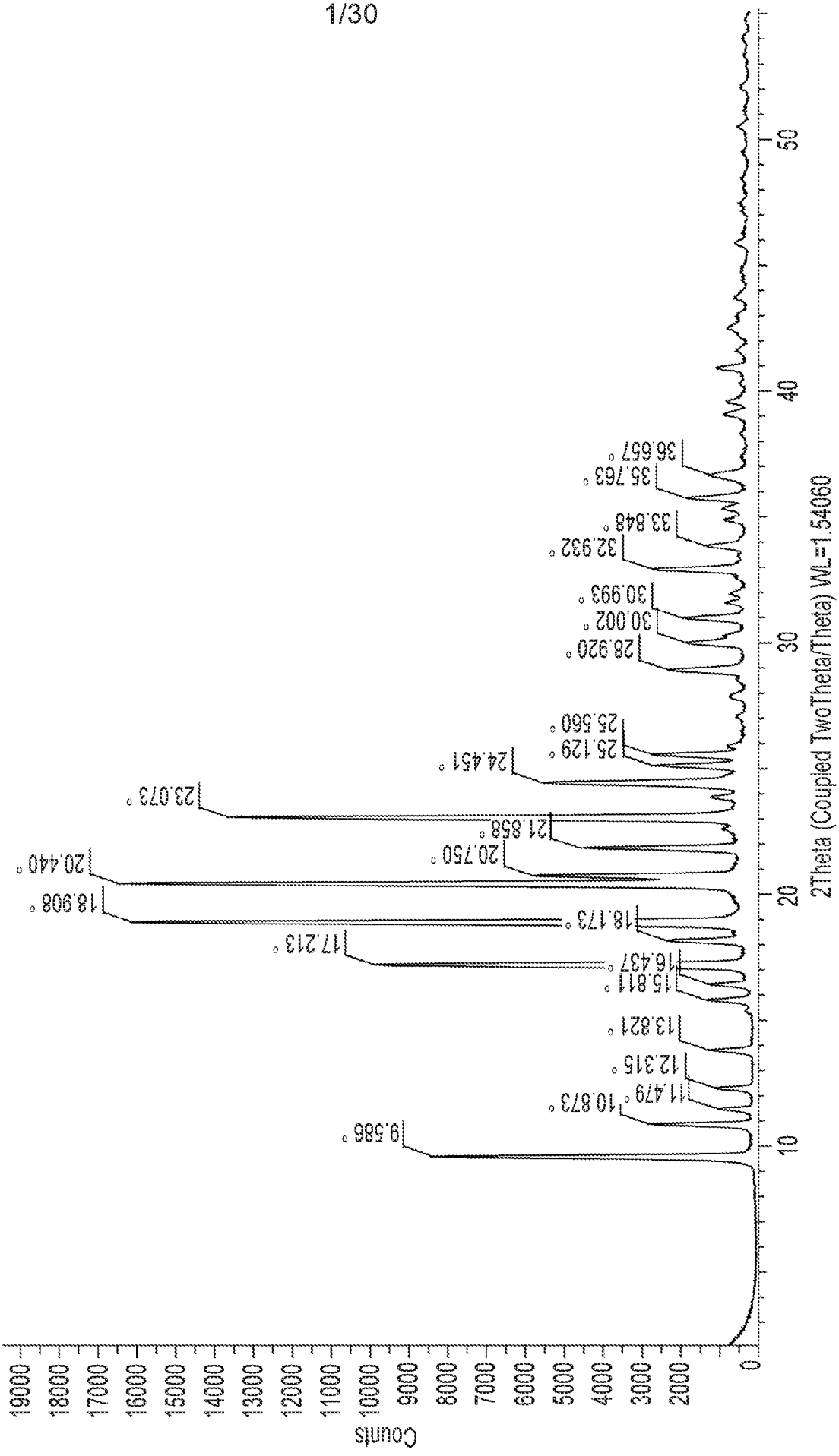

9.586°
10.873°
11.479°
12.315°
13.821°
15.811°
16.437°
17.213°
18.173°
18.908°
20.440°
20.750°
21.858°
23.073°
24.451°
25.129°
25.560°
28.920°
30.002°
30.993°
32.932°
33.848°
35.763°
36.657°
2Theta (Coupled TwoTheta/Theta) WL=1.54060
Counts
0
2000
3000
4000
5000
6000
7000
8000
9000
10000
11000
12000
13000
14000
15000
16000
17000
18000
19000
10
20
30
40
50

FIG. 1A

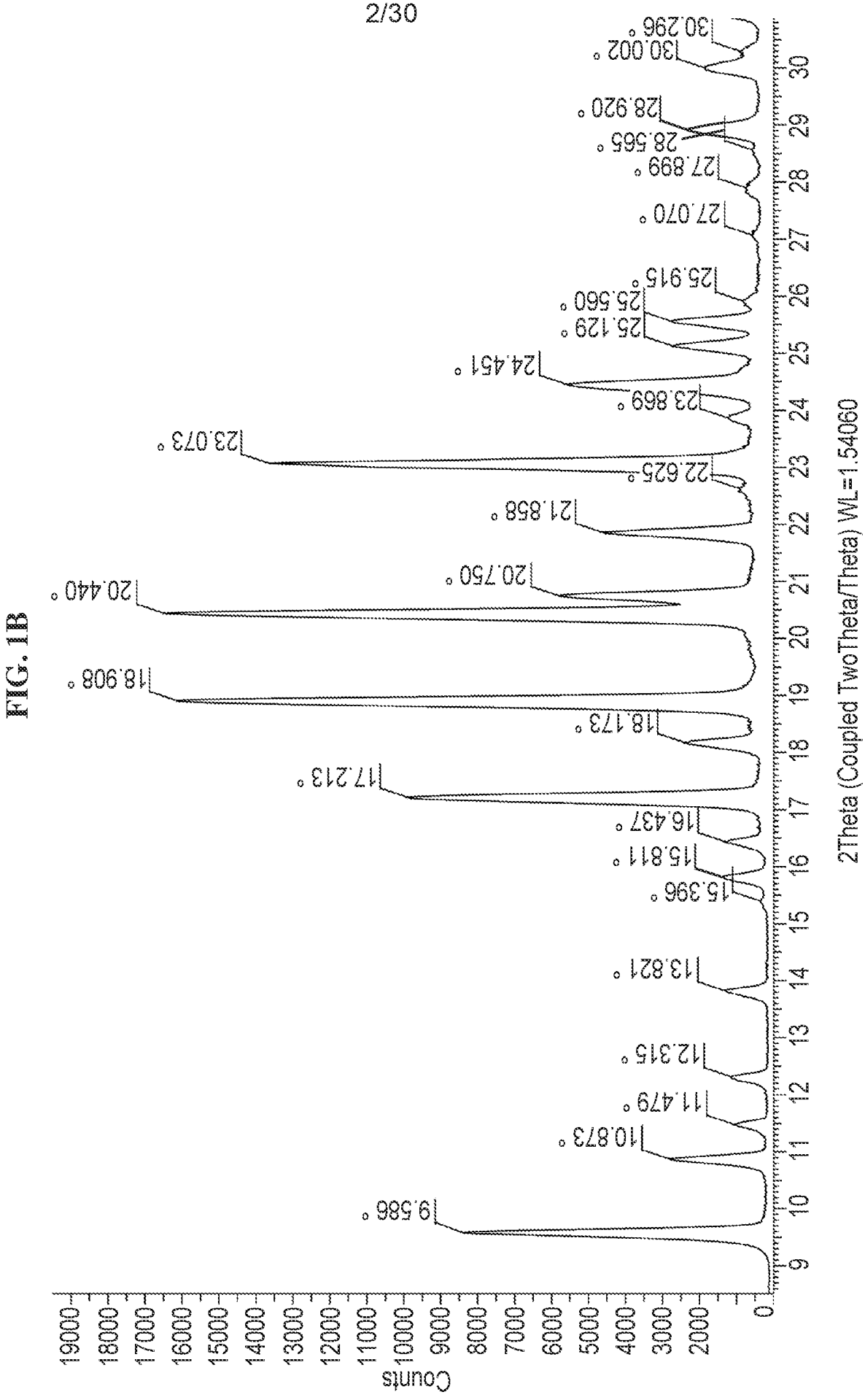
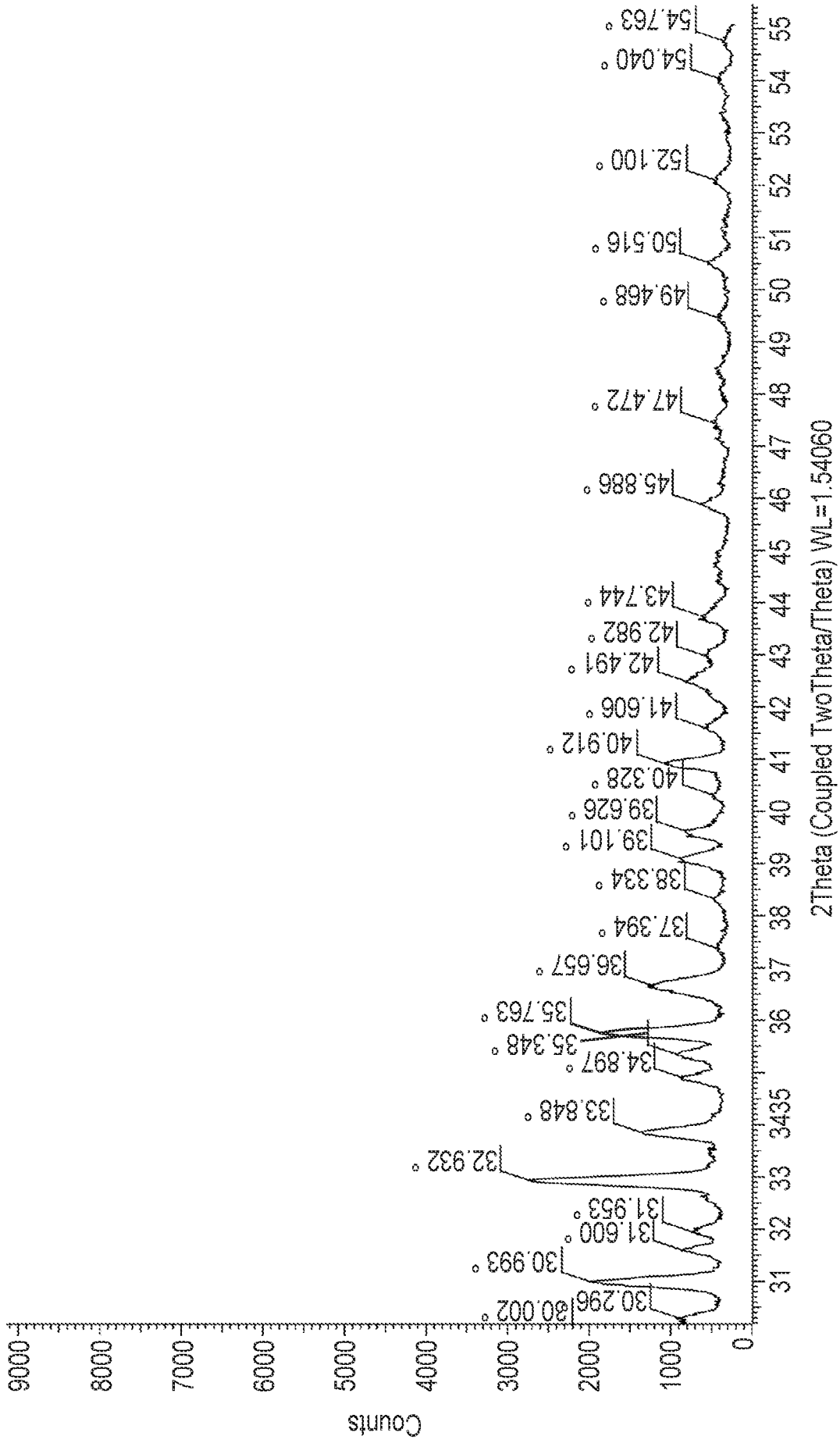

Counts
2Theta (Coupled TwoTheta/Theta) WL=1.54060
9.586°
10.873°
11.479°
12.315°
13.821°
15.396°
15.811°
16.437°
17.213°
18.173°
18.908°
20.440°
20.750°
21.858°
22.625°
23.073°
23.869°
24.451°
25.129°
25.560°
25.915°
27.070°
27.899°
28.565°
28.920°
30.002°
30.296°

FIG. 1B

FIG. 1C


Counts
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
30.296°
30.002°
31.600°
30.993°
31.953°
32.932°
33.848°
34.897°
35.348°
35.763°
36.657°
37.394°
38.334°
39.101°
39.626°
40.328°
40.912°
41.606°
42.491°
42.982°
43.744°
45.886°
47.472°
49.468°
50.516°
52.100°
54.040°
54.763°
31
32
33
3435
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
2Theta (Coupled TwoTheta/Theta) WL=1.54060

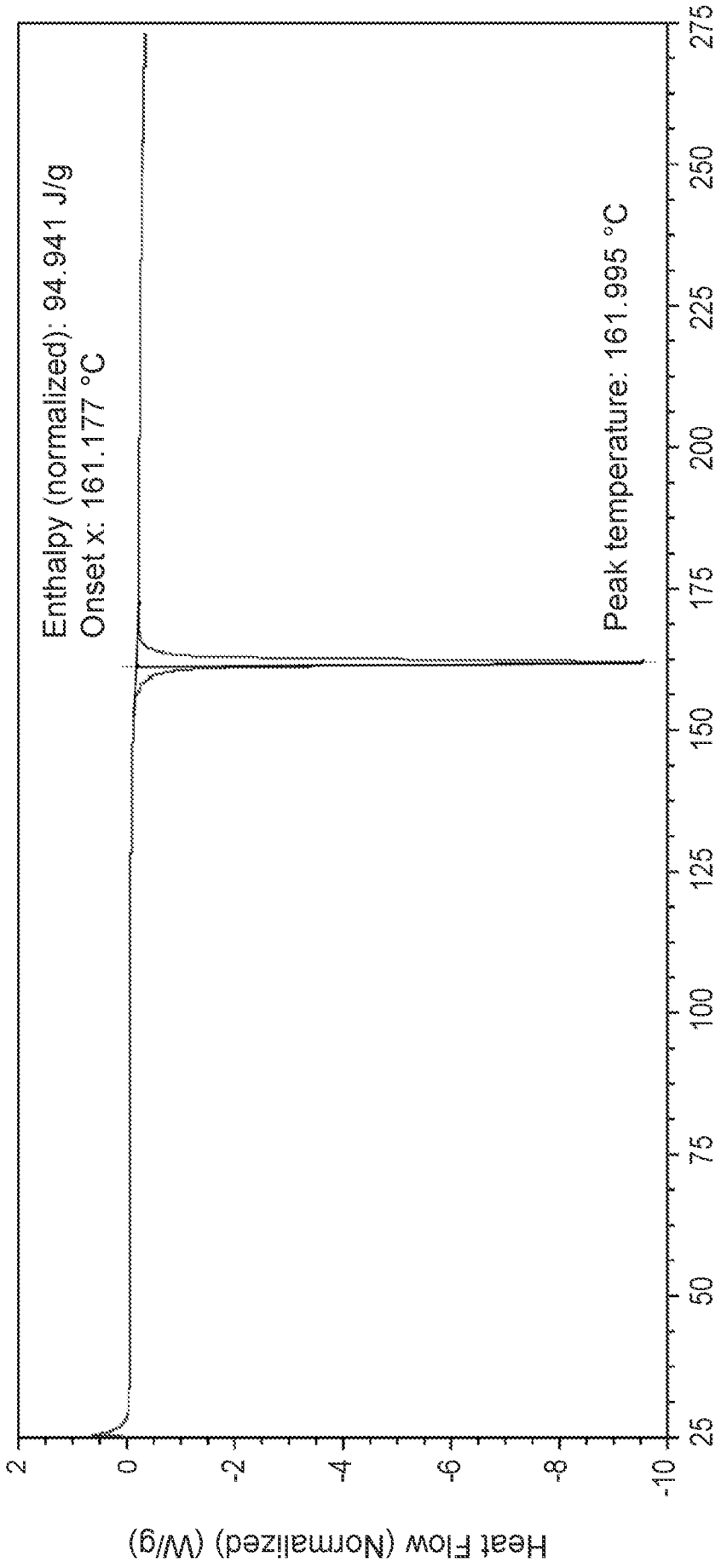

Enthalpy (normalized): 94.941 J/g
Onset x: 161.177 °C
Peak temperature: 161.995 °C
Heat Flow (Normalized) (W/g)
Exo Up
Temperature T (°C)
2
0
-2
-4
-6
-8
-10
25
50
75
100
125
150
175
200
225
250
275

FIG. 2

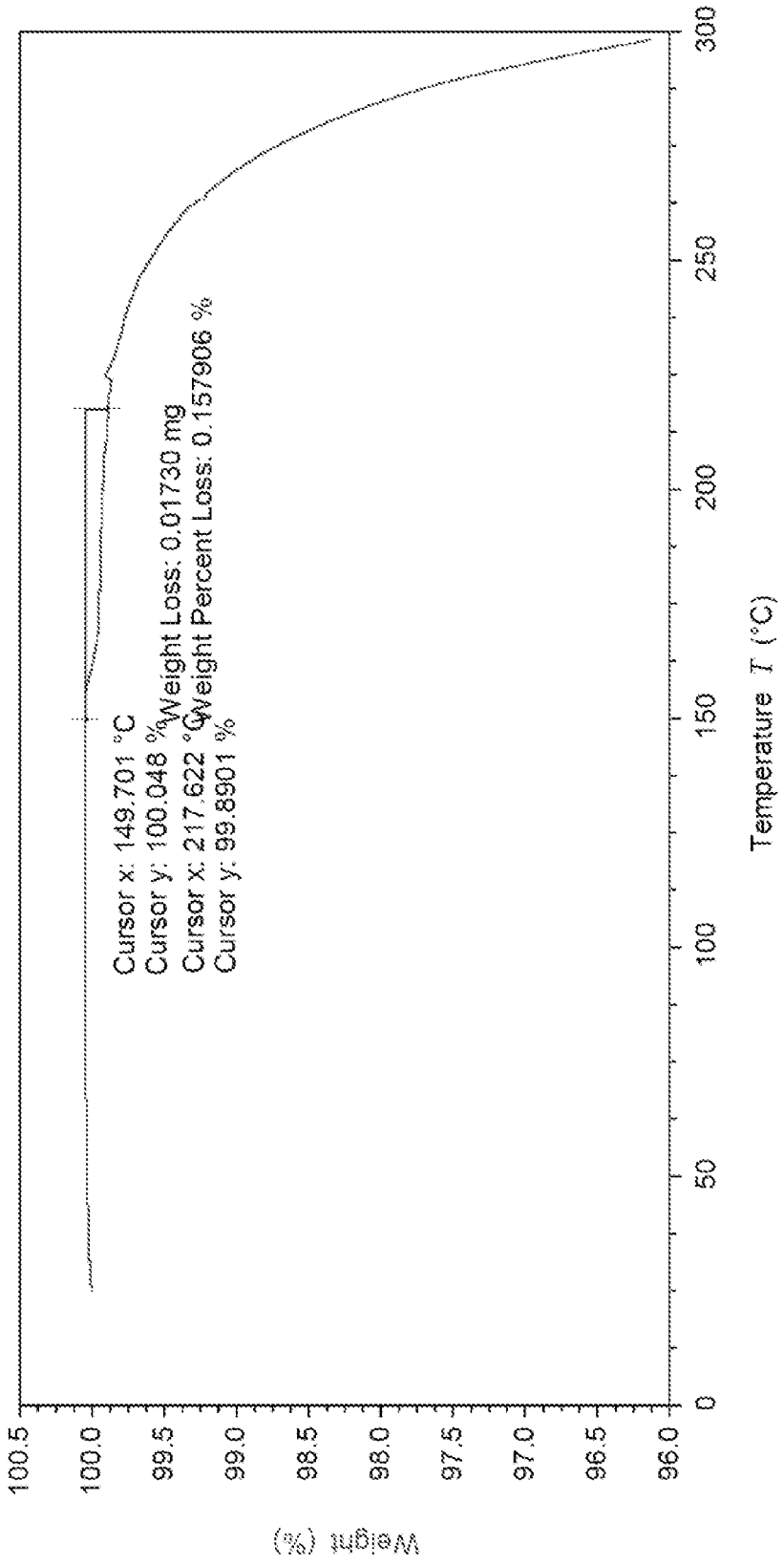

Cursor x: 149.701 °C
Cursor y: 100.048 %
Weight Loss: 0.01730 mg
Cursor x: 217.622 °C
Weight Percent Loss: 0.157906 %
Cursor y: 99.8901 %
Weight (%)
100.5
100.0
99.5
99.0
98.5
98.0
97.5
97.0
96.5
96.0
0
50
100
150
200
250
300
Temperature T (°C)

FIG. 3

FIG. 4

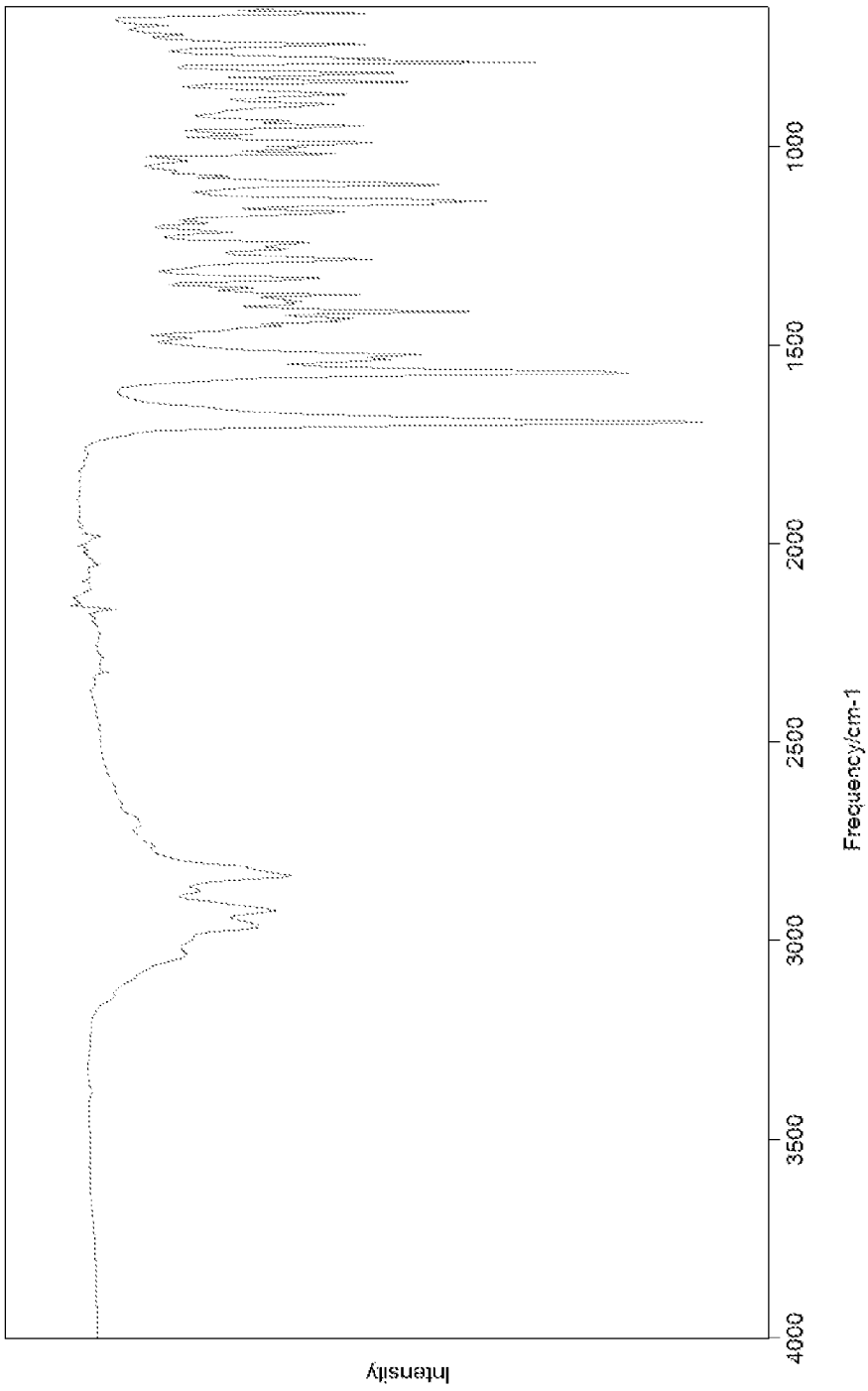


FIG. 5

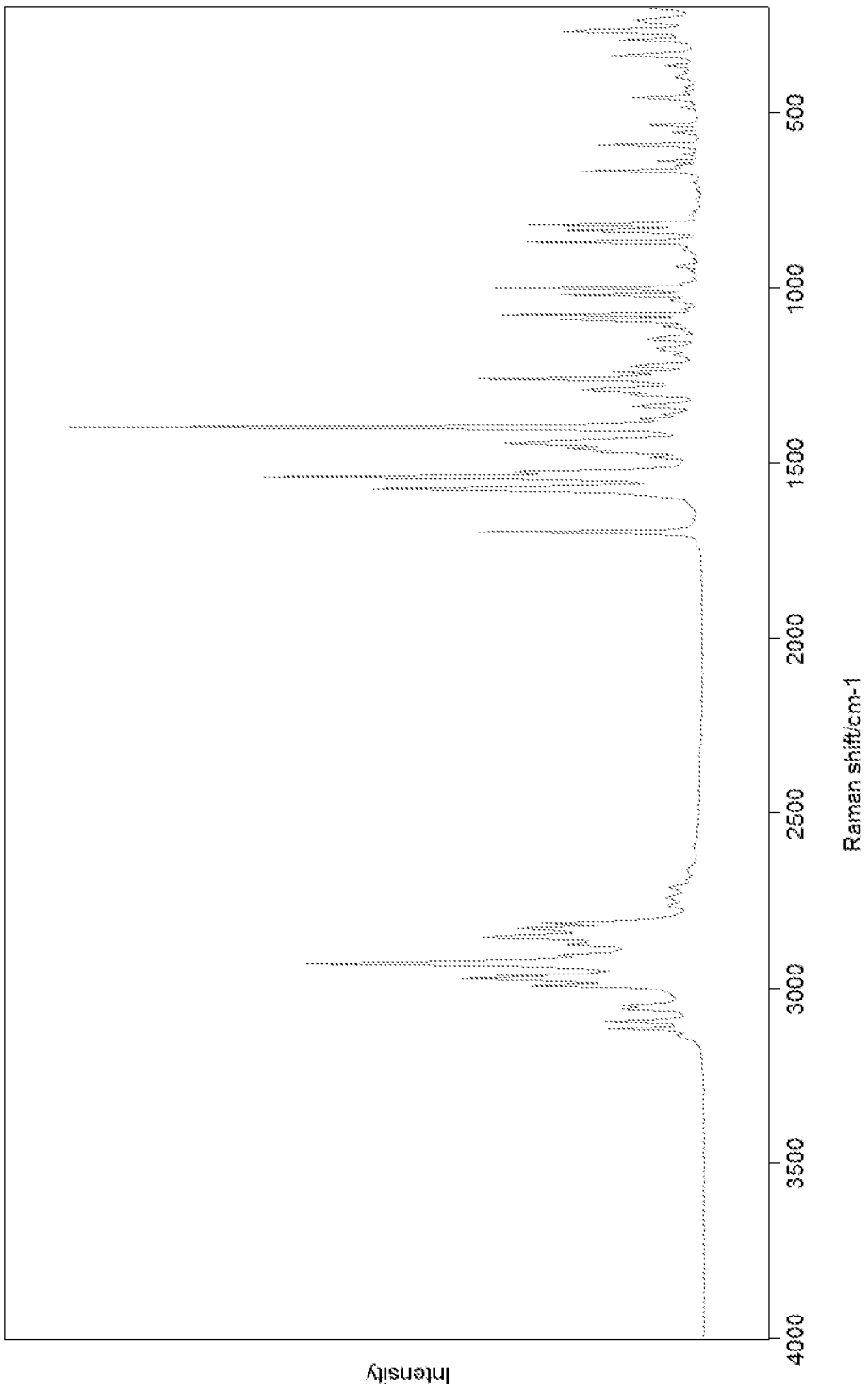

Intensity
4000
3500
3000
2500
2000
1500
1000
500
Raman shift/cm-1

FIG. 6

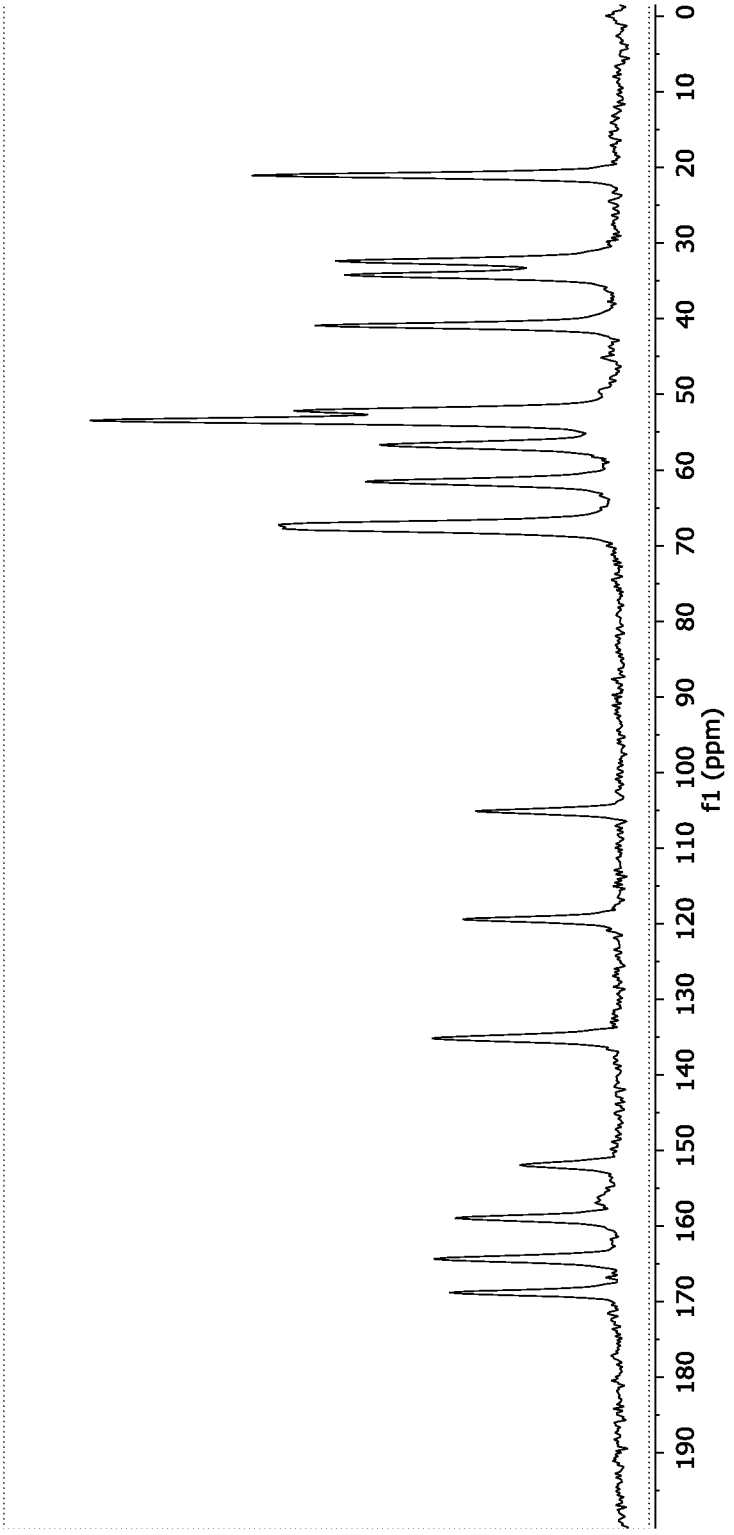
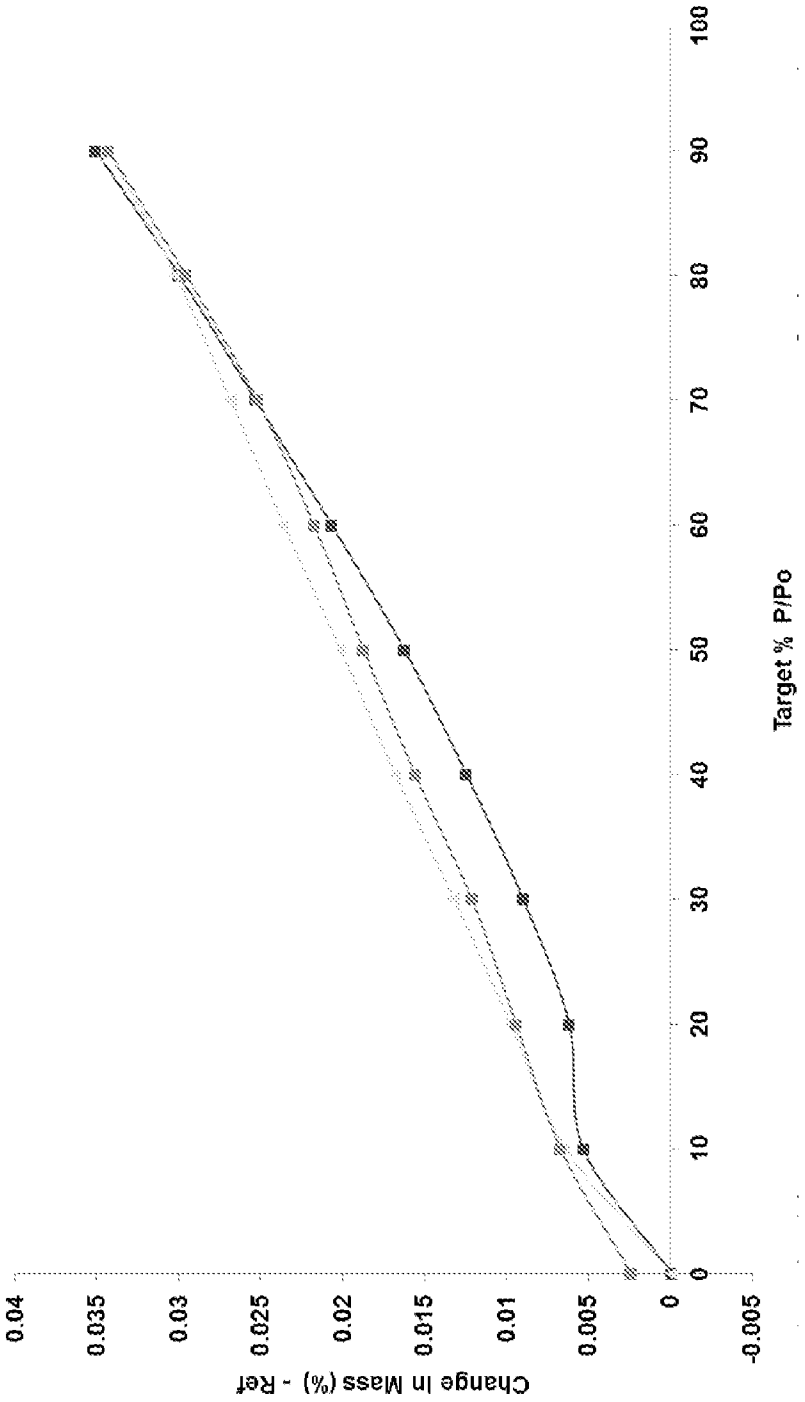

0
10
20
30
40
50
60
70
80
90
100
110
120
130
140
150
160
170
180
190
f1 (ppm)

FIG. 7


Change In Mass (%) - Ref
0.04
0.035
0.03
0.025
0.02
0.015
0.01
0.005
0
-0.005
Target % P/Po
0
10
20
30
40
50
60
70
80
90
100

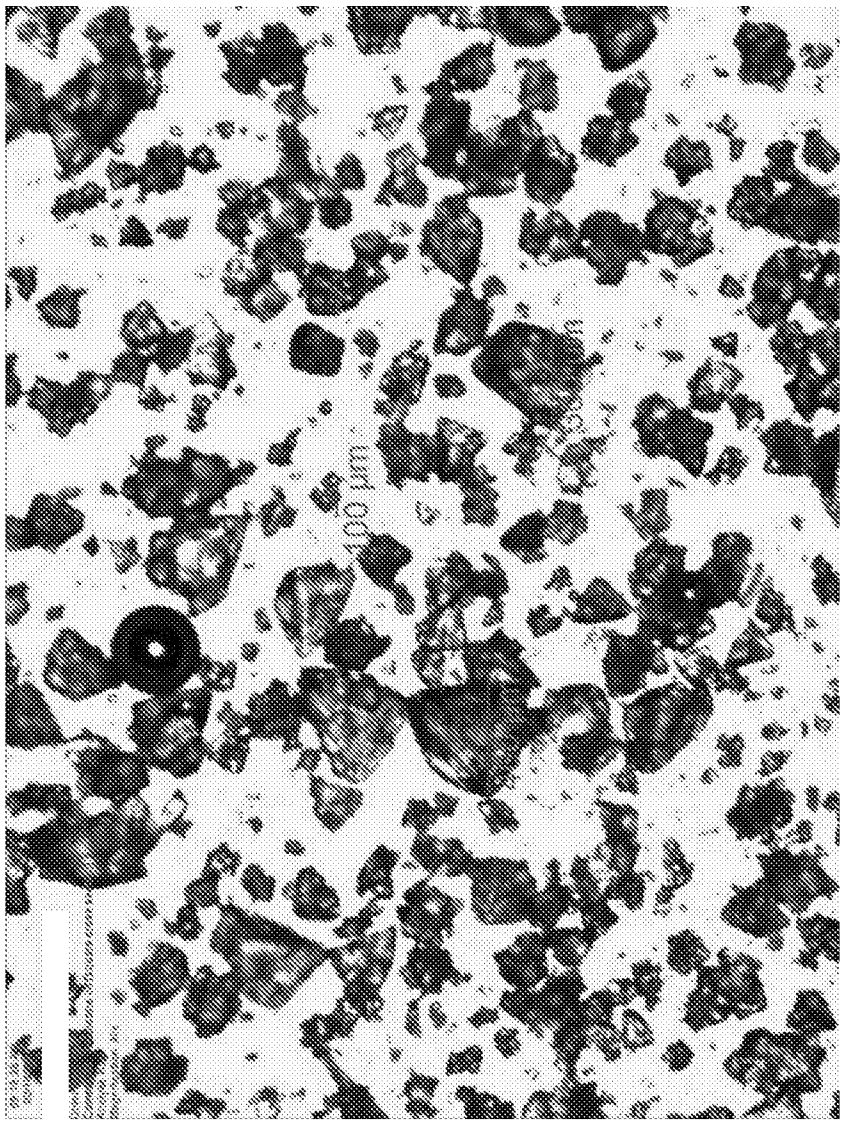
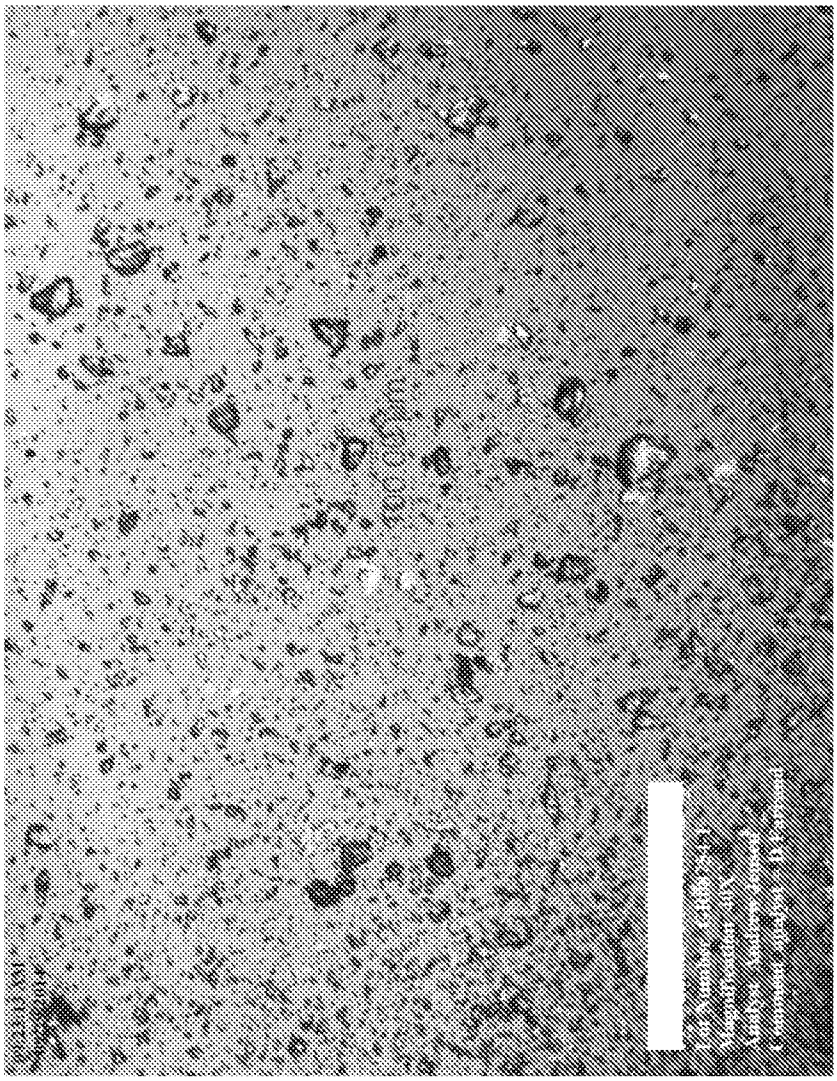


FIG. 8

FIG. 9


Scale bar: 200 μm
Magnification: 10x
Vendor: Leica Microsystems
Software: LAS X (3.7.4.23463)

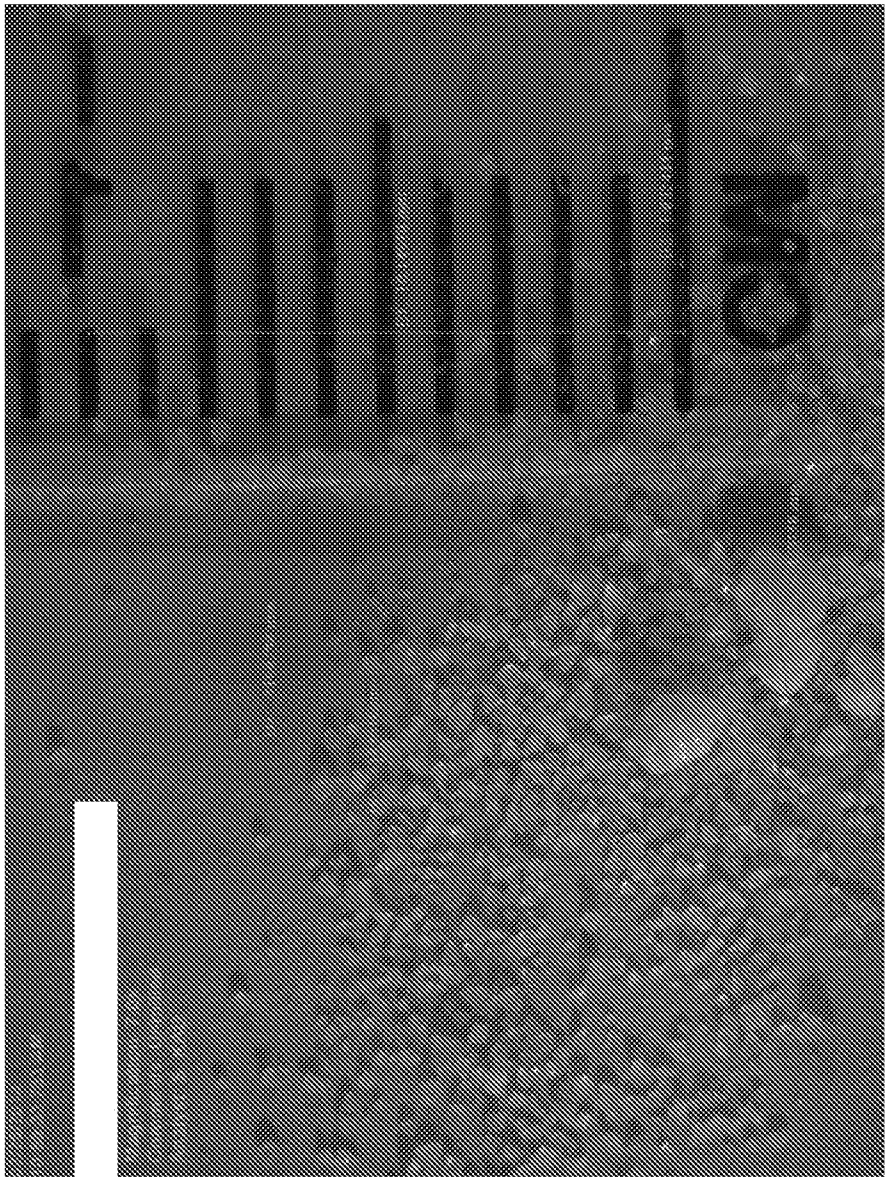


FIG. 10

FIG. 11

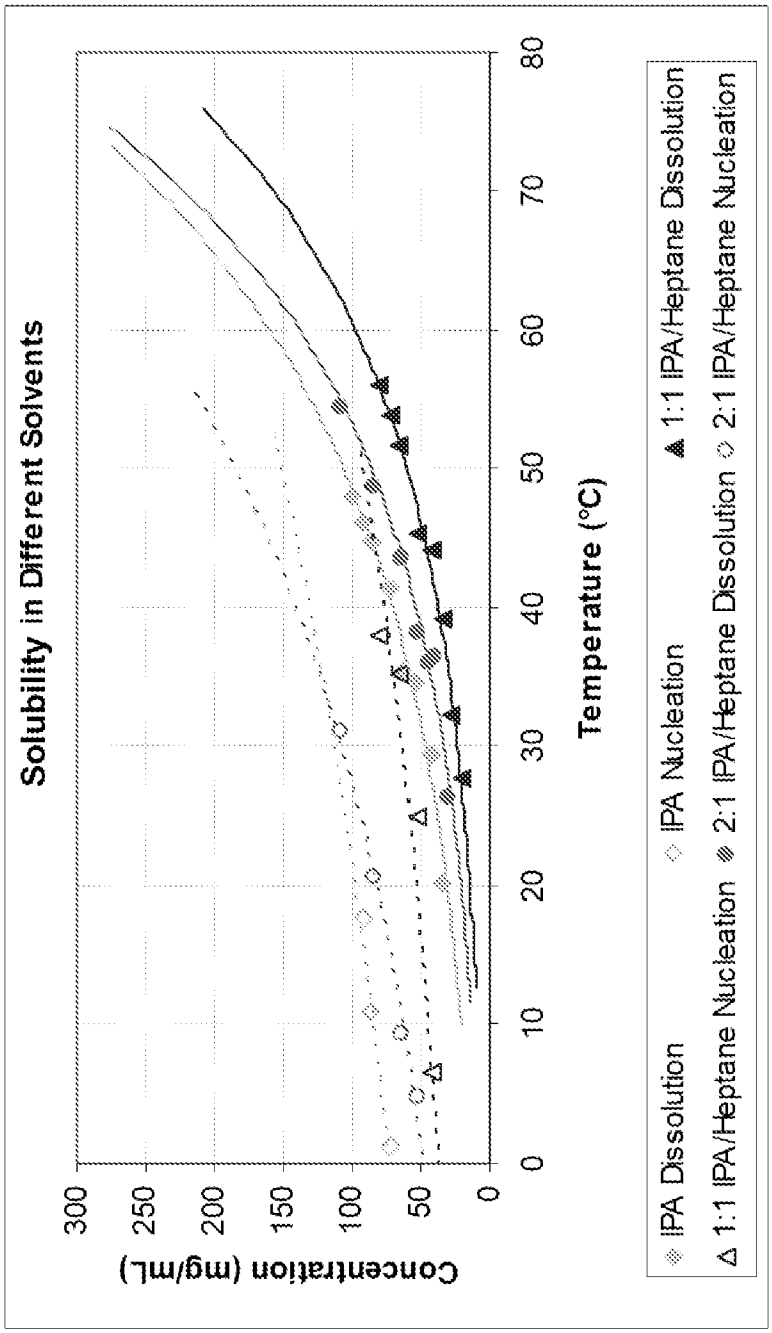

Solubility in Different Solvents
Concentration (mg/mL)
300
250
200
150
100
50
0
0
10
20
30
40
50
60
70
80
Temperature (°C)
IPA Dissolution
IPA Nucleation
1:1 IPA/Heptane Dissolution
1:1 IPA/Heptane Nucleation
2:1 IPA/Heptane Dissolution
2:1 IPA/Heptane Nucleation

FIG. 12

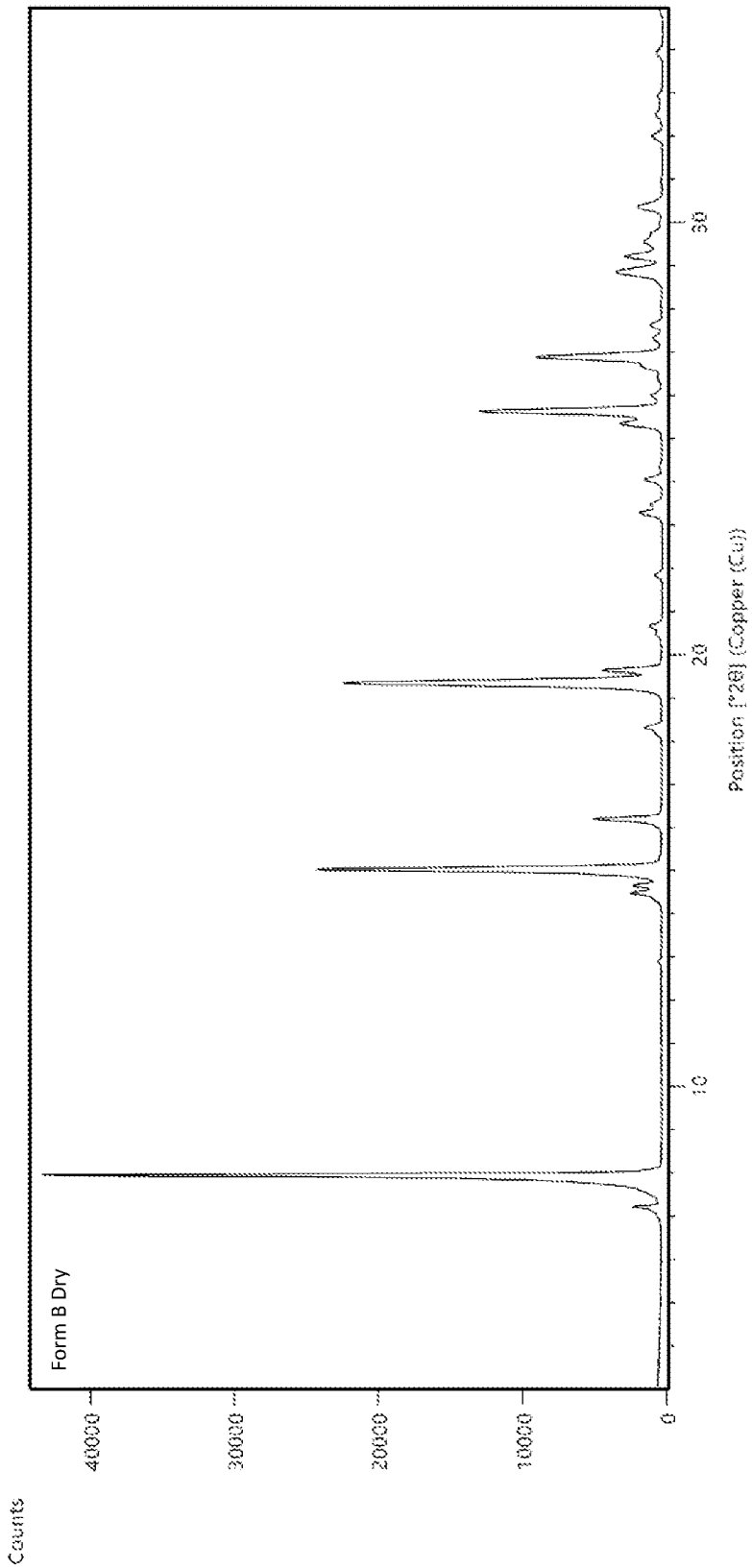

Form B Dry
Counts
40000
30000
20000
10000
0
10
20
30
Position [°2θ] (Copper (Cu))

FIG. 13

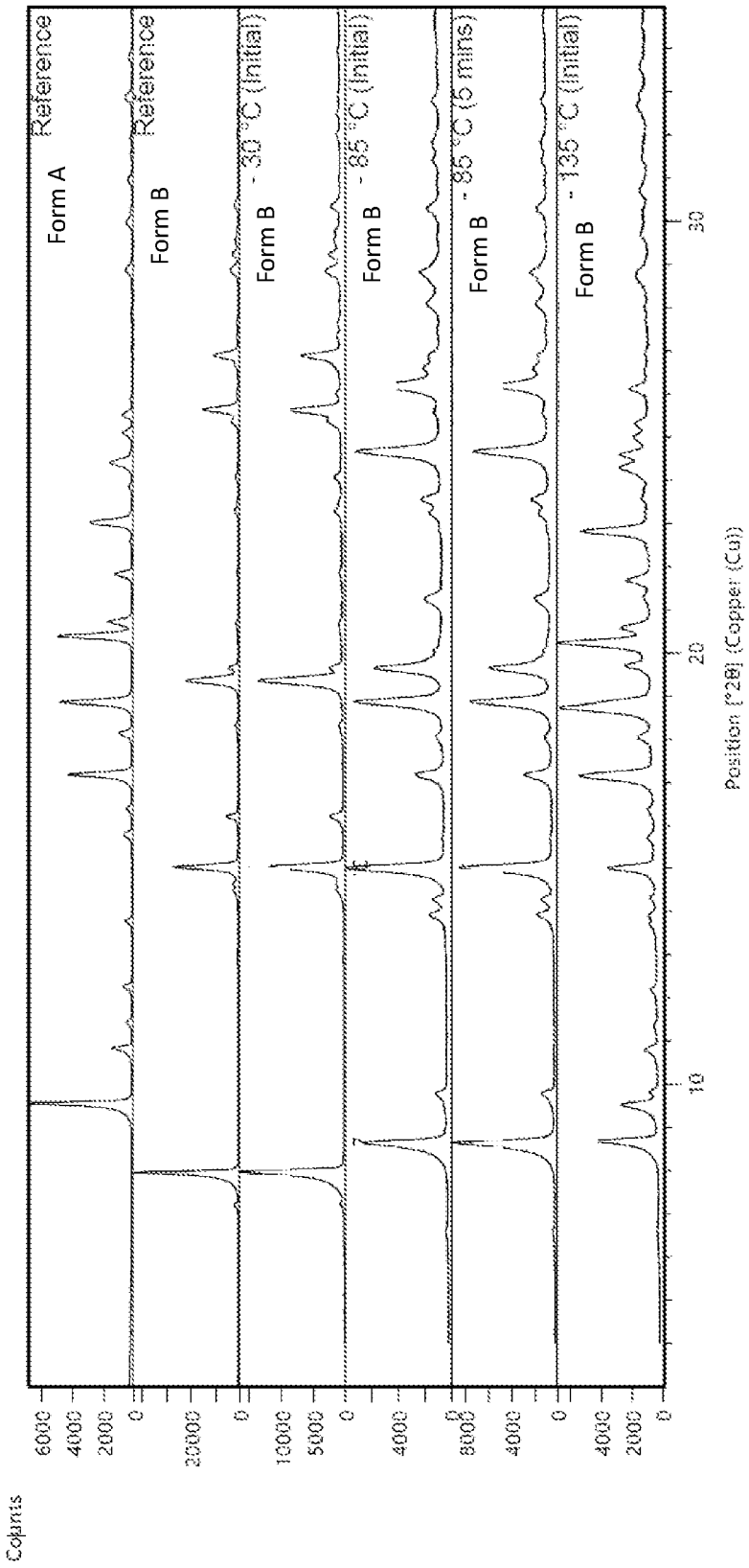

Reference
Form A
Reference
Form B
Form B - 30 °C (Initial)
Form B - 85 °C (Initial)
Form B - 85 °C (5 mins)
Form B - 135 °C (Initial)
Counts
Position [°2θ] (Copper (Cu))

FIG. 14

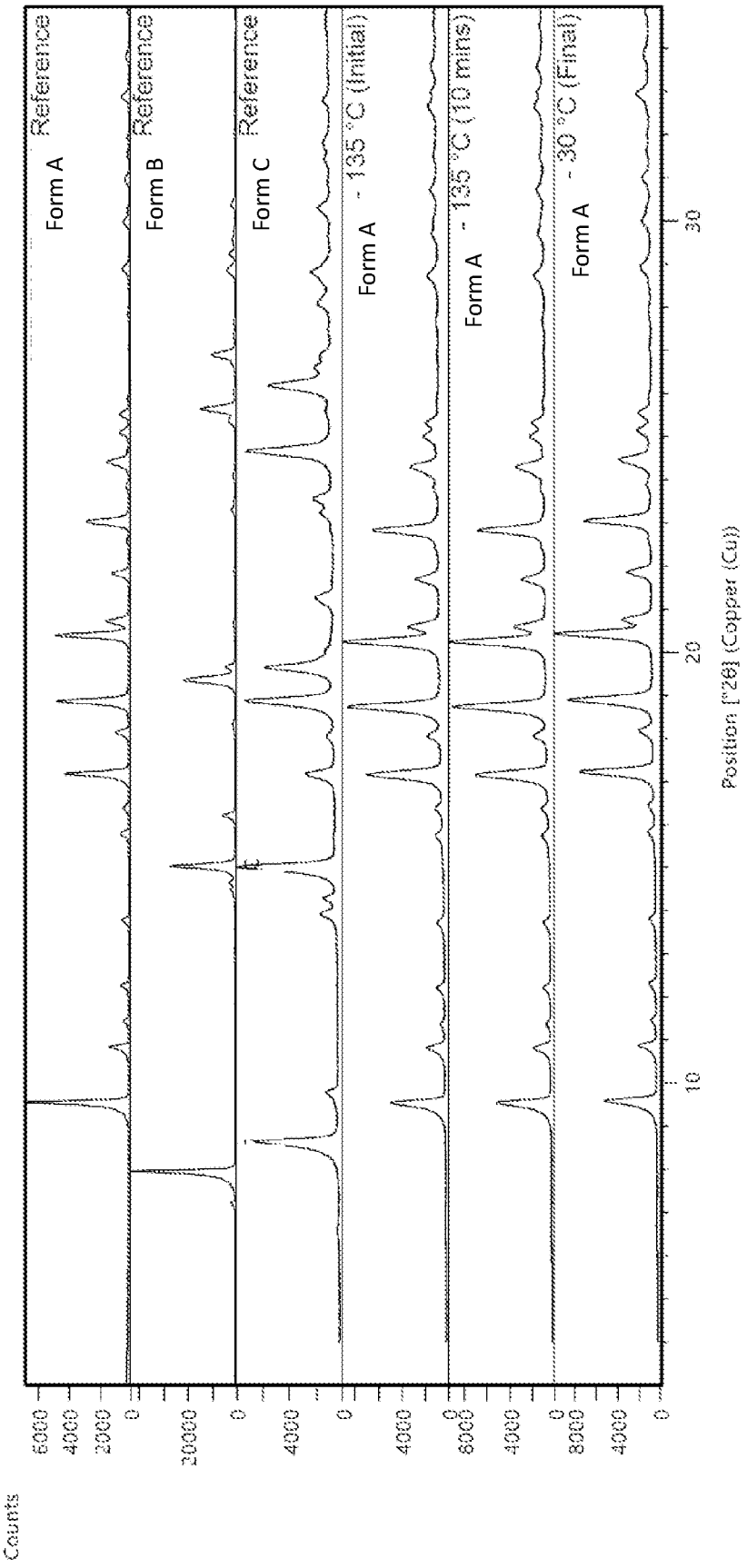
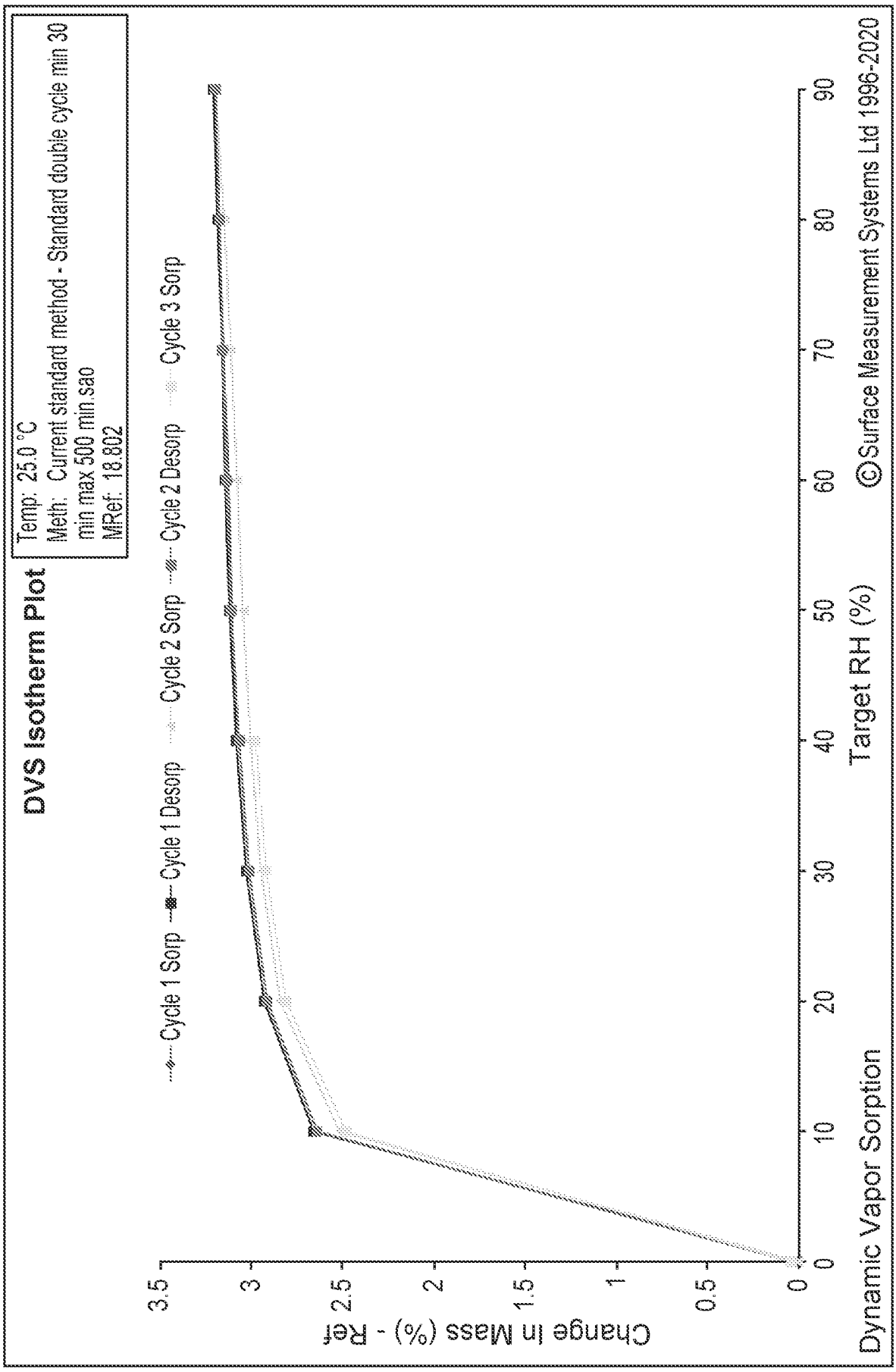

Reference
Form A
Reference
Form B
Reference
Form C
Form A - 135 °C (Initial)
Form A - 135 °C (10 mins)
Form A - 30 °C (Final)
Counts
Position [°2θ] (Copper (Cu))
10
20
30

FIG. 15


DVS Isotherm Plot
Temp: 25.0 °C
Meth: Current standard method - Standard double cycle min 30 min max 500 min sao
MRef: 18.802
Cycle 1 Sorp
Cycle 1 Desorp
Cycle 2 Sorp
Cycle 2 Desorp
Cycle 3 Sorp
Change in Mass (%) - Ref
3.5
3
2.5
2
1.5
1
0.5
0
0
10
20
30
40
50
60
70
80
90
Target RH (%)
Dynamic Vapor Sorption
©Surface Measurement Systems Ltd 1996-2020

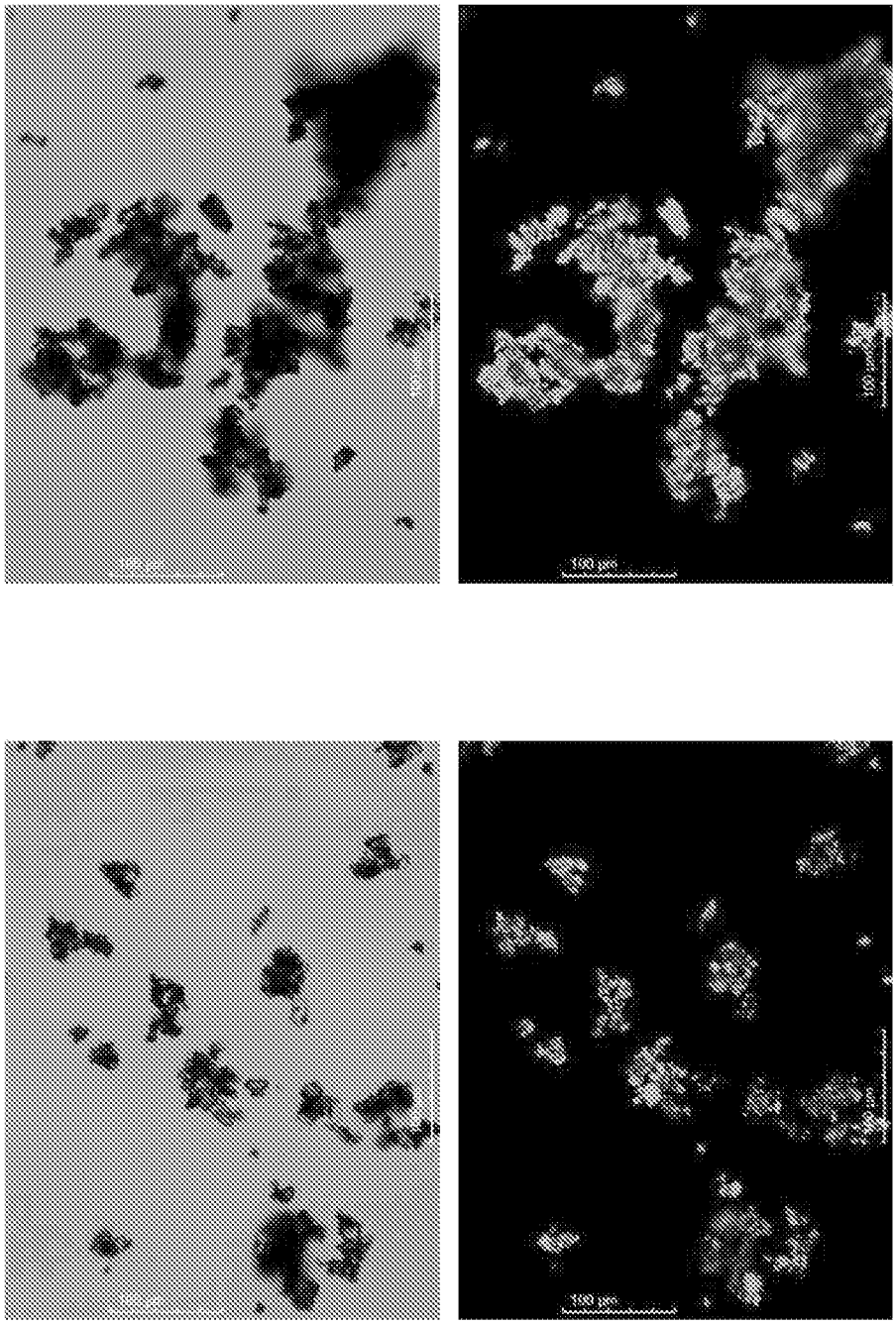


FIG. 16

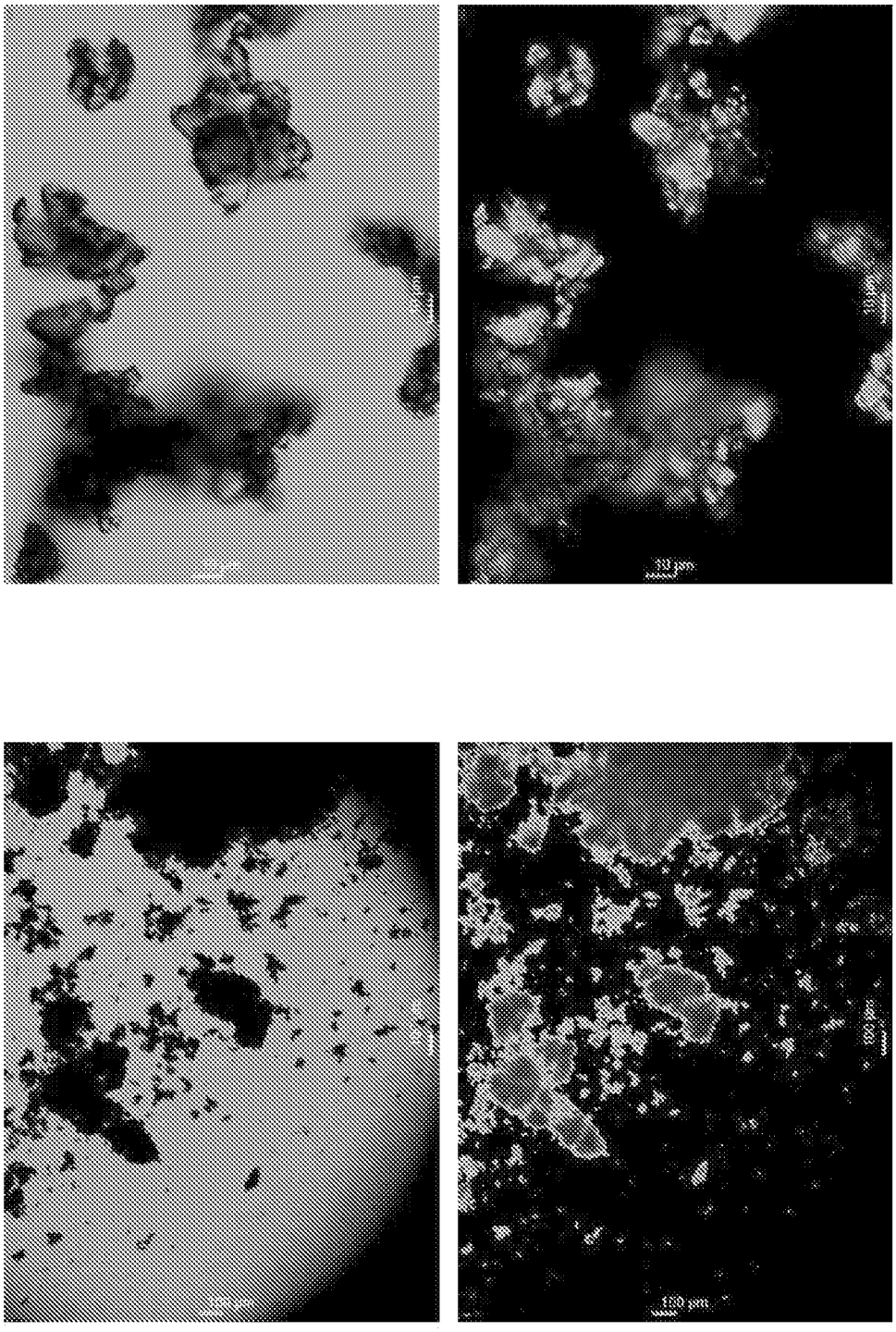


FIG. 17

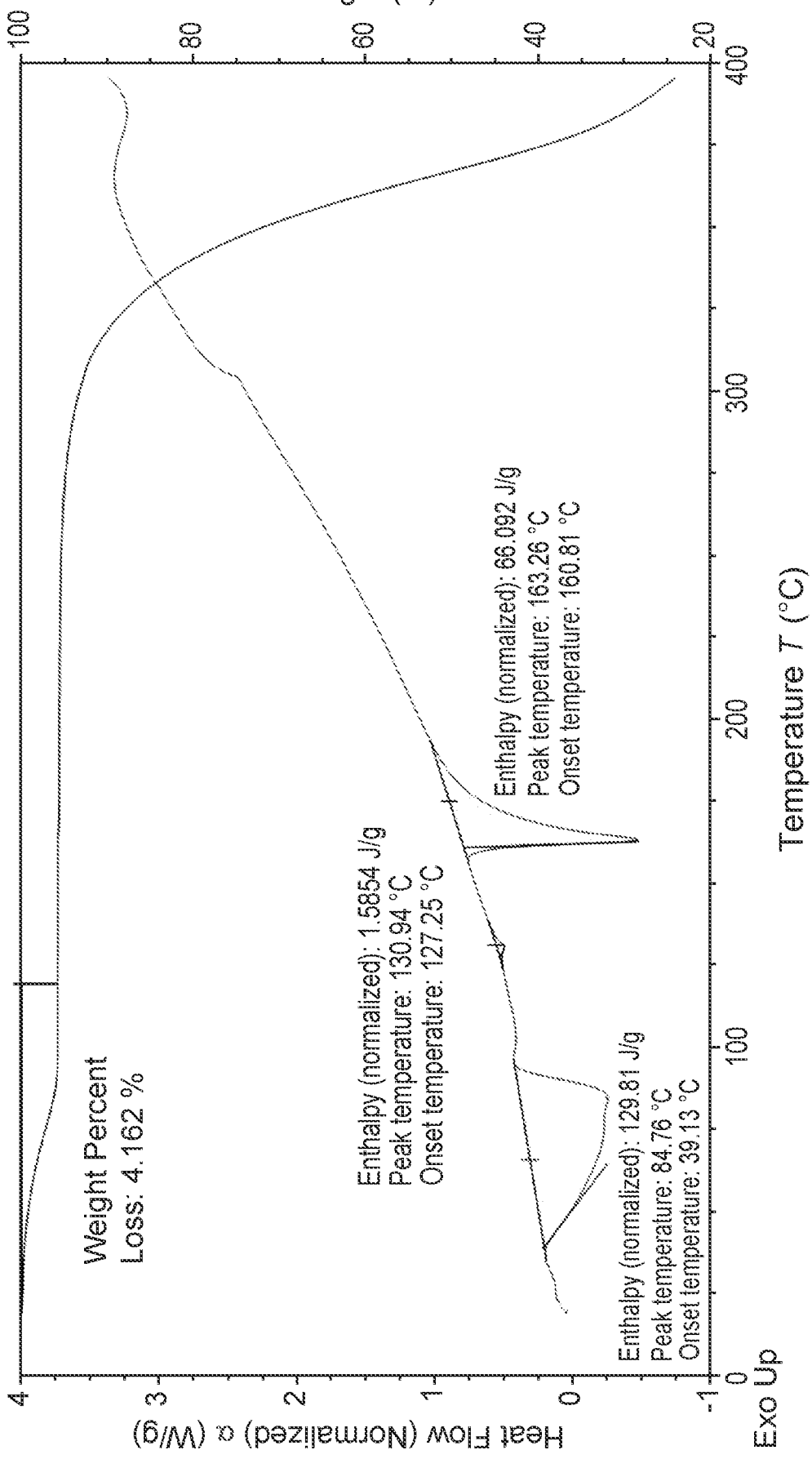
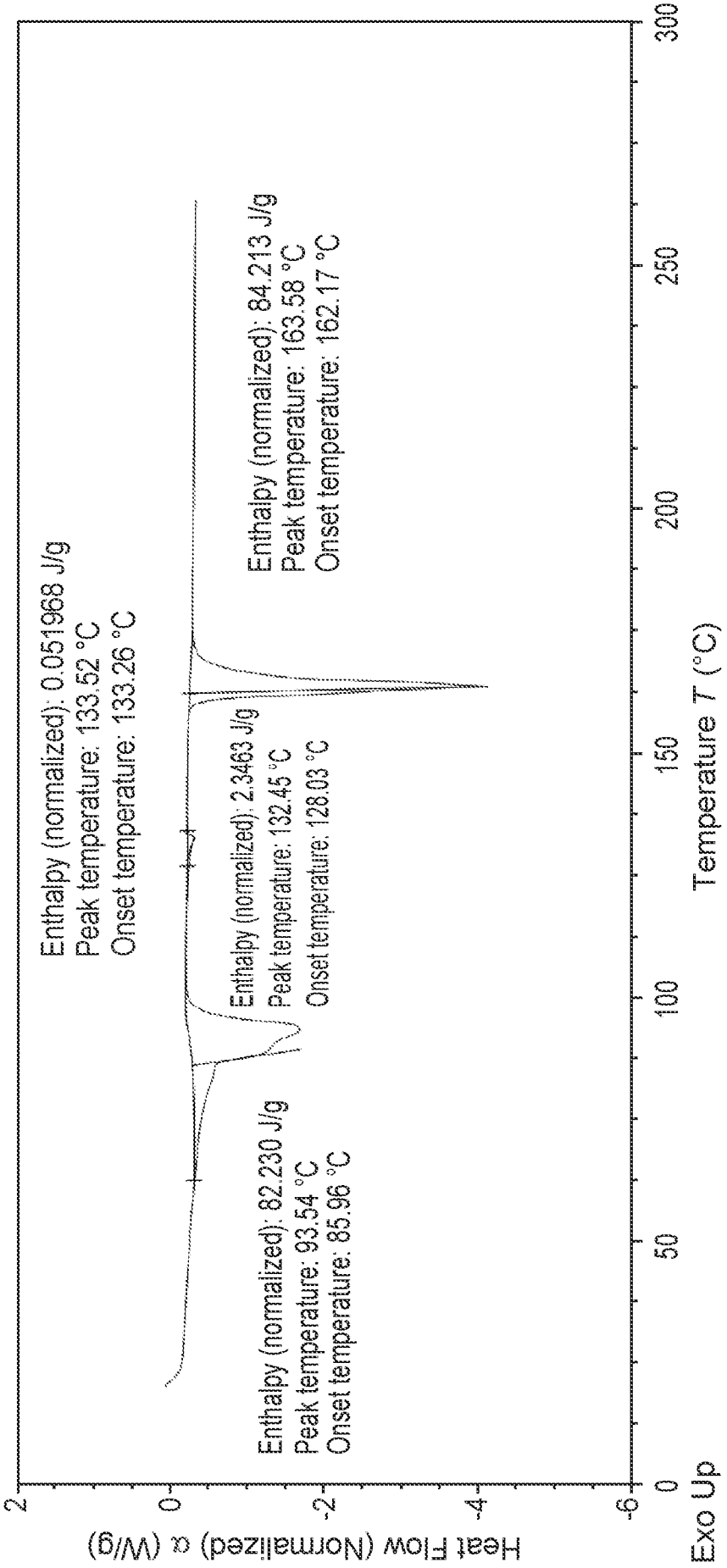

Weight (%)
100
80
60
40
20
Weight Percent
Loss: 4.162 %
Enthalpy (normalized): 66.092 J/g
Peak temperature: 163.26 °C
Onset temperature: 160.81 °C
Enthalpy (normalized): 1.5854 J/g
Peak temperature: 130.94 °C
Onset temperature: 127.25 °C
Enthalpy (normalized): 129.81 J/g
Peak temperature: 84.76 °C
Onset temperature: 39.13 °C
Heat Flow (Normalized) α (W/g)
4
3
2
1
0
-1
Exo Up
0
100
200
300
400
Temperature T (°C)

FIG. 18

FIG. 19


Enthalpy (normalized): 0.051968 J/g
Peak temperature: 133.52 °C
Onset temperature: 133.26 °C
Enthalpy (normalized): 84.213 J/g
Peak temperature: 163.58 °C
Onset temperature: 162.17 °C
Enthalpy (normalized): 2.3463 J/g
Peak temperature: 132.45 °C
Onset temperature: 128.03 °C
Enthalpy (normalized): 82.230 J/g
Peak temperature: 93.54 °C
Onset temperature: 85.96 °C
Heat Flow (Normalized) α (W/g)
Exo Up
Temperature T (°C)
2
0
-2
-4
-6
0
50
100
150
200
250
300

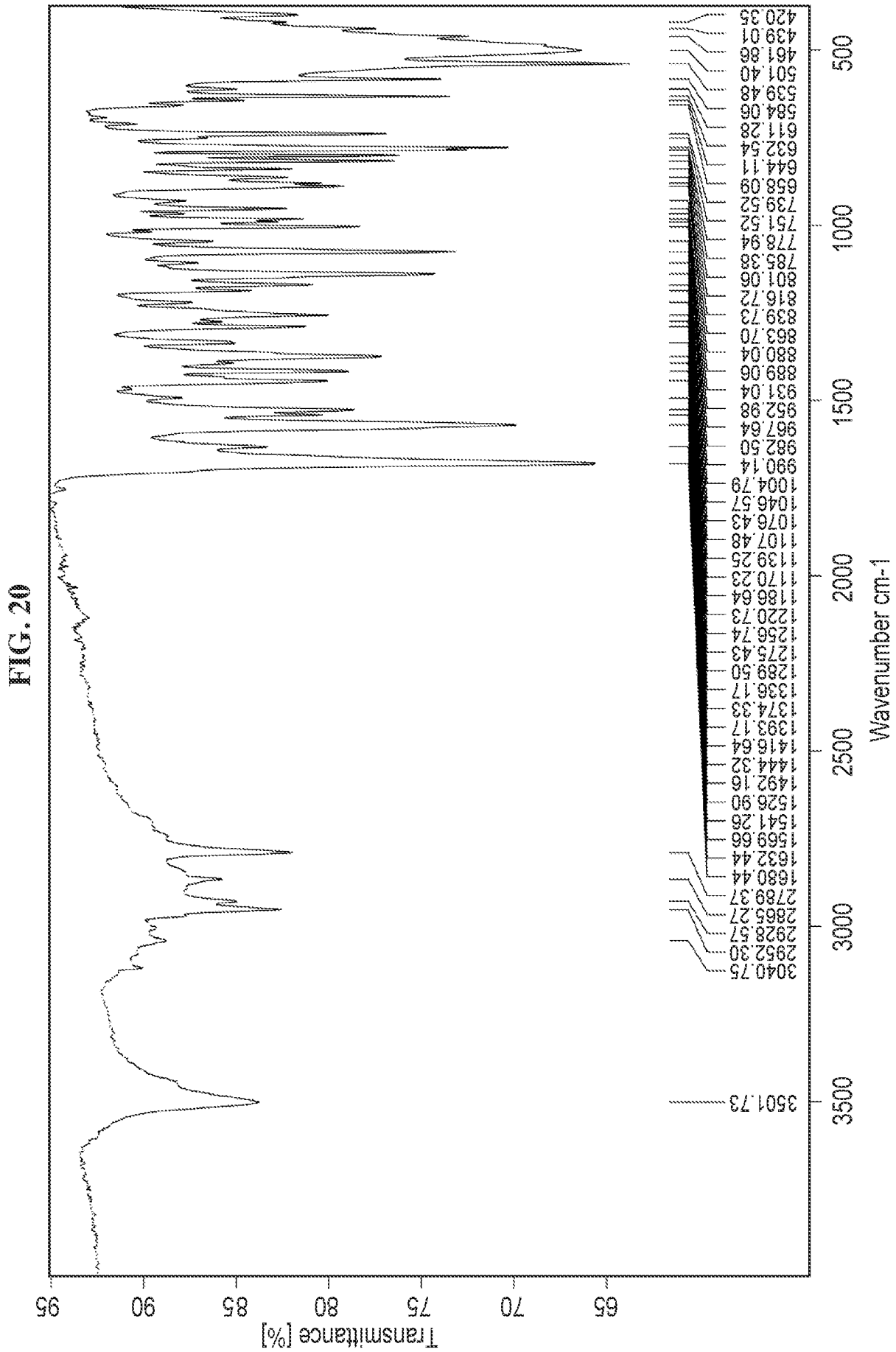

Transmittance [%]
95
90
85
80
75
70
65
Wavenumber cm-1
3500
3000
2500
2000
1500
1000
500
3501.73
3040.75
2952.30
2928.57
2865.27
2789.37
1680.44
1632.44
1569.66
1541.26
1526.90
1492.16
1444.32
1416.64
1393.17
1374.33
1336.17
1289.50
1275.43
1256.74
1220.73
1186.64
1170.23
1139.25
1107.48
1076.43
1046.57
1004.79
990.14
982.50
967.64
952.98
931.04
889.06
880.04
863.70
839.73
816.72
801.06
785.38
778.94
751.52
739.52
658.09
644.11
632.54
611.28
584.06
539.48
501.40
461.86
439.01
420.35

FIG. 20

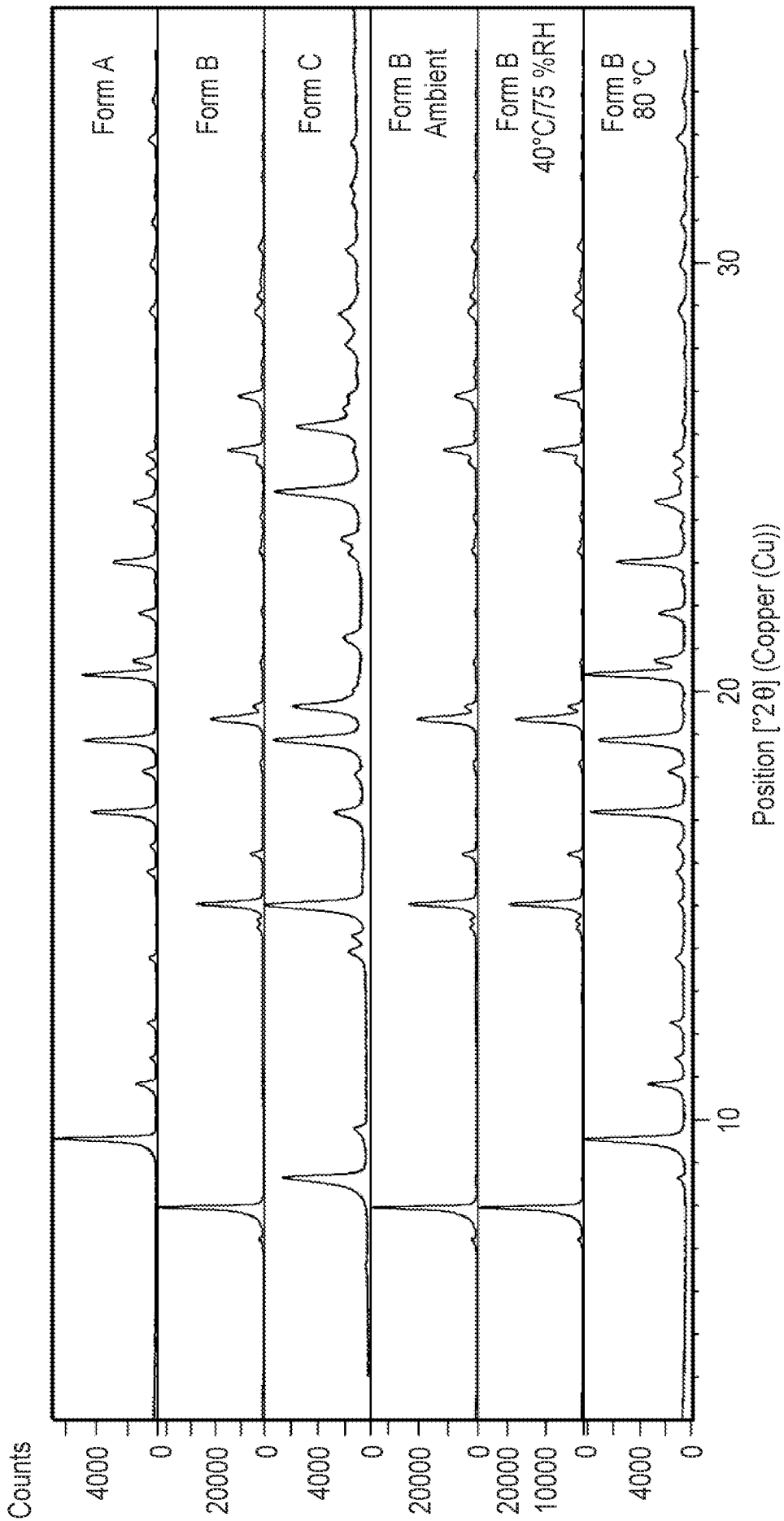

Form A
Form B
Form C
Form B Ambient
Form B 40°C/75 %RH
Form B 80 °C
Counts
4000
0
20000
0
4000
0
20000
0
20000
10000
0
4000
0
10
20
30
Position [°2θ] (Copper (Cu))

FIG. 21

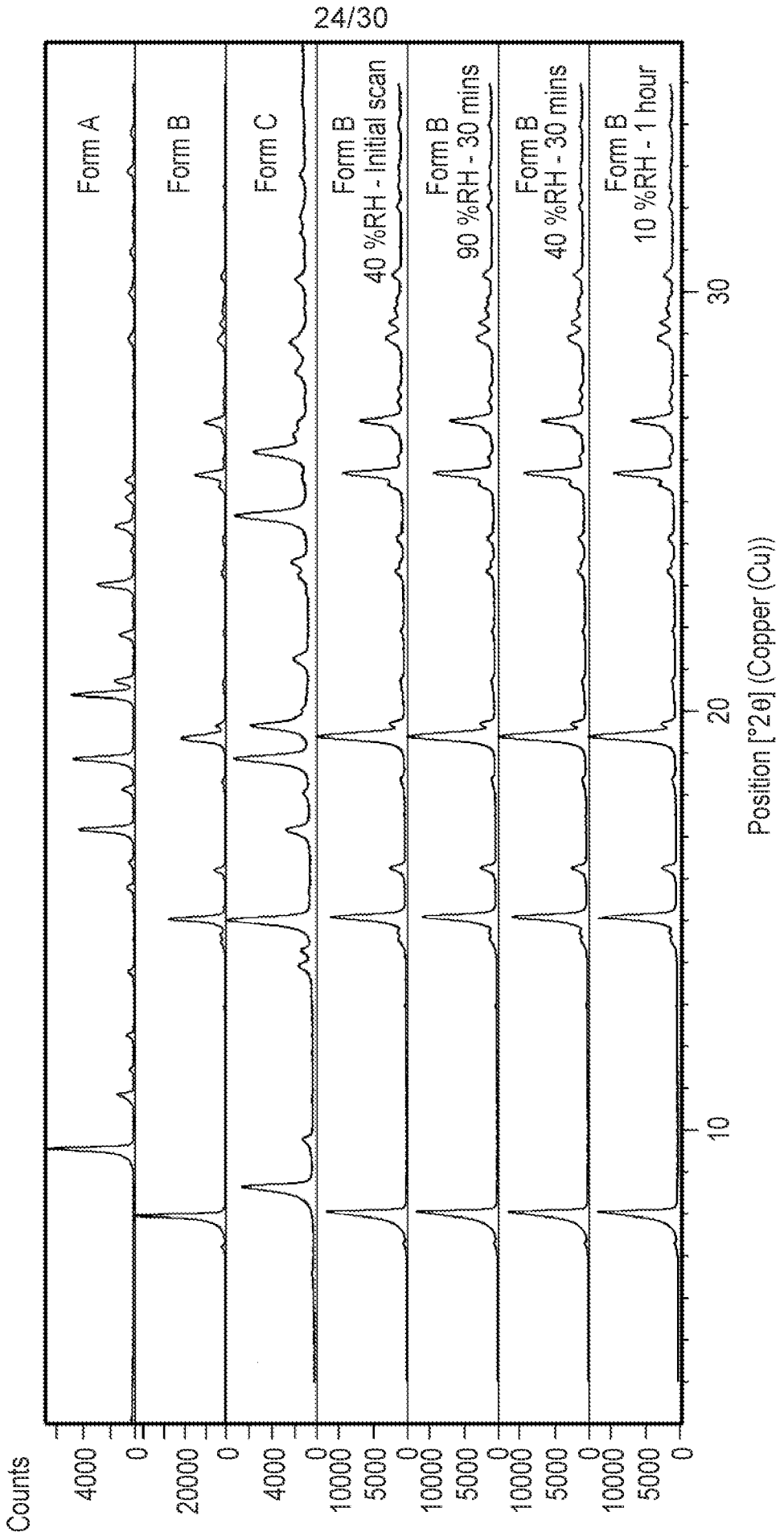
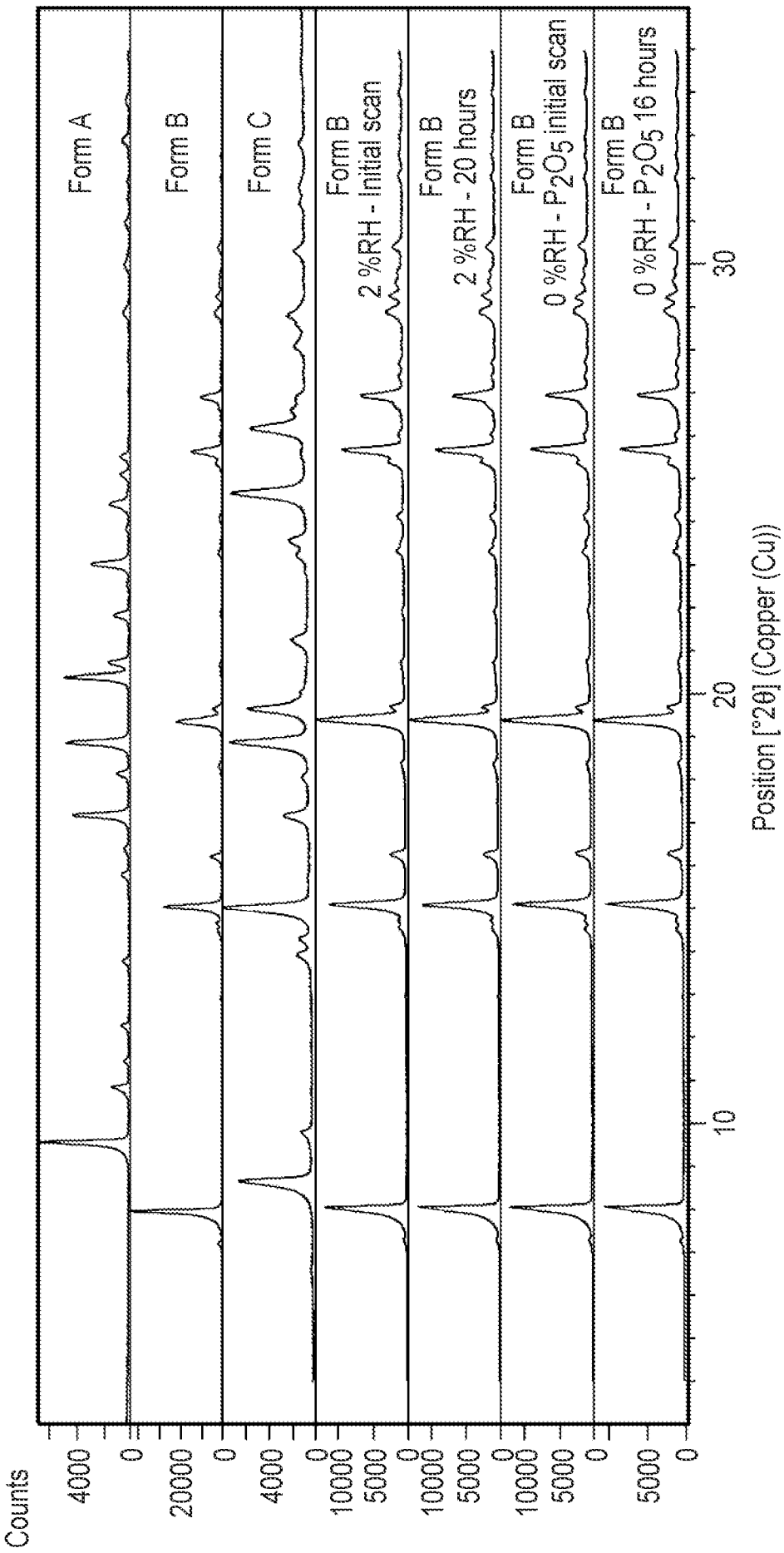

Form A
Form B
Form C
Form B
40 %RH - Initial scan
Form B
90 %RH - 30 mins
Form B
40 %RH - 30 mins
Form B
10 %RH - 1 hour
Counts
4000
0
20000
0
4000
0
10000
5000
0
10000
5000
0
10000
5000
0
10000
5000
0
10
20
30
Position [°2θ] (Copper (Cu))

FIG. 22

FIG. 23


Form A
Form B
Form C
Form B
2 %RH - Initial scan
Form B
2 %RH - 20 hours
Form B
0 %RH - P2O5 initial scan
Form B
0 %RH - P2O5 16 hours
Counts
4000
0
20000
0
4000
0
10000
5000
0
10000
5000
0
10000
5000
0
5000
0
10
20
30
Position [°2θ] (Copper (Cu))

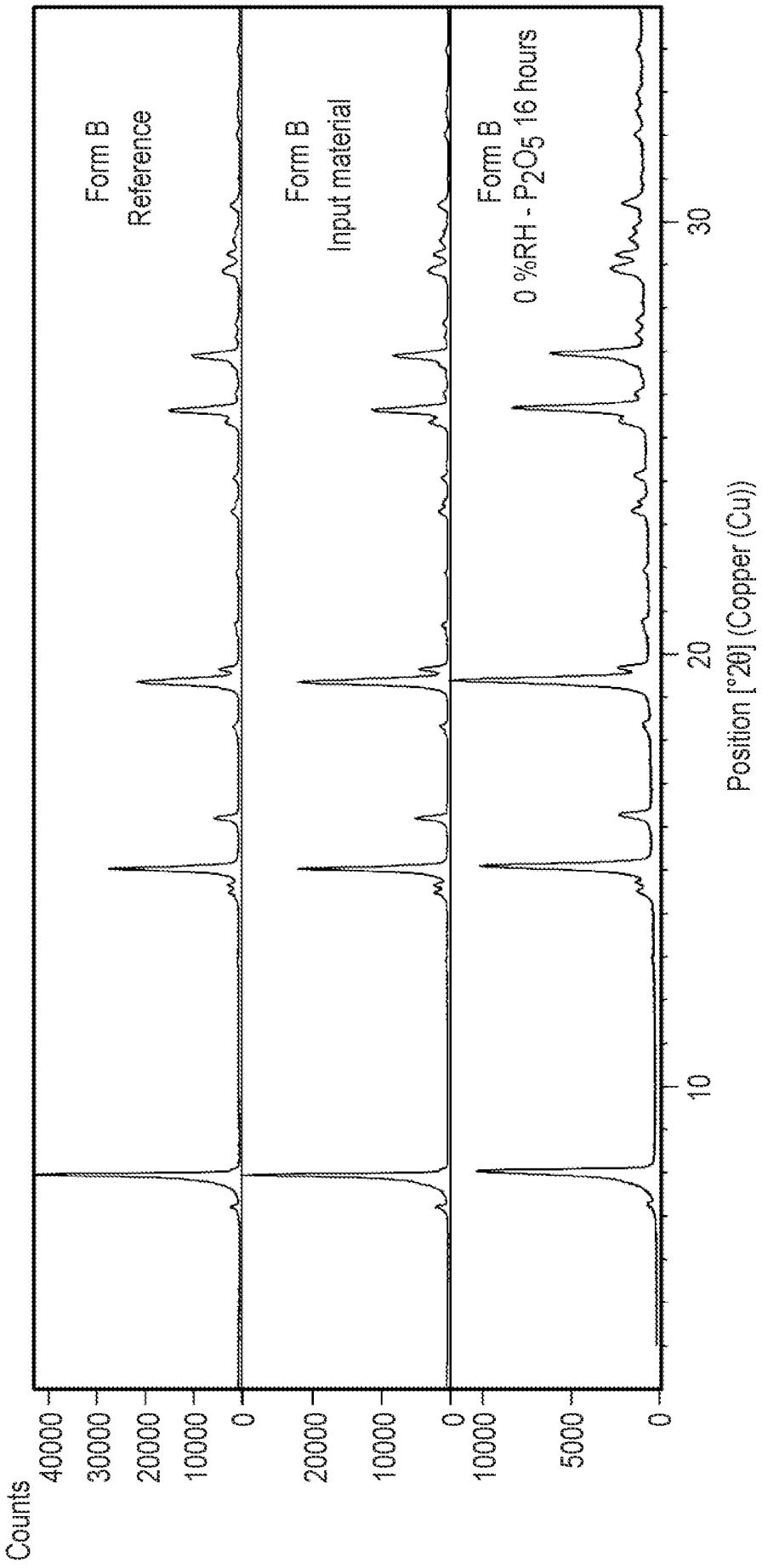

Form B
Reference
Form B
Input material
Form B
0 %RH - P_2O_5 16 hours
Counts
40000
30000
20000
10000
0
20000
10000
0
10000
5000
0
10
20
30
Position [°2θ] (Copper (Cu))

FIG. 24

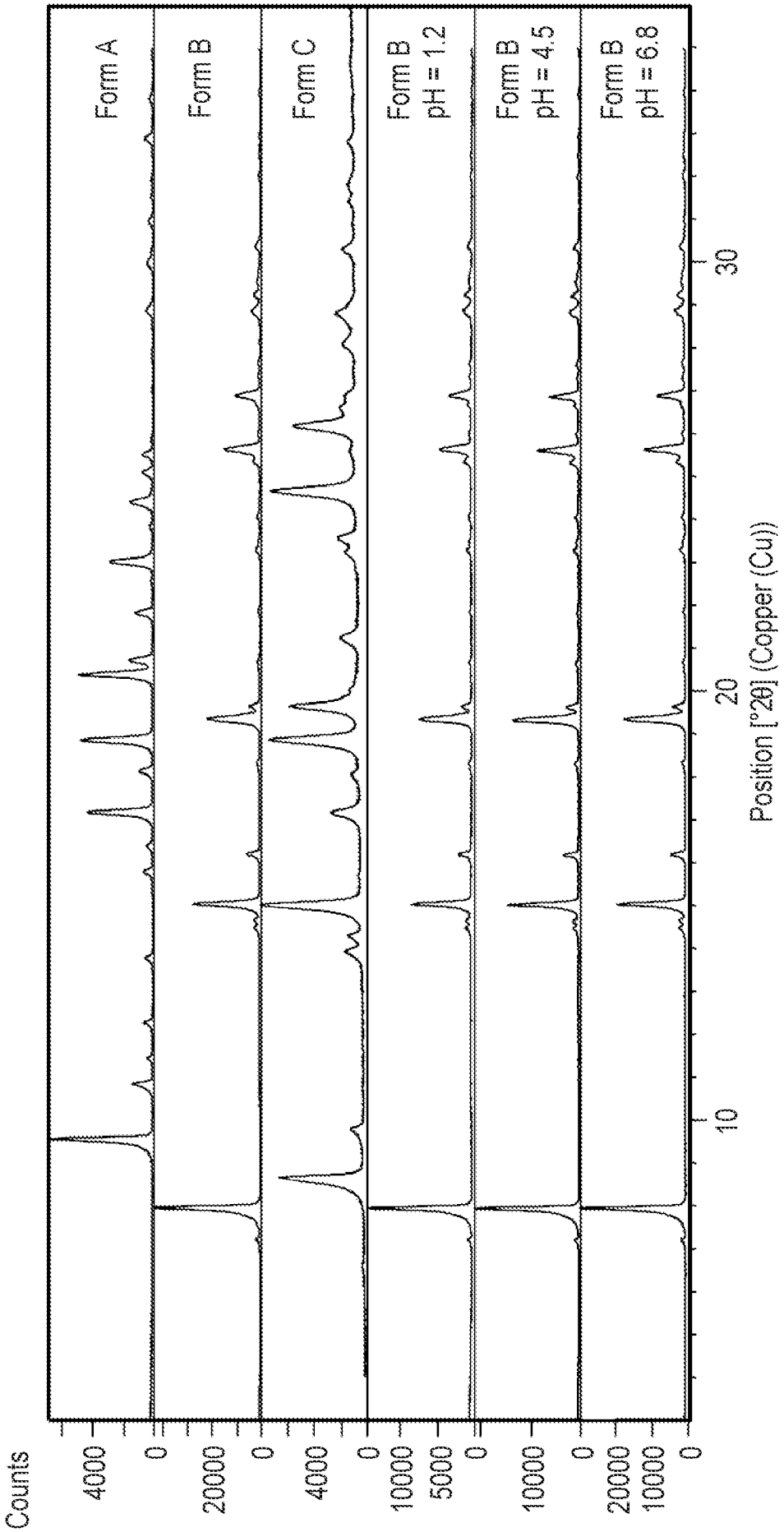

Form A
Form B
Form C
Form B pH = 1.2
Form B pH = 4.5
Form B pH = 6.8
Counts
4000
0
20000
0
4000
0
10000
5000
0
10000
0
20000
10000
0
10
20
30
Position [°2θ] (Copper (Cu))

FIG. 25

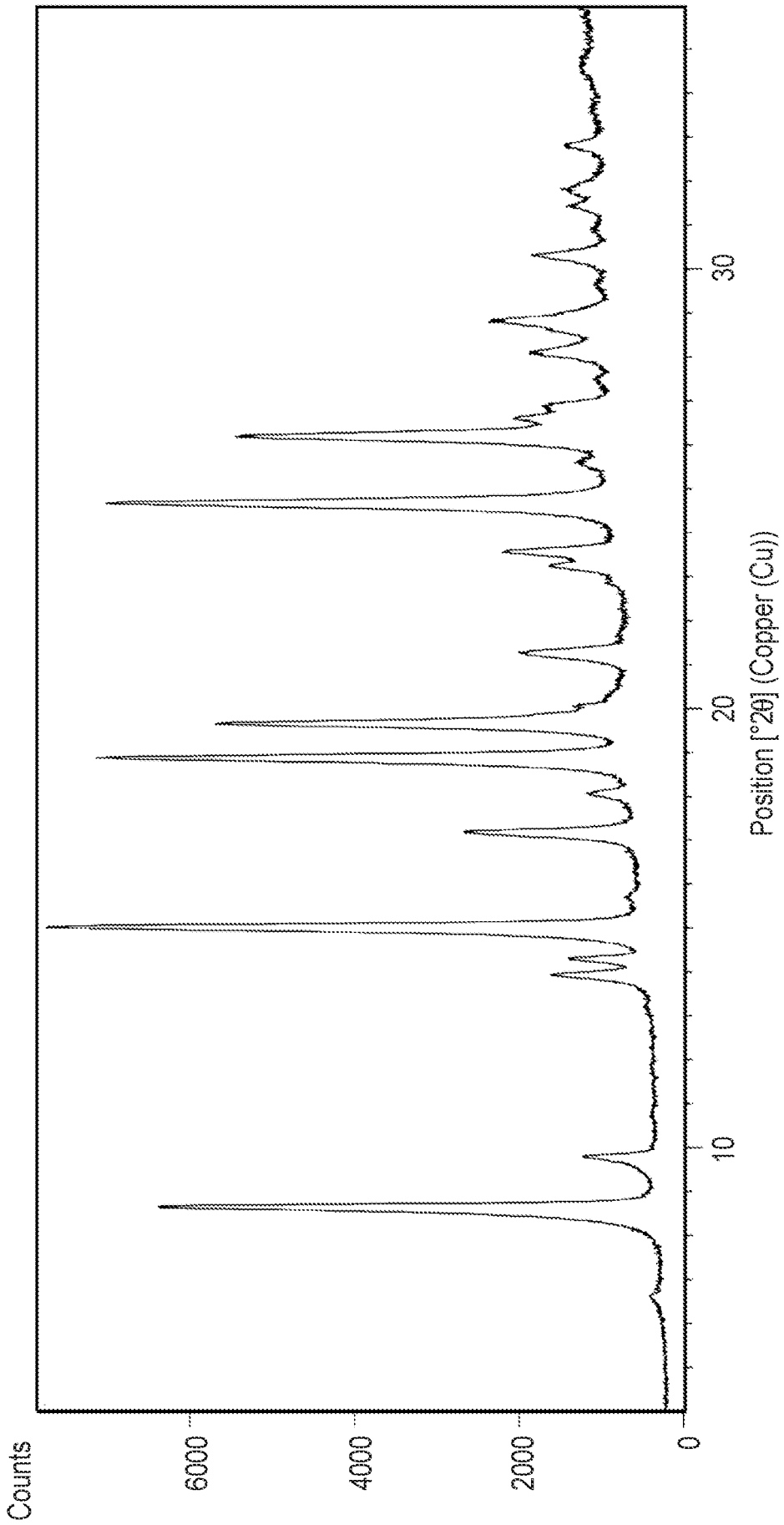
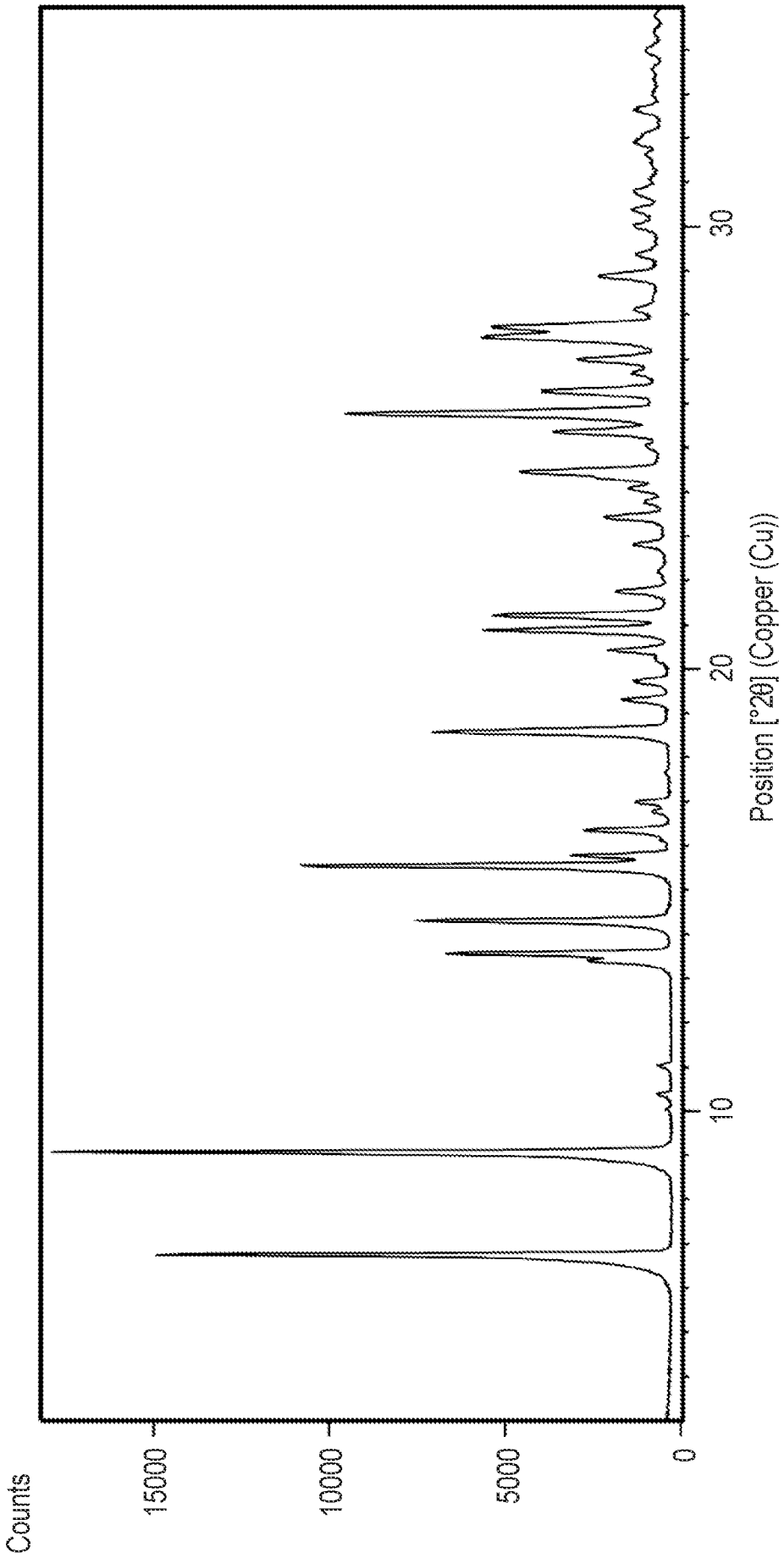


FIG. 26

FIG. 27



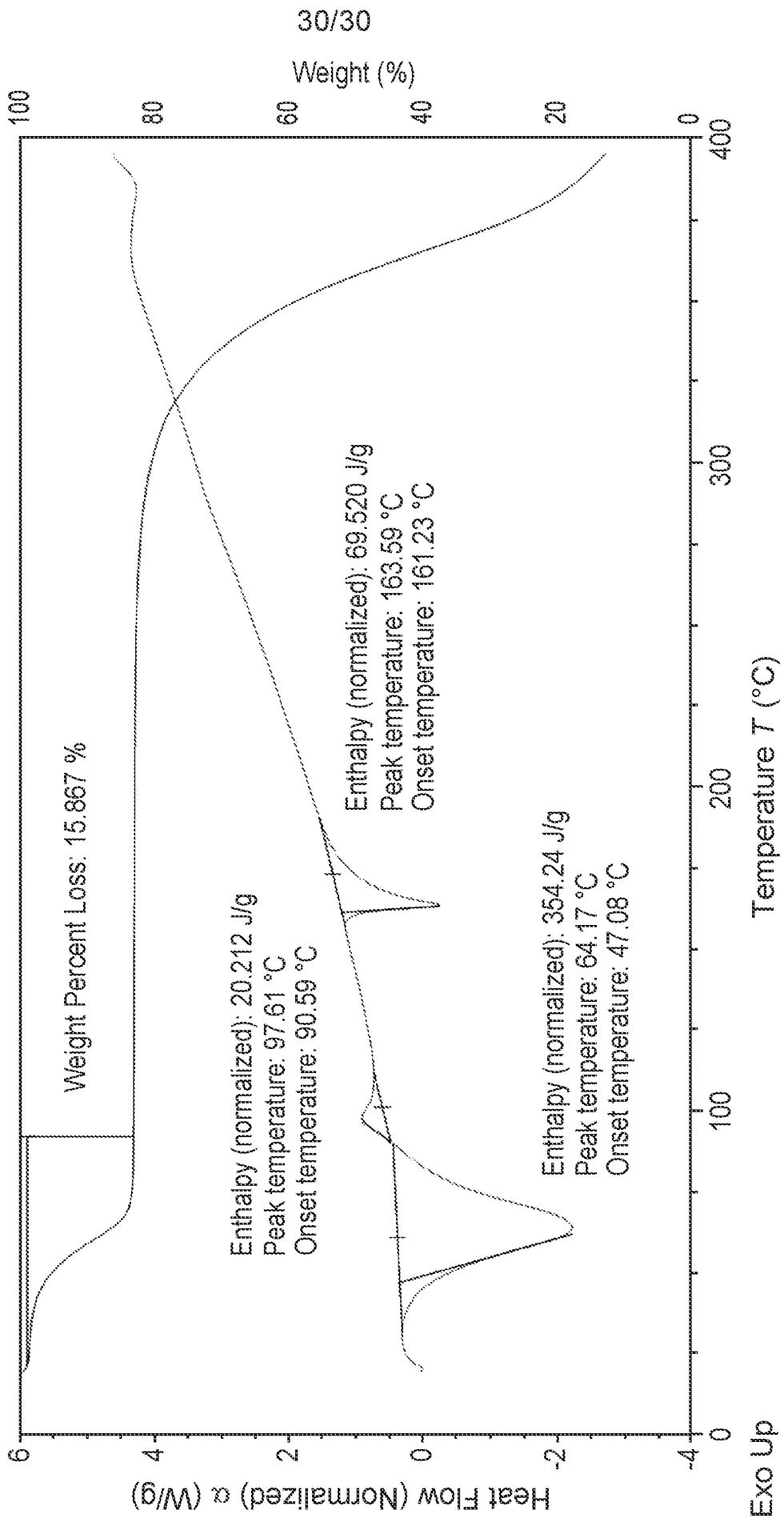

30/30
Weight (%)
100
80
60
40
20
0
Weight Percent Loss: 15.867 %
Enthalpy (normalized): 20.212 J/g
Peak temperature: 97.61 °C
Onset temperature: 90.59 °C
Enthalpy (normalized): 69.520 J/g
Peak temperature: 163.59 °C
Onset temperature: 161.23 °C
Enthalpy (normalized): 354.24 J/g
Peak temperature: 64.17 °C
Onset temperature: 47.08 °C
Heat Flow (Normalized) α (W/g)
6
4
2
0
-2
-4
Exo Up
0
100
200
300
400
Temperature T (°C)

FIG. 28