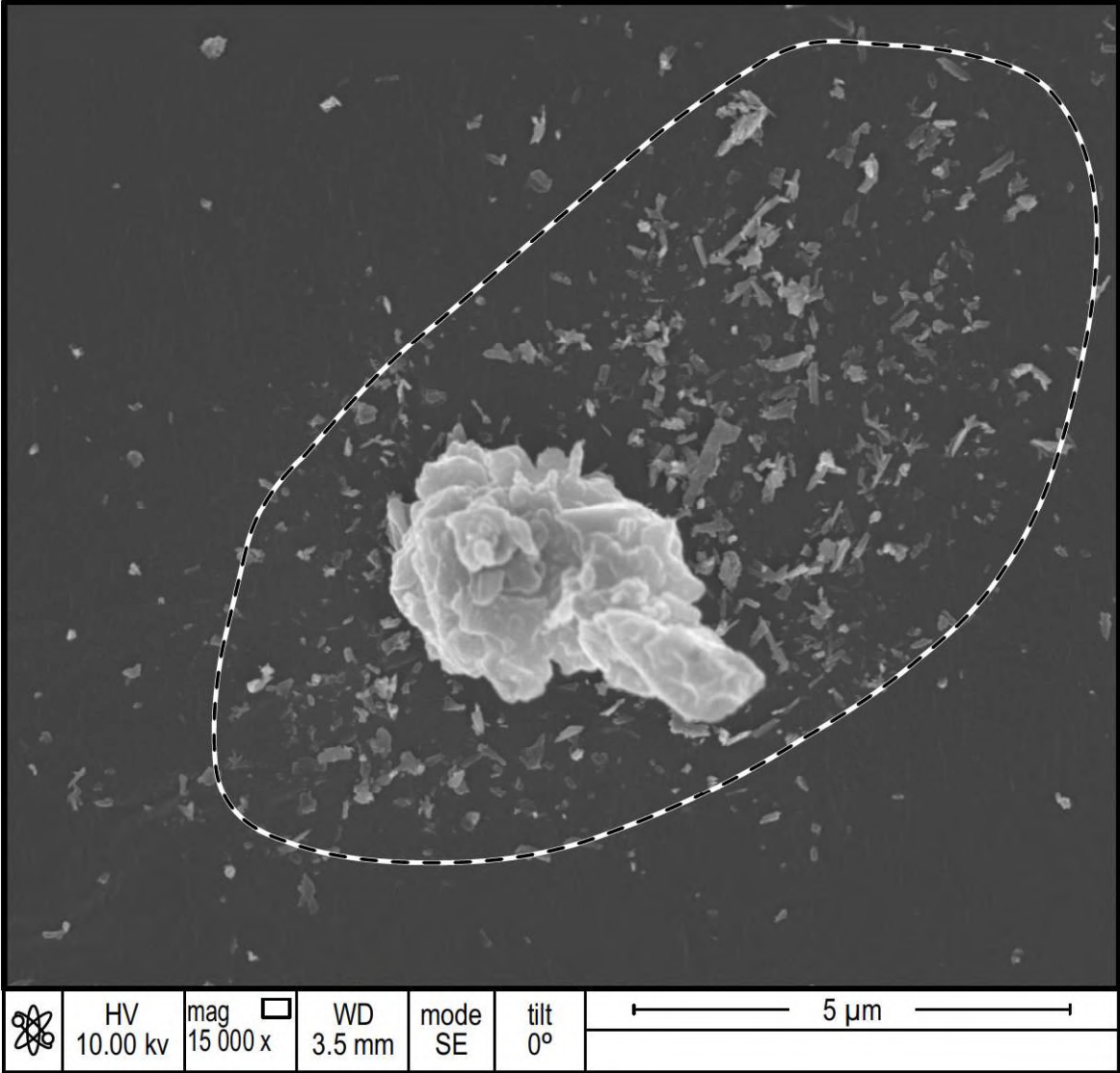


FIG. 76B

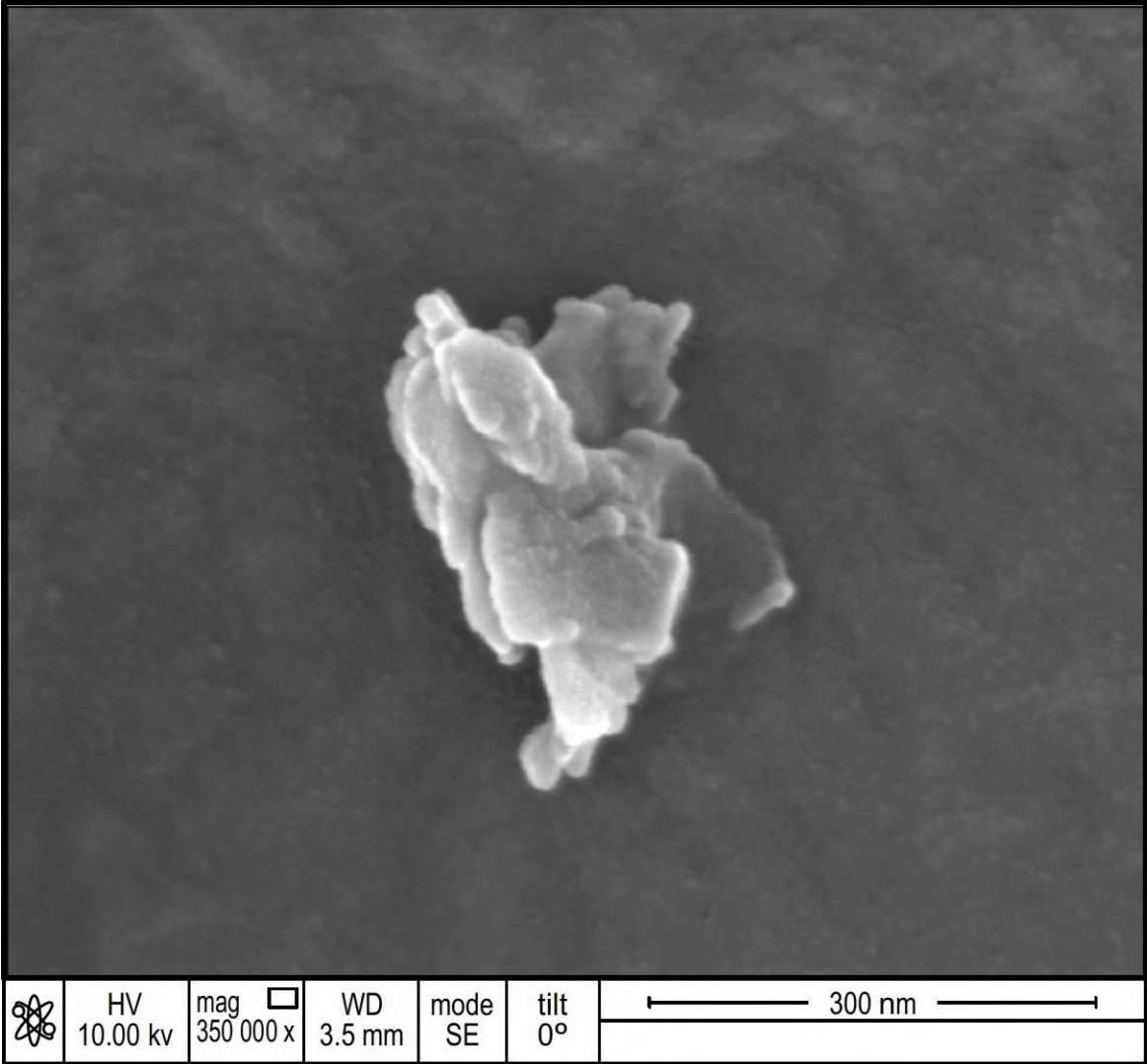


FIG. 76C

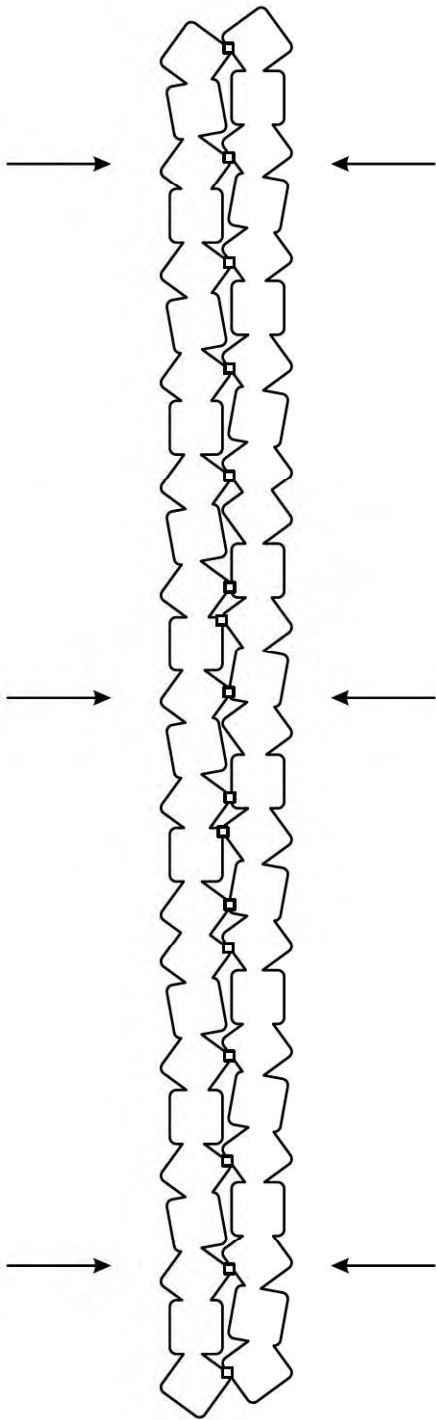


FIG. 77

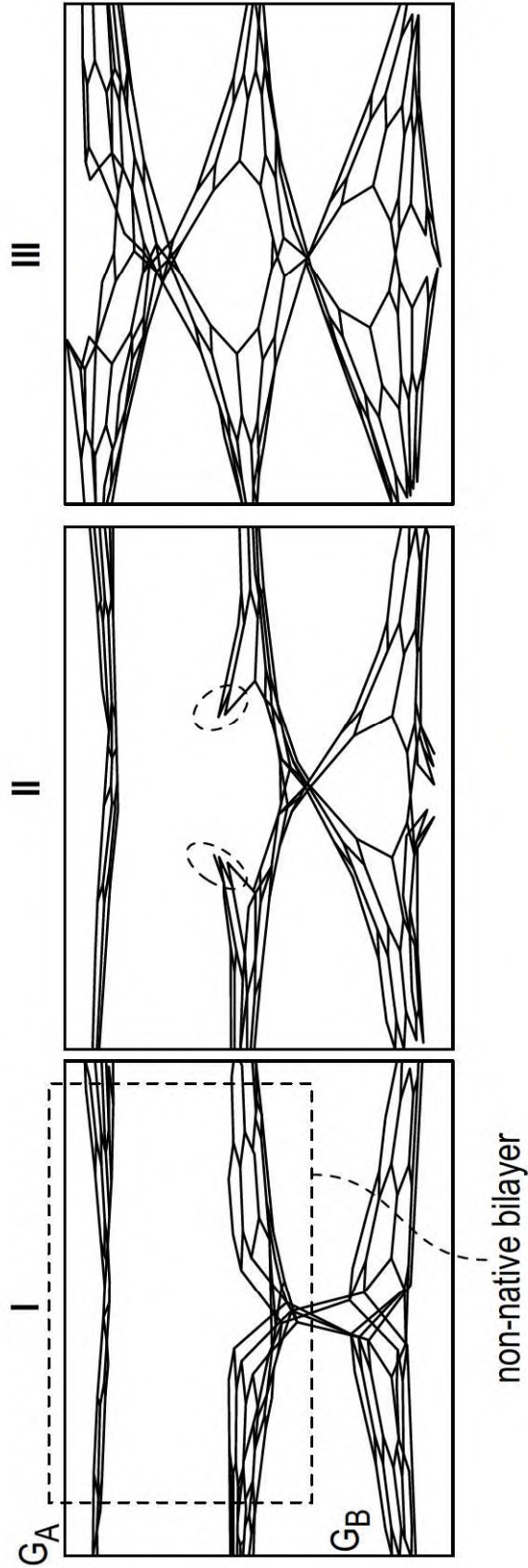


FIG. 78

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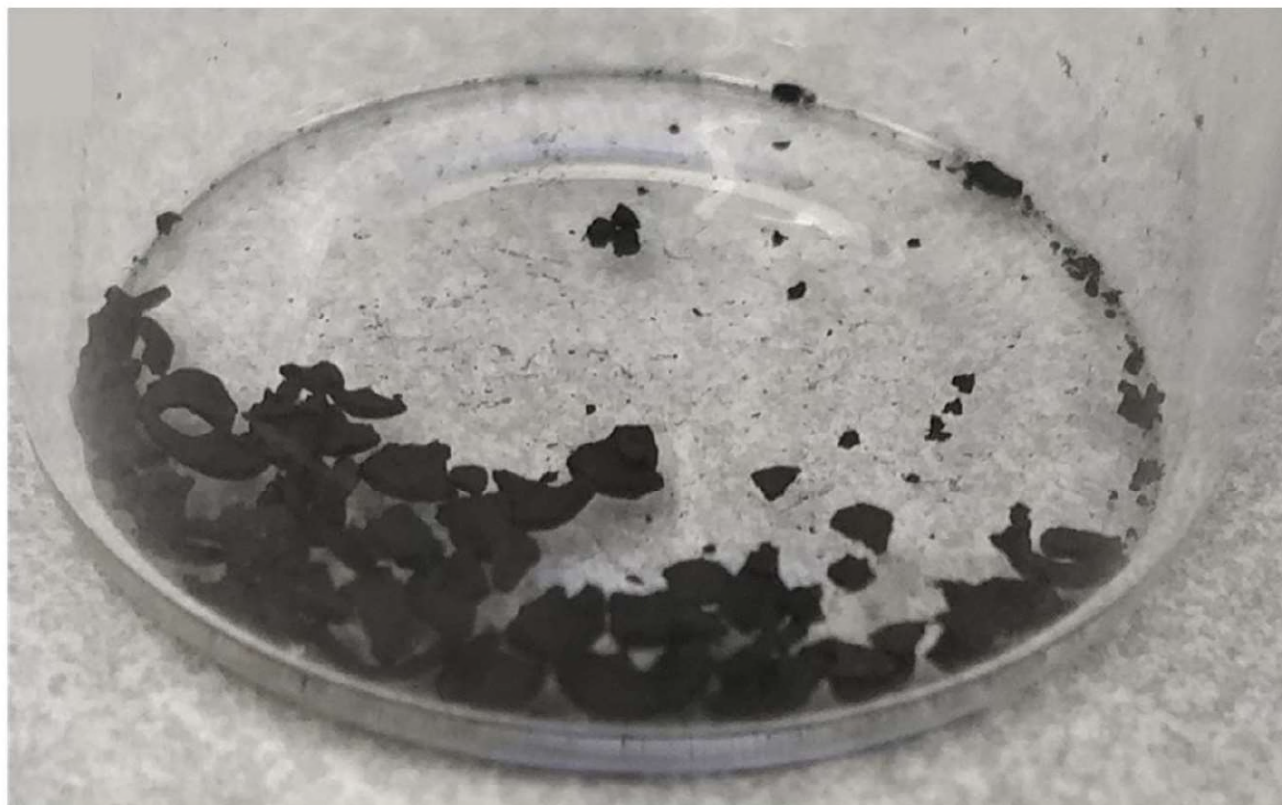


Fig. 79A

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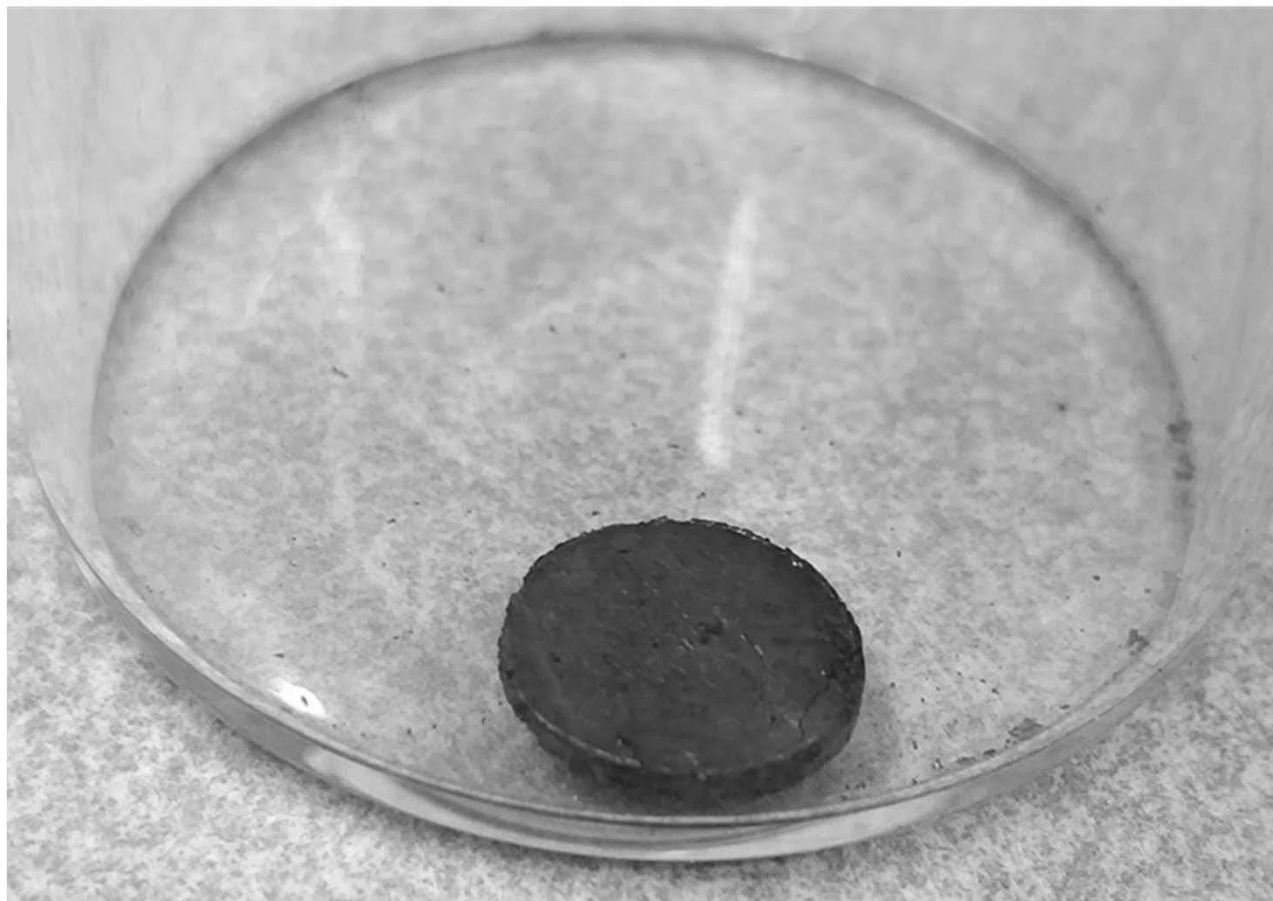


Fig. 79B

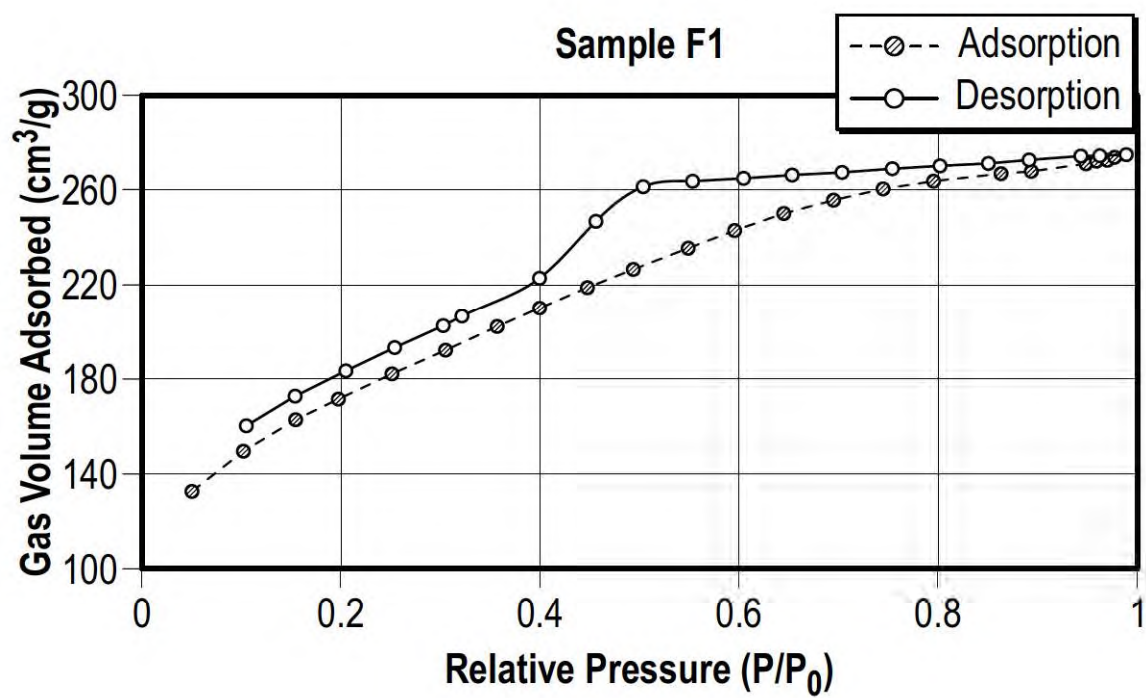


FIG. 80A

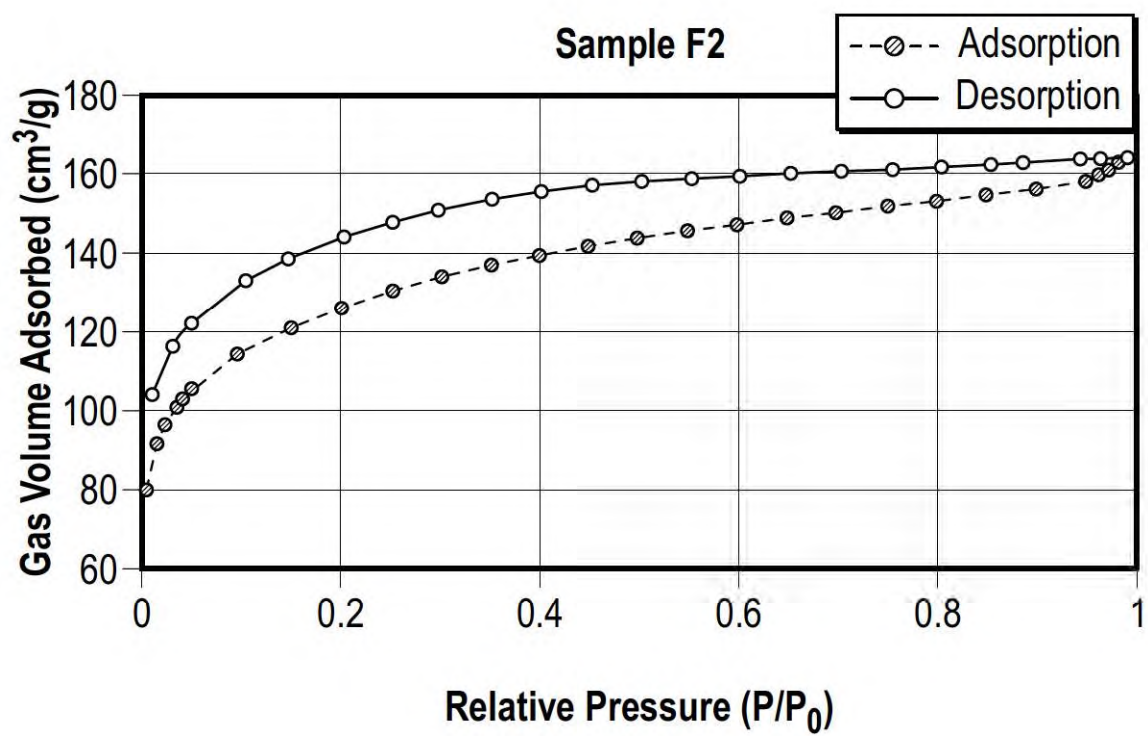


FIG. 80B

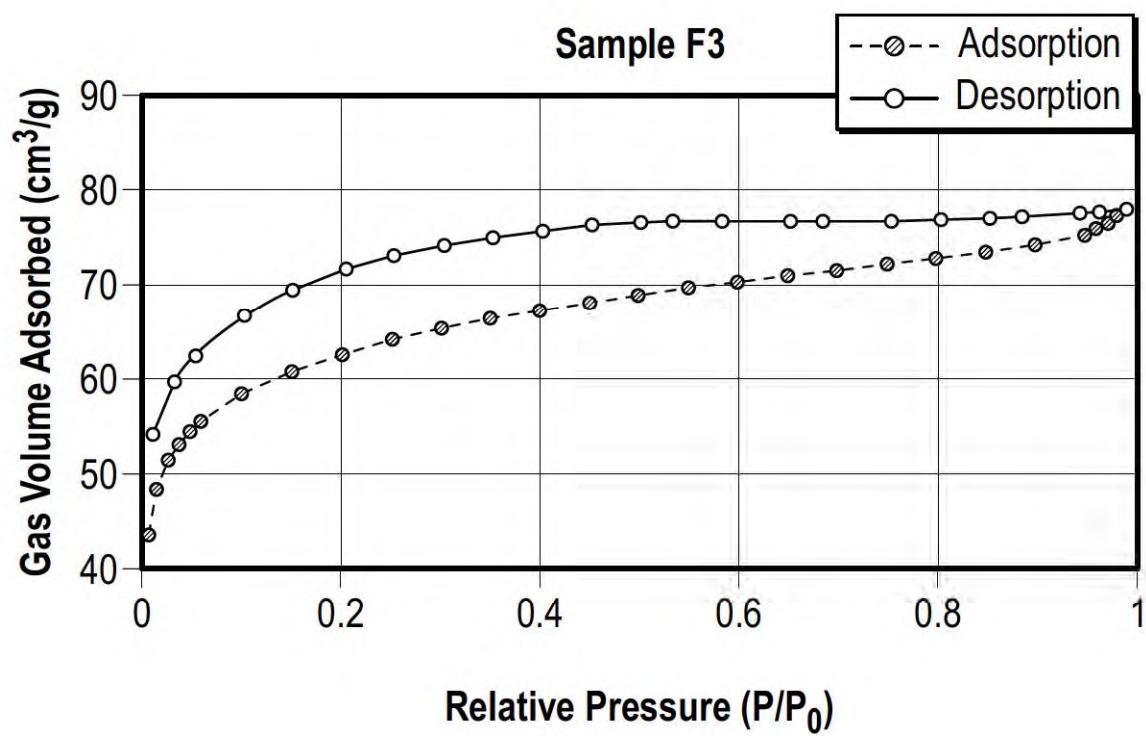


FIG. 80C

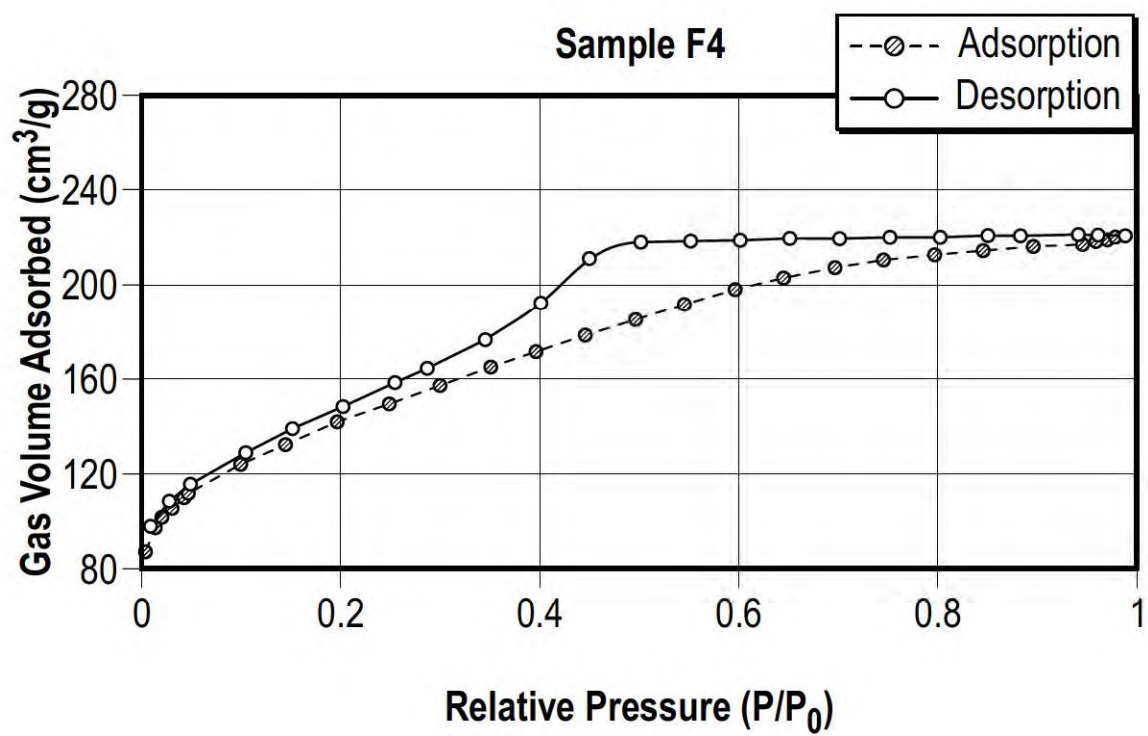


FIG. 80D

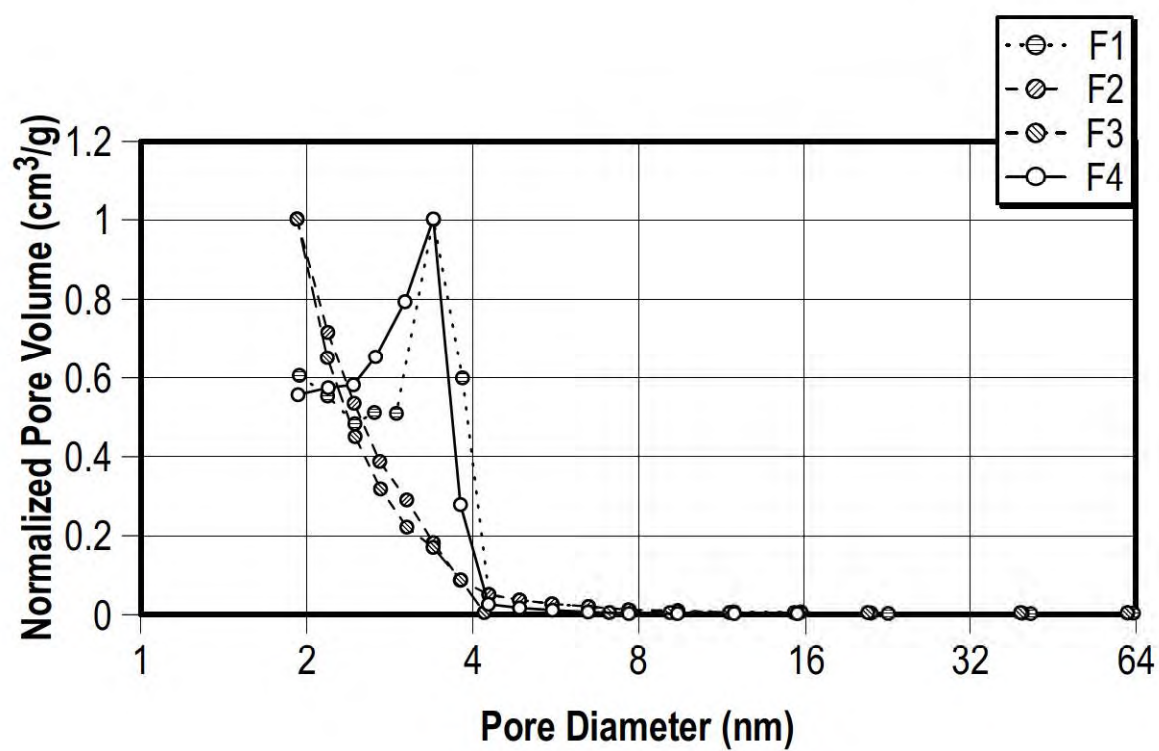


FIG. 81

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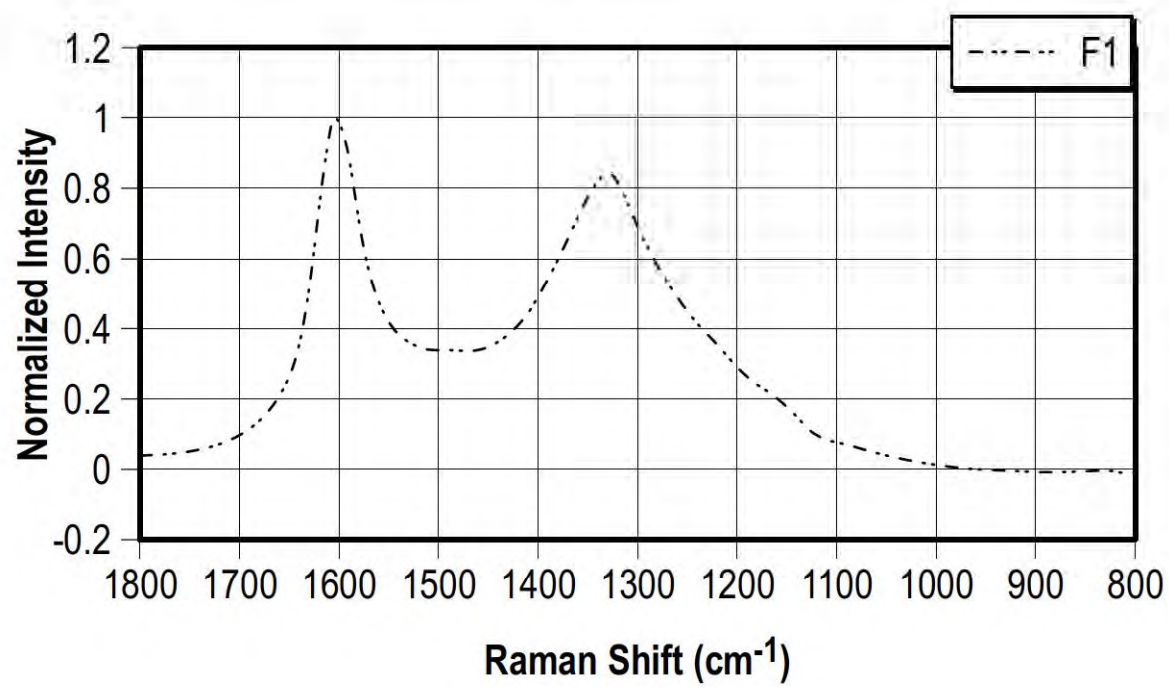


FIG. 82A

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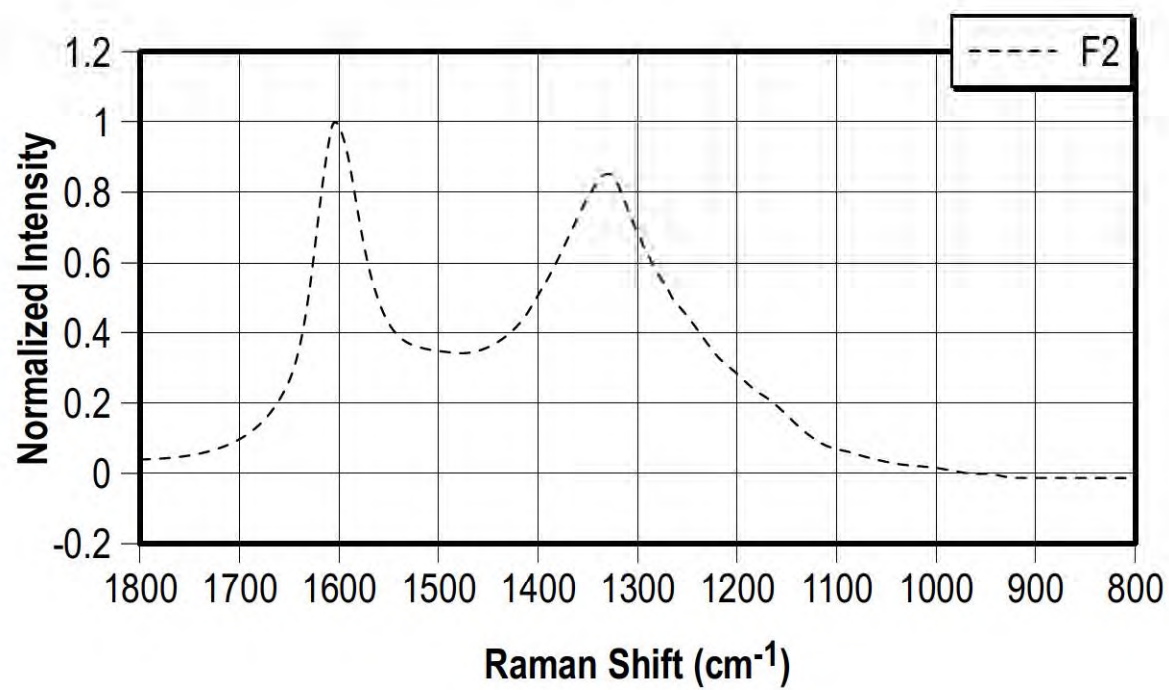


FIG. 82B

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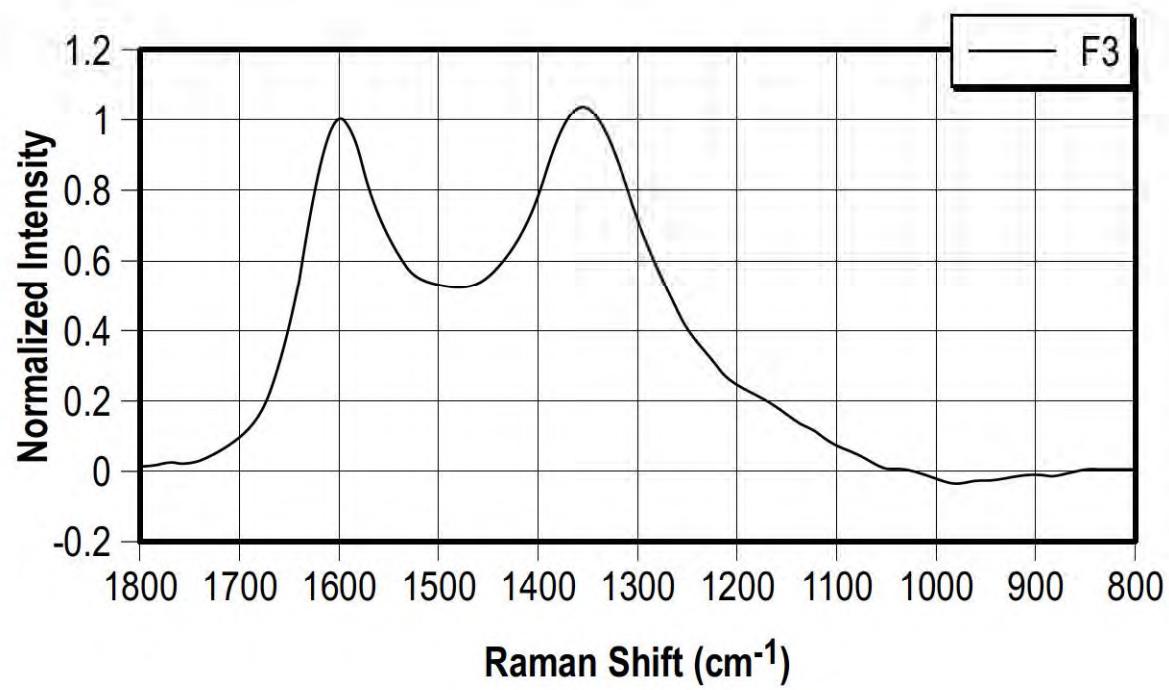


FIG. 82C

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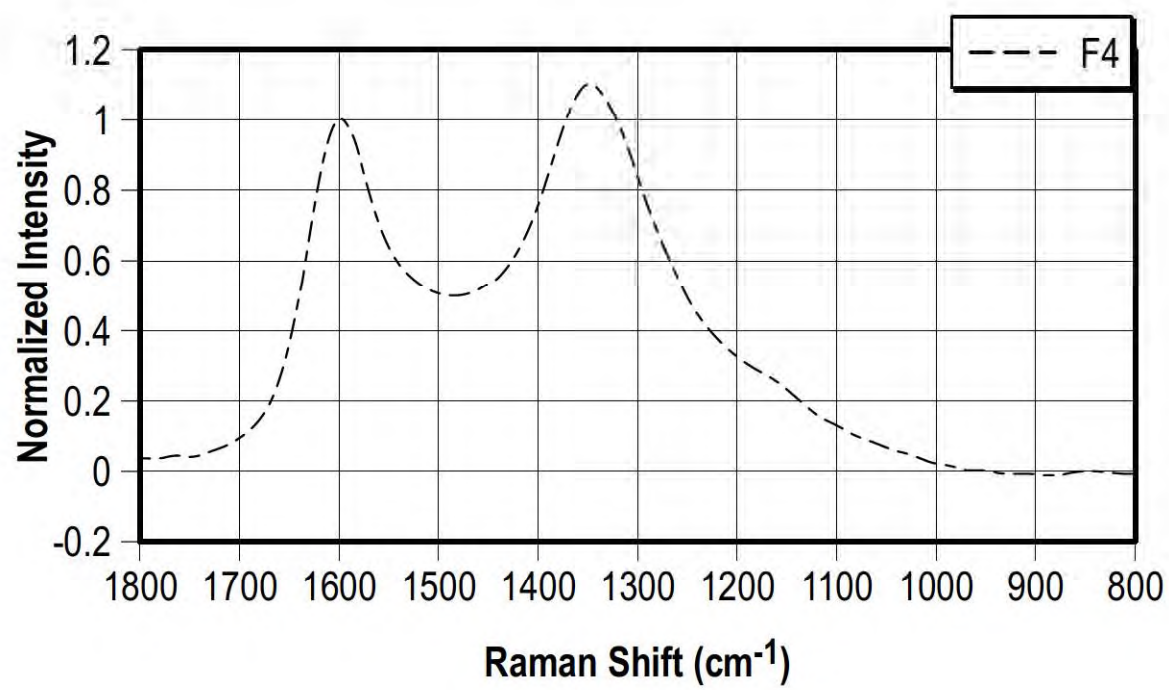


FIG. 82D

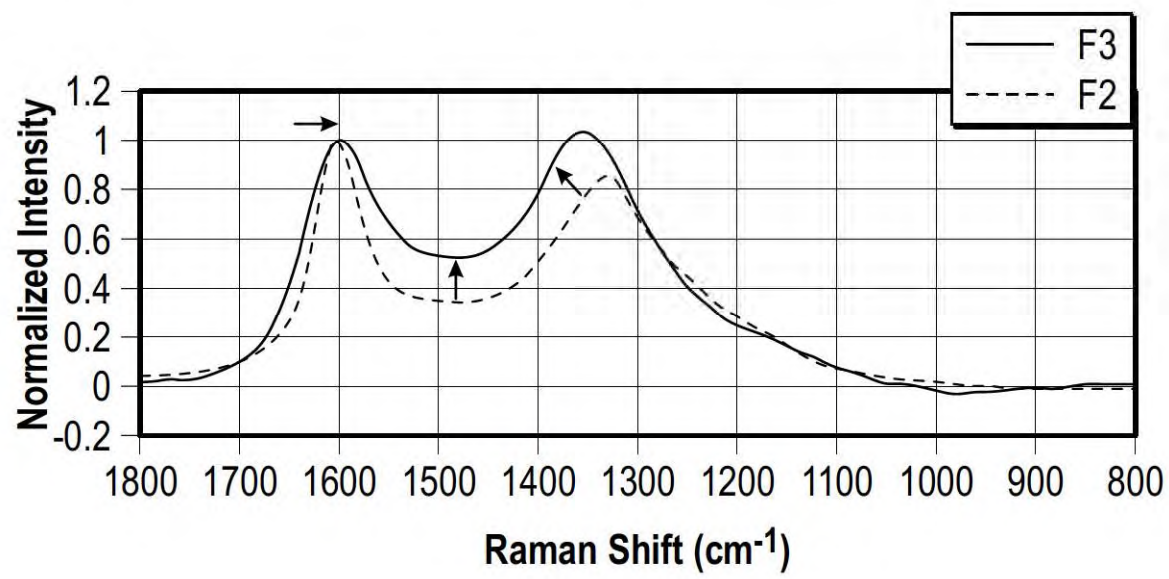


FIG. 83

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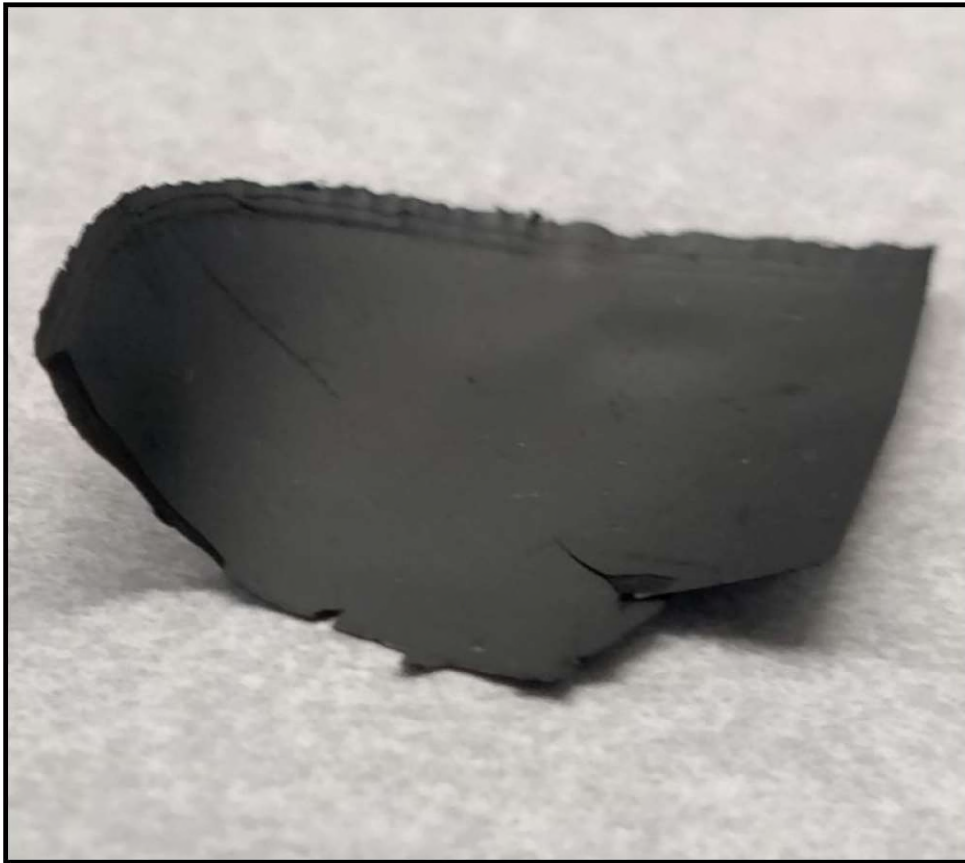


FIG. 84A

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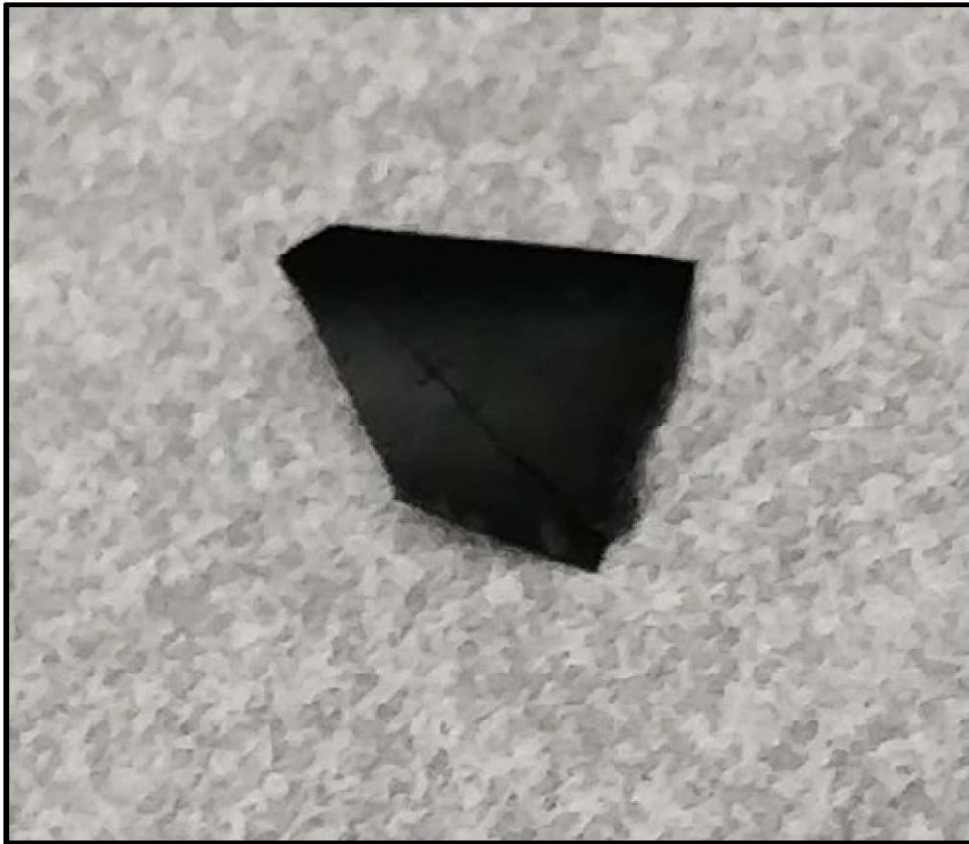


FIG. 84B

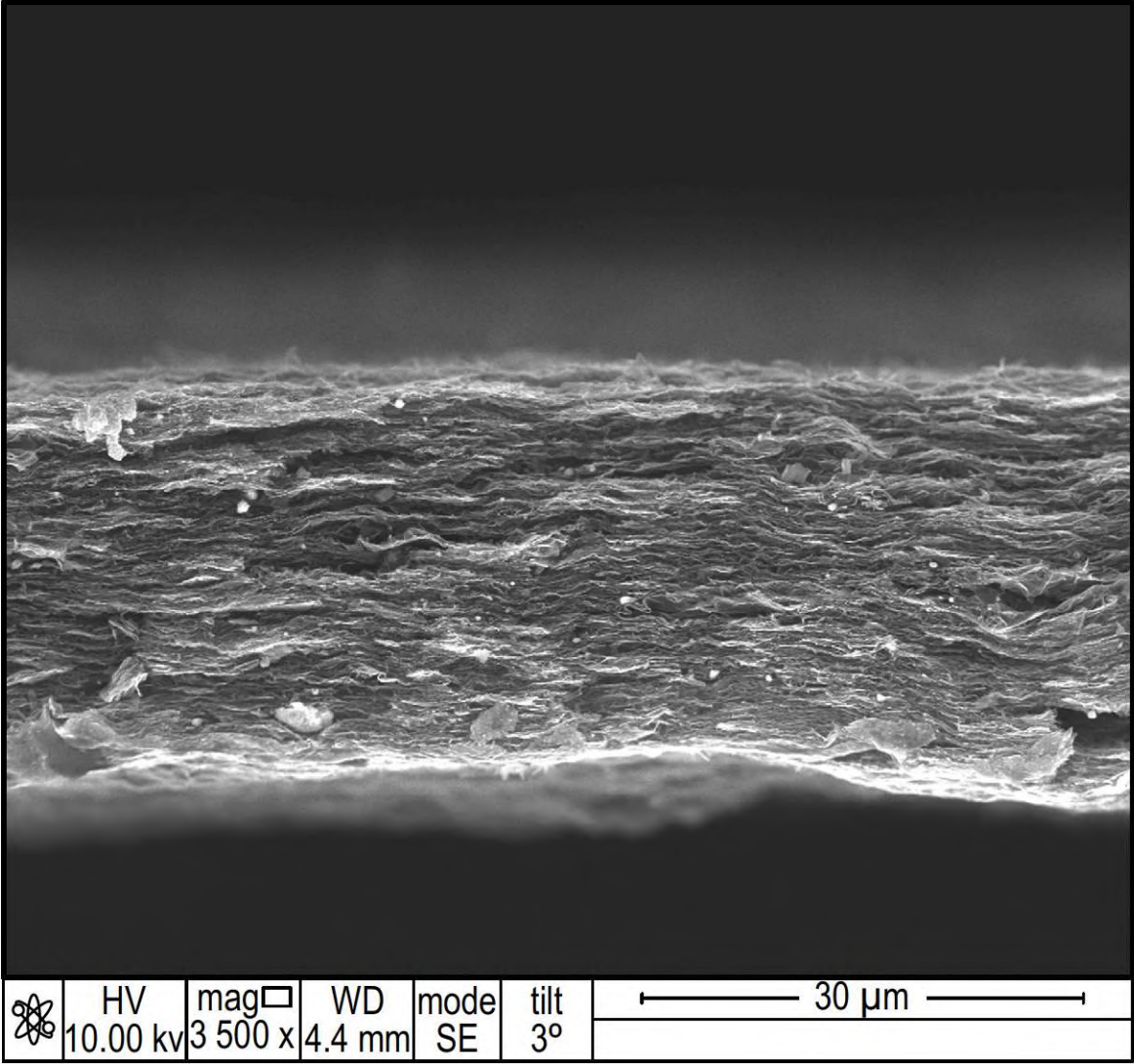


FIG. 85A

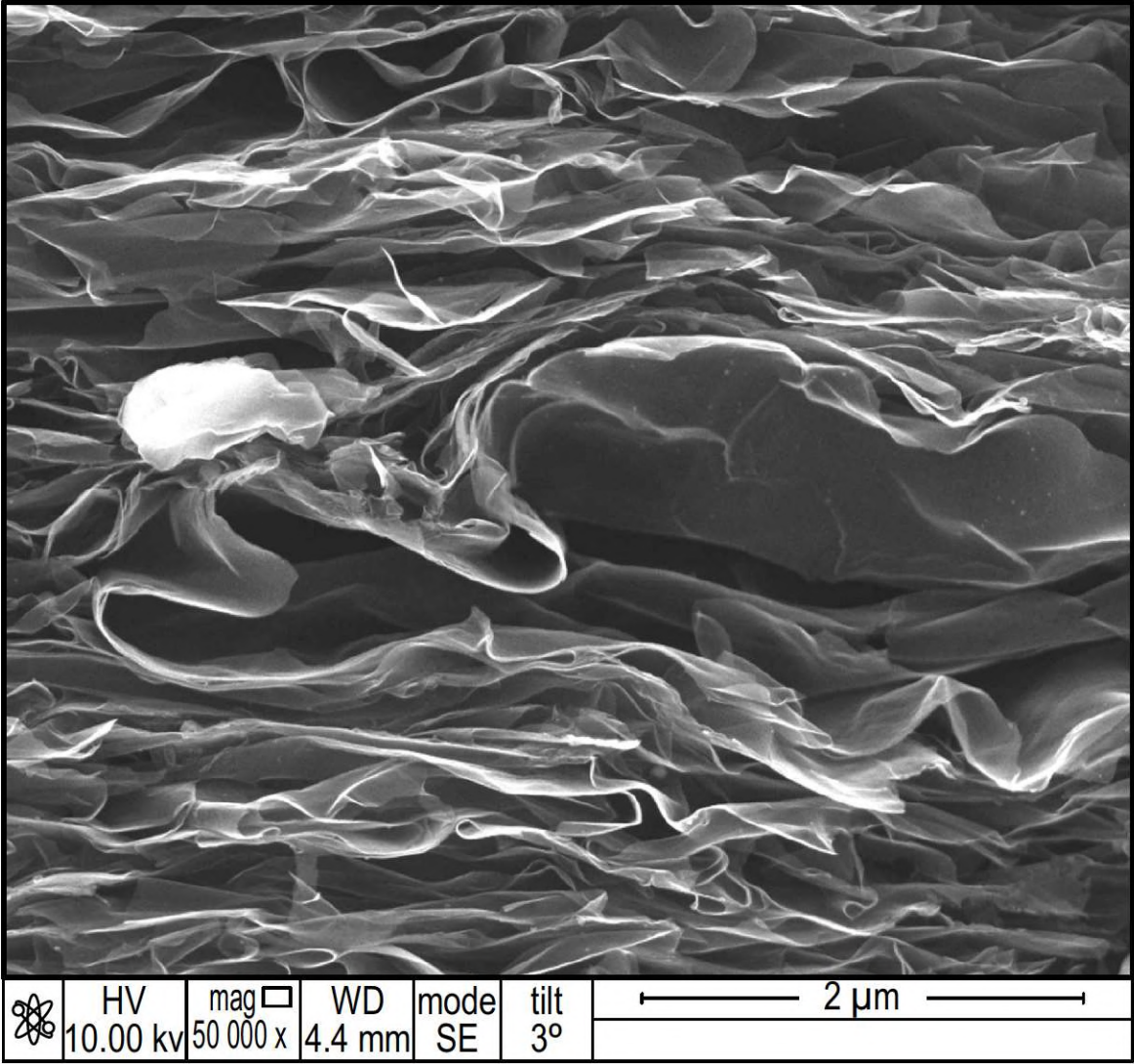


FIG. 85B

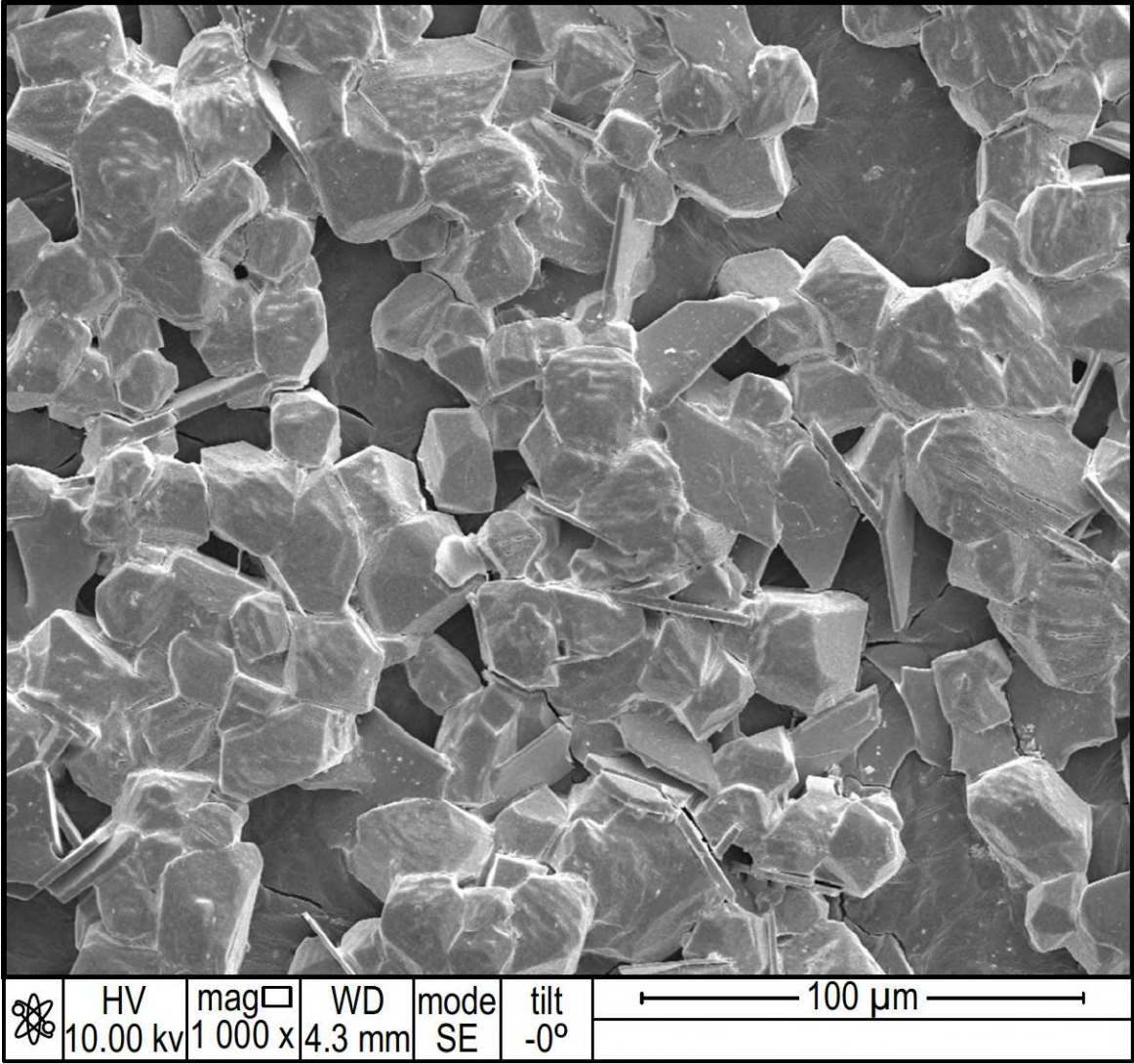


FIG. 85C

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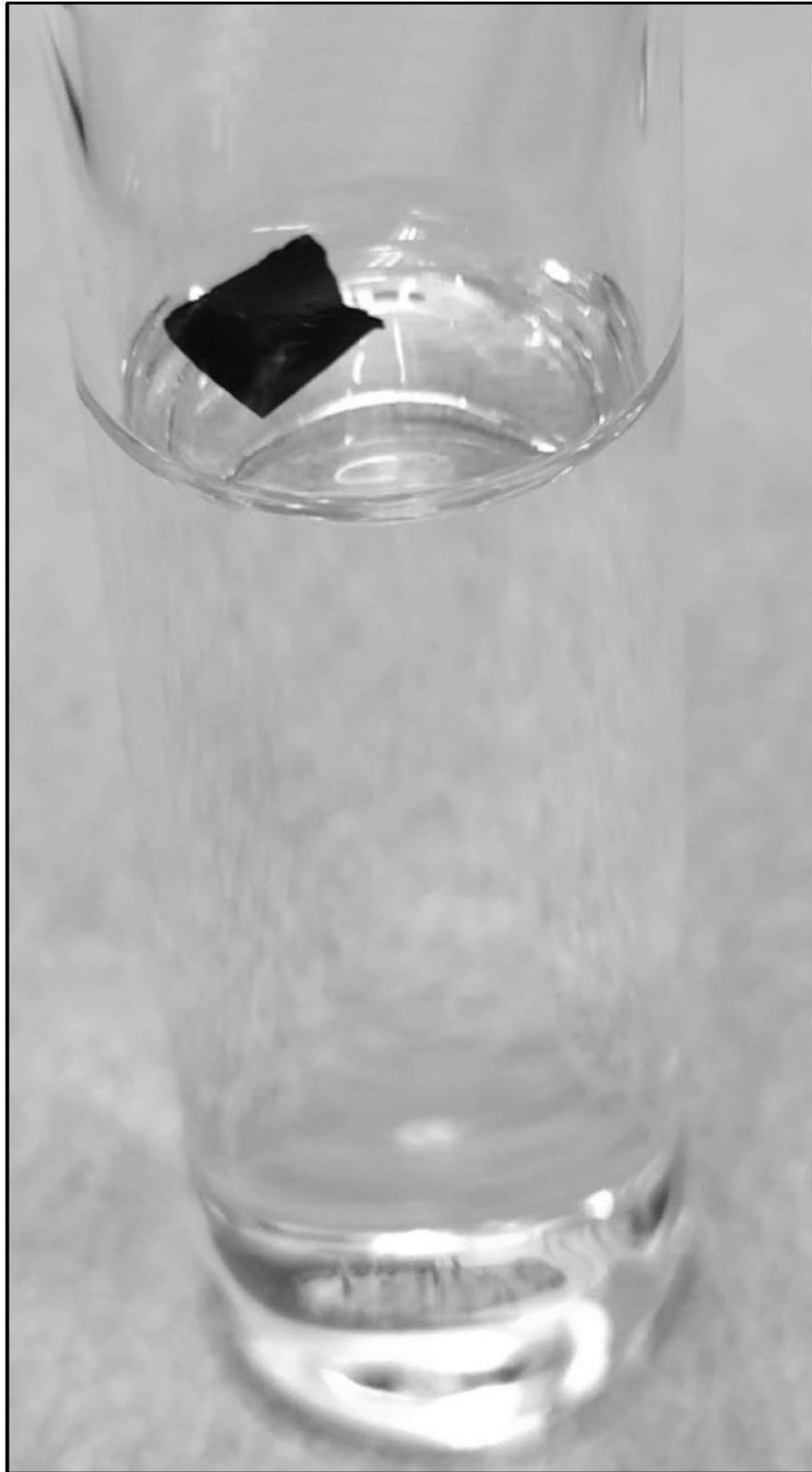


FIG. 86A

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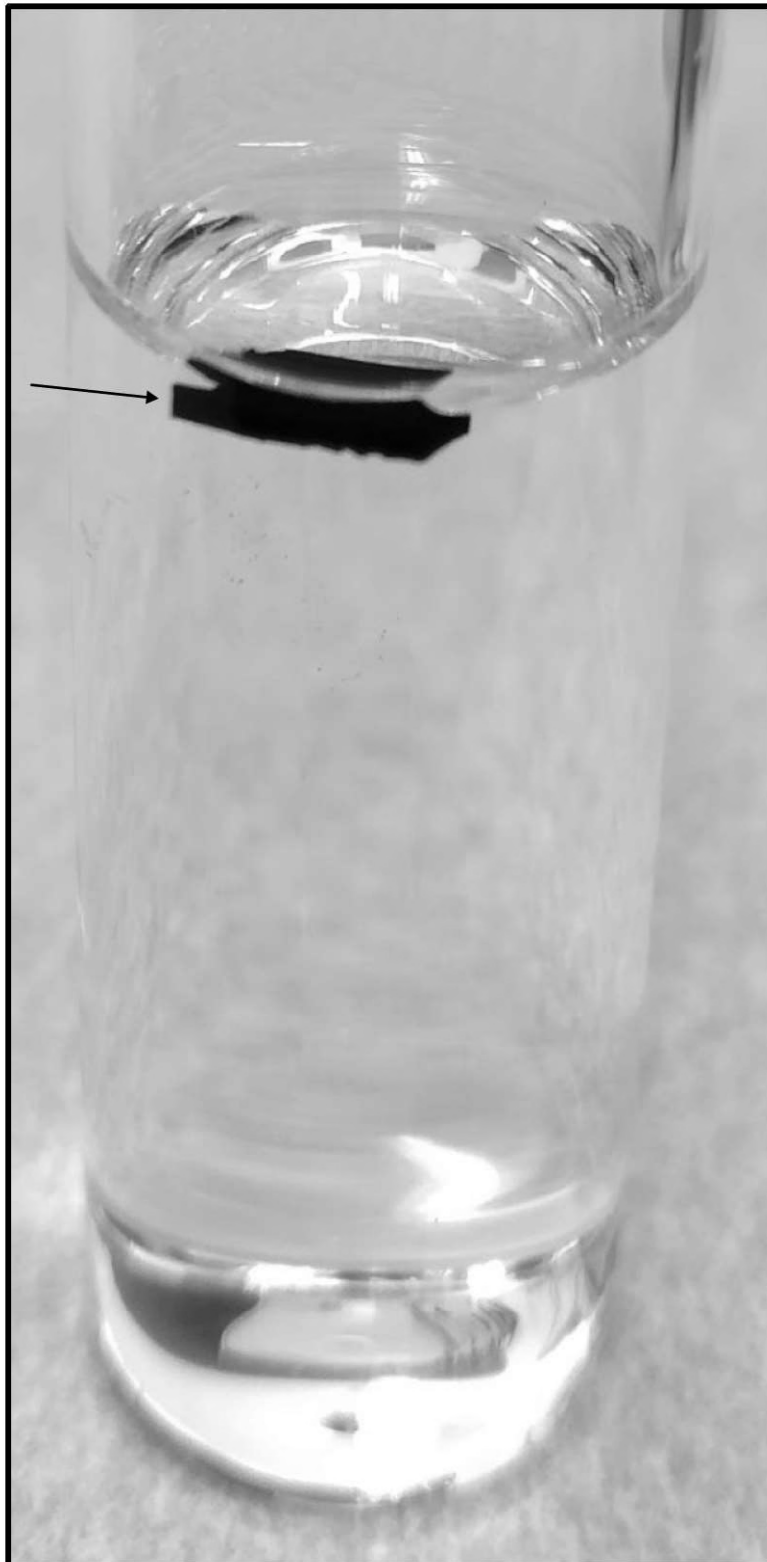


FIG. 86B

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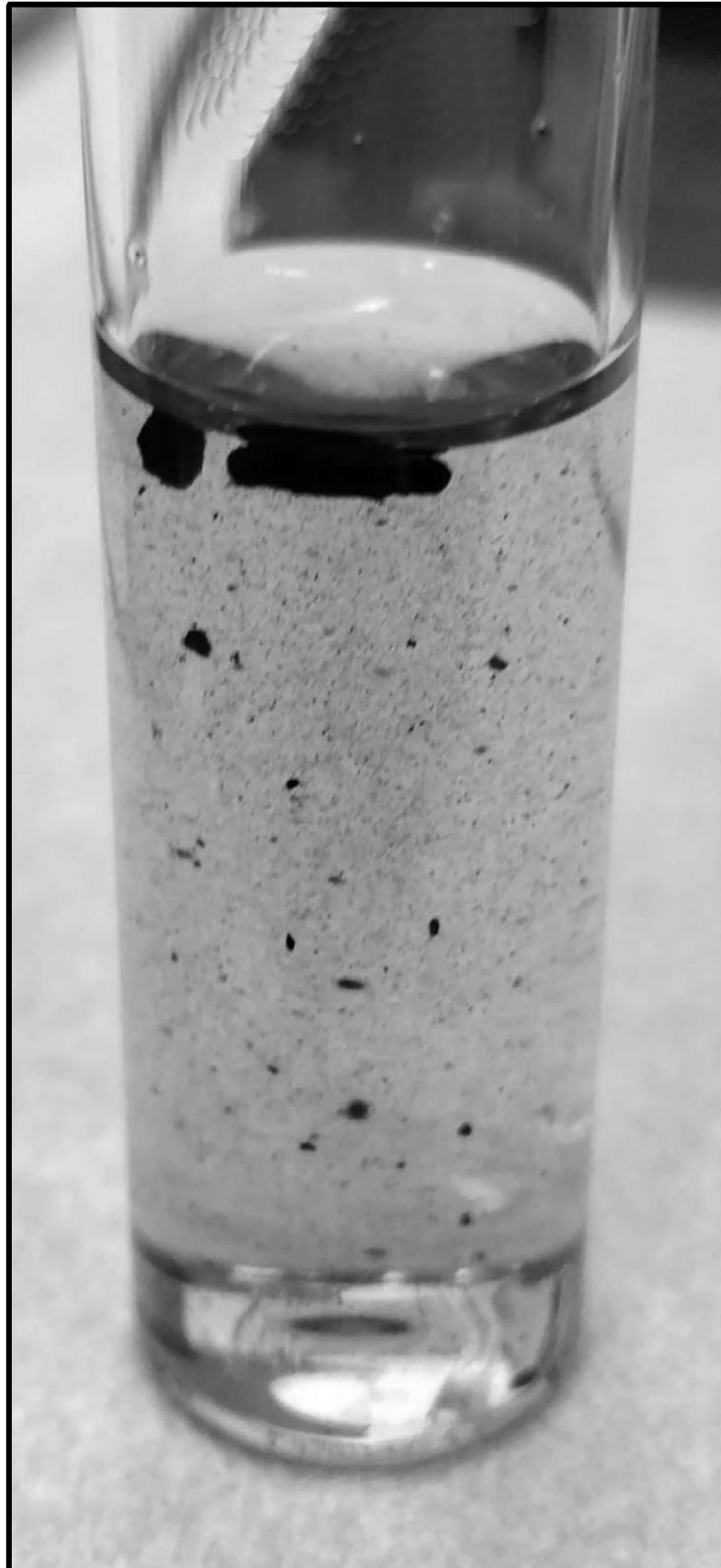


FIG. 86C

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FIG. 86D

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FIG. 87A

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FIG. 87B

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FIG. 87C

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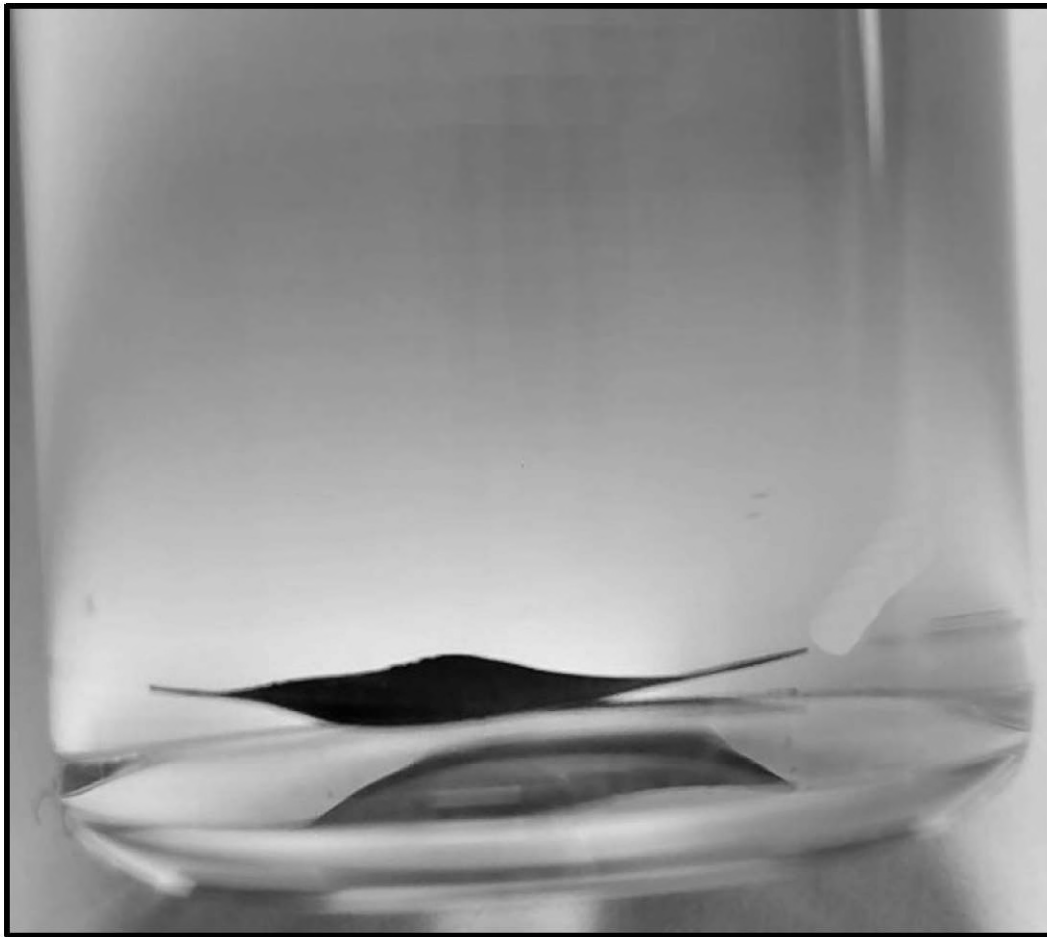


FIG. 87D

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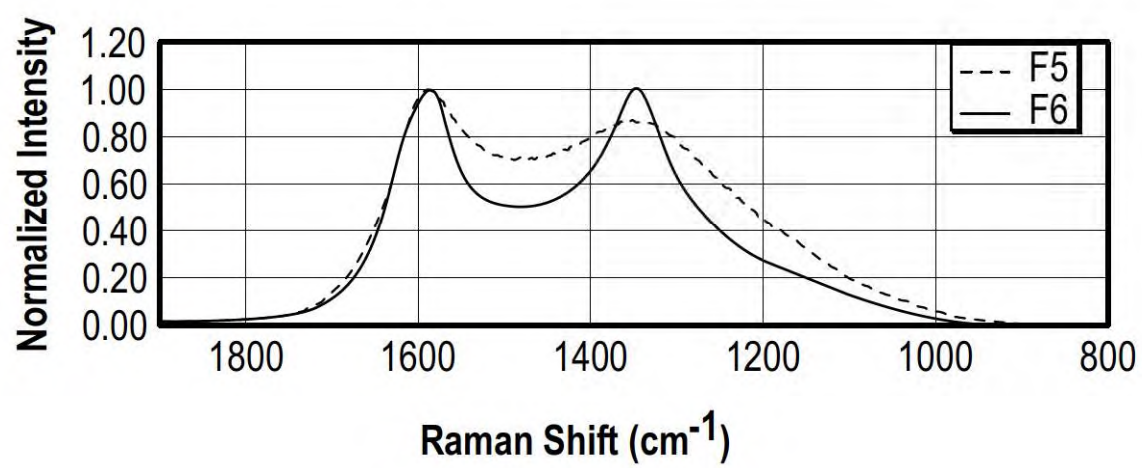


FIG. 88A

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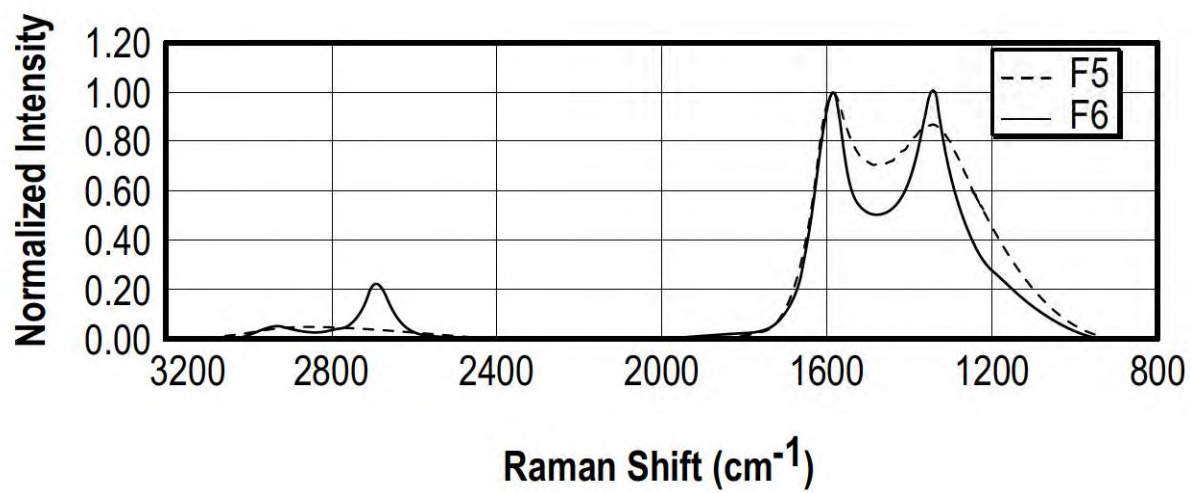


FIG. 88B

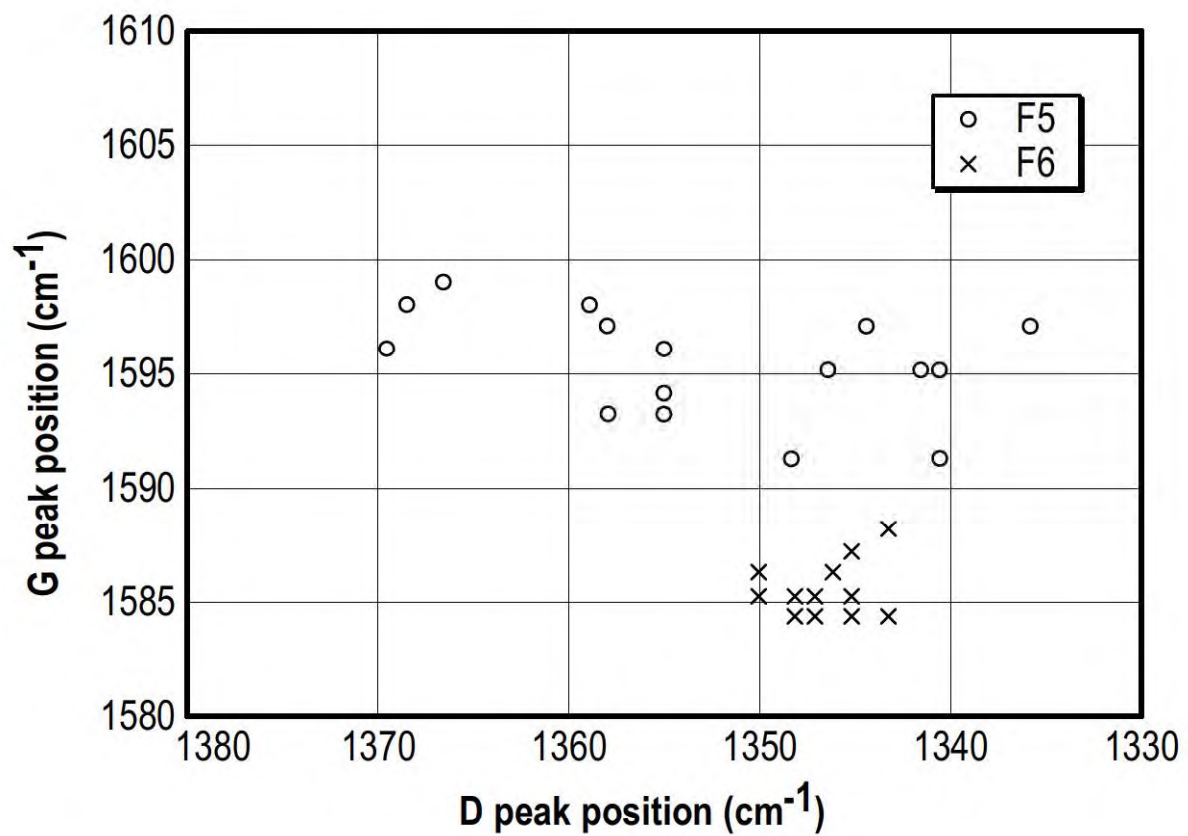


FIG. 88C

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Fig. 89

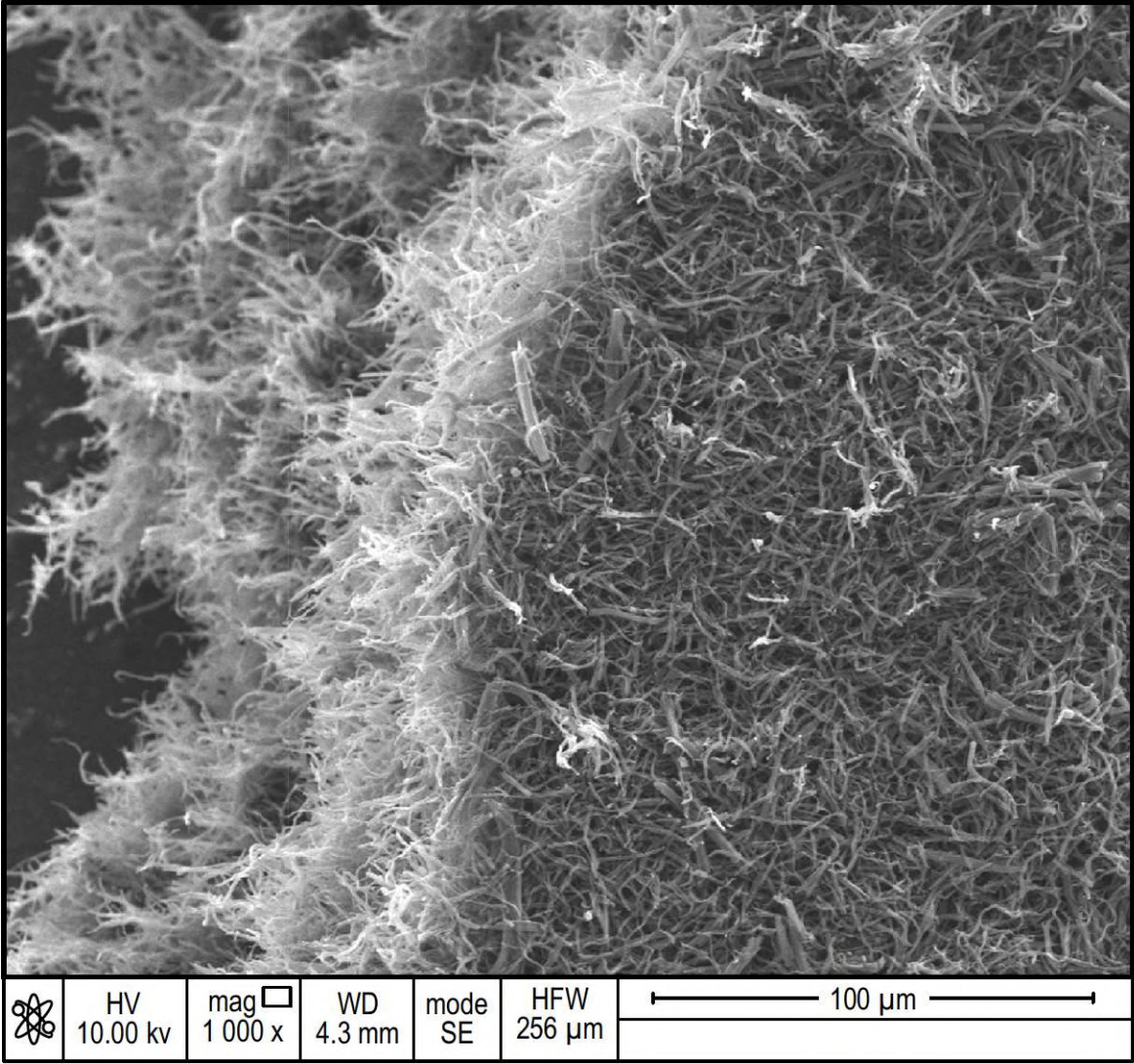


FIG. 90A

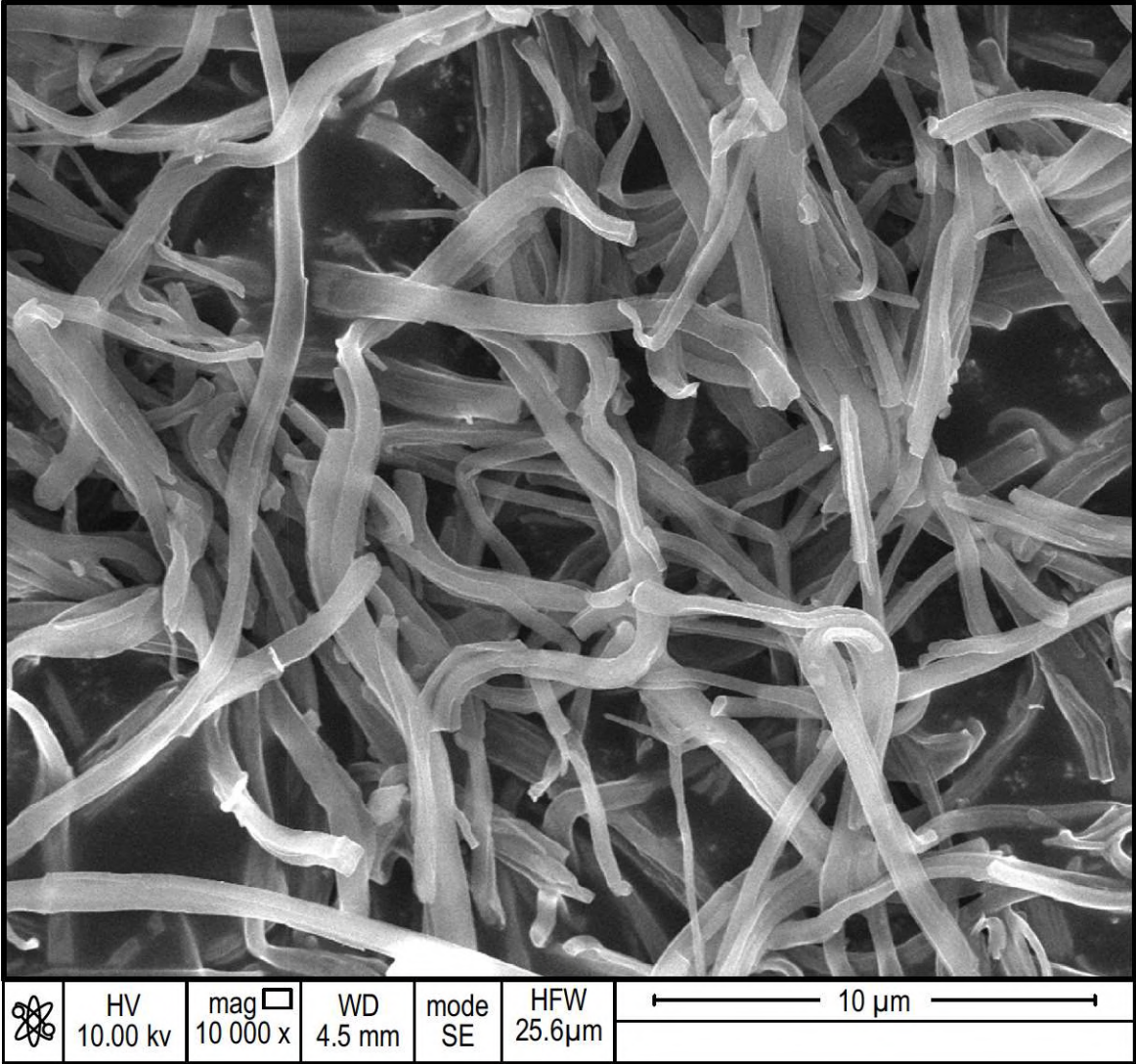


FIG. 90B

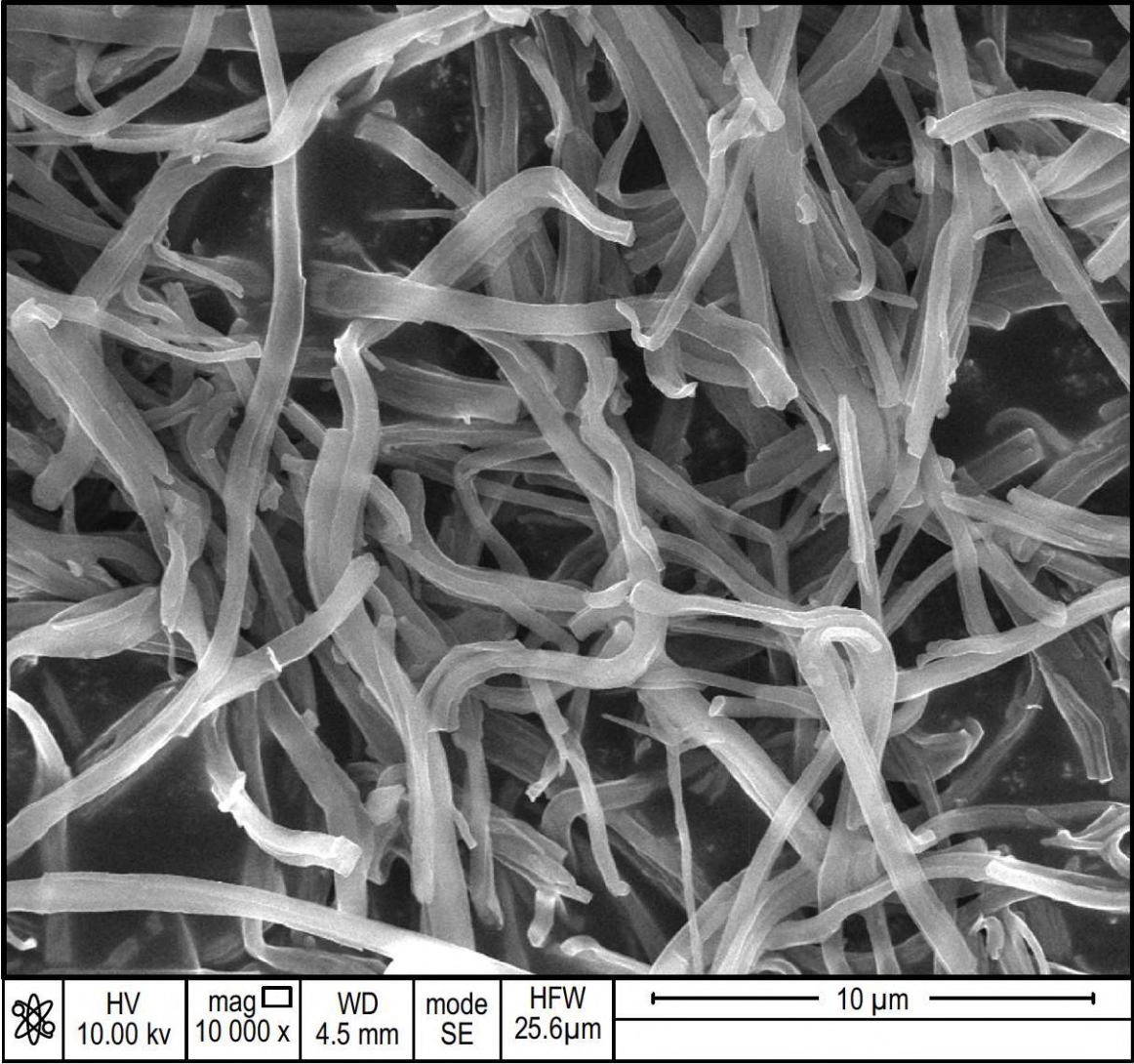


FIG. 91A

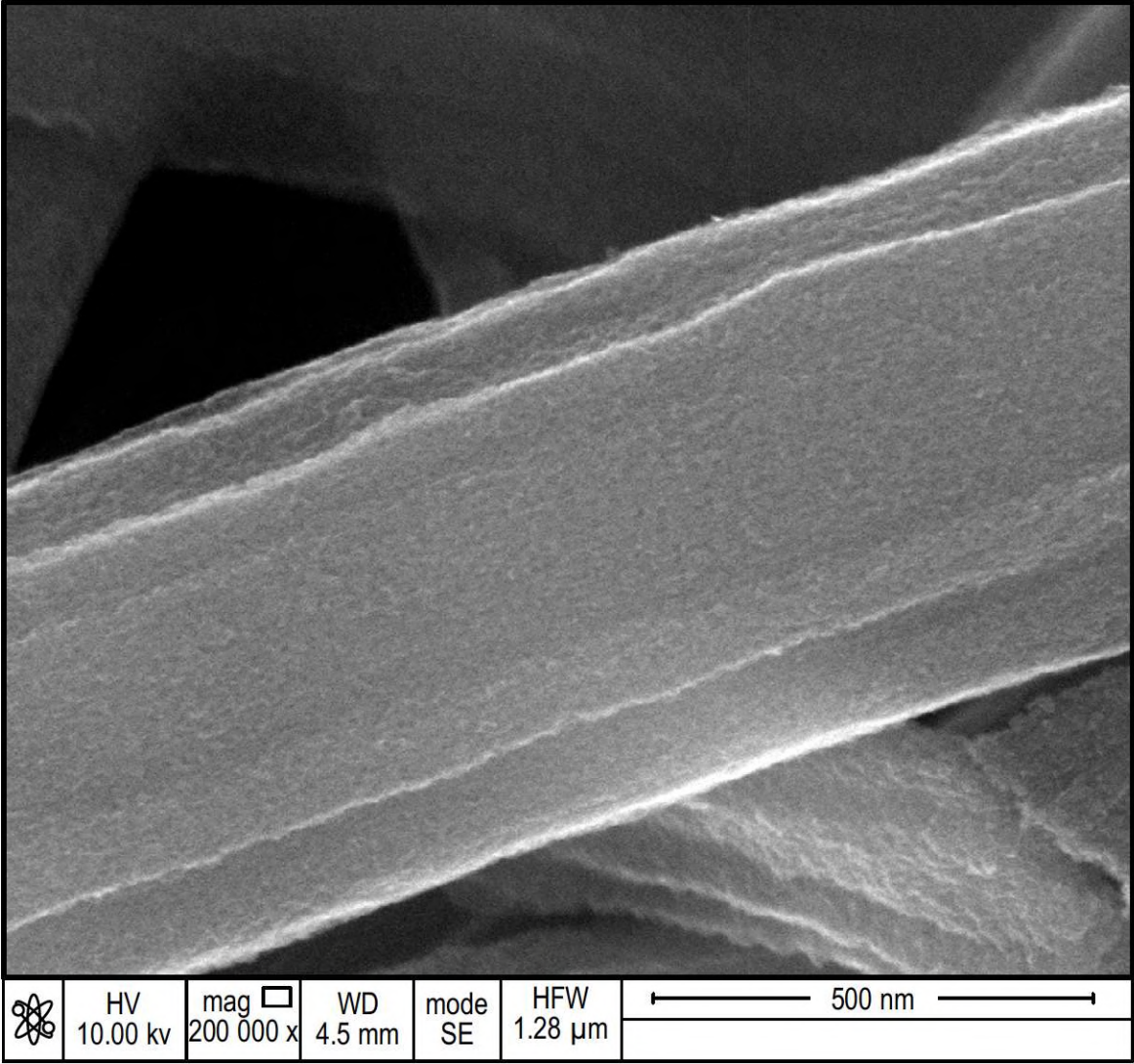


FIG. 91B

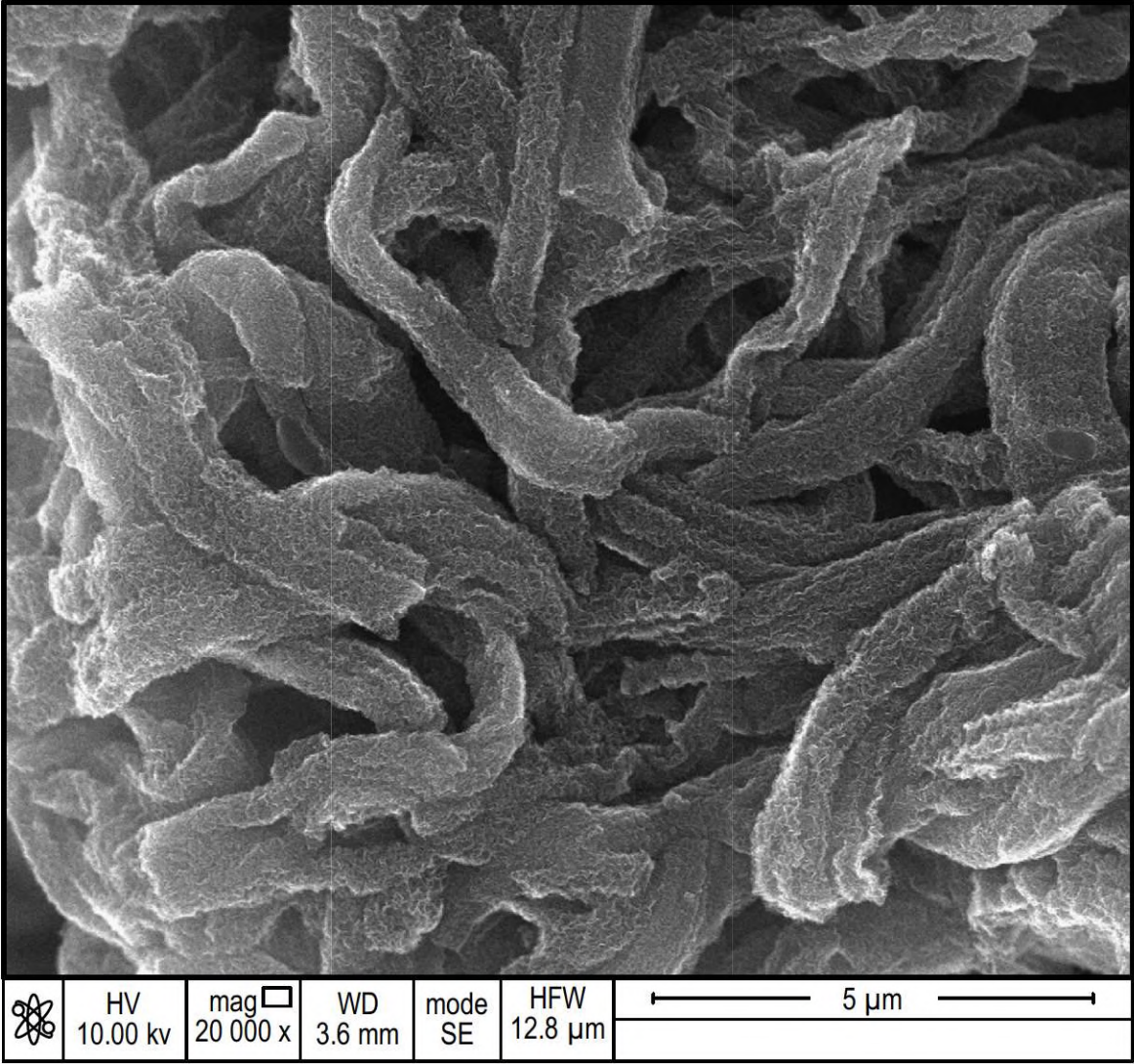


FIG. 92A

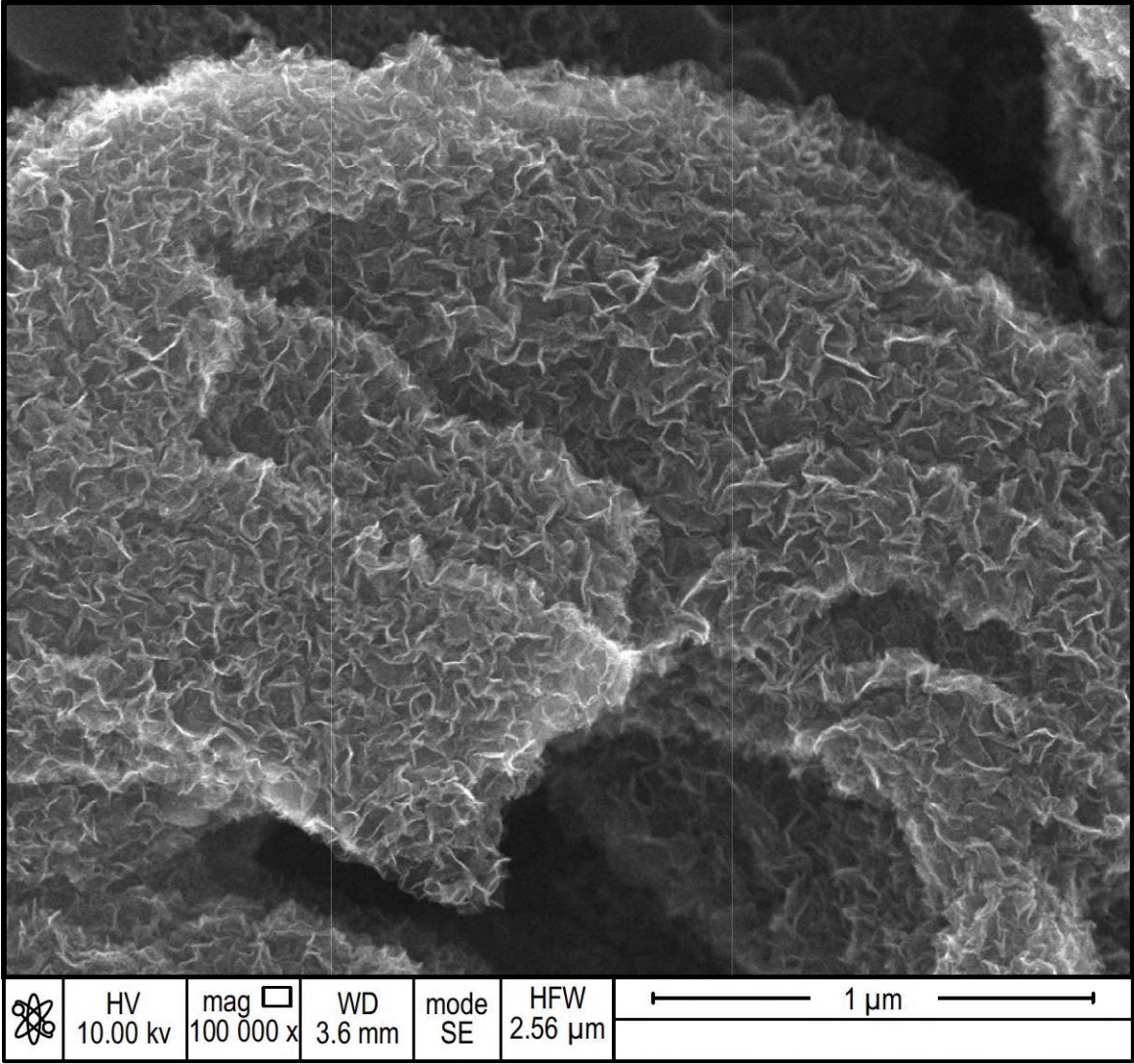


FIG. 92B

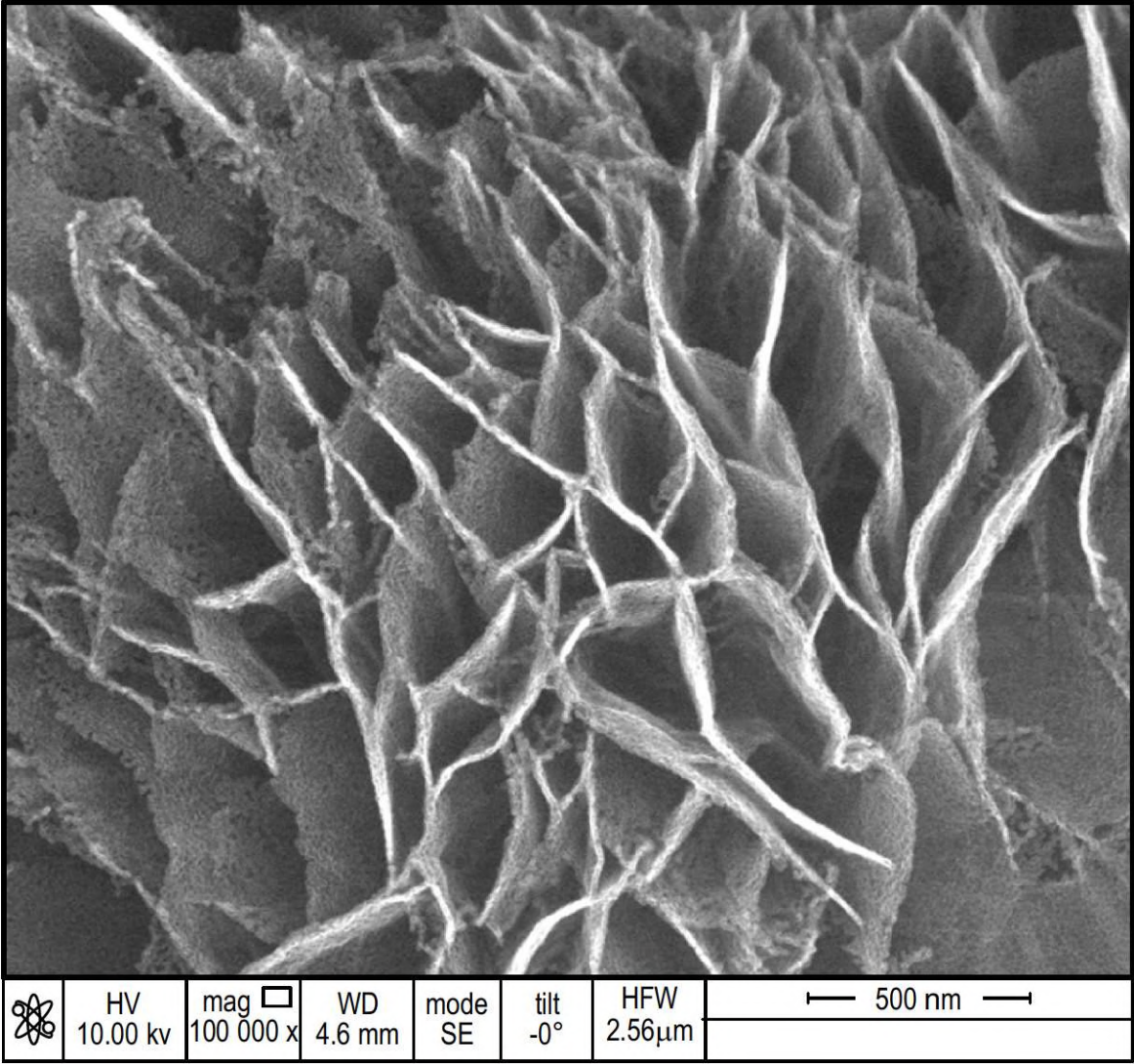


FIG. 93

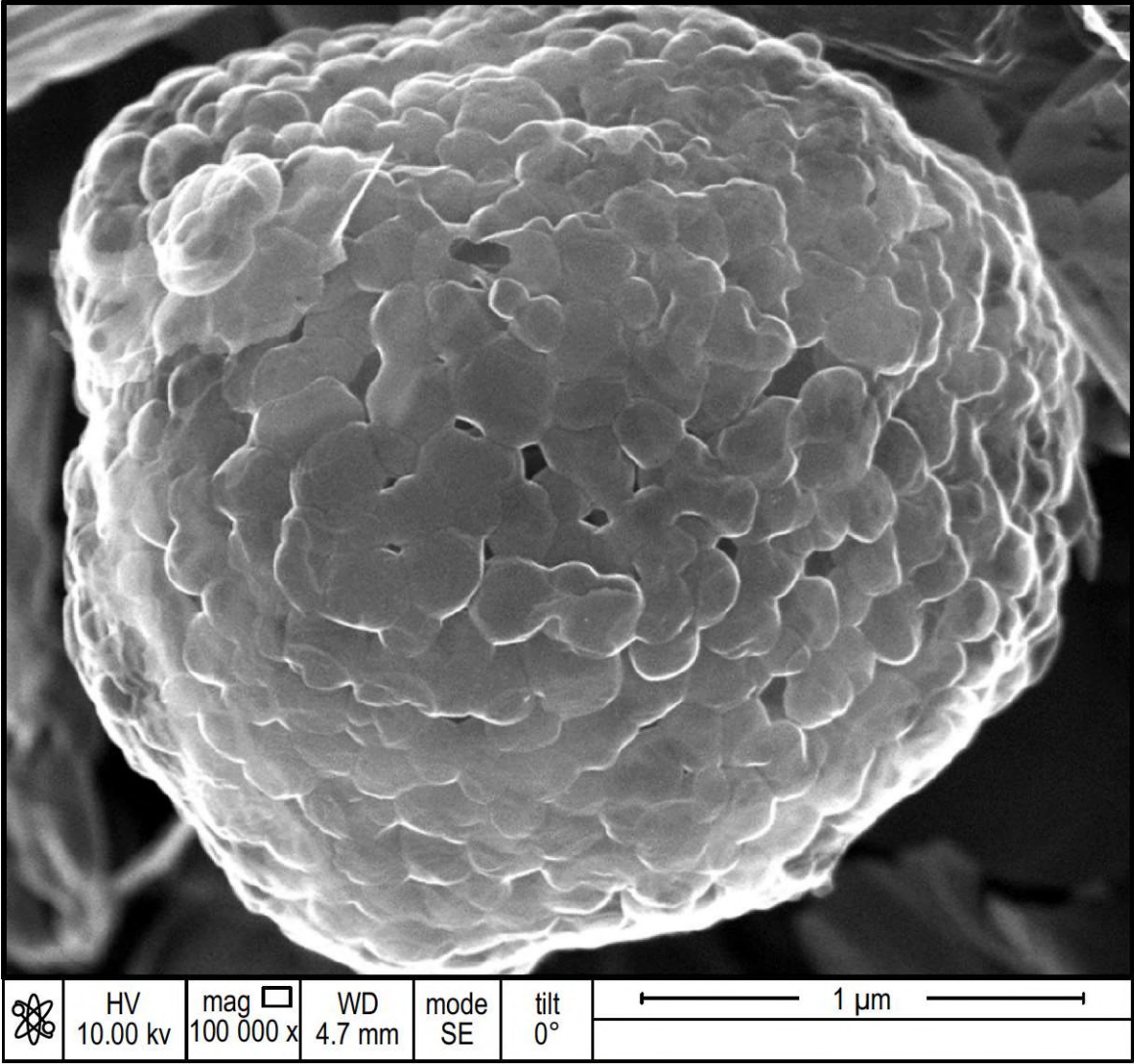


FIG. 94A

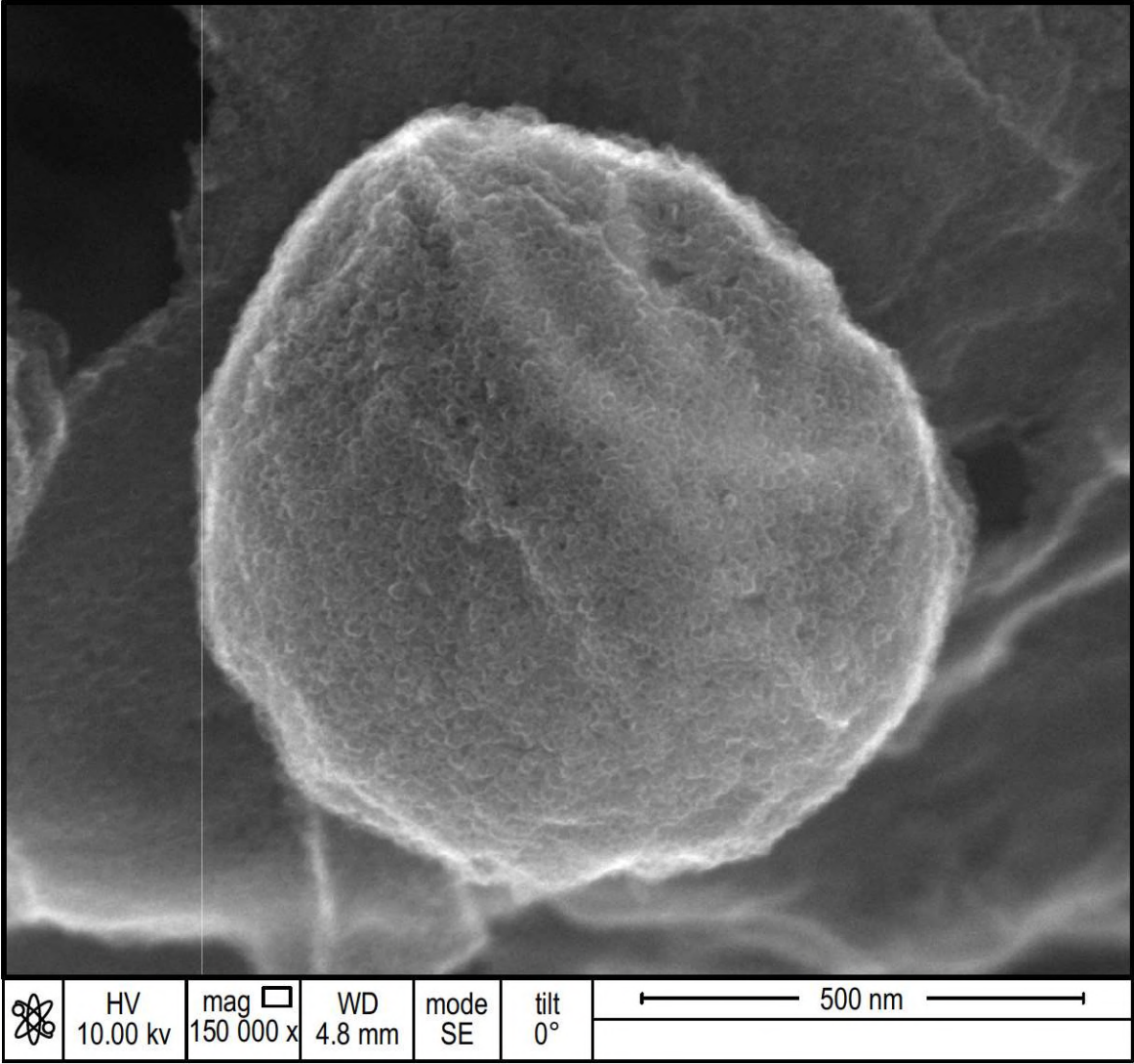


FIG. 94B

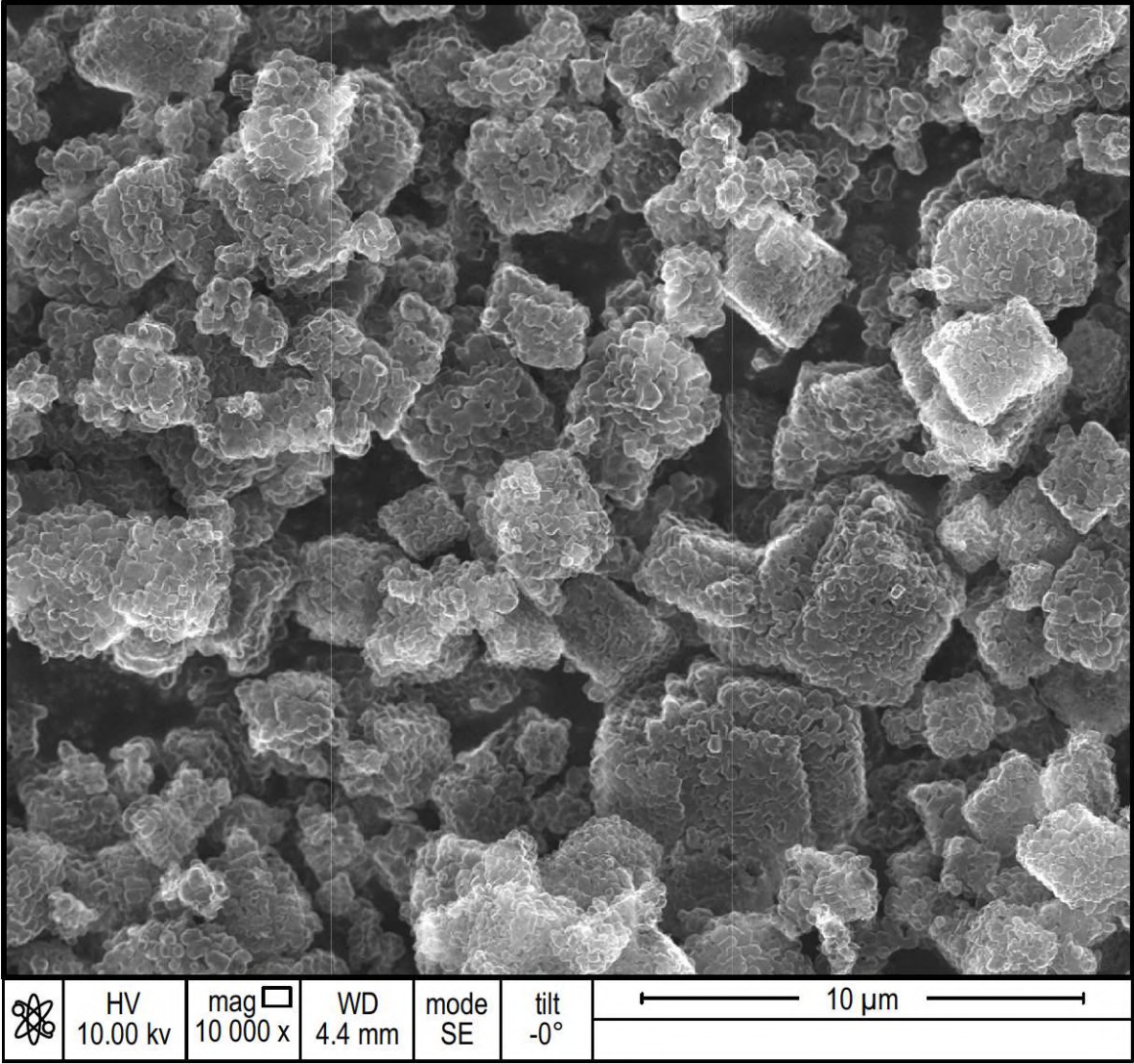


FIG. 95A

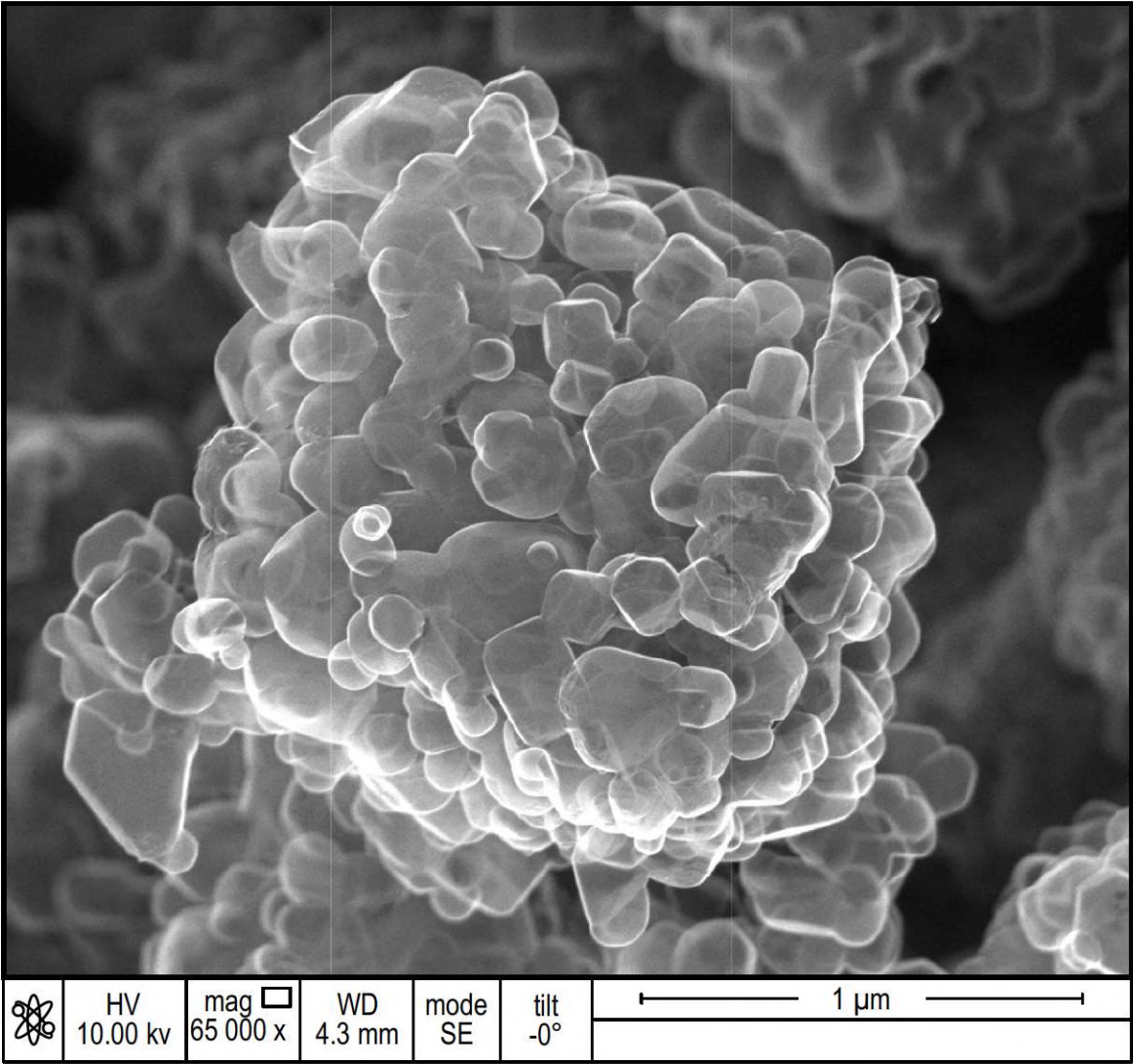
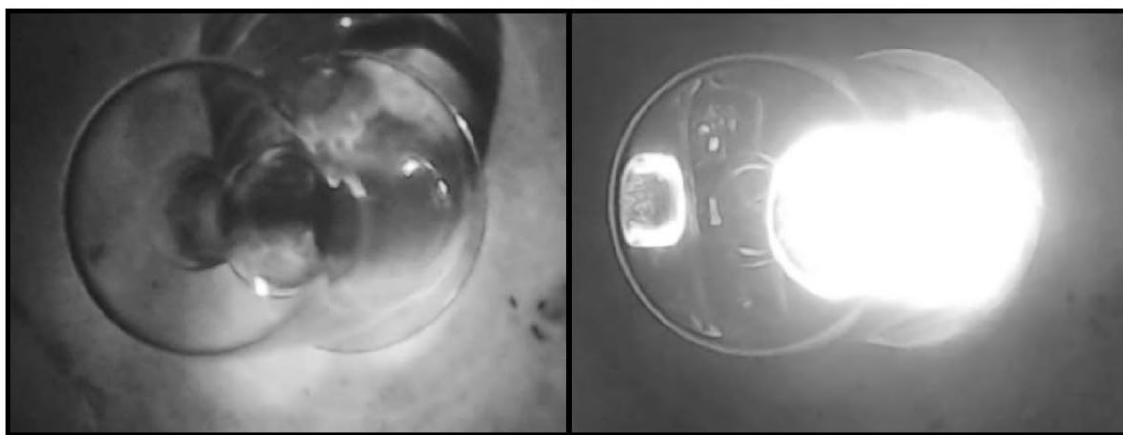


FIG. 95B

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Before microwave irradiation

During microwave irradiation

FIG. 96

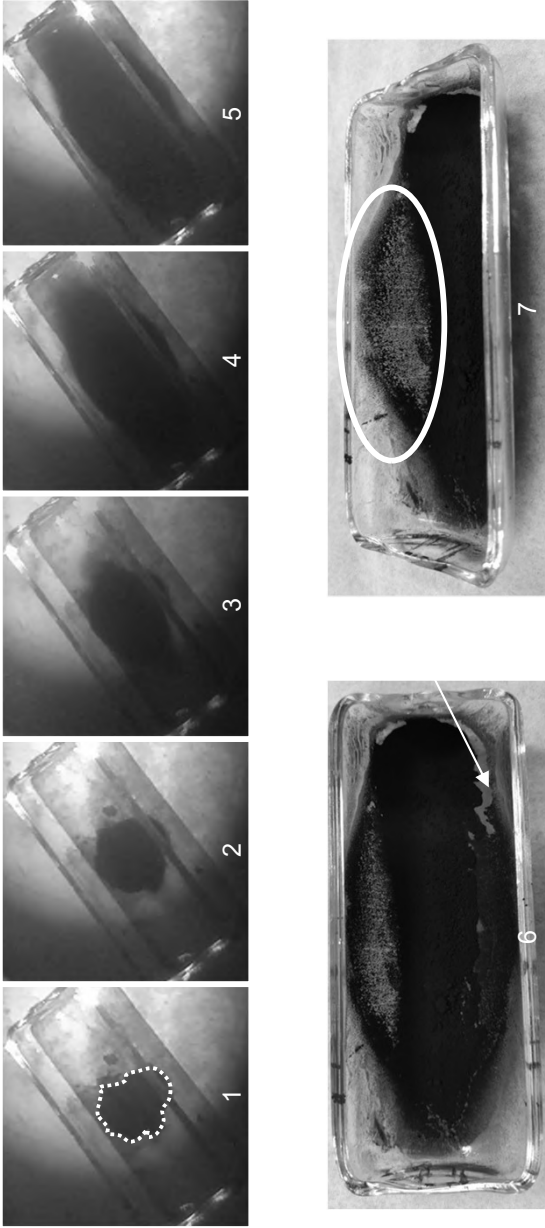


FIG. 97

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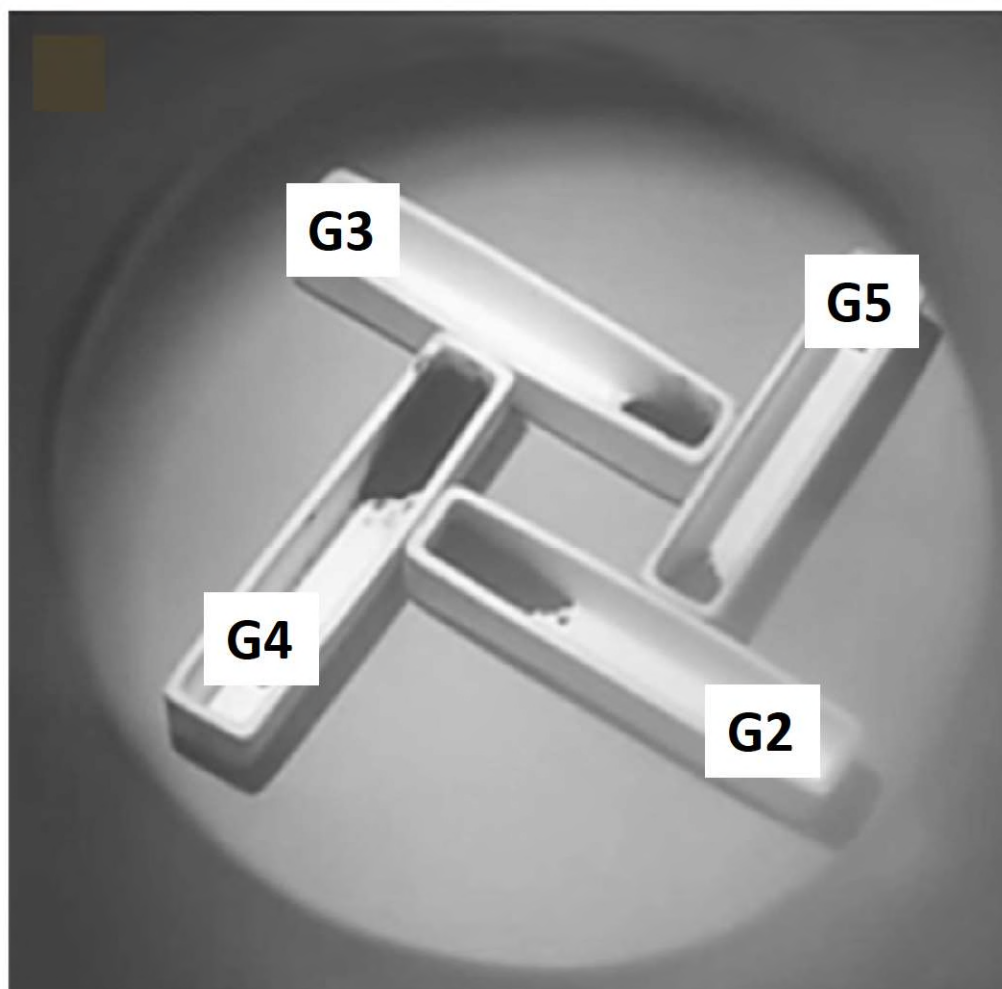


Fig. 98A

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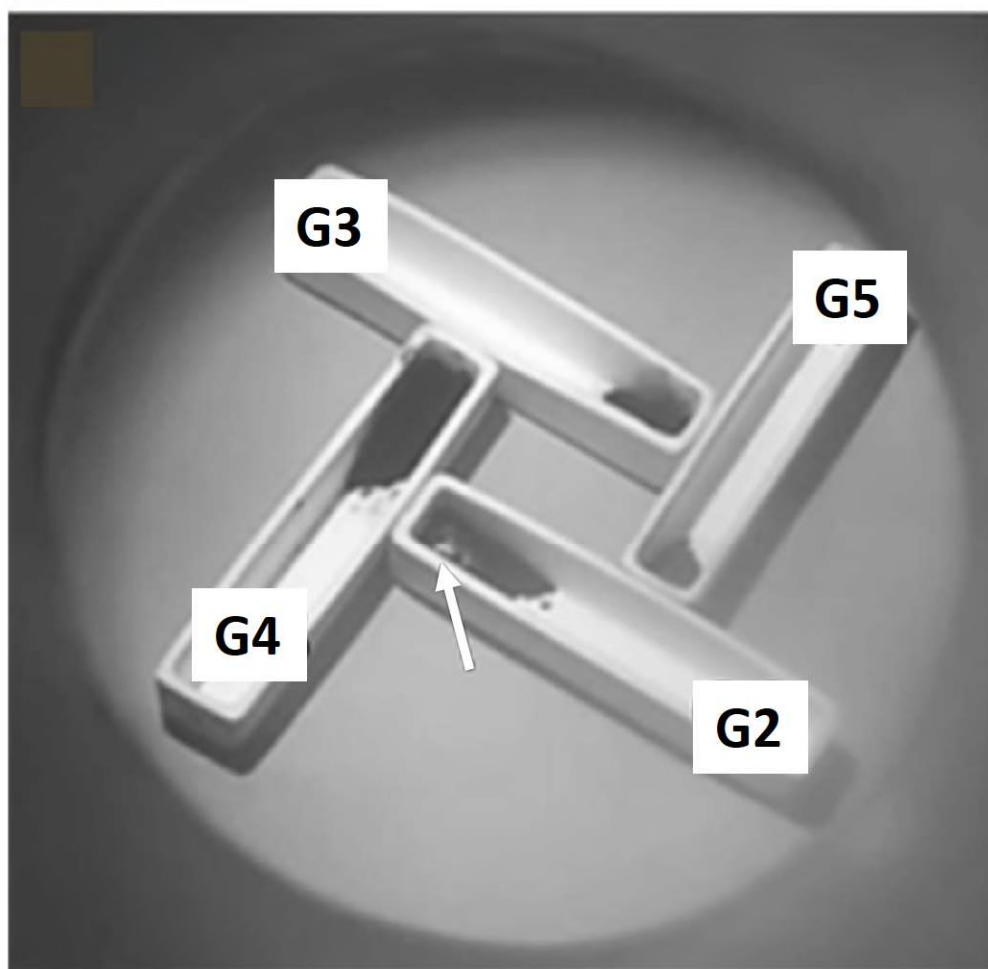


Fig. 98B

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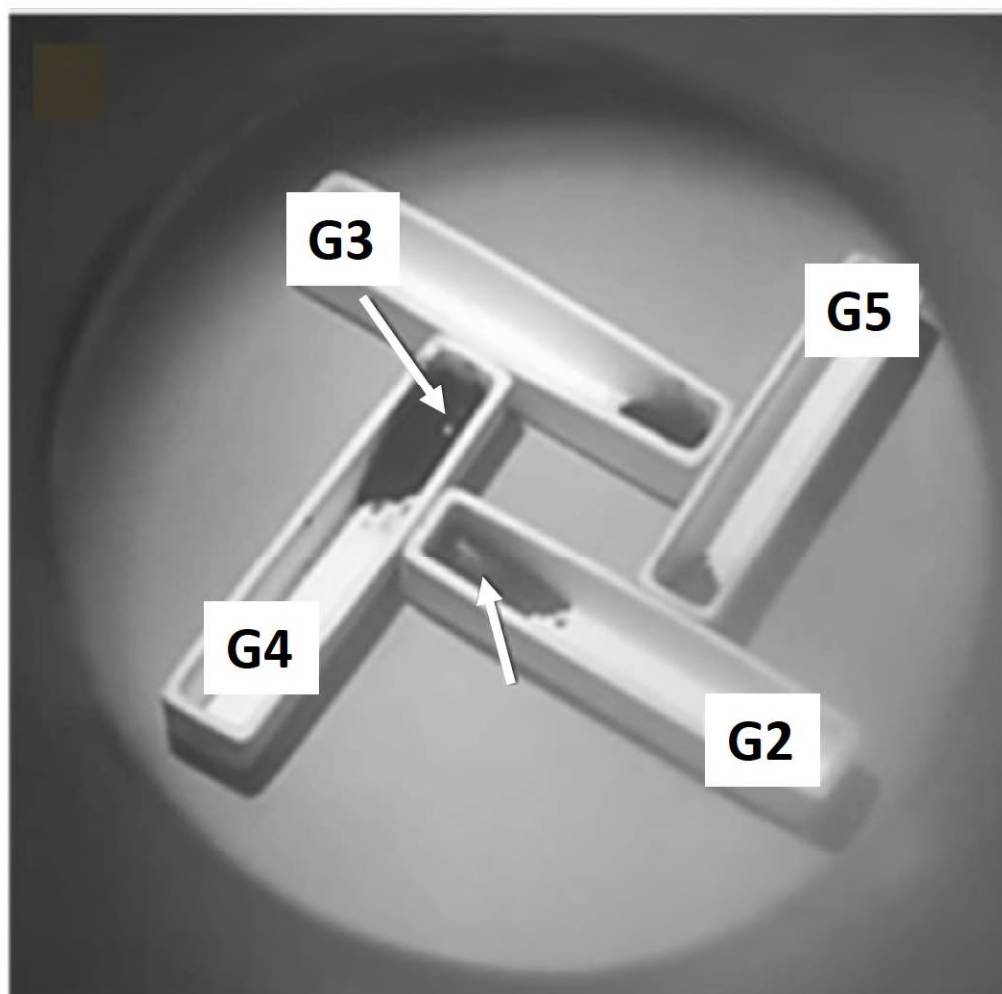


Fig. 98C

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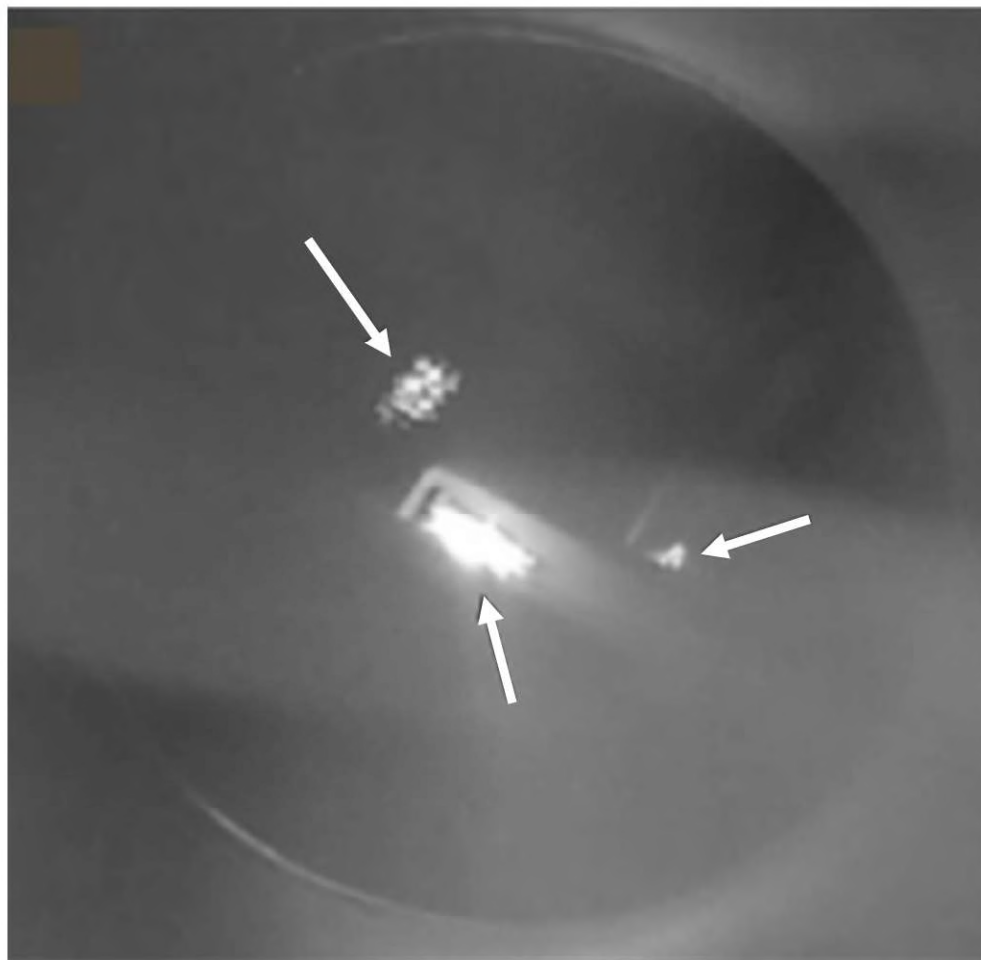


Fig. 98D

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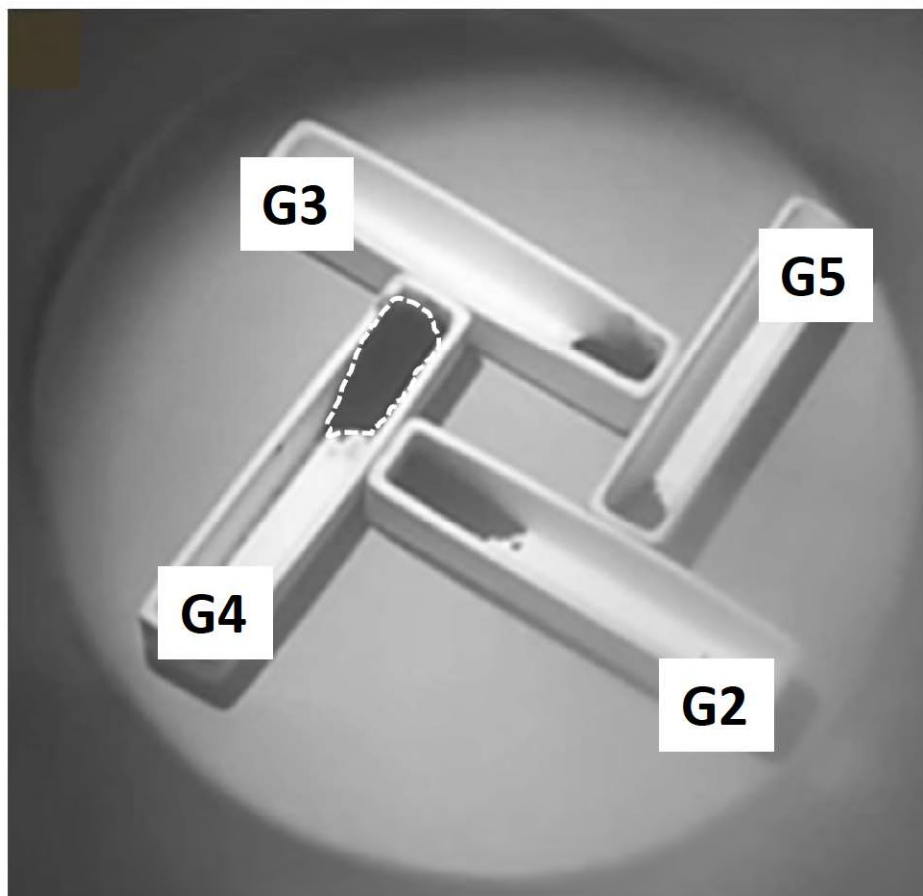


Fig. 99A

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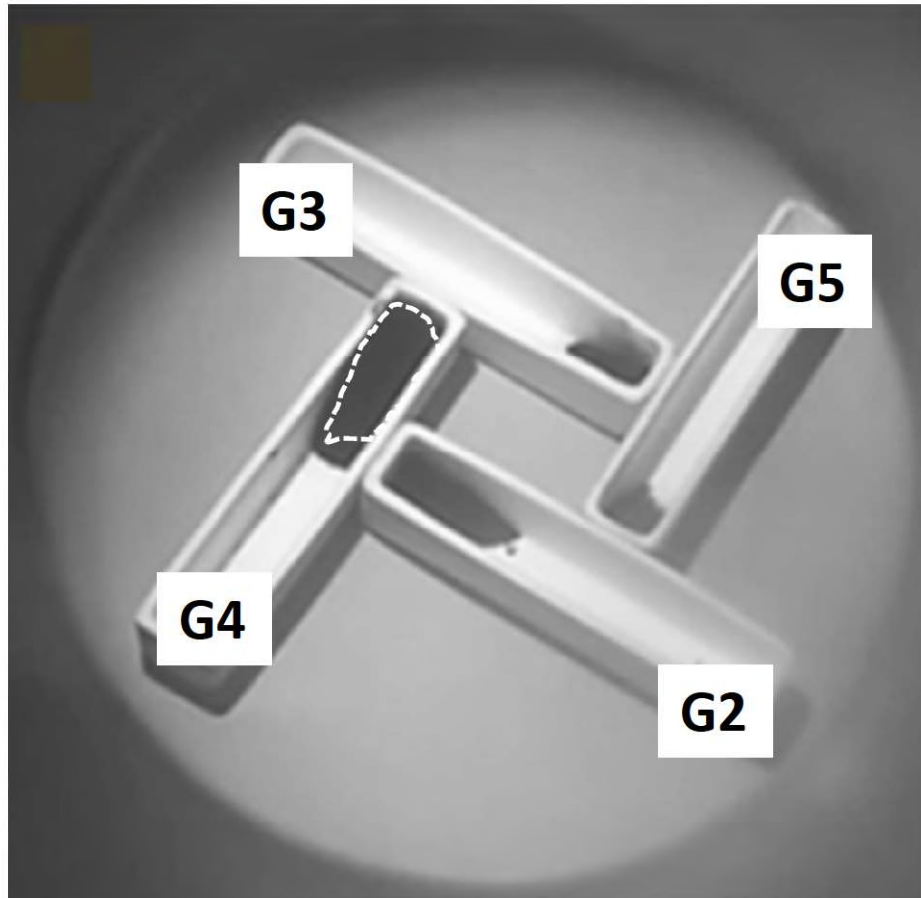


Fig. 99B

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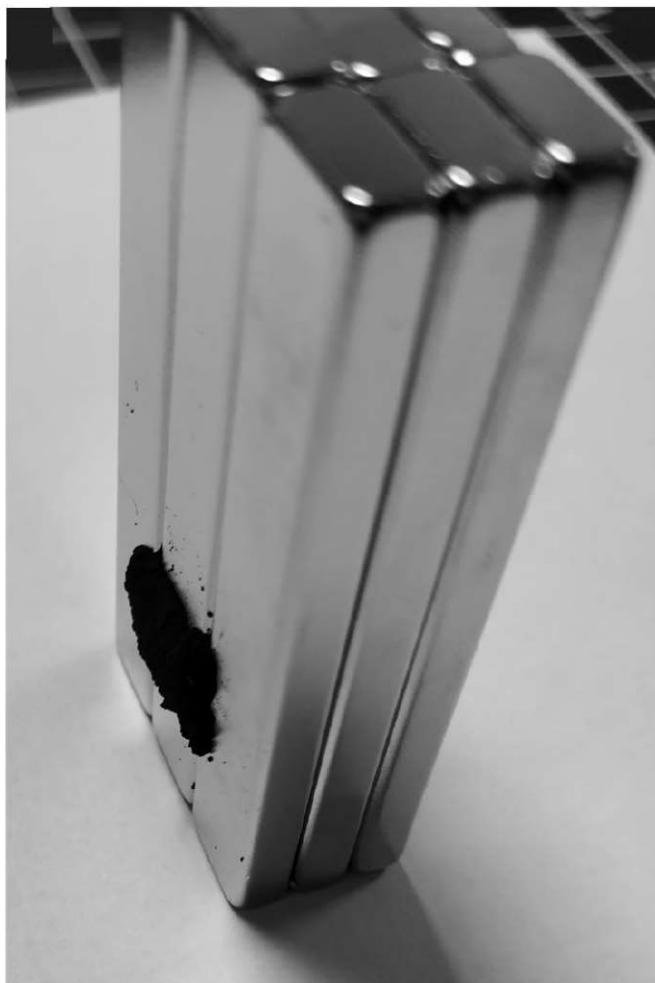


Fig. 100A

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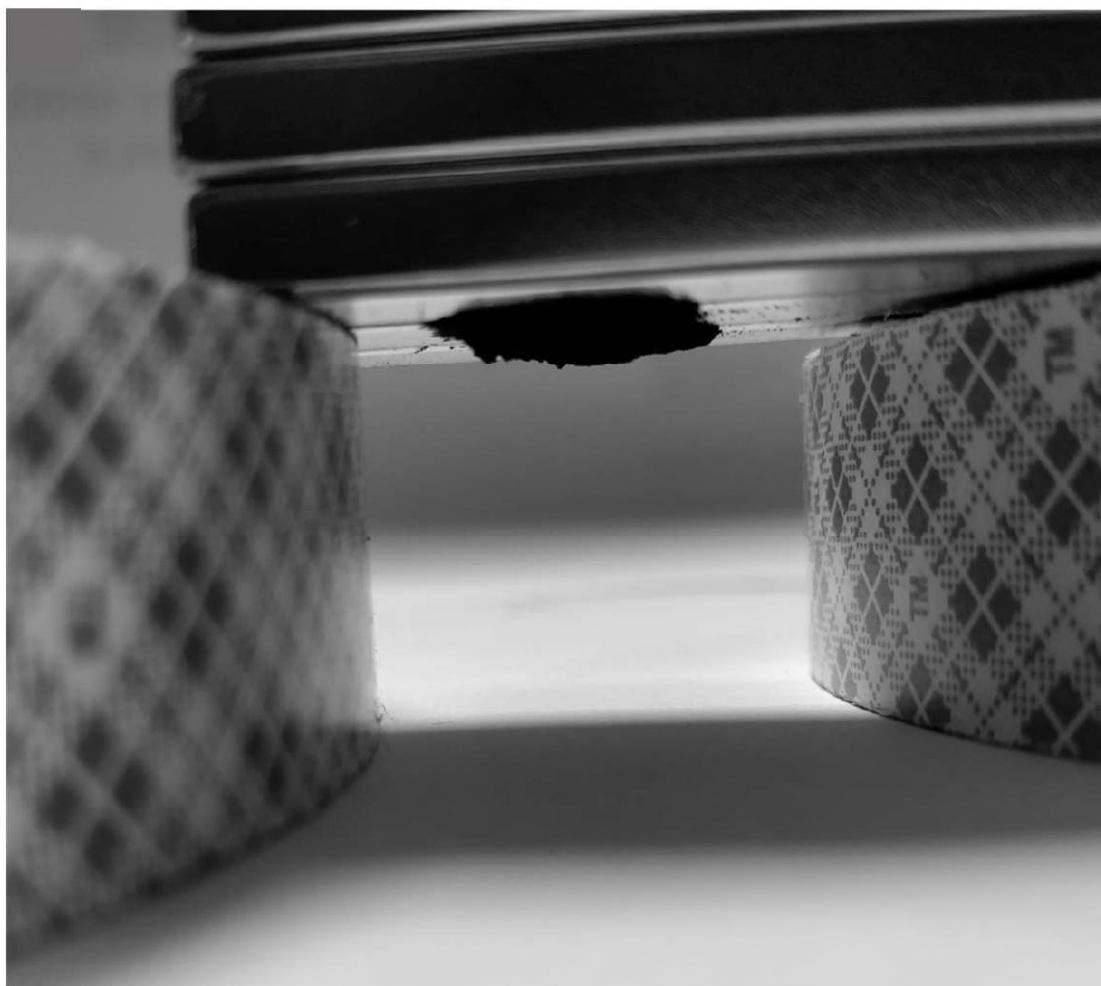


Fig. 100B

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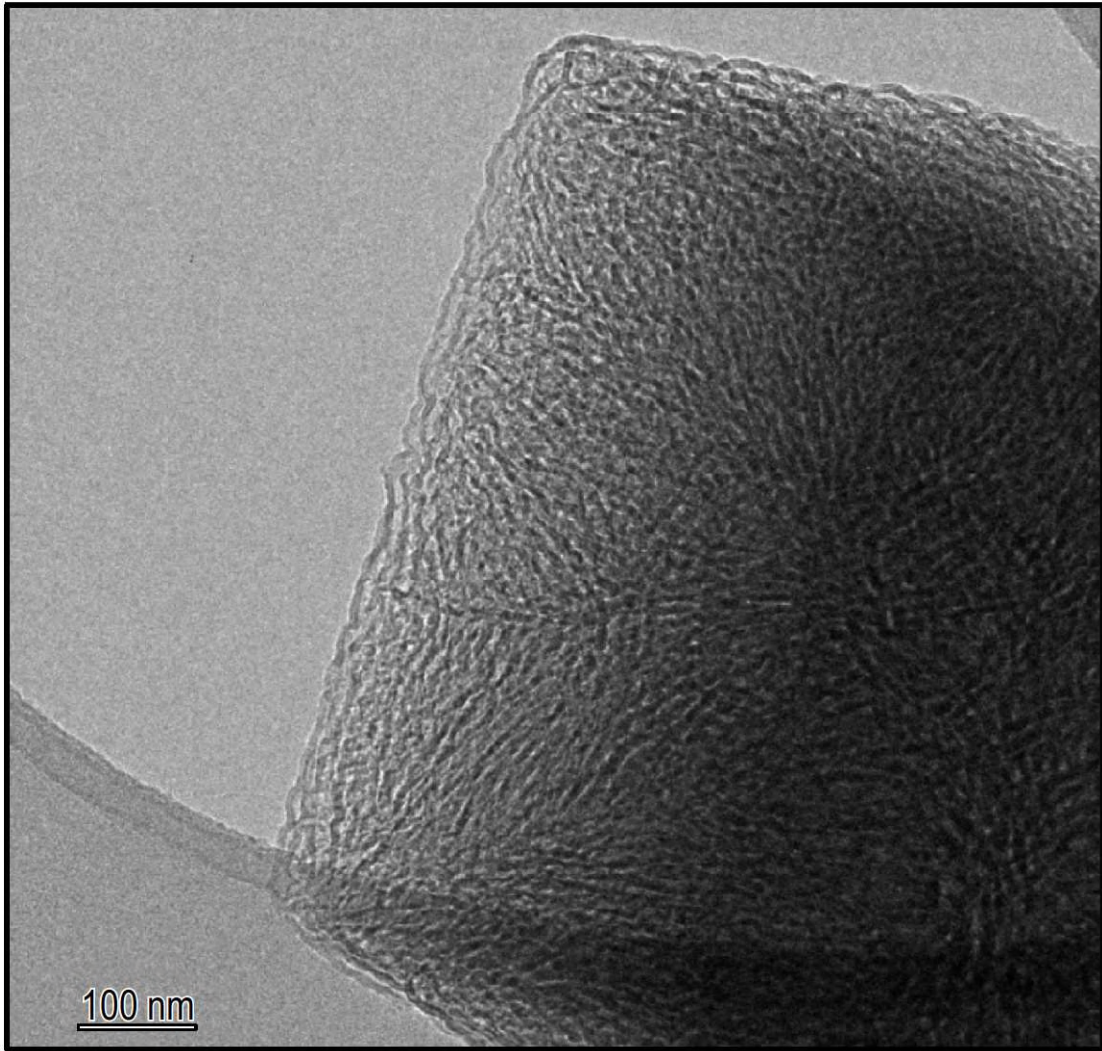


FIG. 101A

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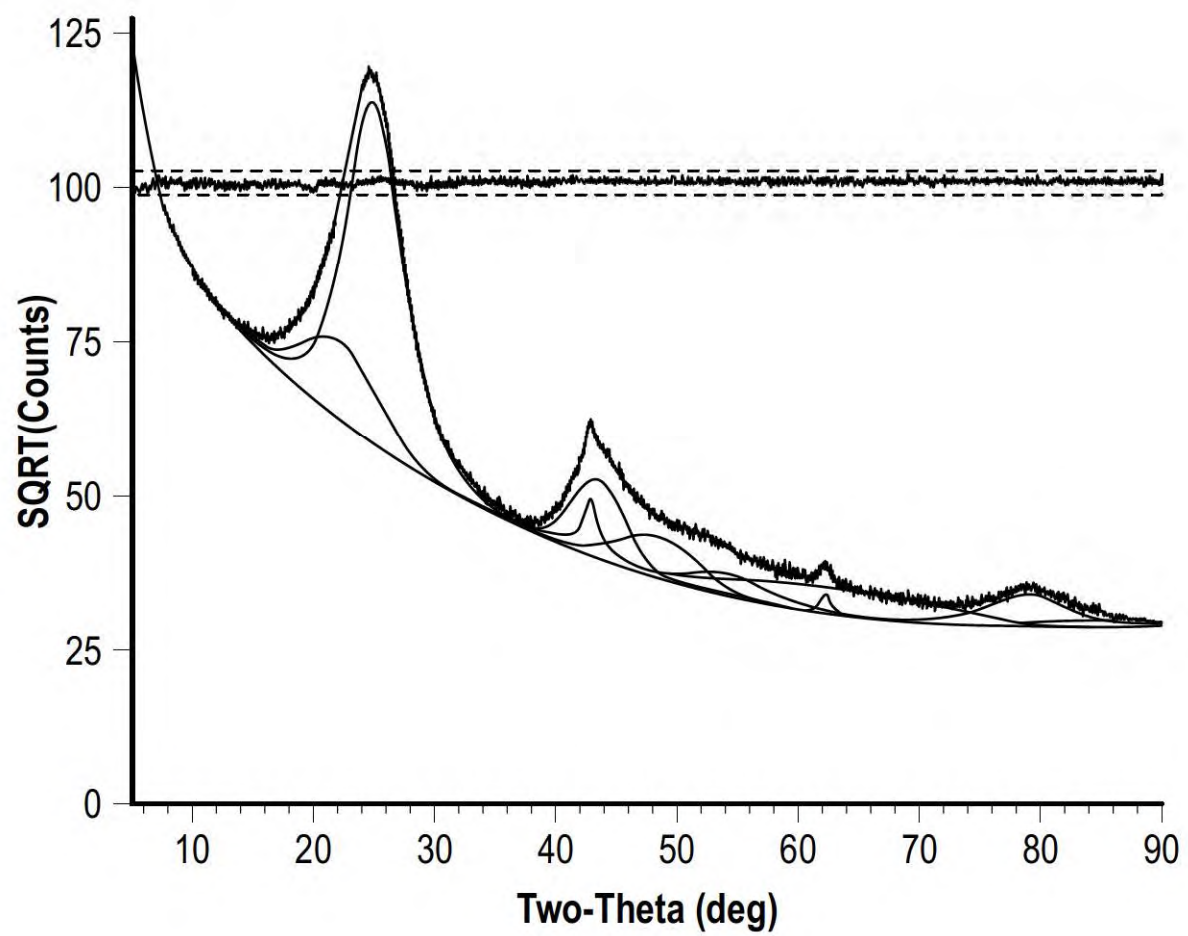


FIG. 101B

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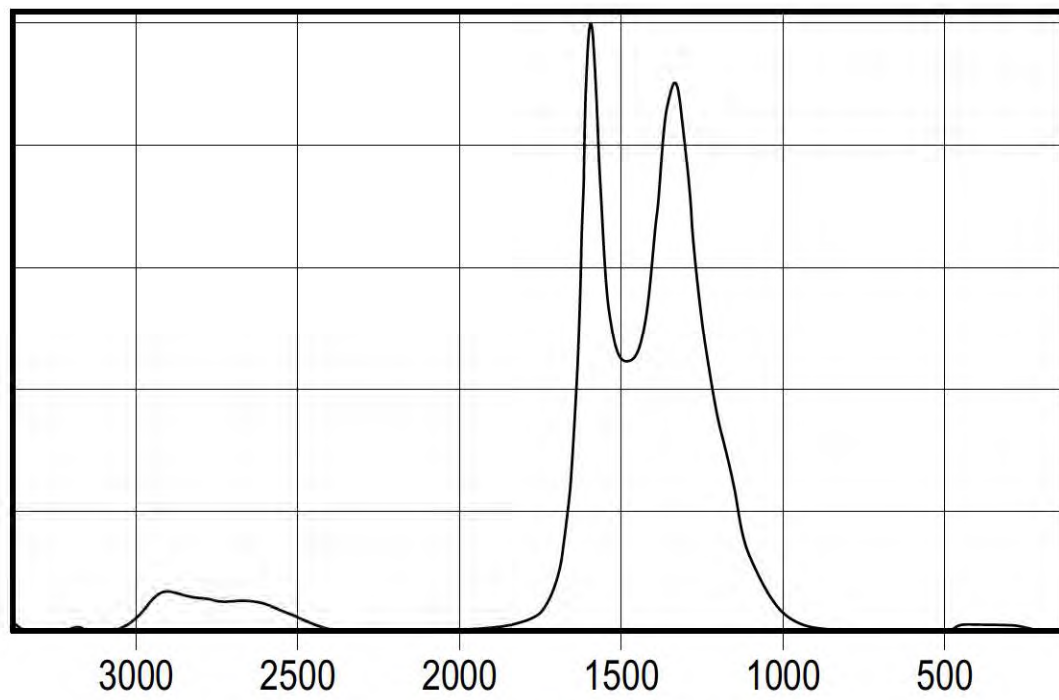


FIG. 101C

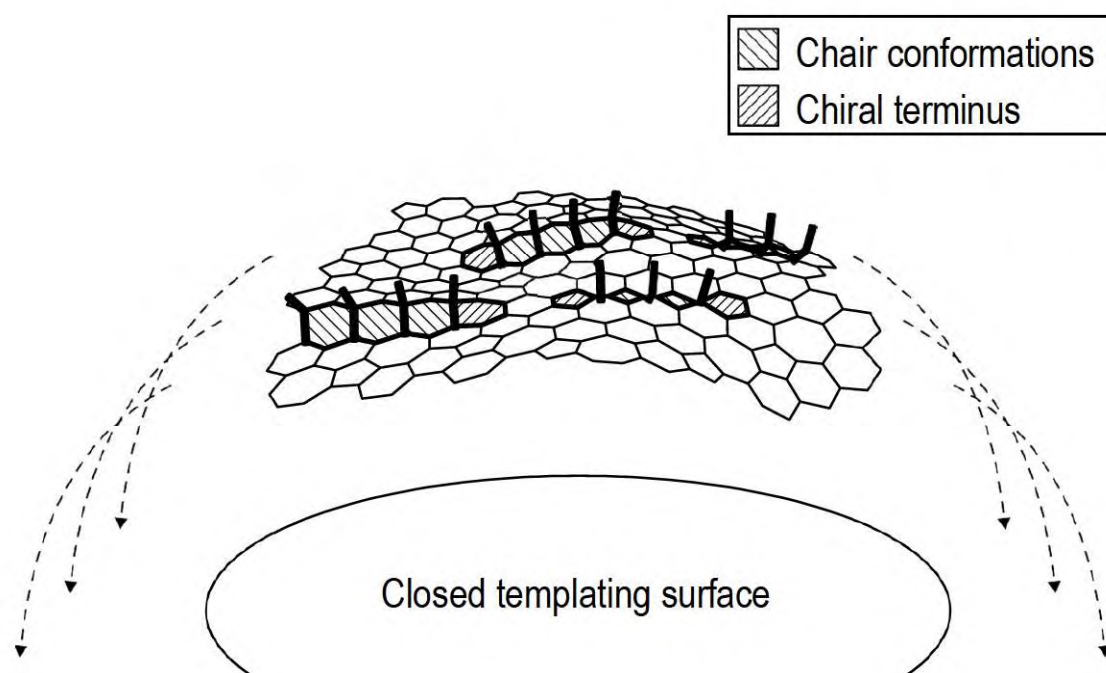


FIG. 102

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FIG. 103A

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FIG. 103B

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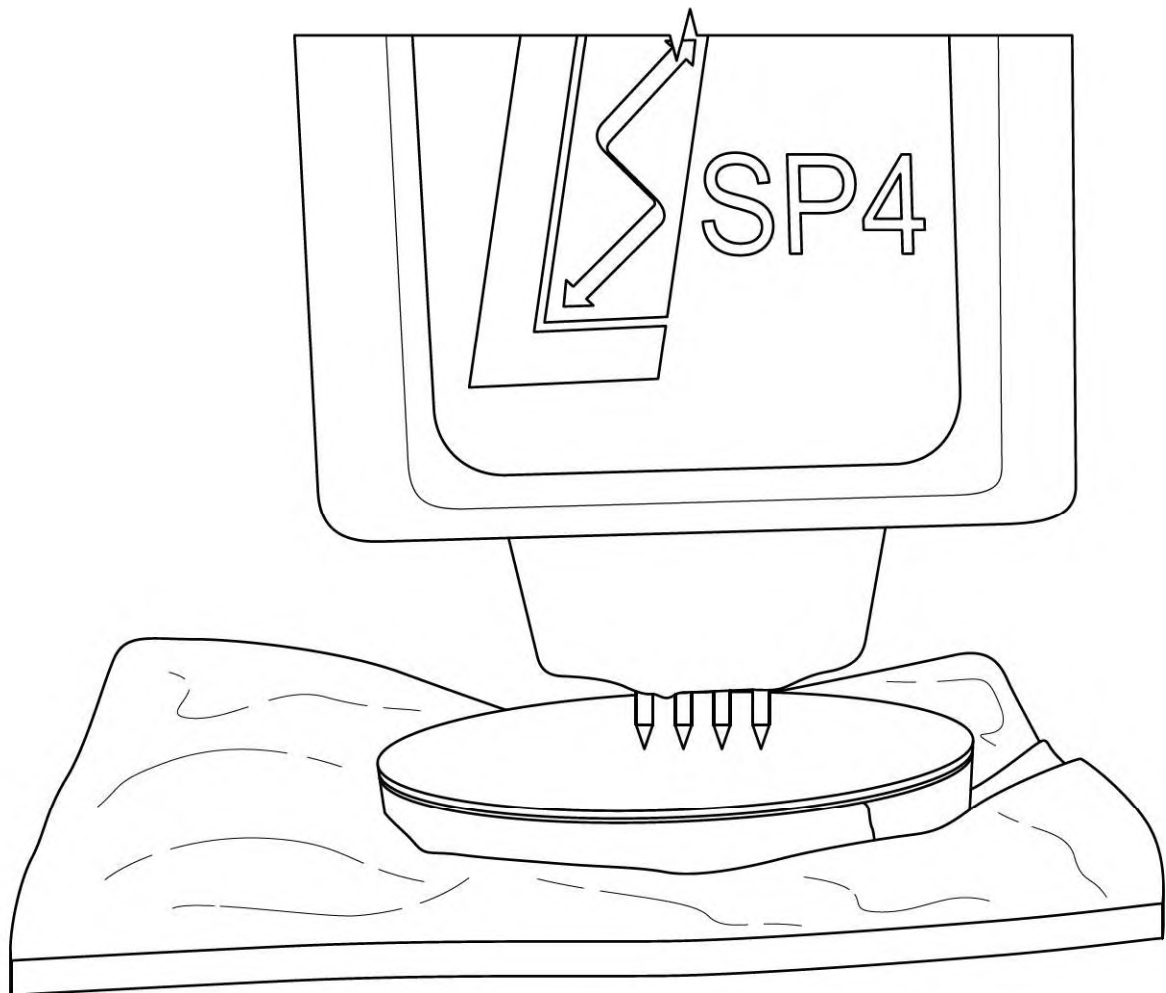


FIG. 104

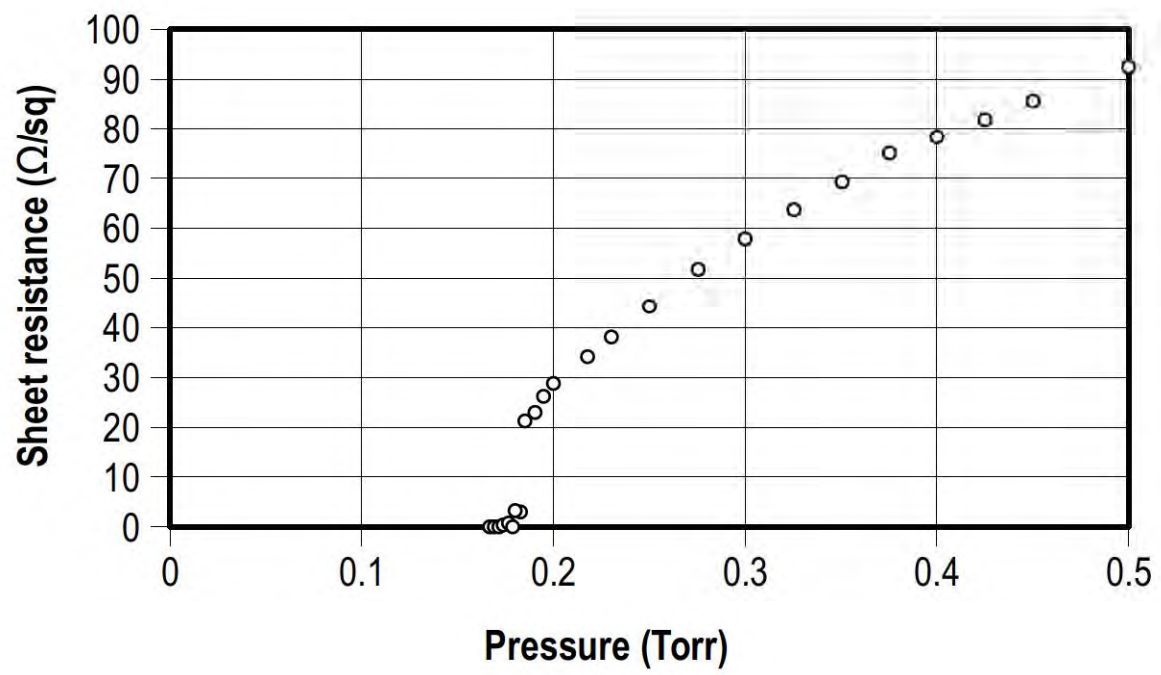


FIG. 105

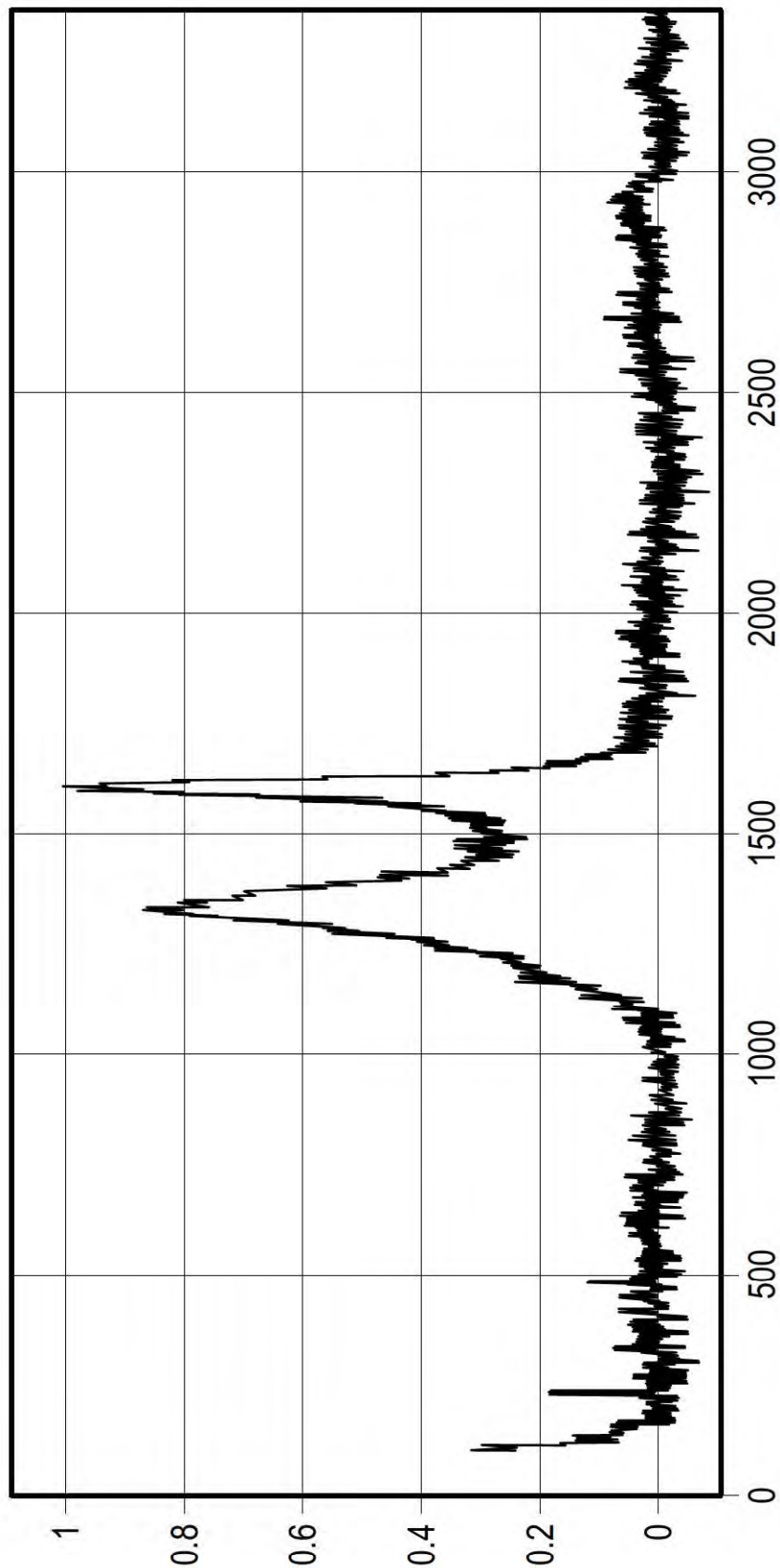


FIG. 106

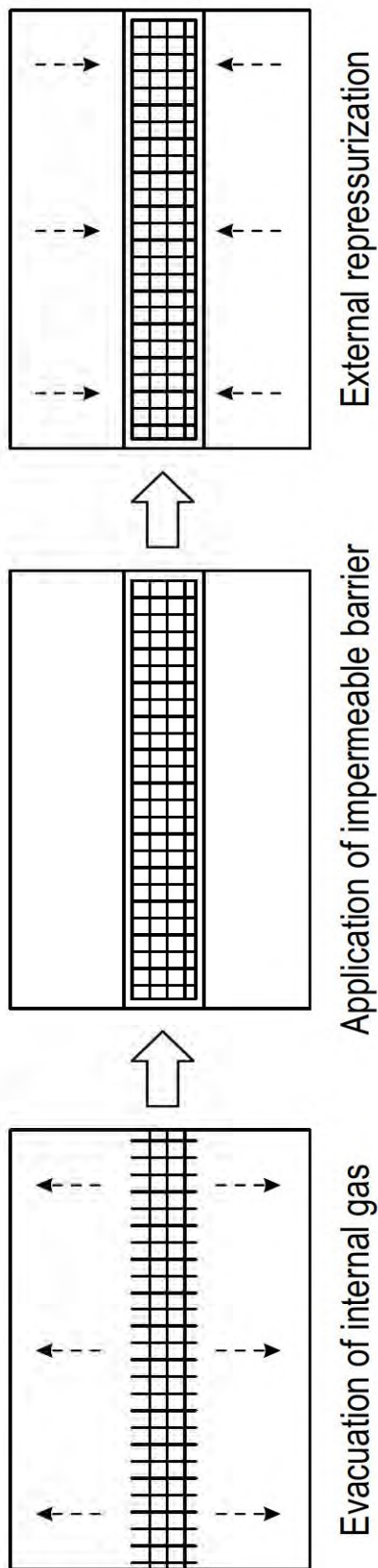


FIG. 107

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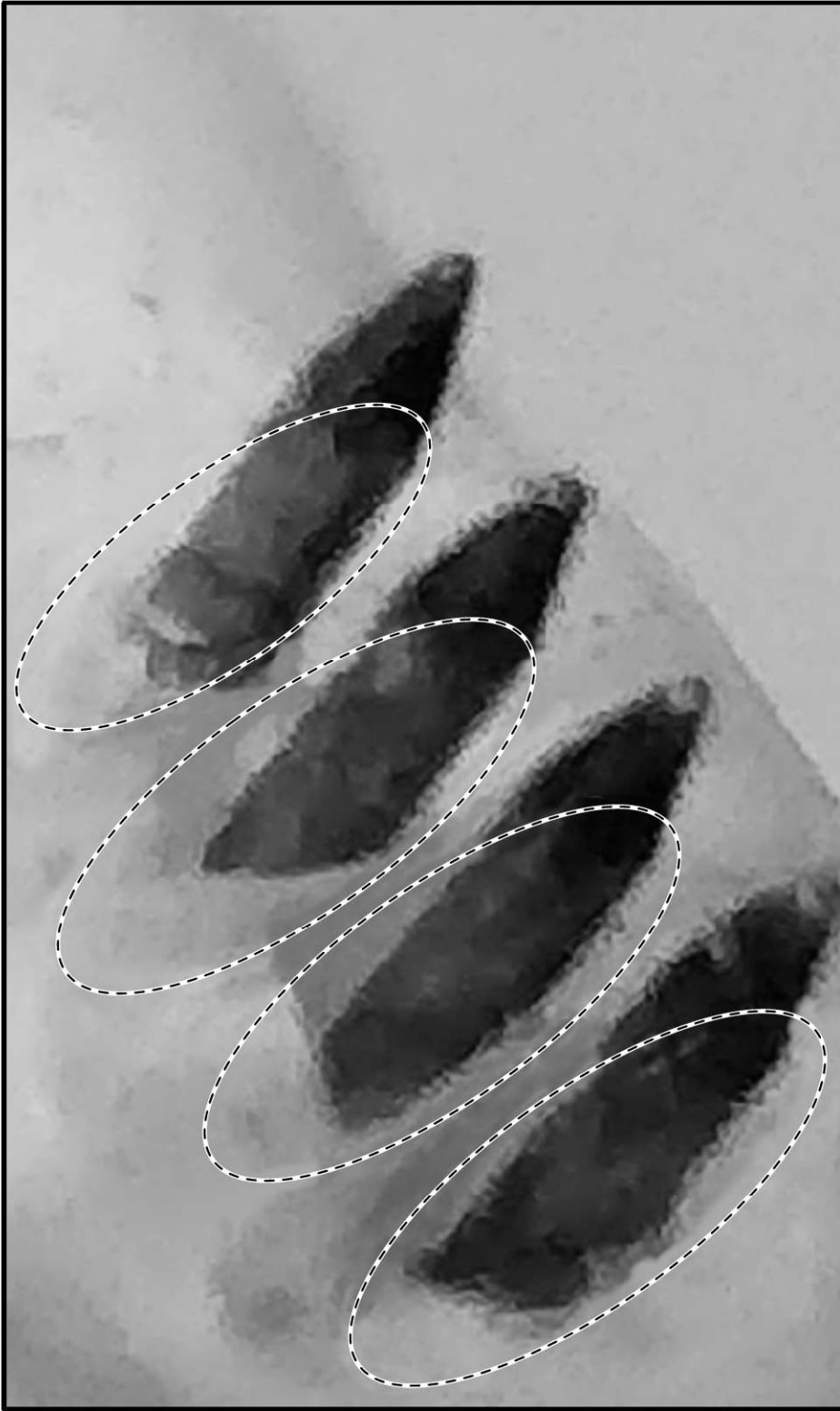


FIG. 108

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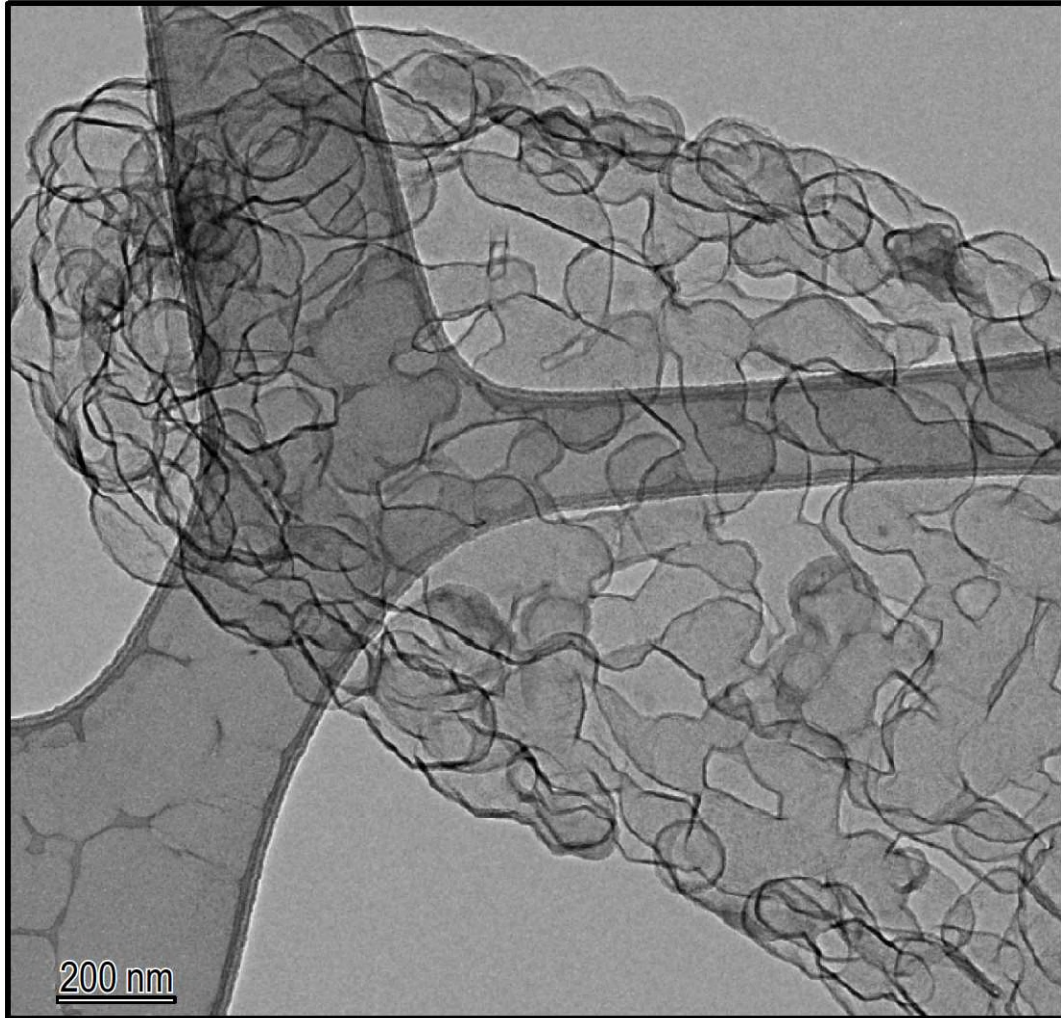


FIG. 109A

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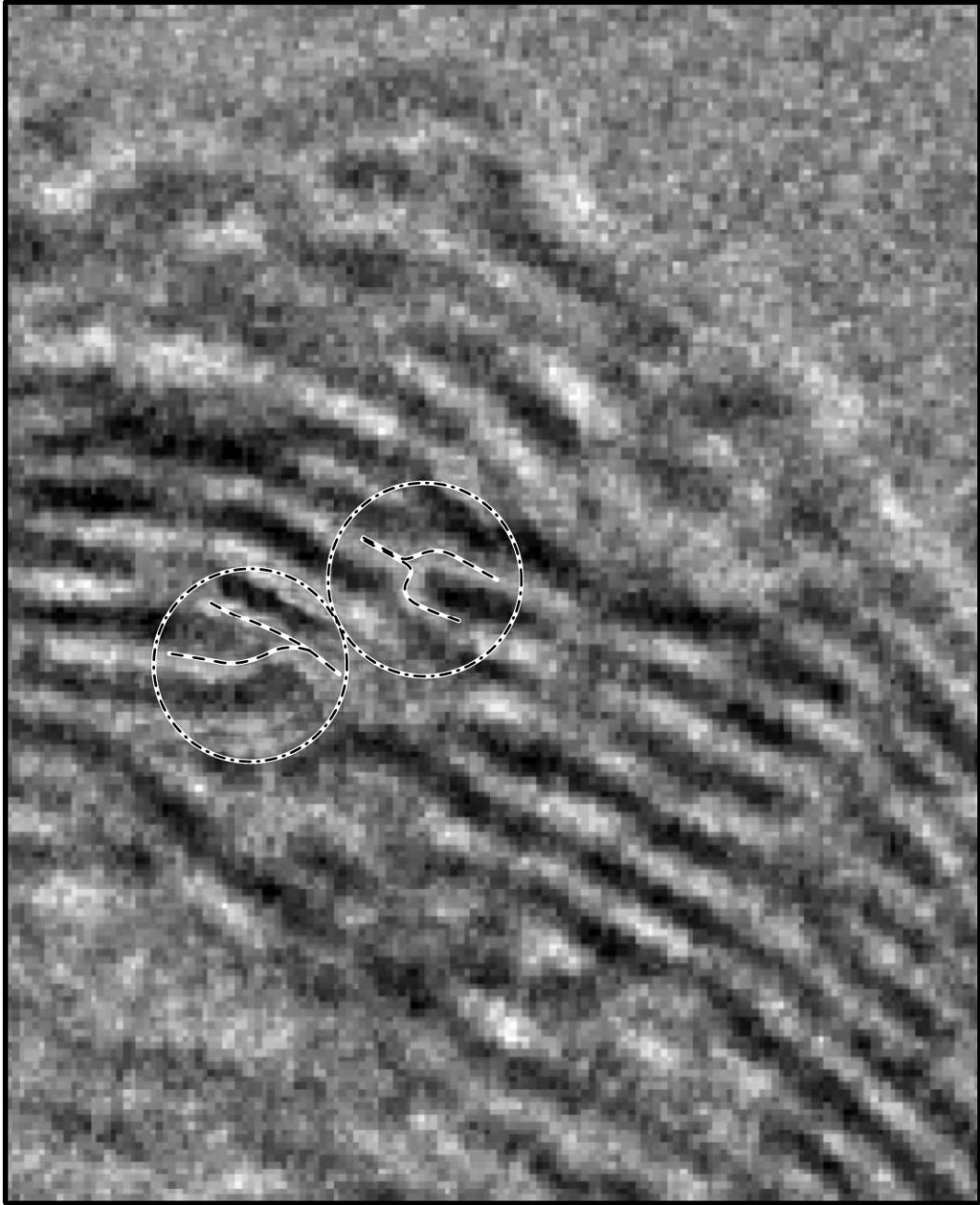


FIG. 109B

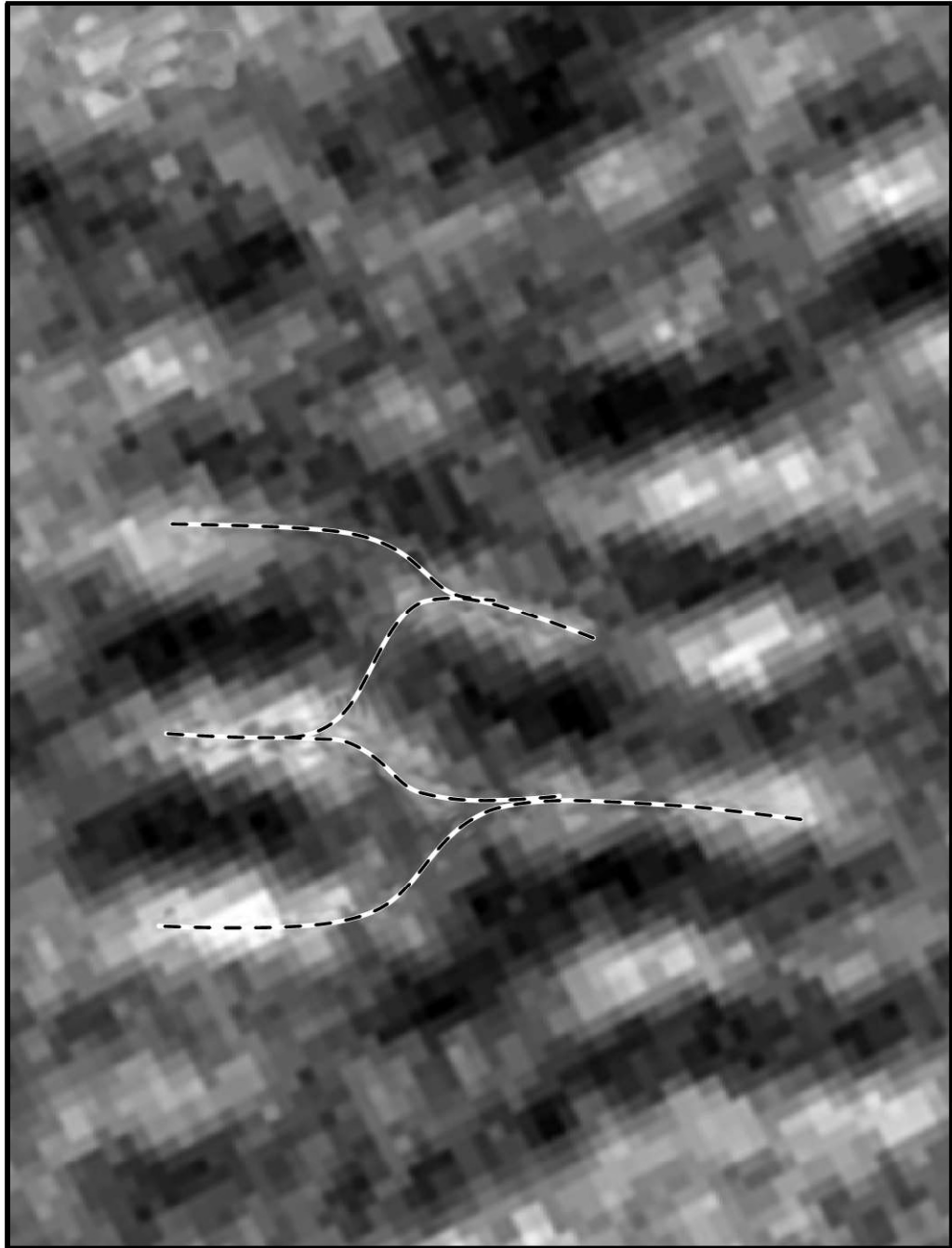


FIG. 109C