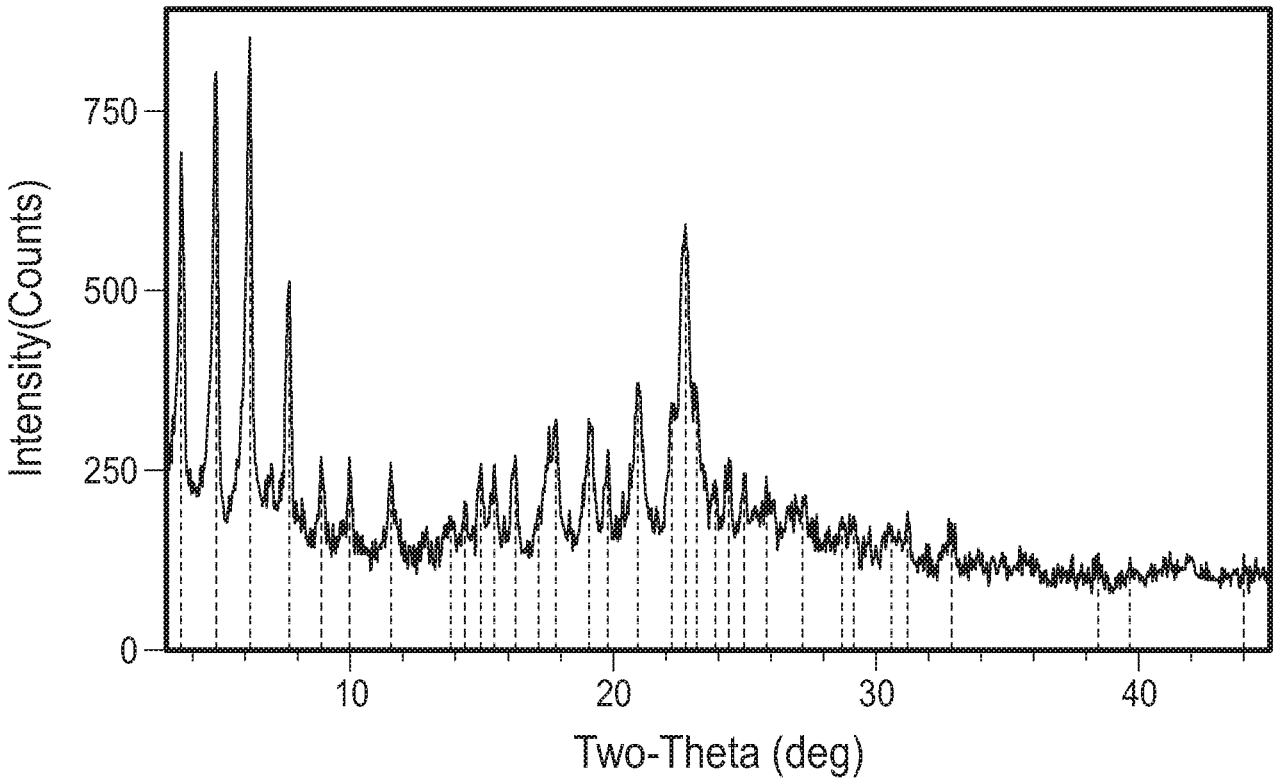

FIG. 1

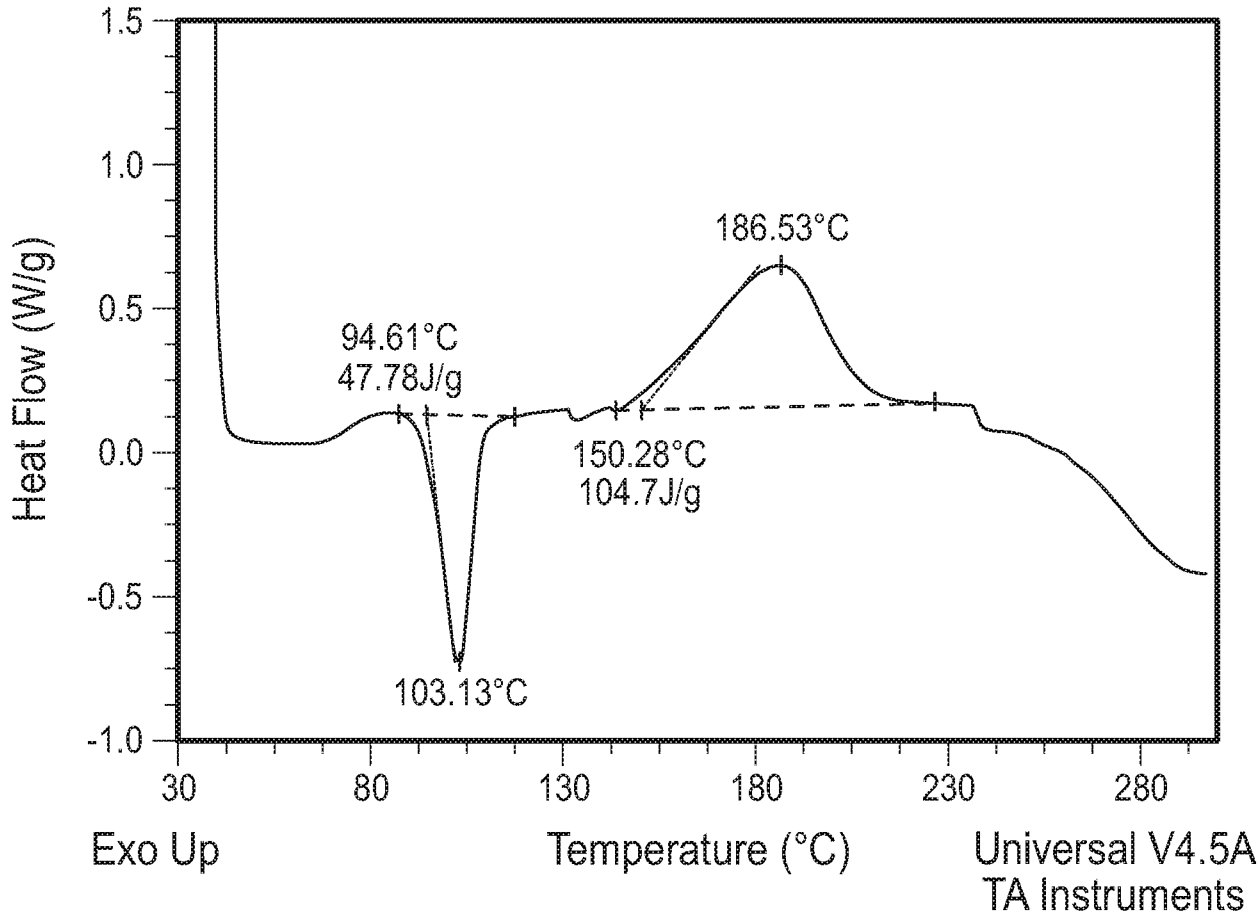
1.5
1.0
0.5
0.0
-0.5
-1.0
Heat Flow (W/g)
186.53°C
94.61°C
47.78J/g
150.28°C
104.7J/g
103.13°C
30
80
130
180
230
280
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 2

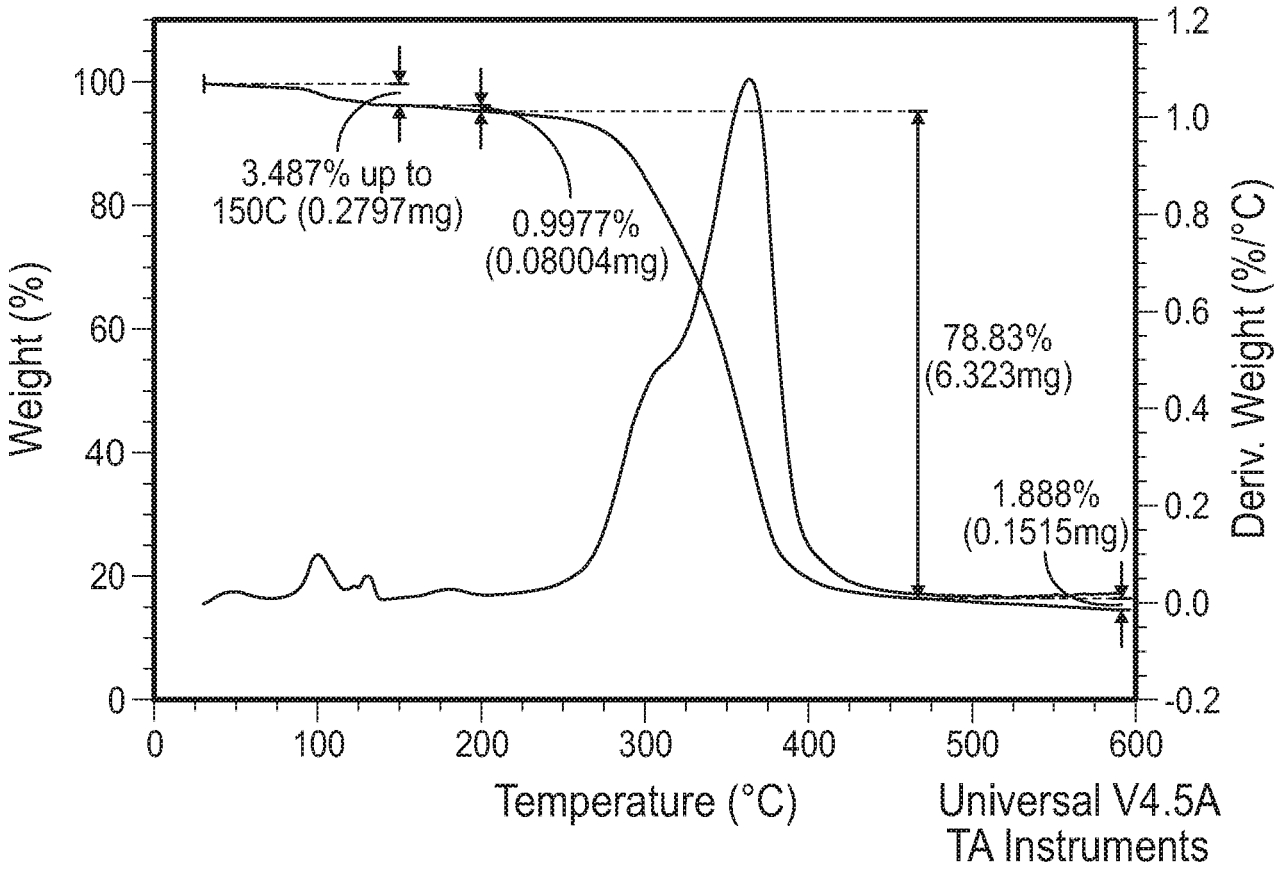
Weight (%)
Deriv. Weight (%/°C)
Temperature (°C)
3.487% up to
150C (0.2797mg)
0.9977%
(0.08004mg)
78.83%
(6.323mg)
1.888%
(0.1515mg)
Universal V4.5A
TA Instruments

FIG. 3

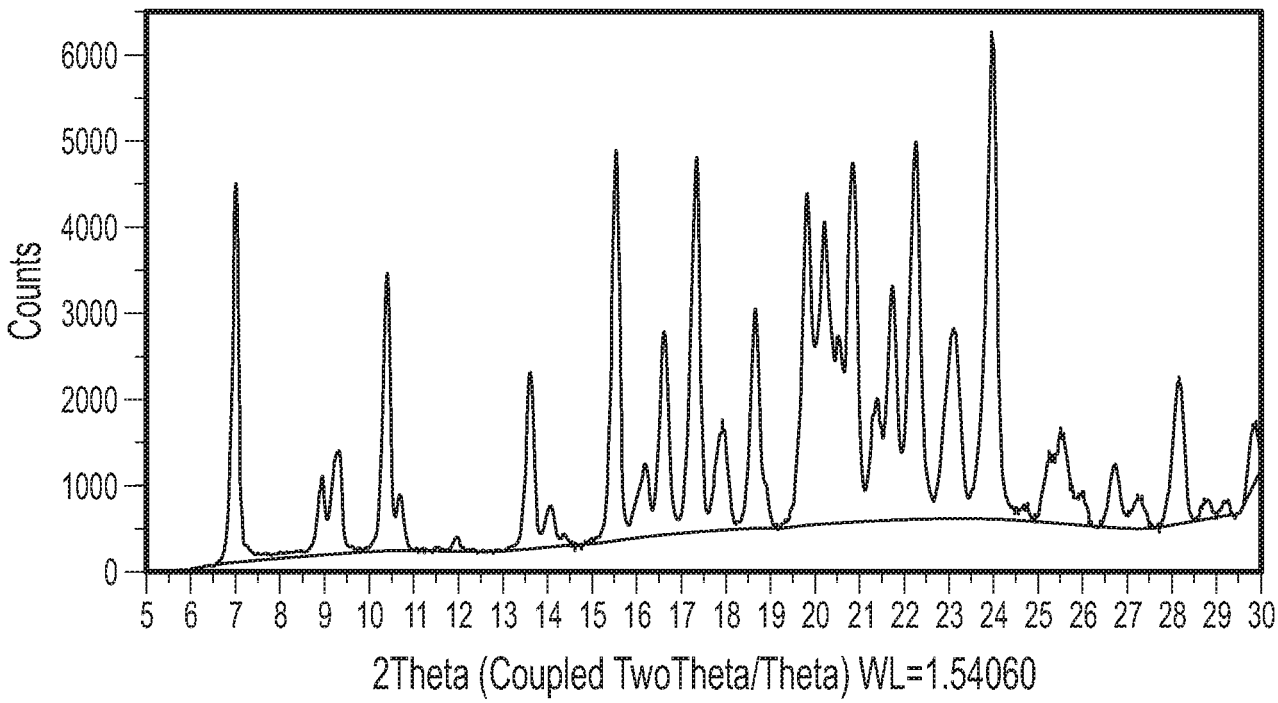
Counts
6000
5000
4000
3000
2000
1000
0
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2Theta (Coupled TwoTheta/Theta) WL=1.54060

FIG. 4

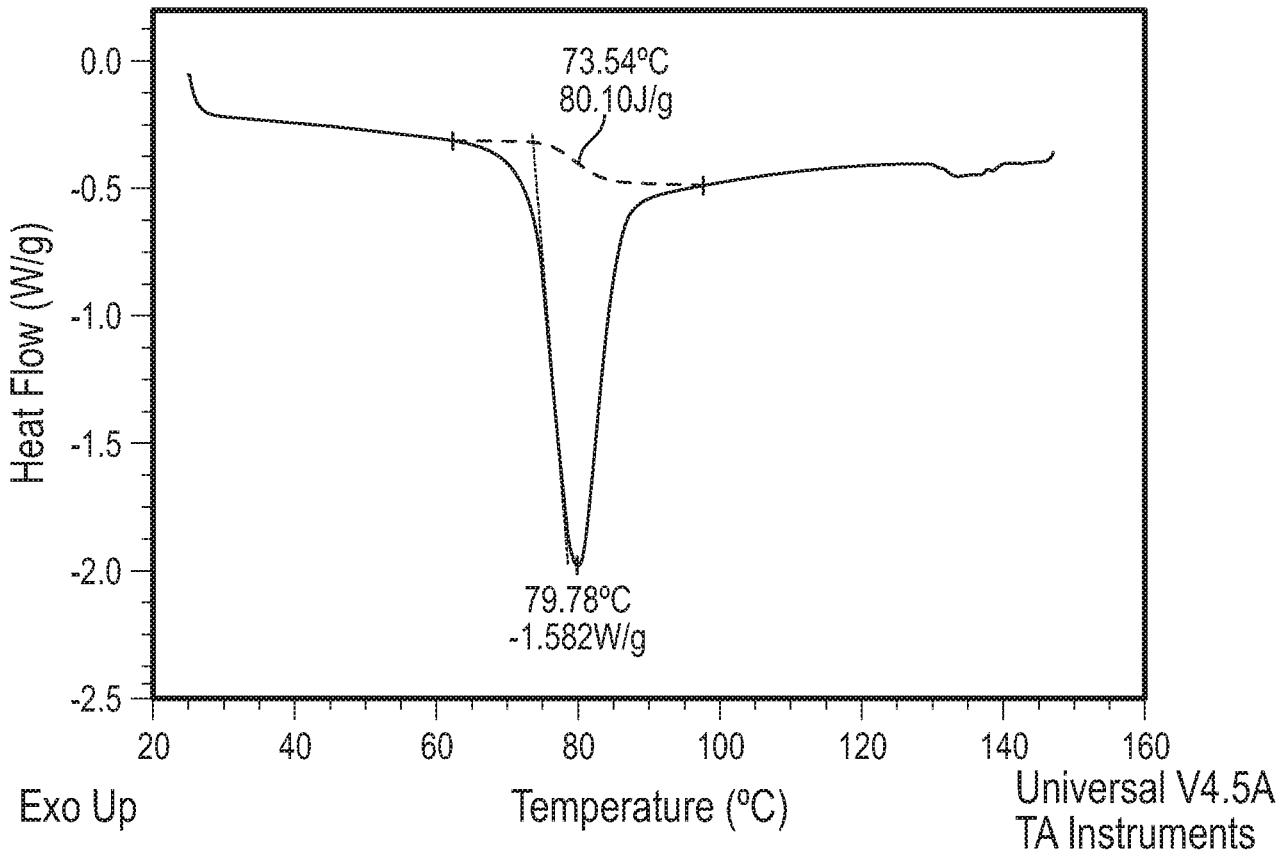
73.54°C
80.10J/g
79.78°C
-1.582W/g
Heat Flow (W/g)
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
20
40
60
80
100
120
140
160
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 5

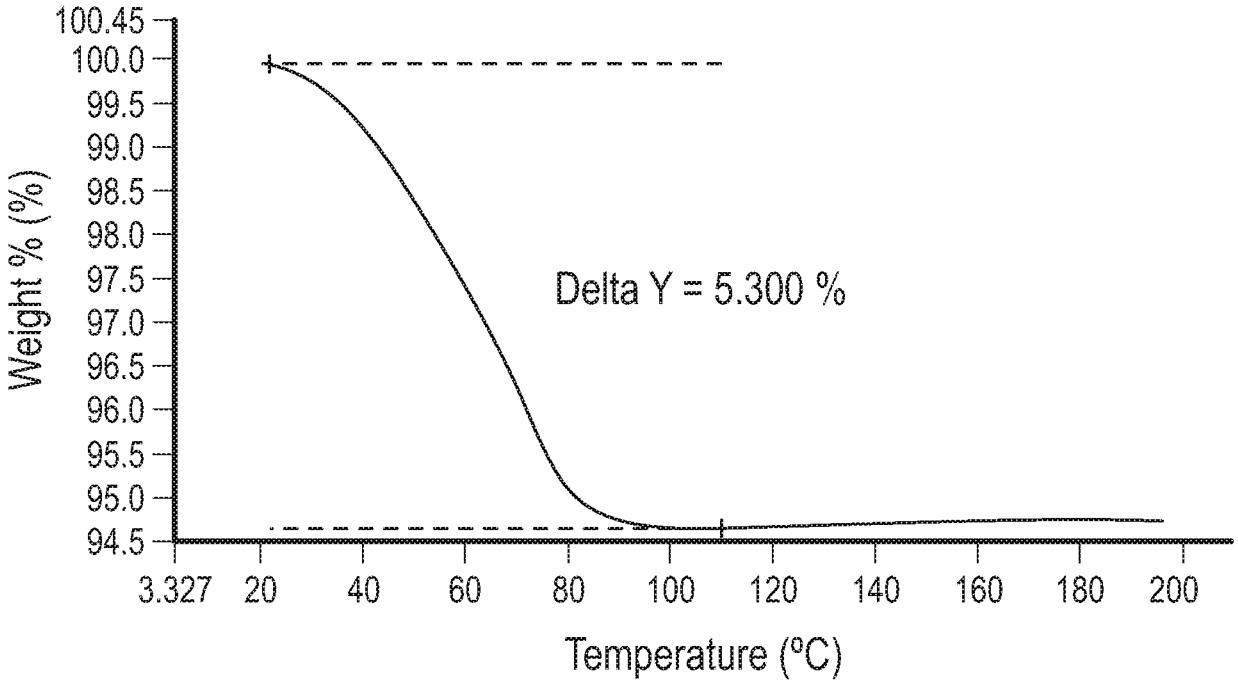
100.45
100.0
99.5
99.0
98.5
98.0
97.5
97.0
96.5
96.0
95.5
95.0
94.5
Weight % (%)
Delta Y = 5.300 %
3.327
20
40
60
80
100
120
140
160
180
200
Temperature (°C)

FIG. 6

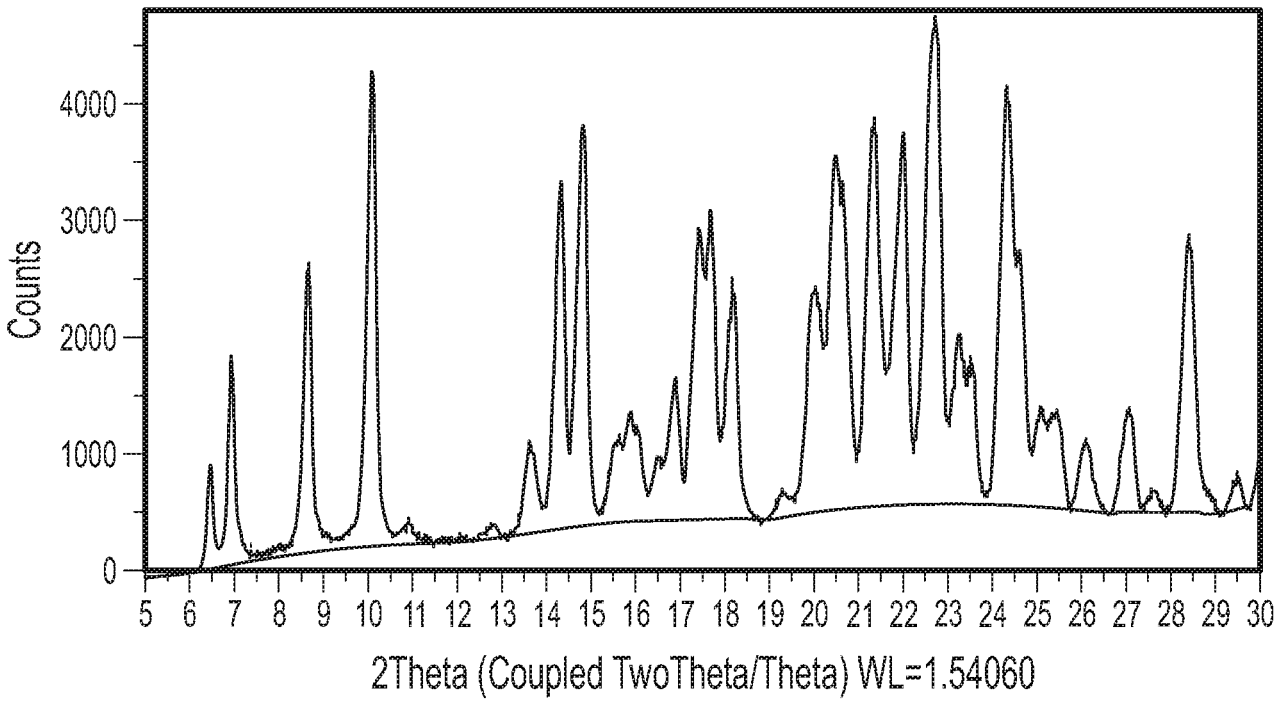
Counts
4000
3000
2000
1000
0
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2Theta (Coupled TwoTheta/Theta) WL=1.54060

FIG. 7

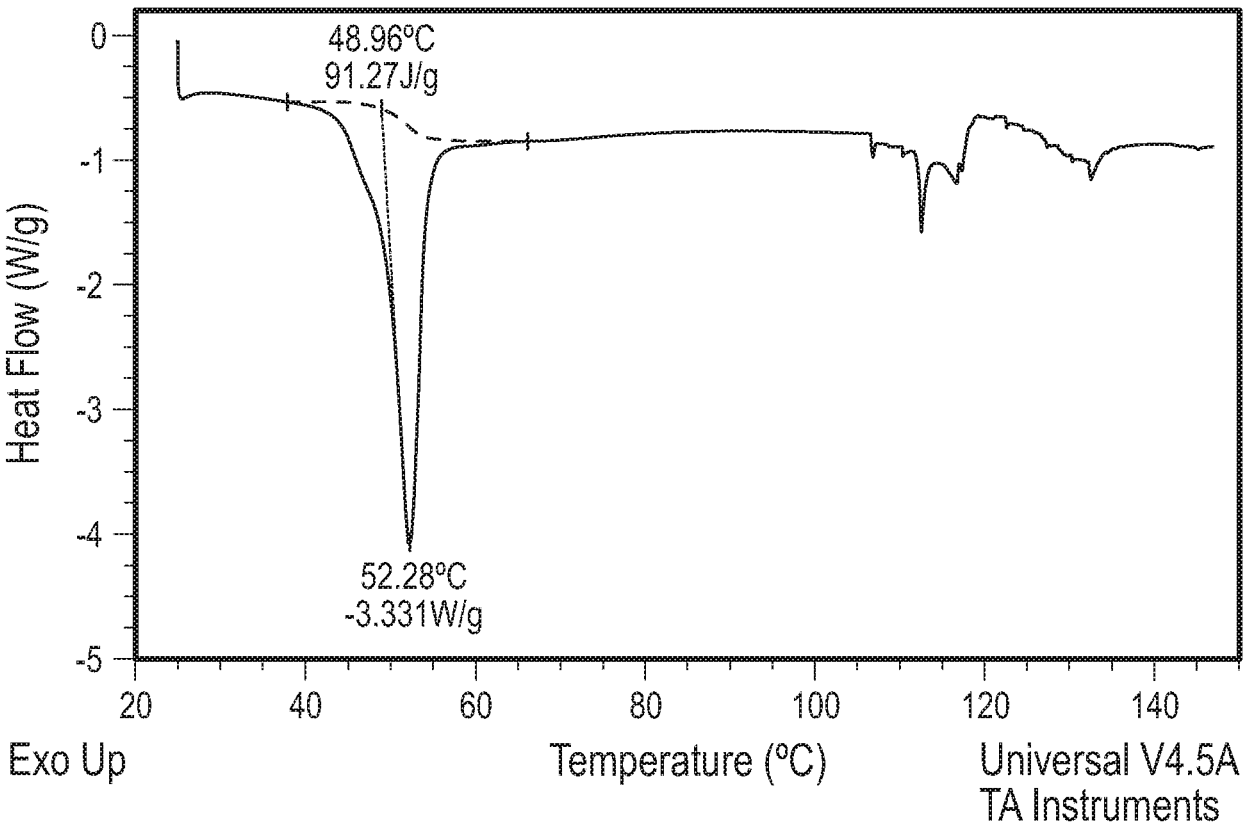
48.96°C
91.27J/g
52.28°C
-3.331W/g
Heat Flow (W/g)
0
-1
-2
-3
-4
-5
20
40
60
80
100
120
140
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 8

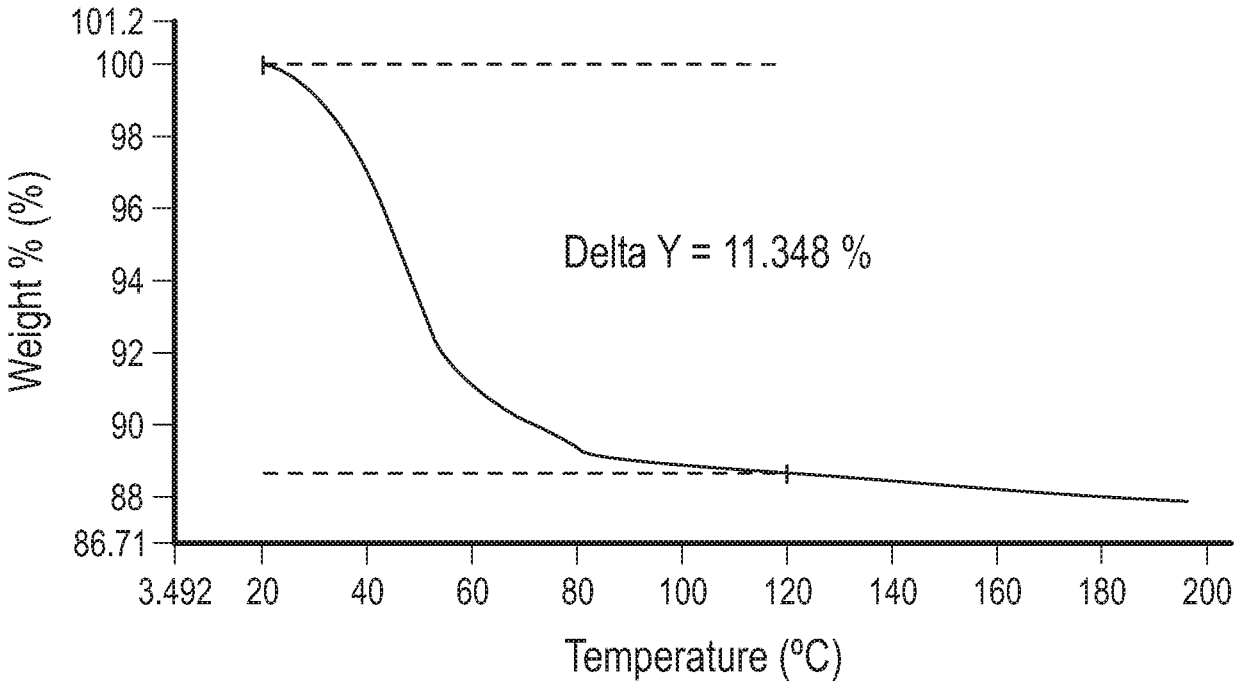
101.2
100
98
96
94
92
90
88
86.71
Weight % (%)
Delta Y = 11.348 %
3.492
20
40
60
80
100
120
140
160
180
200
Temperature (°C)

FIG. 9

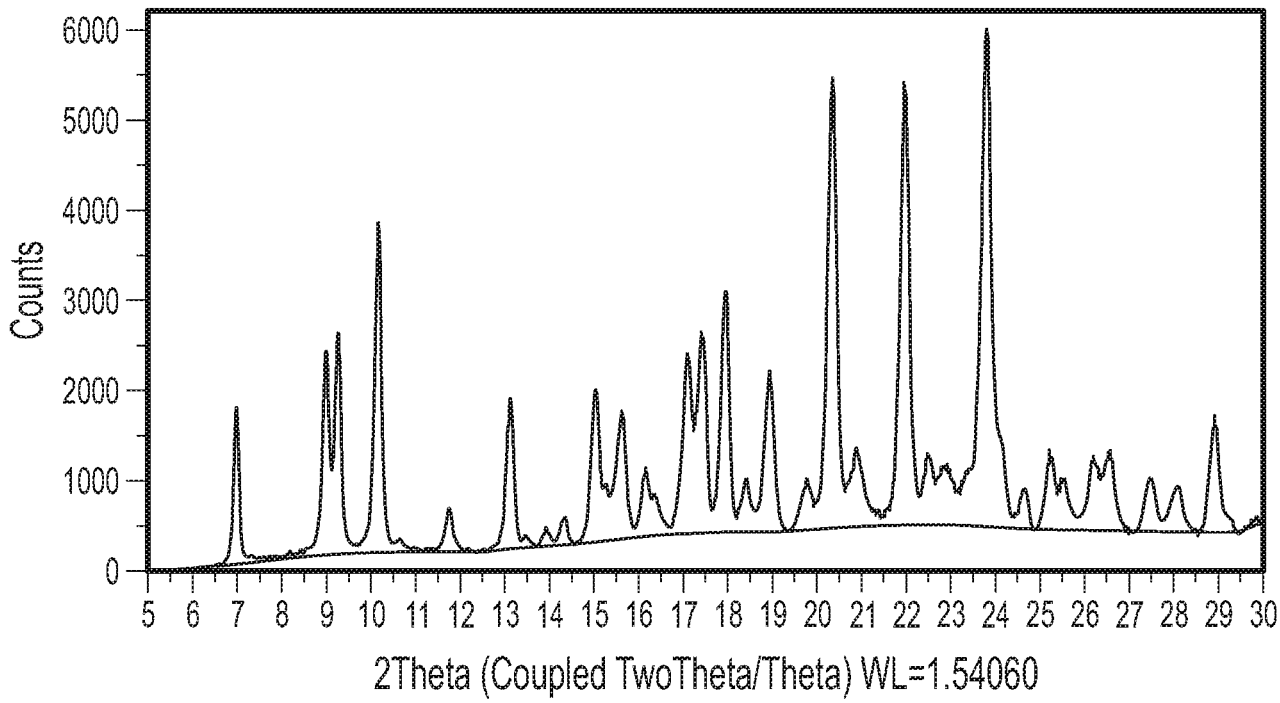
Counts
6000
5000
4000
3000
2000
1000
0
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2Theta (Coupled TwoTheta/Theta) WL=1.54060

FIG. 10

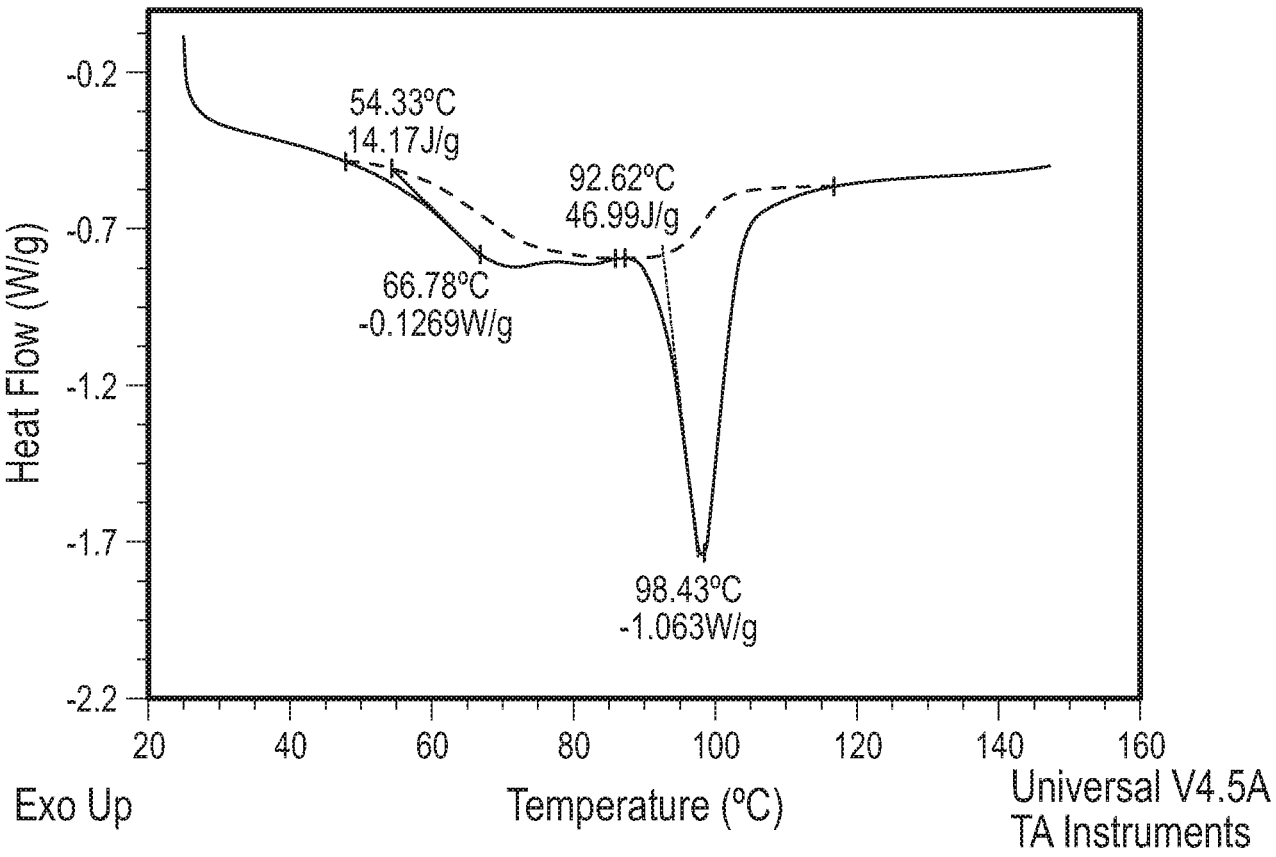
-0.2
-0.7
-1.2
-1.7
-2.2
Heat Flow (W/g)
54.33°C
14.17J/g
92.62°C
46.99J/g
66.78°C
-0.1269W/g
98.43°C
-1.063W/g
20
40
60
80
100
120
140
160
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG.11

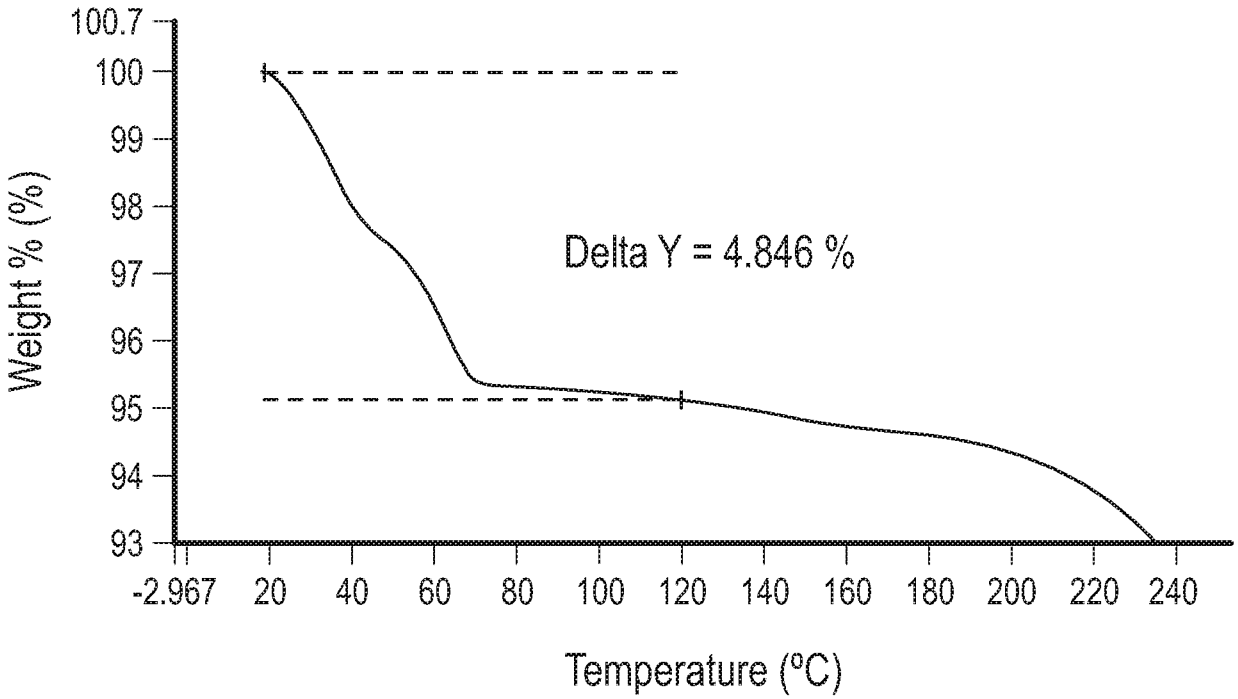
100.7
100
99
98
97
96
95
94
93
Weight % (%)
Delta Y = 4.846 %
-2.967
20
40
60
80
100
120
140
160
180
200
220
240
Temperature (°C)

FIG. 12

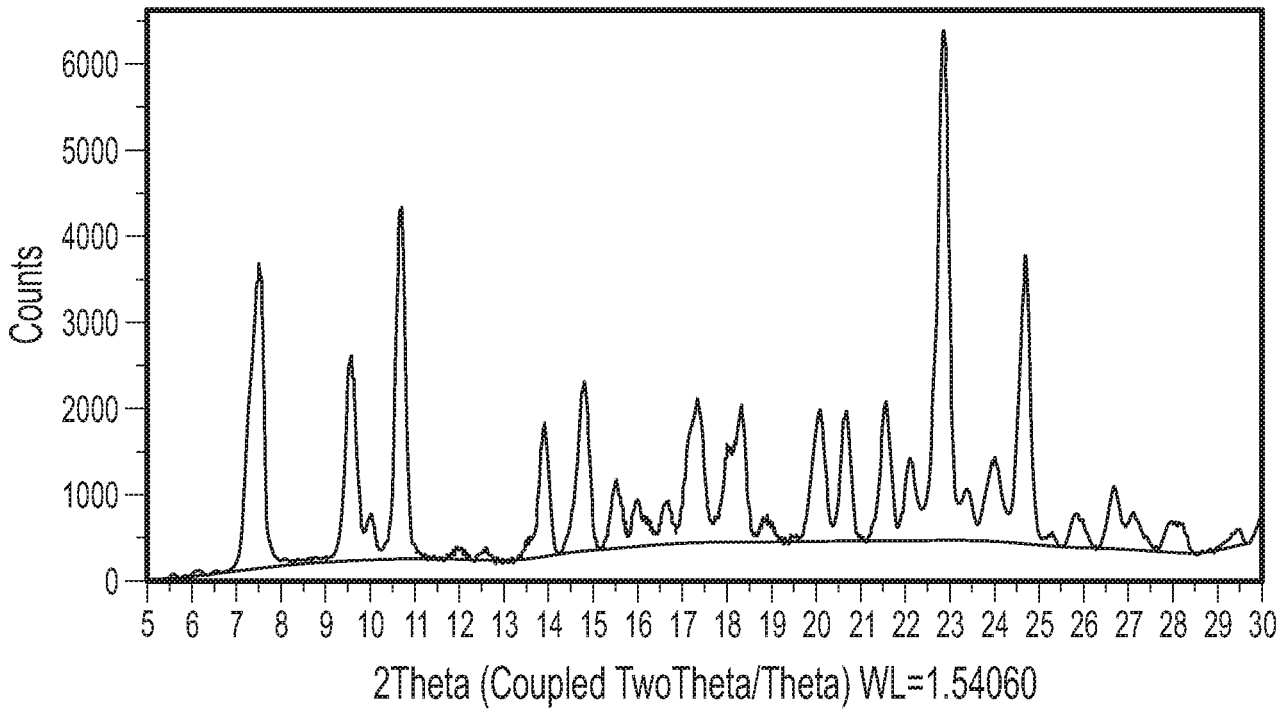
Counts
6000
5000
4000
3000
2000
1000
0
5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
2Theta (Coupled TwoTheta/Theta) WL=1.54060

FIG. 13

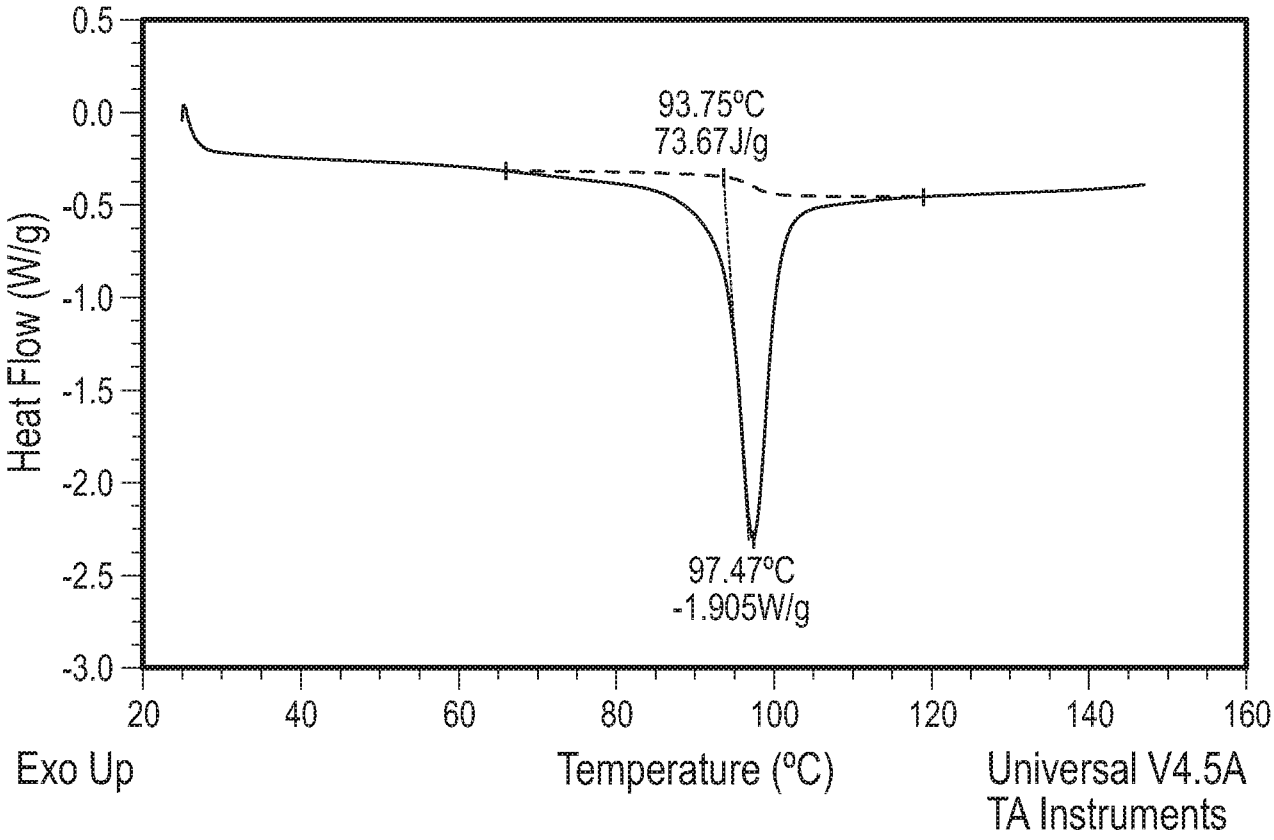
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
Heat Flow (W/g)
93.75°C
73.67J/g
97.47°C
-1.905W/g
20
40
60
80
100
120
140
160
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 14

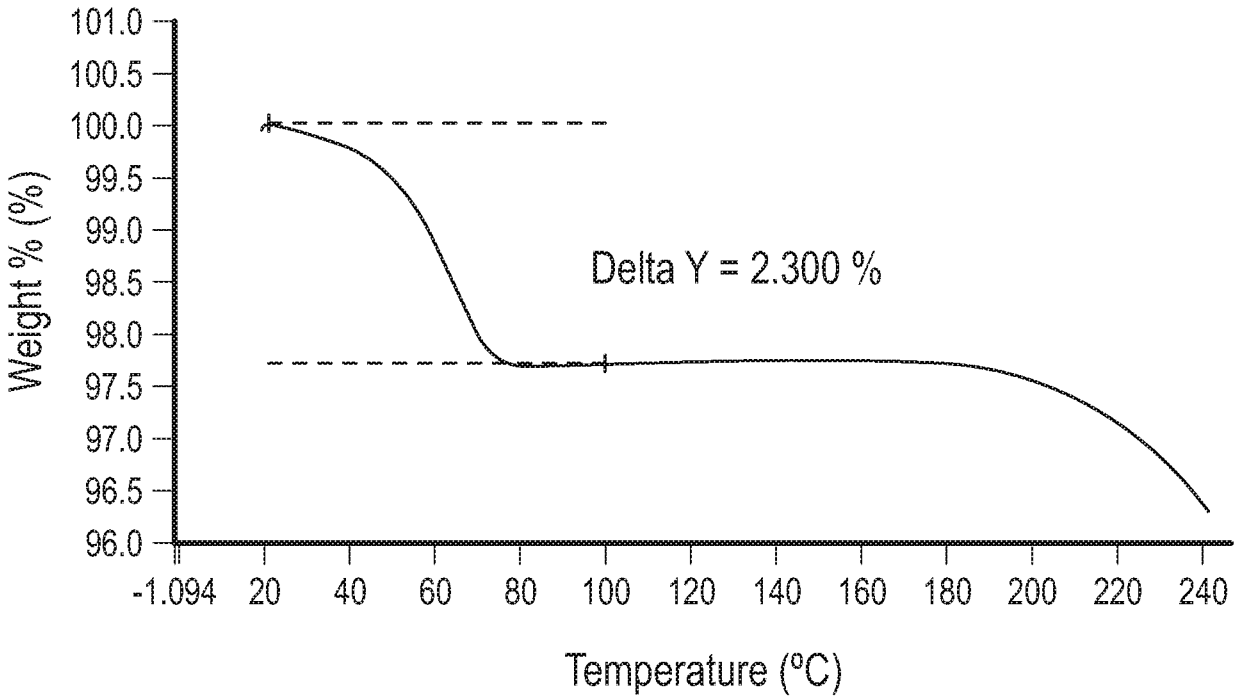
101.0
100.5
100.0
99.5
99.0
98.5
98.0
97.5
97.0
96.5
96.0
Weight % (%)
Delta Y = 2.300 %
-1.094
20
40
60
80
100
120
140
160
180
200
220
240
Temperature (°C)

FIG. 15

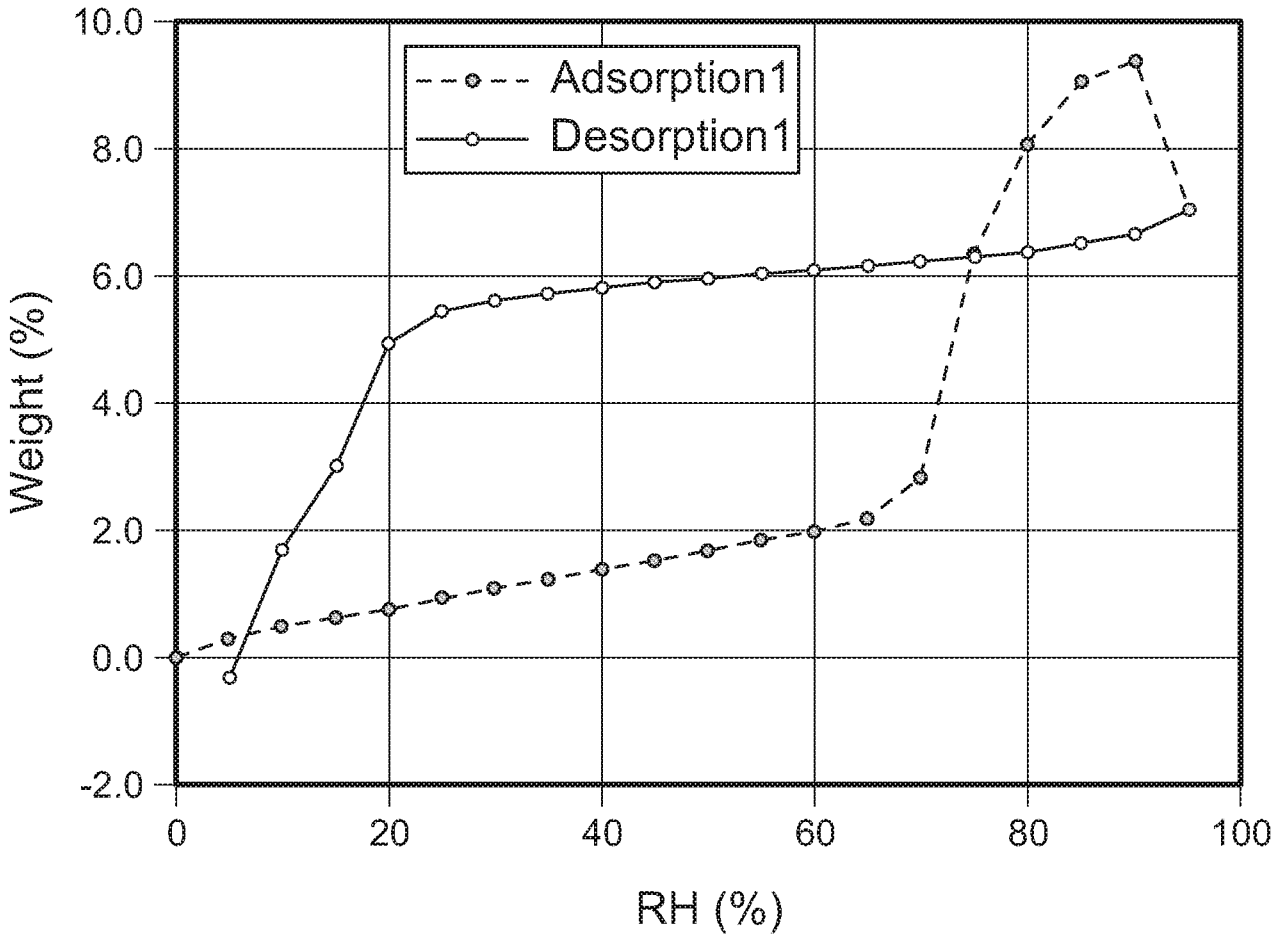
Adsorption1
Desorption1
Weight (%)
RH (%)
10.0
8.0
6.0
4.0
2.0
0.0
-2.0
0
20
40
60
80
100

FIG. 16

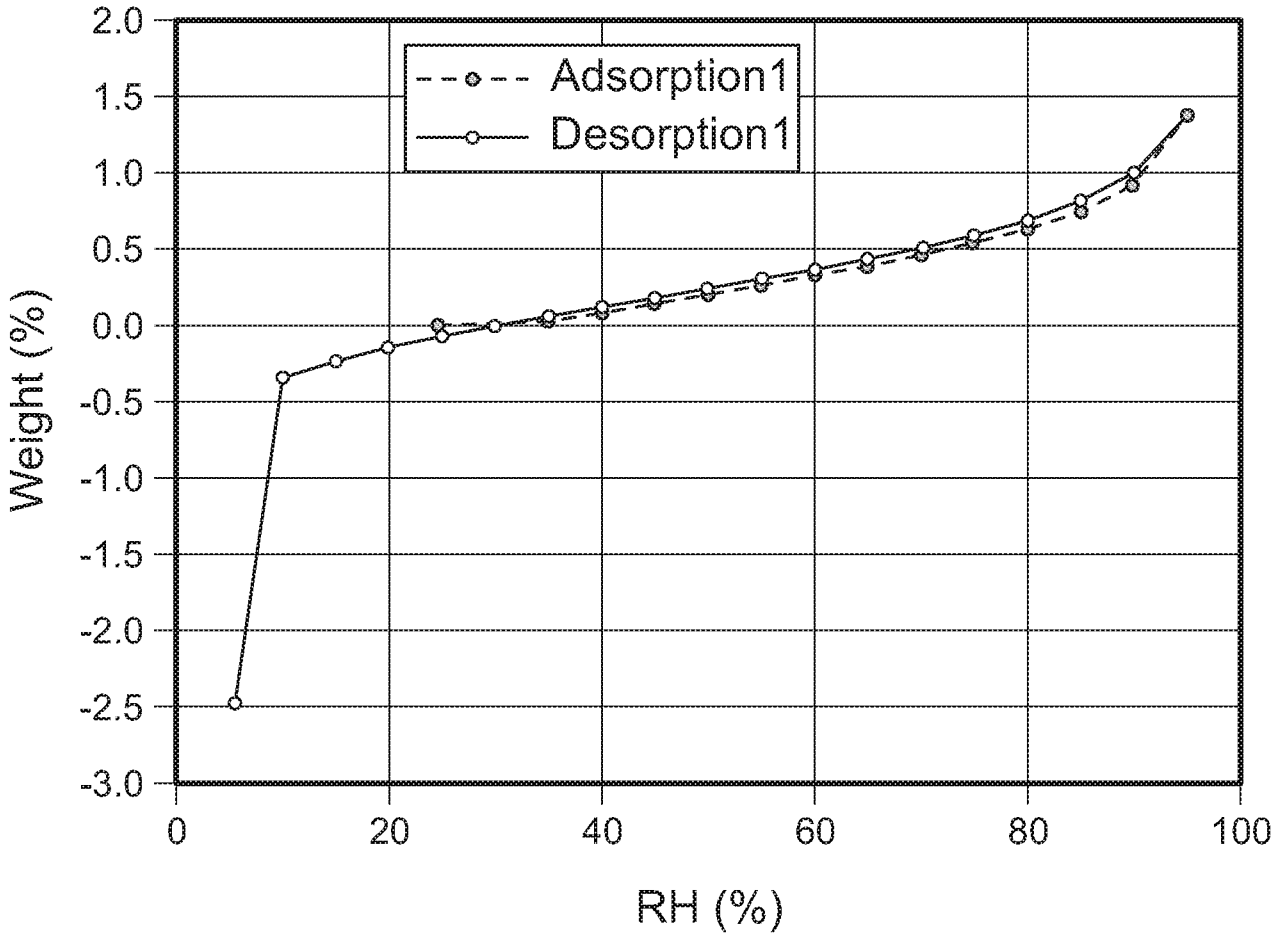
Adsorption1
Desorption1
Weight (%)
RH (%)
2.0
1.5
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
-2.5
-3.0
0
20
40
60
80
100

FIG. 17

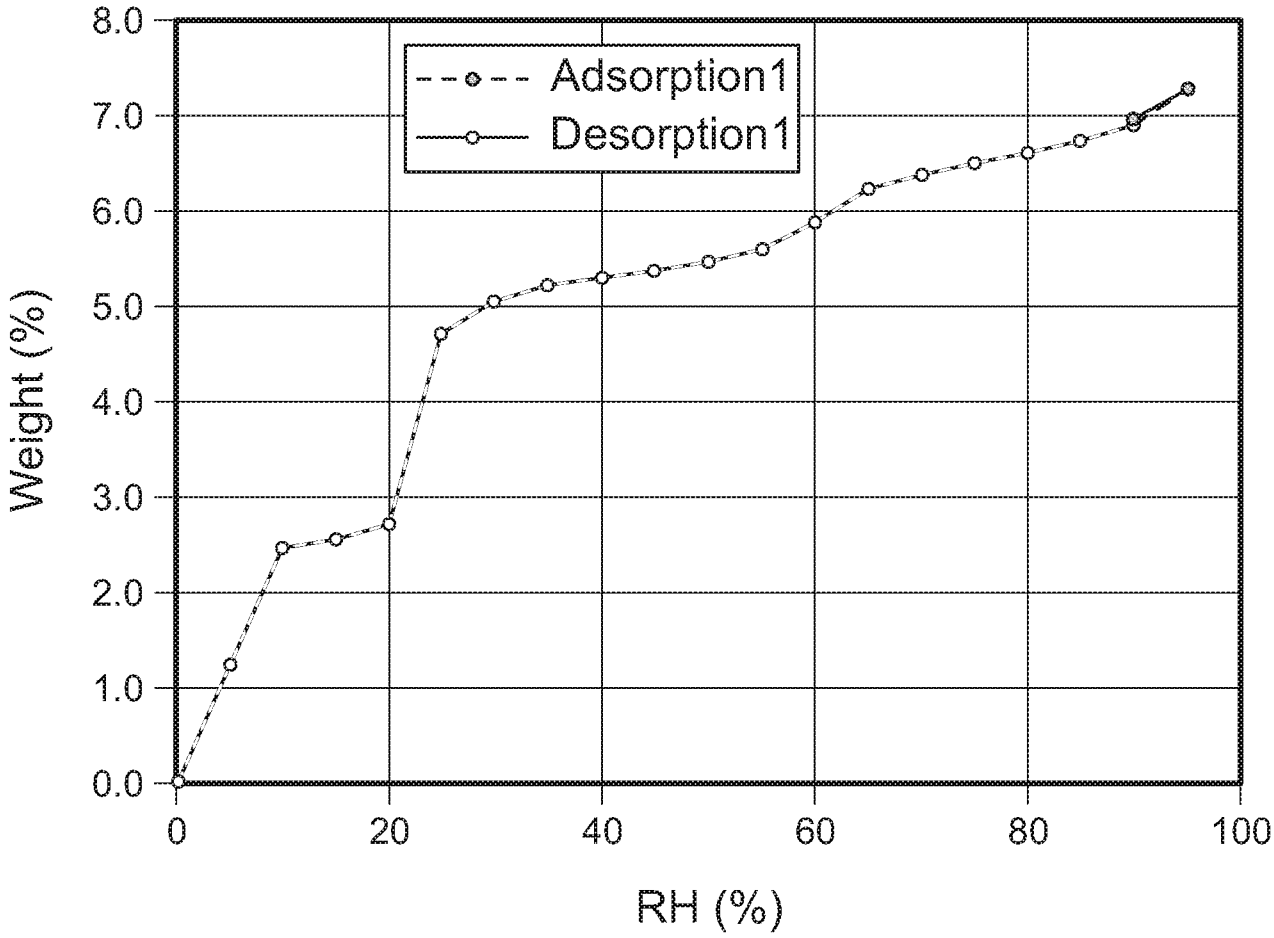
Adsorption1
Desorption1
Weight (%)
RH (%)
8.0
7.0
6.0
5.0
4.0
3.0
2.0
1.0
0.0
0
20
40
60
80
100

FIG. 18

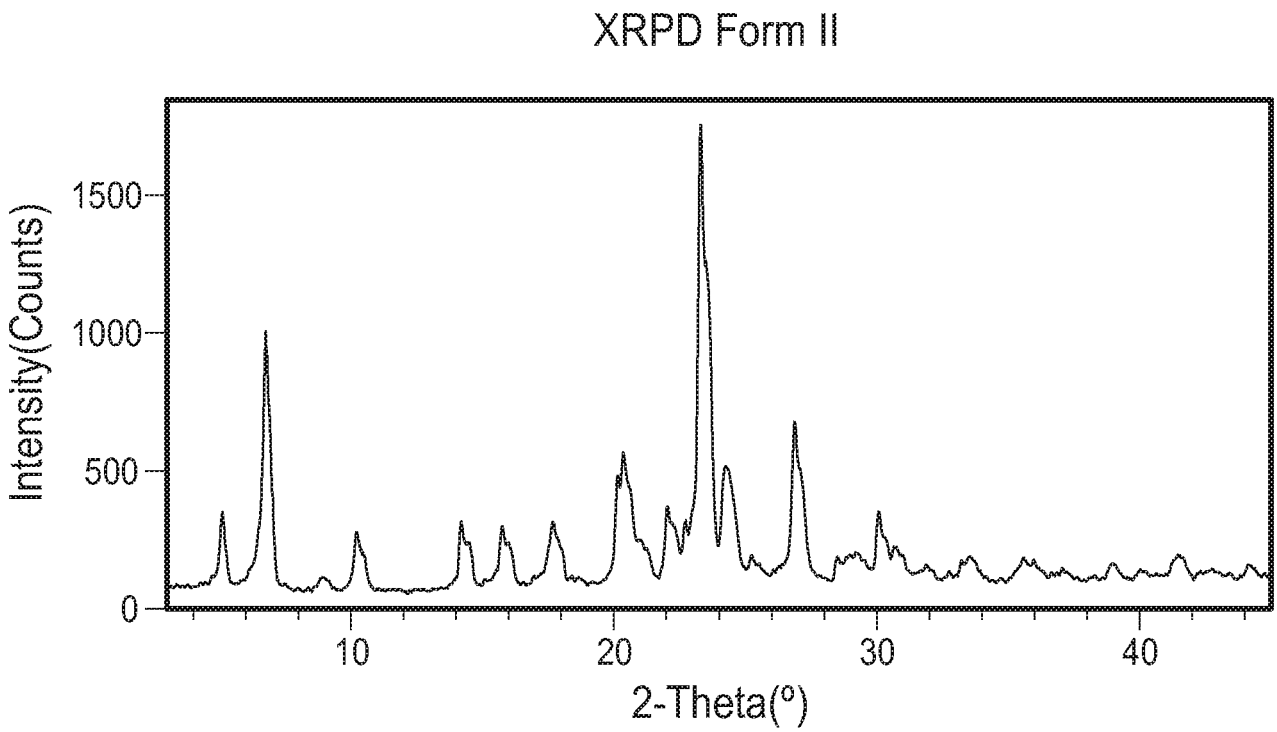
XRPD Form II
Intensity(Counts)
1500
1000
500
0
10
20
30
40
2-Theta(°)

FIG. 19

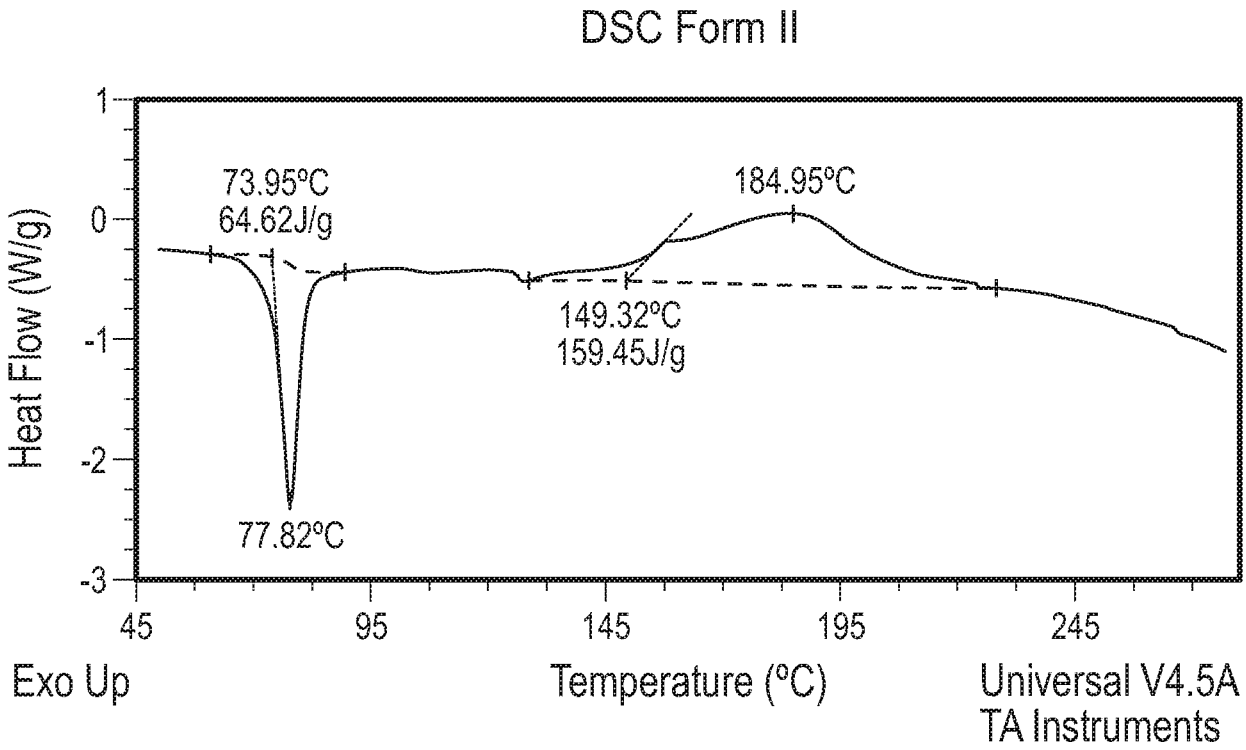
DSC Form II
Heat Flow (W/g)
1
0
-1
-2
-3
73.95°C
64.62J/g
77.82°C
149.32°C
159.45J/g
184.95°C
45
95
145
195
245
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 20

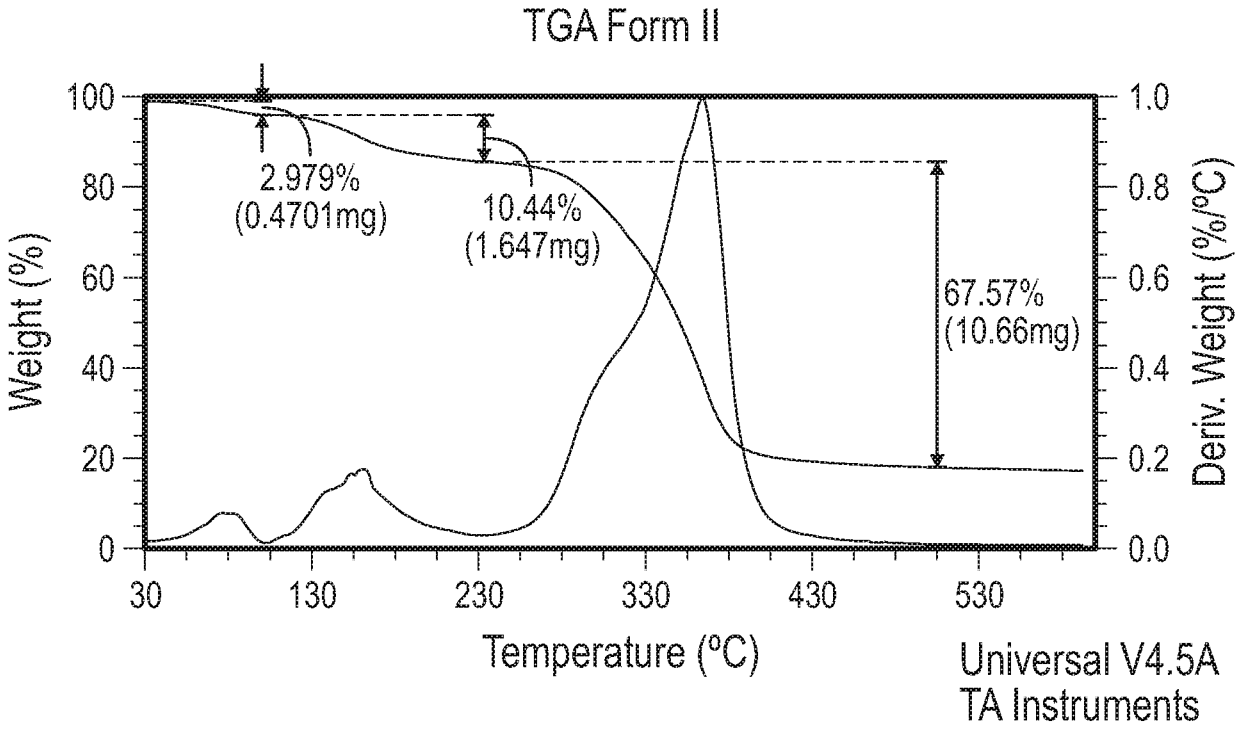
TGA Form II
100
80
60
40
20
0
Weight (%)
1.0
0.8
0.6
0.4
0.2
0.0
Deriv. Weight (%/°C)
2.979%
(0.4701mg)
10.44%
(1.647mg)
67.57%
(10.66mg)
30
130
230
330
430
530
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 21

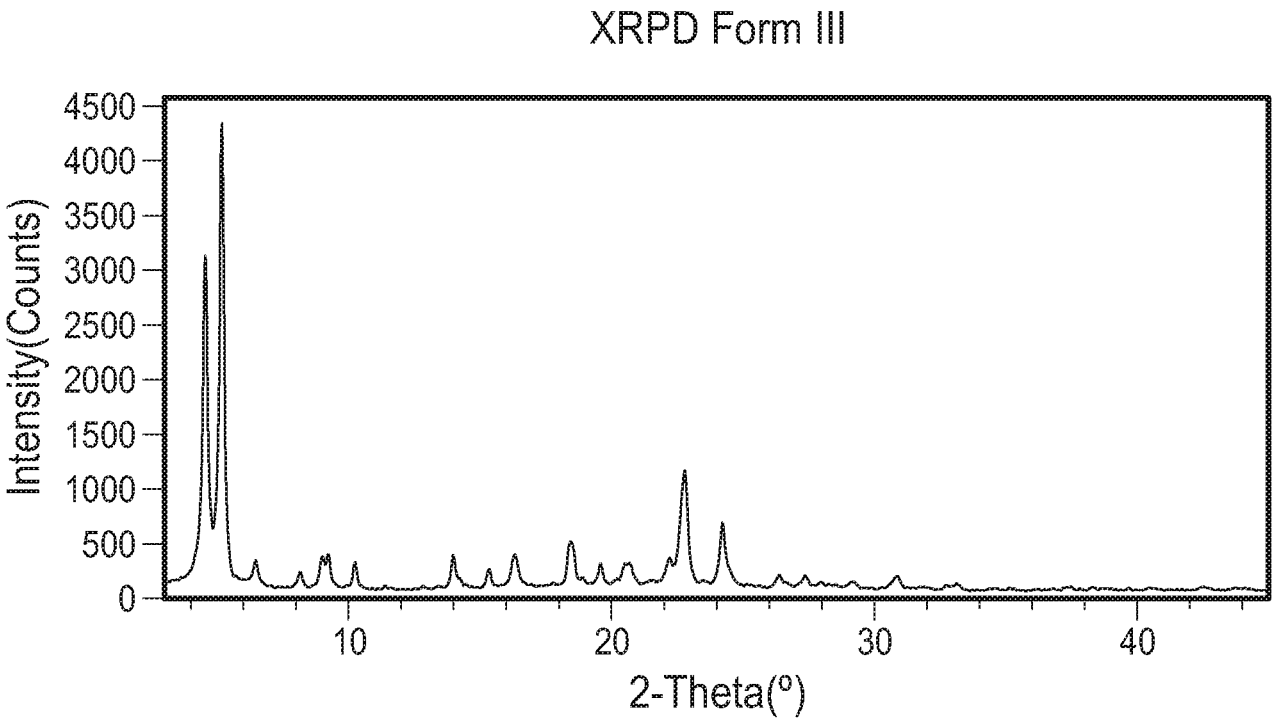
XRPD Form III
Intensity(Counts)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
10
20
30
40
2-Theta(°)

FIG. 22

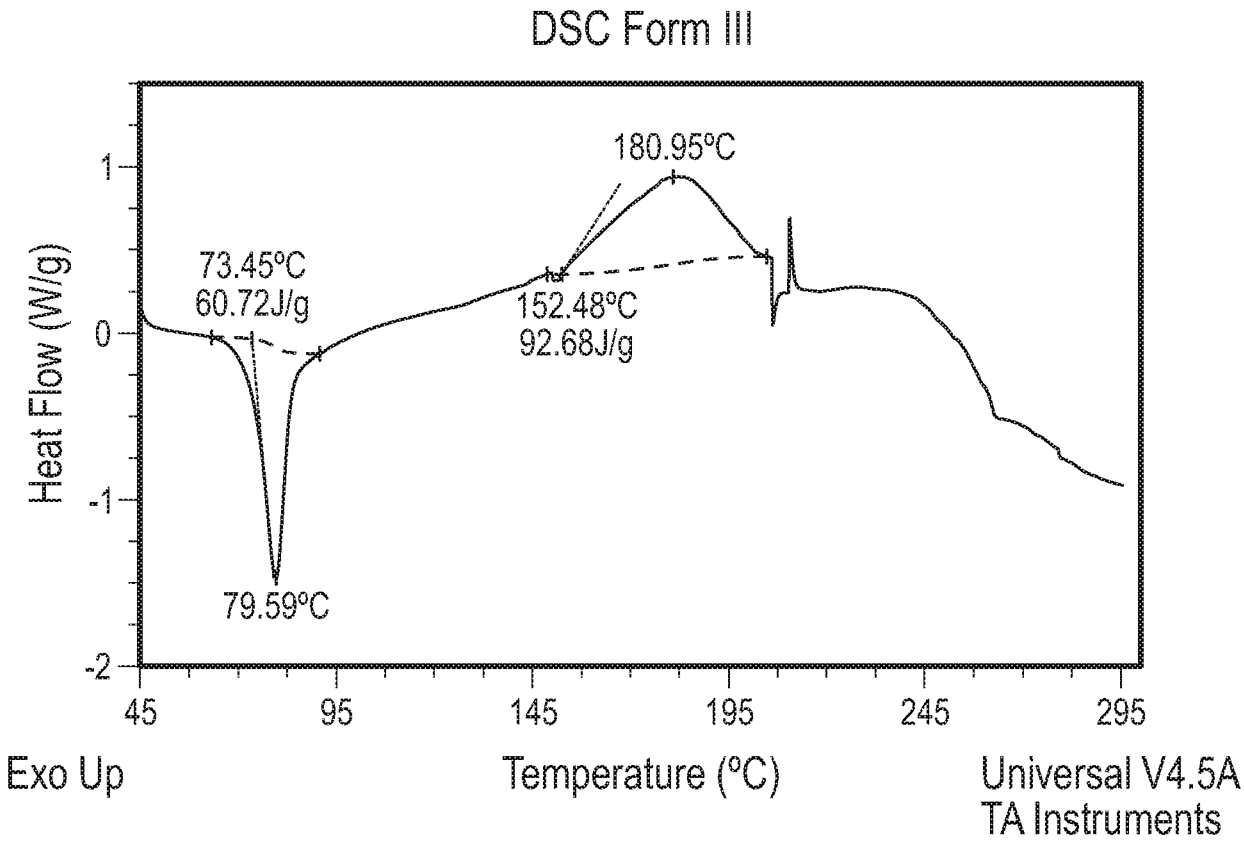
DSC Form III
180.95°C
73.45°C
60.72J/g
152.48°C
92.68J/g
79.59°C
Heat Flow (W/g)
1
0
-1
-2
45
95
145
195
245
295
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 23

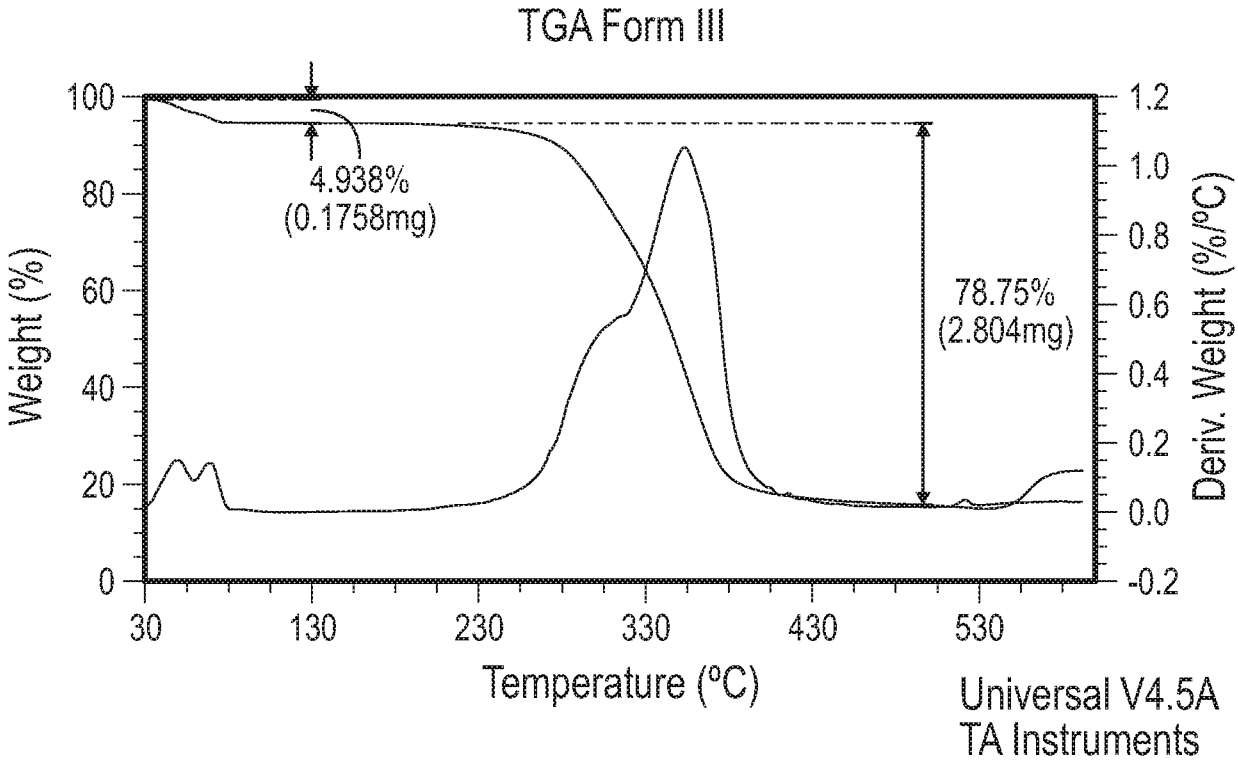
TGA Form III
Weight (%)
Deriv. Weight (%/°C)
Temperature (°C)
4.938%
(0.1758mg)
78.75%
(2.804mg)
Universal V4.5A
TA Instruments

FIG. 24

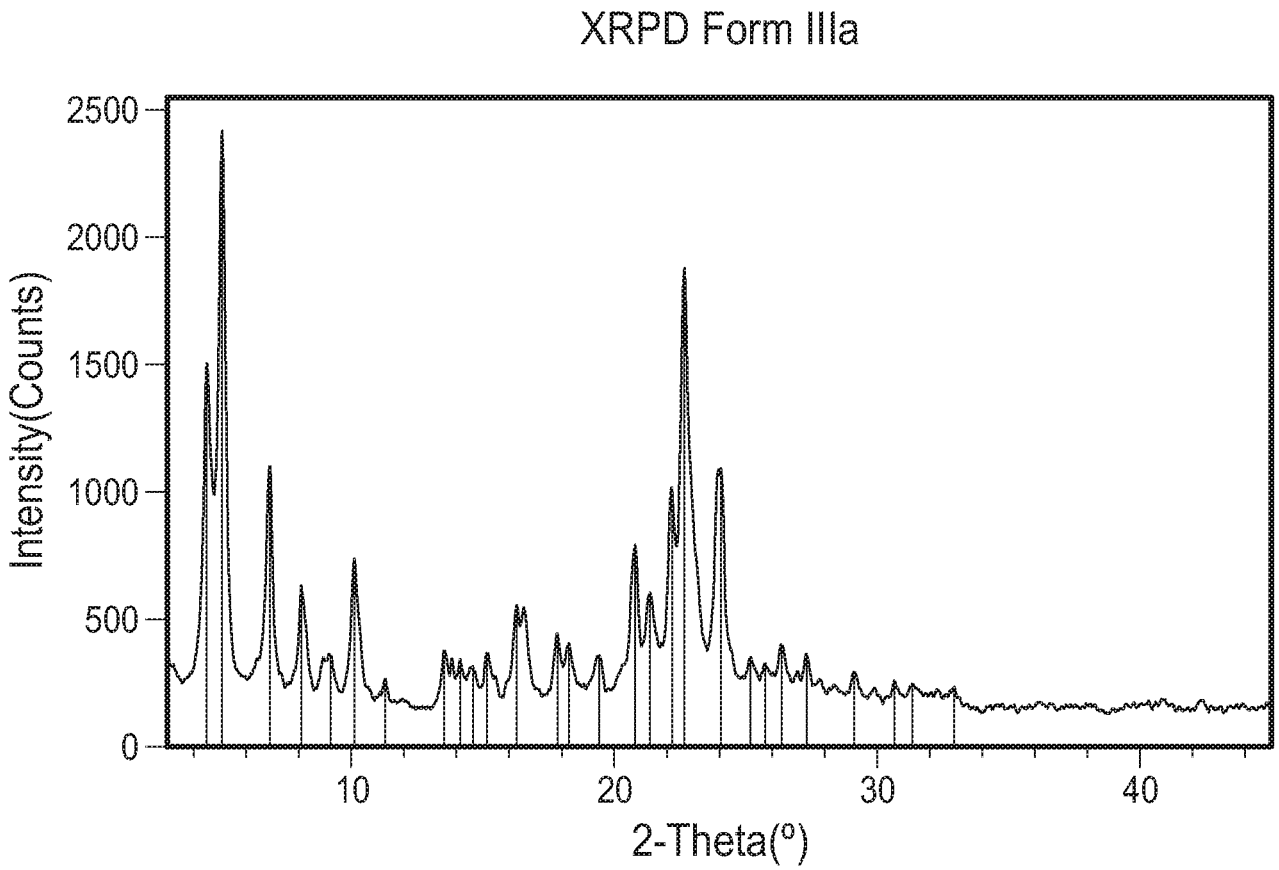
XRPD Form IIIa
Intensity(Counts)
2500
2000
1500
1000
500
0
10
20
30
40
2-Theta(°)

FIG. 25

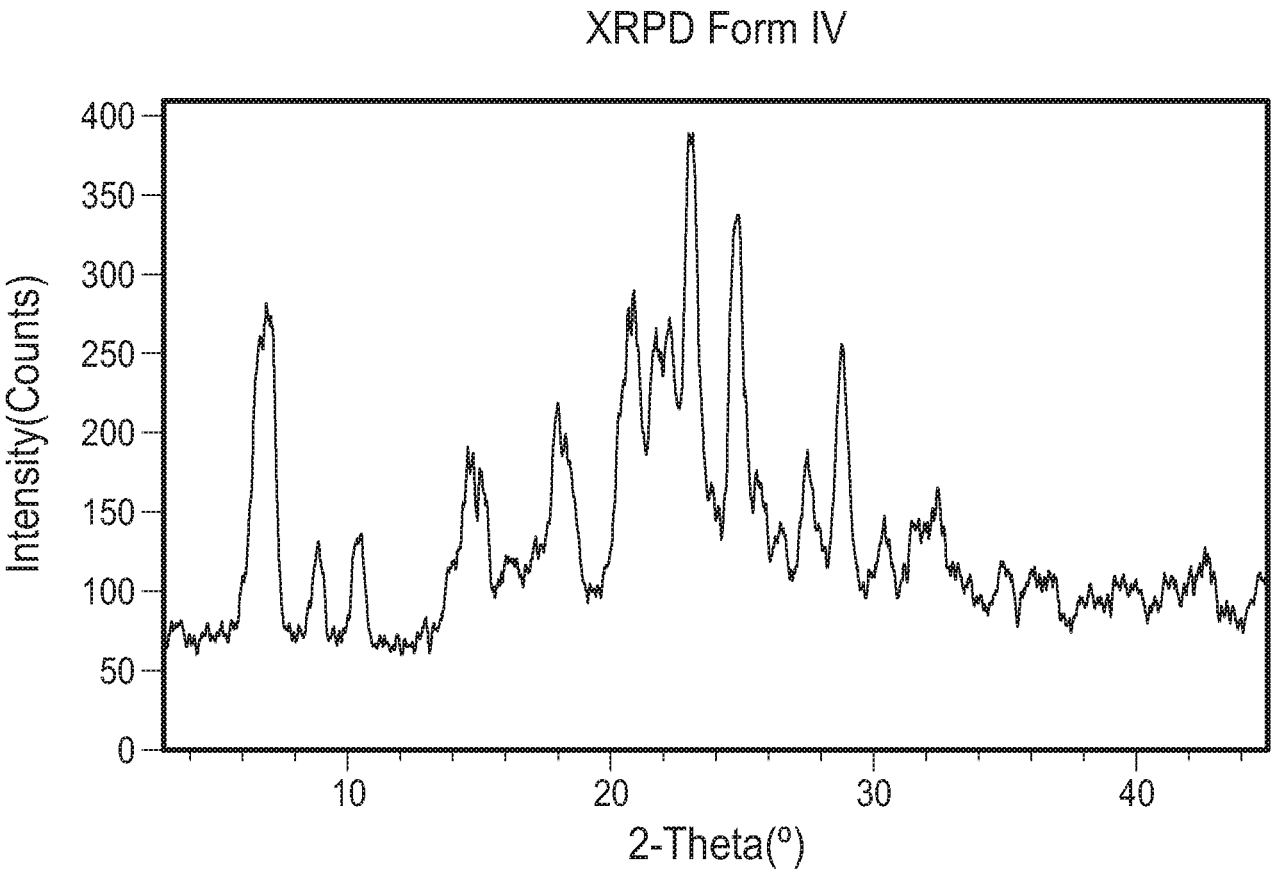
XRPD Form IV
Intensity(Counts)
400
350
300
250
200
150
100
50
0
10
20
30
40
2-Theta(°)

FIG. 26

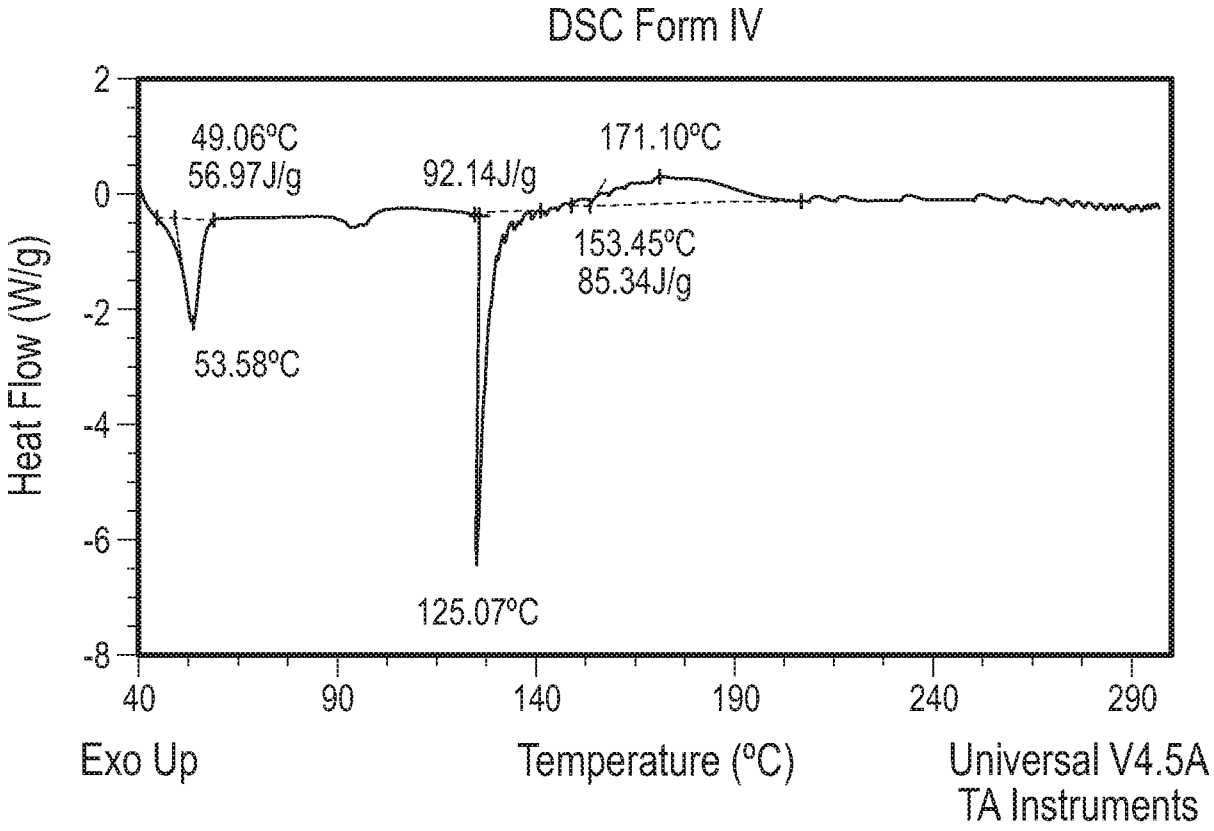
DSC Form IV
Heat Flow (W/g)
2
0
-2
-4
-6
-8
49.06°C
56.97J/g
53.58°C
92.14J/g
125.07°C
171.10°C
153.45°C
85.34J/g
40
90
140
190
240
290
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 27

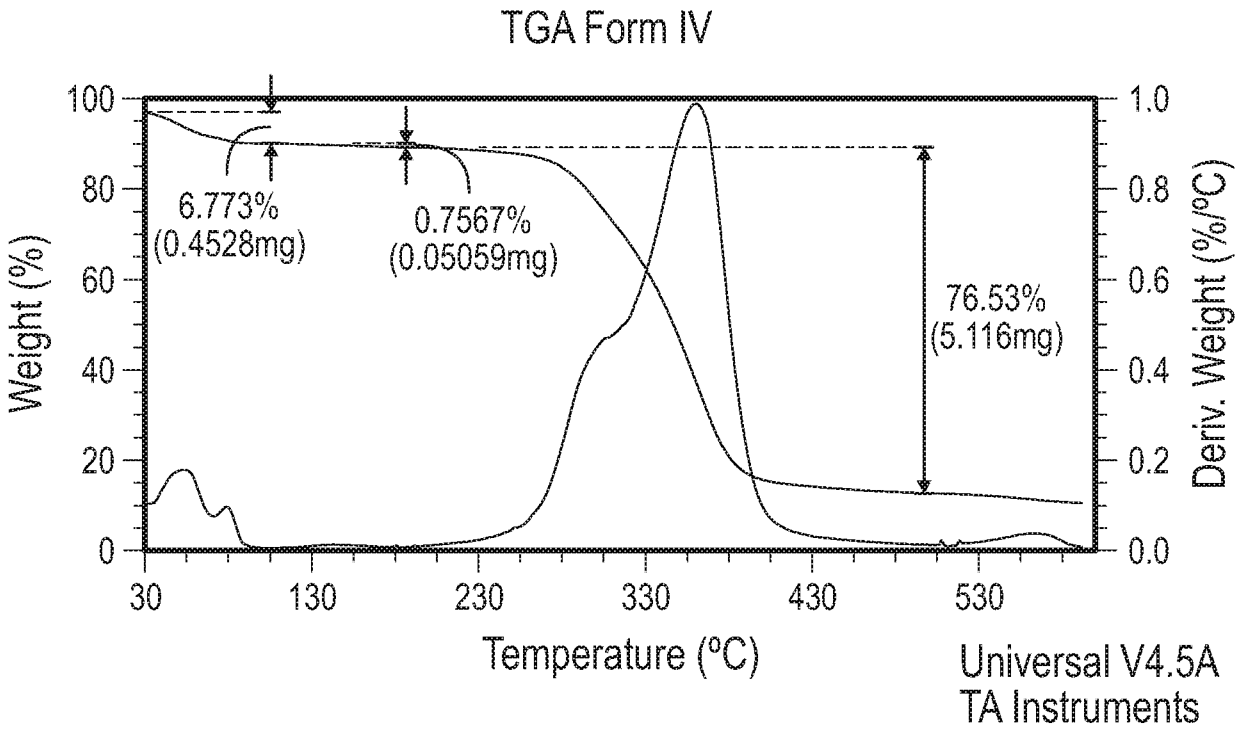
TGA Form IV
Weight (%)
Deriv. Weight (%/°C)
100
80
60
40
20
0
1.0
0.8
0.6
0.4
0.2
0.0
6.773%
(0.4528mg)
0.7567%
(0.05059mg)
76.53%
(5.116mg)
30
130
230
330
430
530
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 28

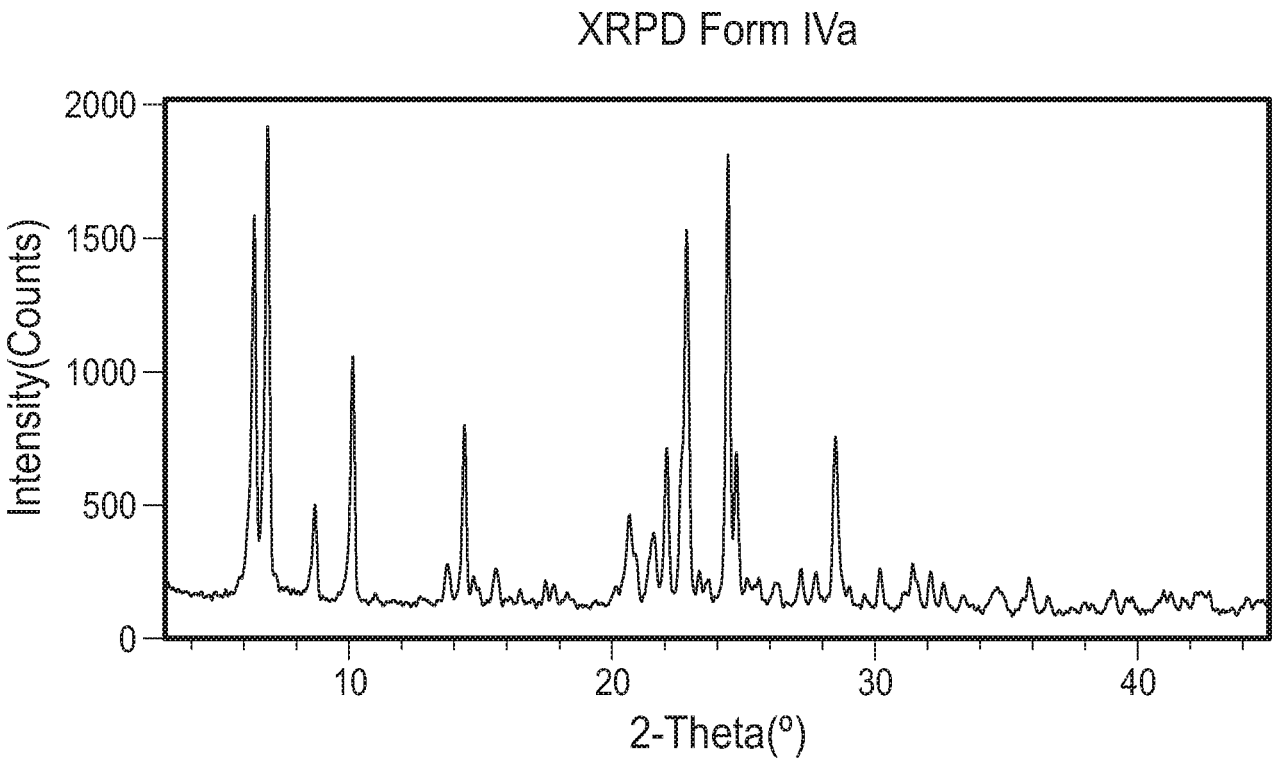
XRPD Form IVa
Intensity(Counts)
2000
1500
1000
500
0
10
20
30
40
2-Theta(°)

FIG. 29

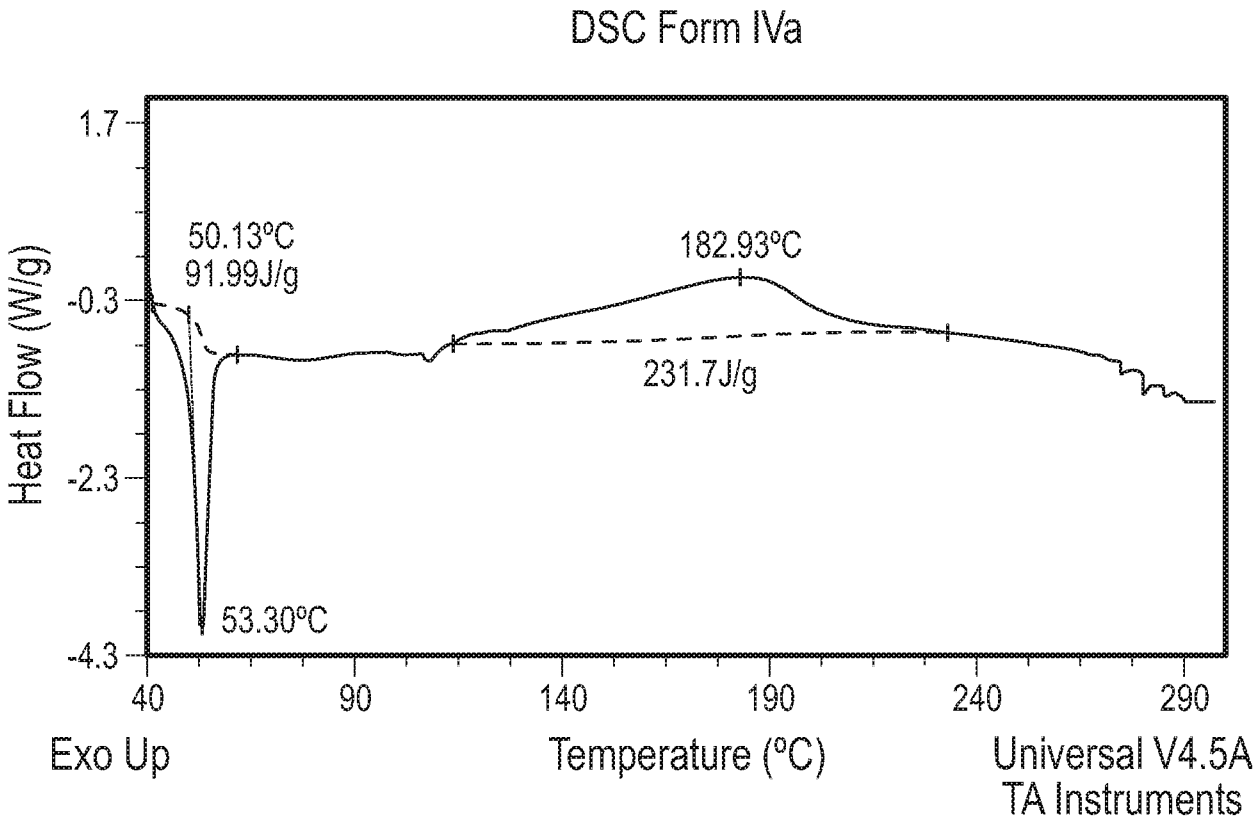
DSC Form IVa
1.7
-0.3
-2.3
-4.3
Heat Flow (W/g)
50.13°C
91.99J/g
182.93°C
231.7J/g
53.30°C
40
90
140
190
240
290
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 30

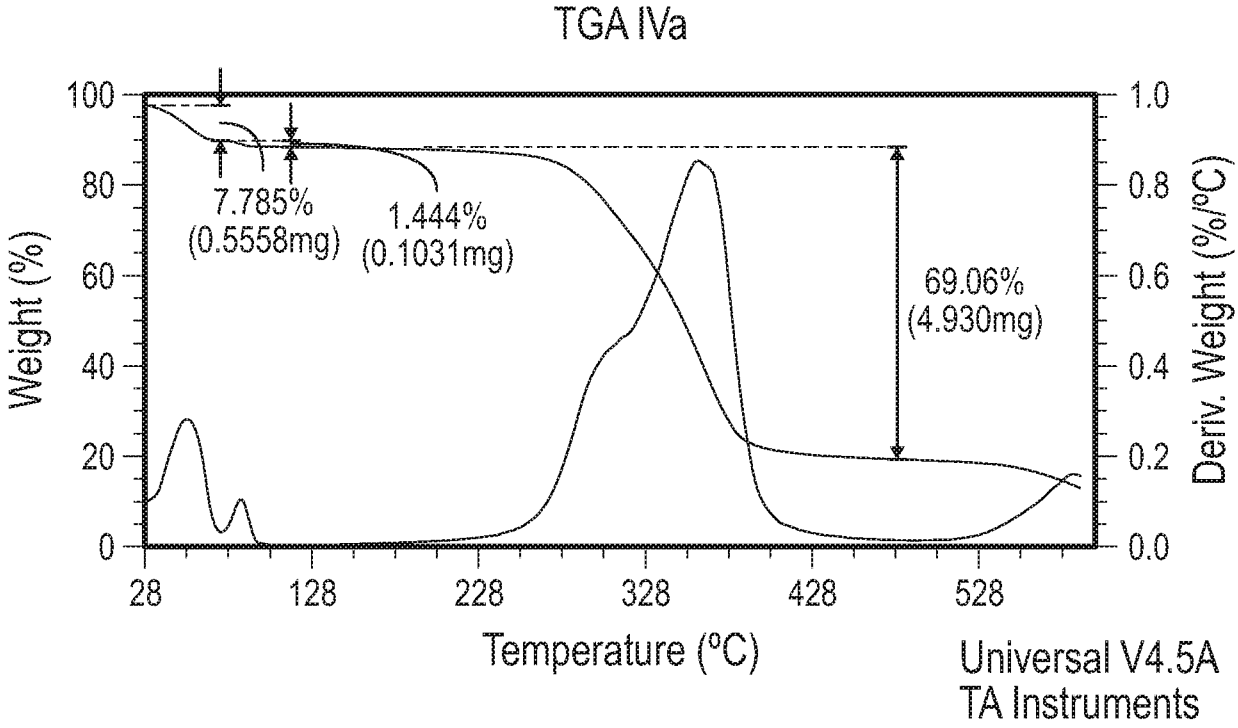
TGA IVa
100
80
60
40
20
0
Weight (%)
1.0
0.8
0.6
0.4
0.2
0.0
Deriv. Weight (%/°C)
7.785%
(0.5558mg)
1.444%
(0.1031mg)
69.06%
(4.930mg)
28
128
228
328
428
528
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 31

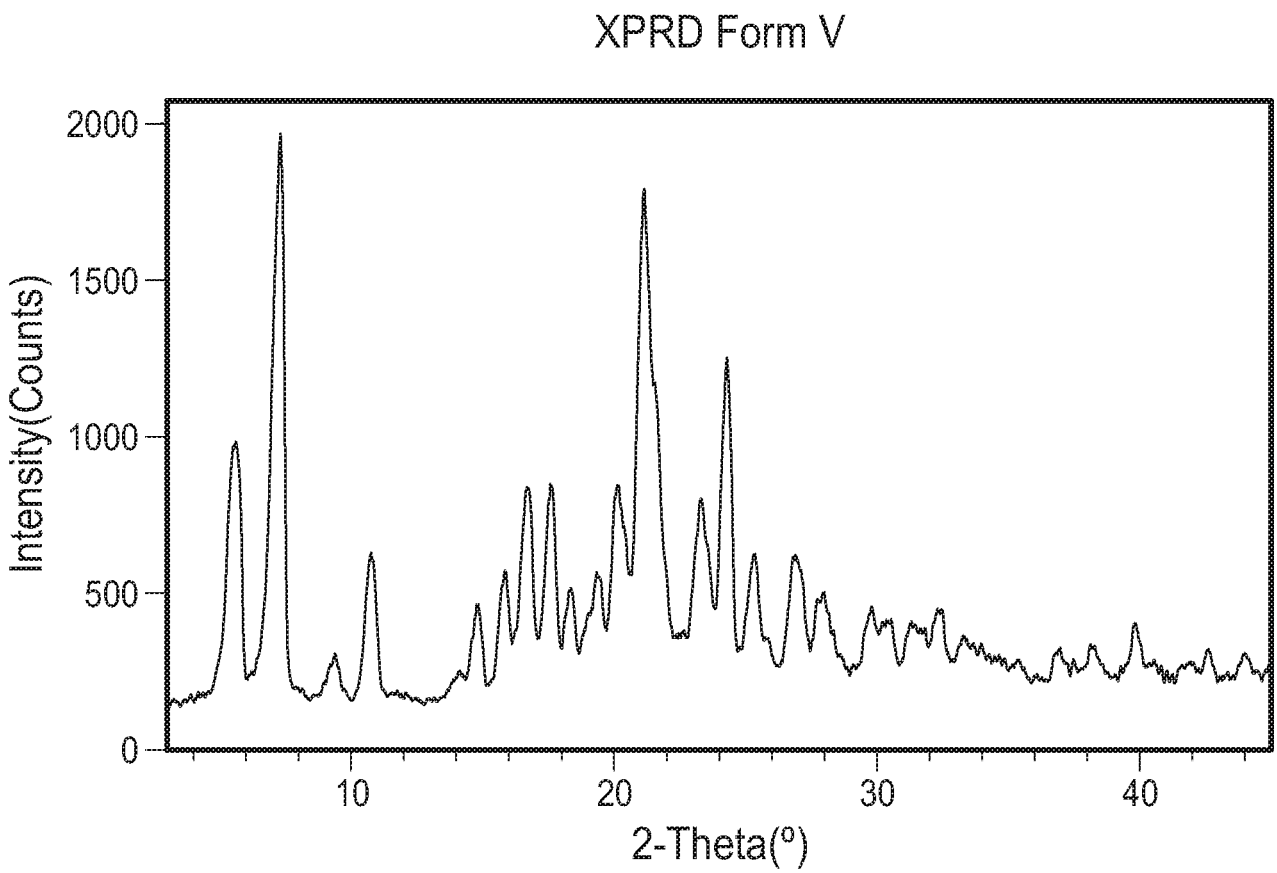
XPRD Form V
Intensity(Counts)
2000
1500
1000
500
0
10
20
30
40
2-Theta(°)

FIG. 32

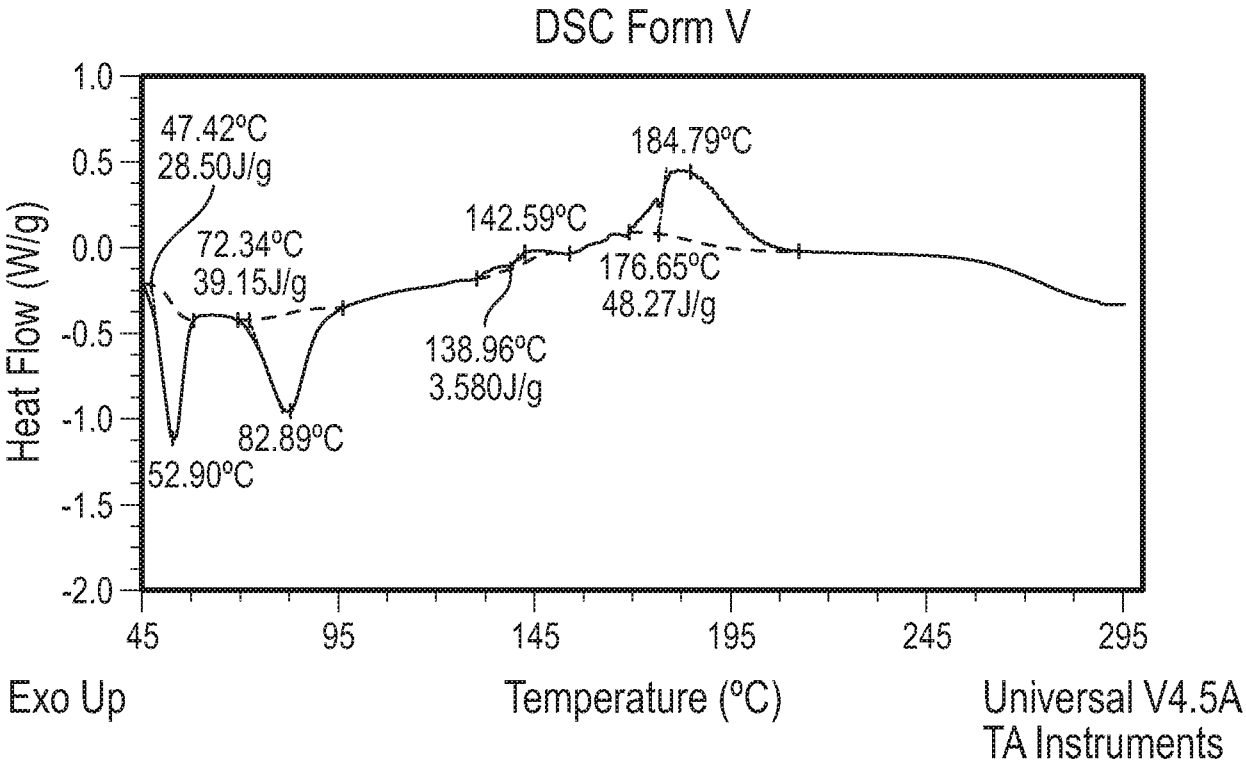
DSC Form V
1.0
0.5
0.0
-0.5
-1.0
-1.5
-2.0
Heat Flow (W/g)
47.42°C
28.50J/g
72.34°C
39.15J/g
52.90°C
82.89°C
138.96°C
3.580J/g
142.59°C
184.79°C
176.65°C
48.27J/g
45
95
145
195
245
295
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 33

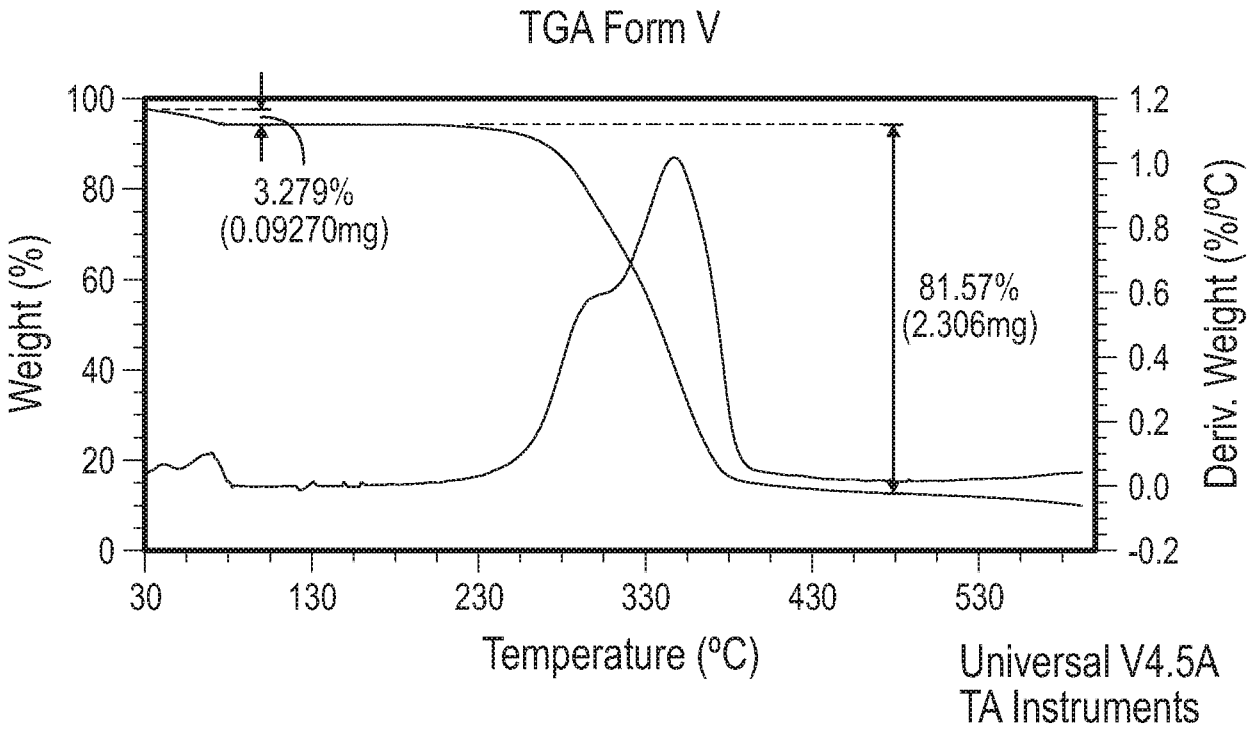
TGA Form V
Weight (%)
Deriv. Weight (%/°C)
Temperature (°C)
3.279%
(0.09270mg)
81.57%
(2.306mg)
Universal V4.5A
TA Instruments

FIG. 34

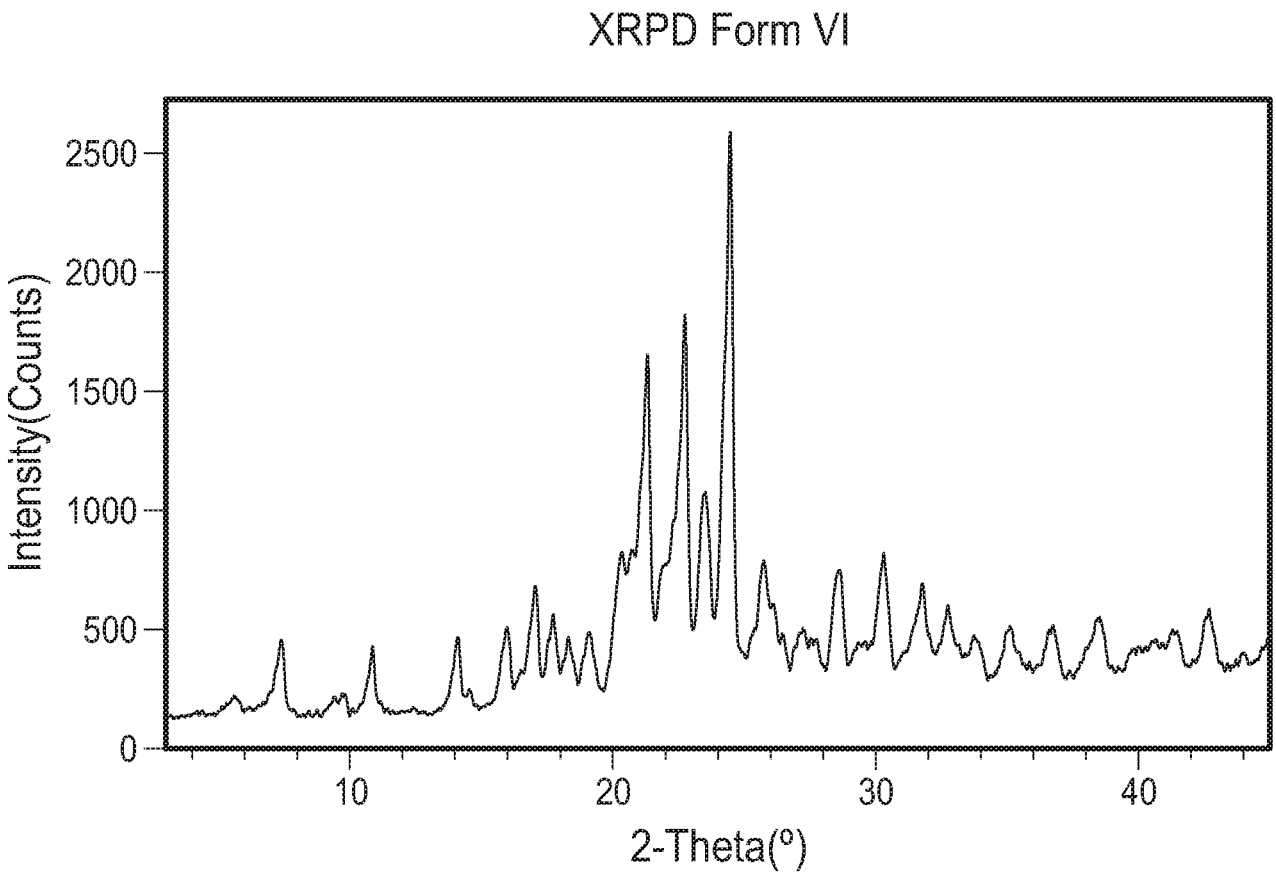
XRPD Form VI
Intensity(Counts)
2500
2000
1500
1000
500
0
10
20
30
40
2-Theta(°)

FIG. 35

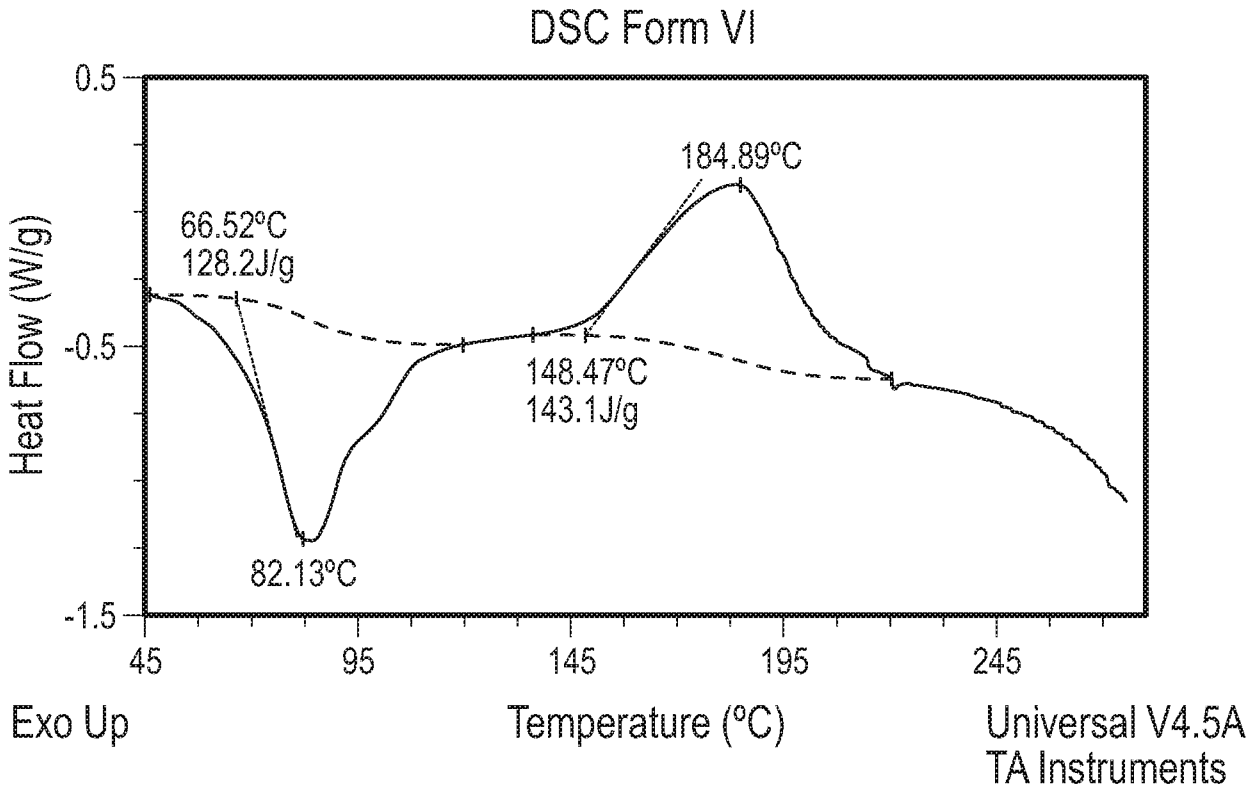
DSC Form VI
0.5
-0.5
-1.5
Heat Flow (W/g)
66.52°C
128.2J/g
184.89°C
148.47°C
143.1J/g
82.13°C
45
95
145
195
245
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 36

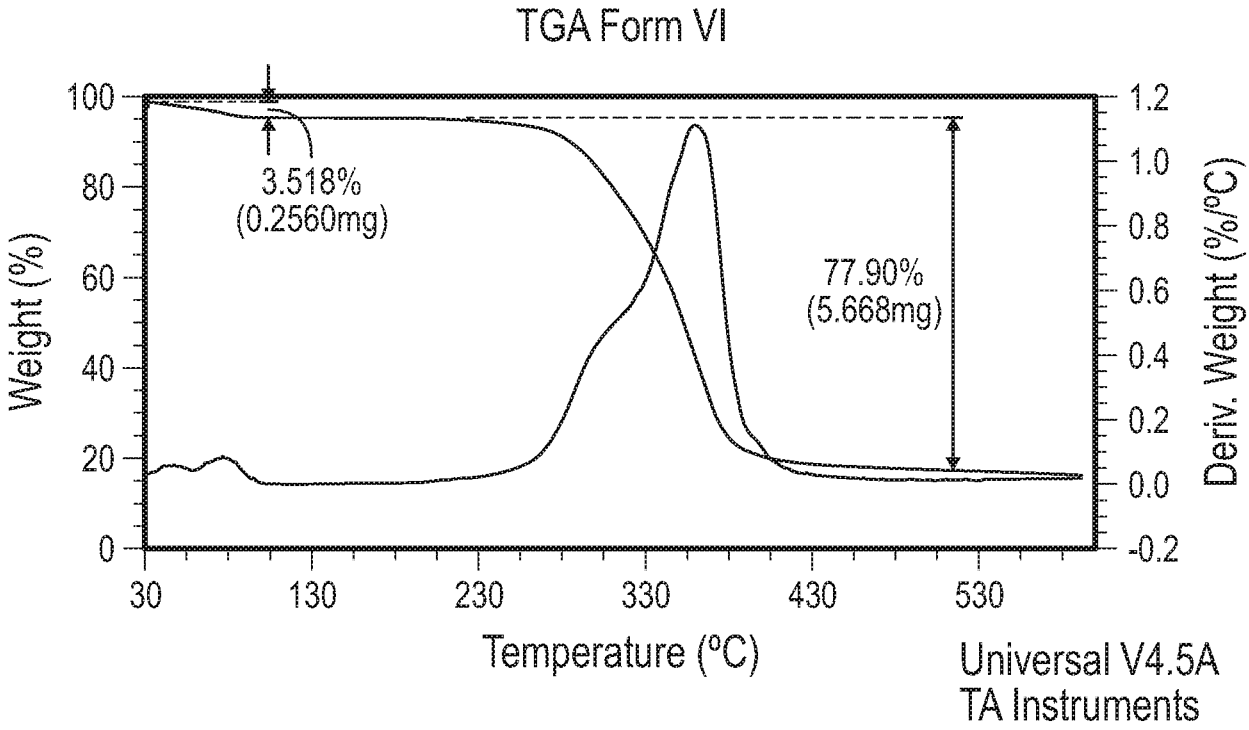
TGA Form VI
Weight (%)
Deriv. Weight (%/°C)
Temperature (°C)
3.518%
(0.2560mg)
77.90%
(5.668mg)
Universal V4.5A
TA Instruments

FIG. 37

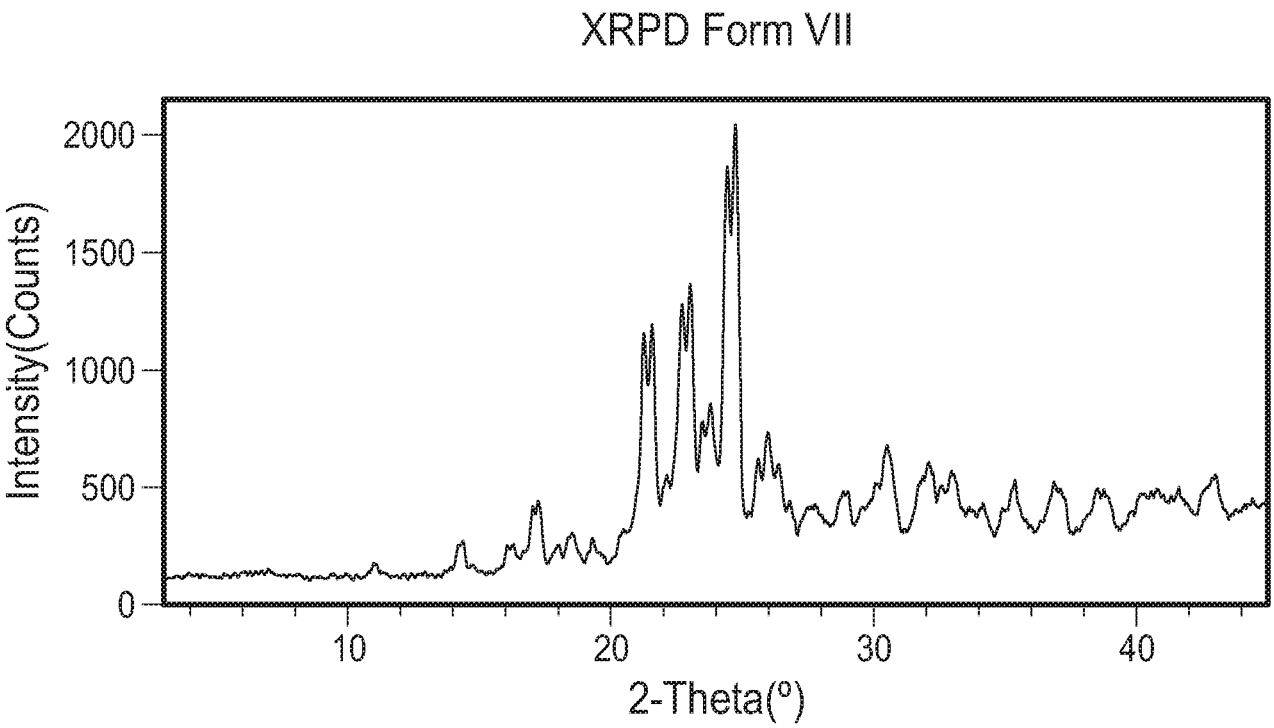
XRPD Form VII
Intensity(Counts)
2000
1500
1000
500
0
10
20
30
40
2-Theta(°)

FIG. 38

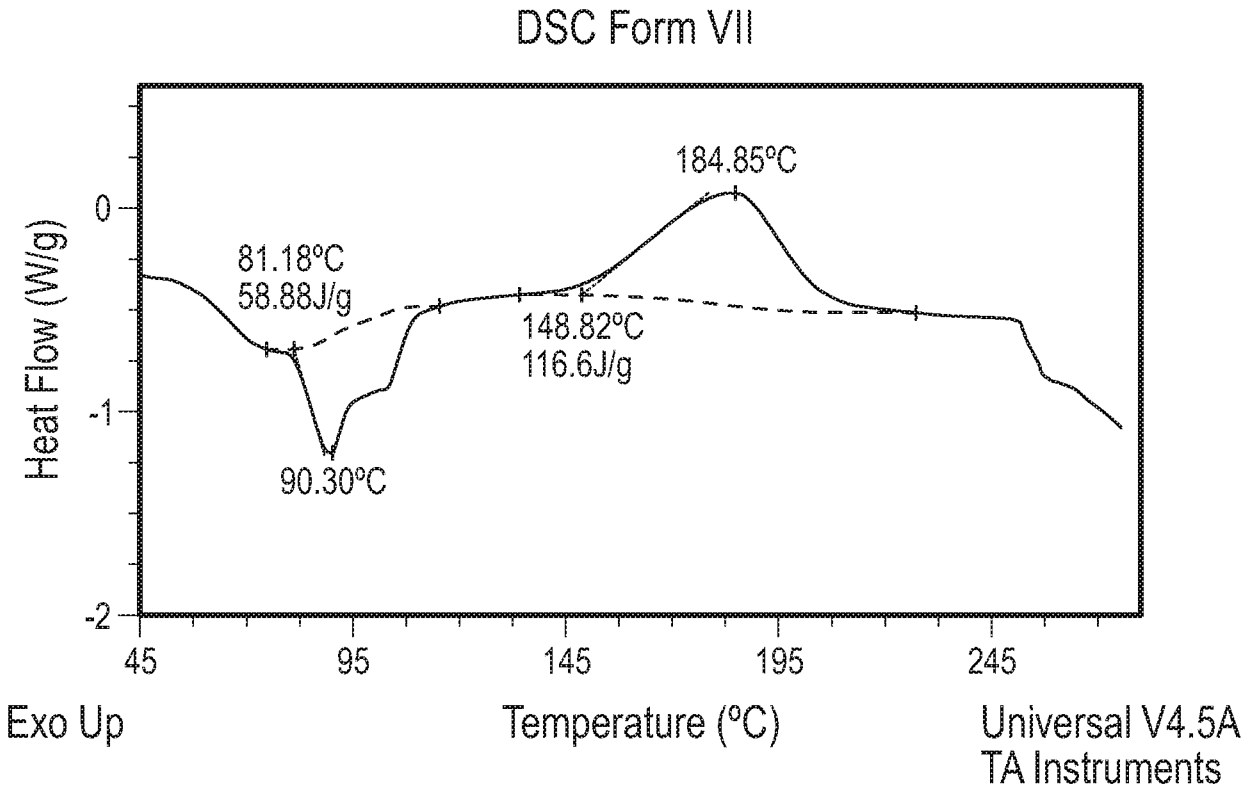
DSC Form VII
184.85°C
81.18°C
58.88J/g
148.82°C
116.6J/g
90.30°C
Heat Flow (W/g)
0
-1
-2
45
95
145
195
245
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 39

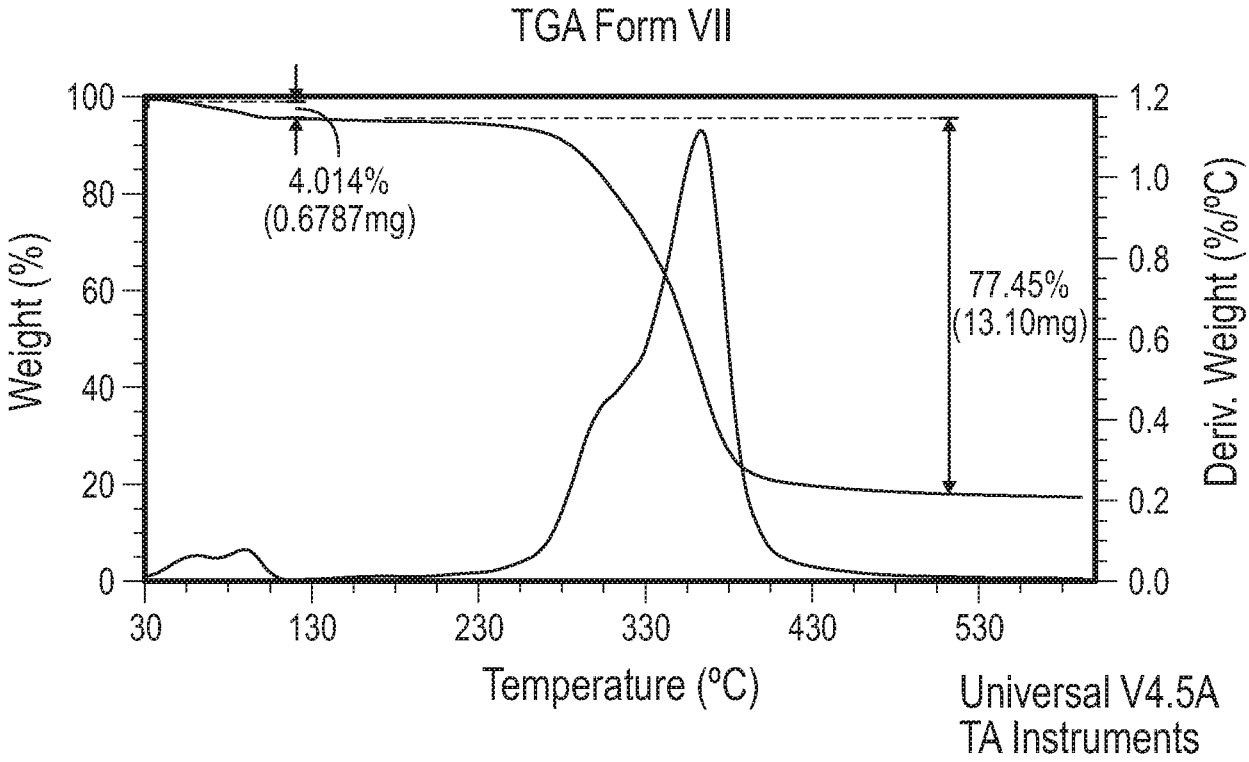
TGA Form VII
Weight (%)
Deriv. Weight (%/°C)
Temperature (°C)
4.014%
(0.6787mg)
77.45%
(13.10mg)
Universal V4.5A
TA Instruments

FIG. 40

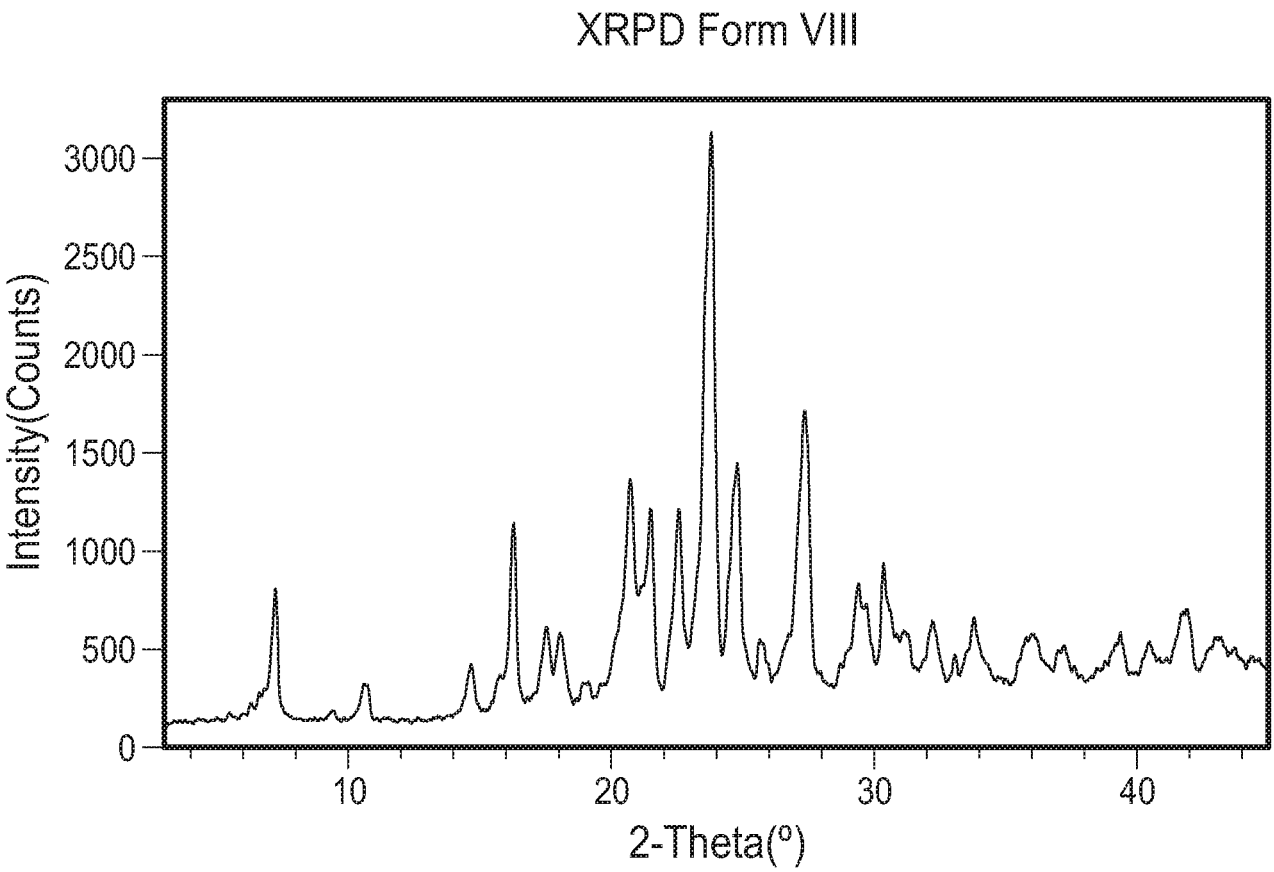
XRPD Form VIII
Intensity(Counts)
3000
2500
2000
1500
1000
500
0
10
20
30
40
2-Theta(°)

FIG. 41

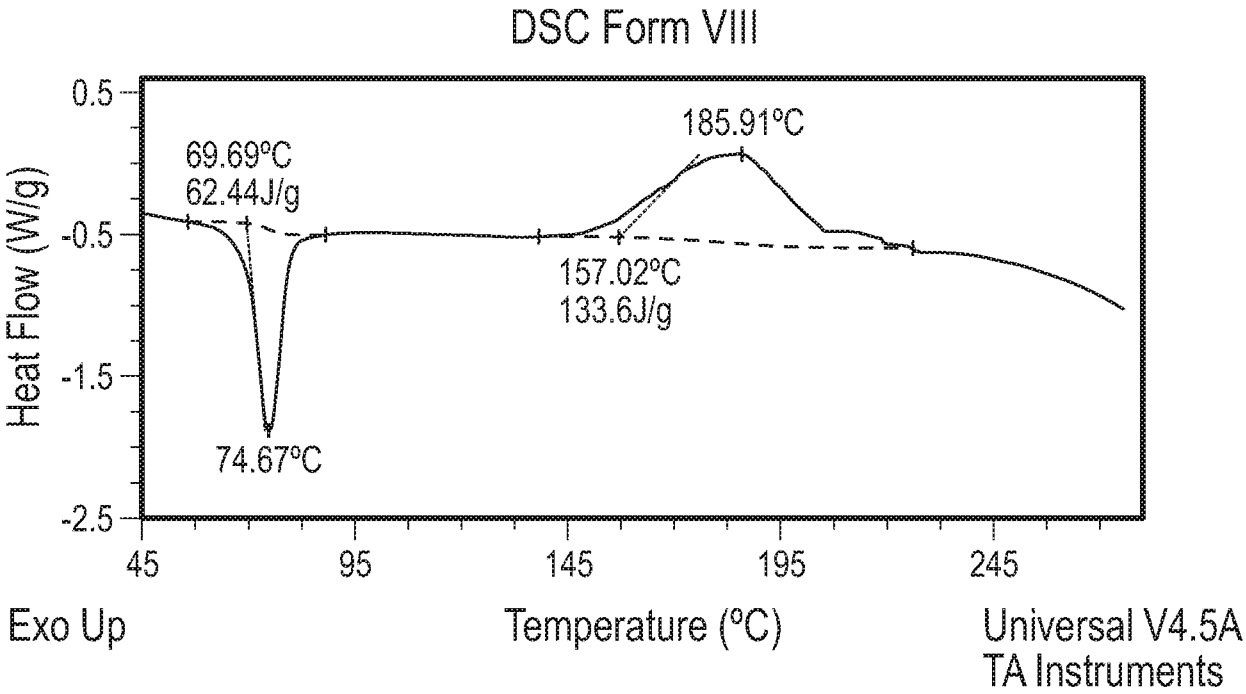
DSC Form VIII
0.5
-0.5
-1.5
-2.5
Heat Flow (W/g)
69.69°C
62.44J/g
185.91°C
157.02°C
133.6J/g
74.67°C
45
95
145
195
245
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 42

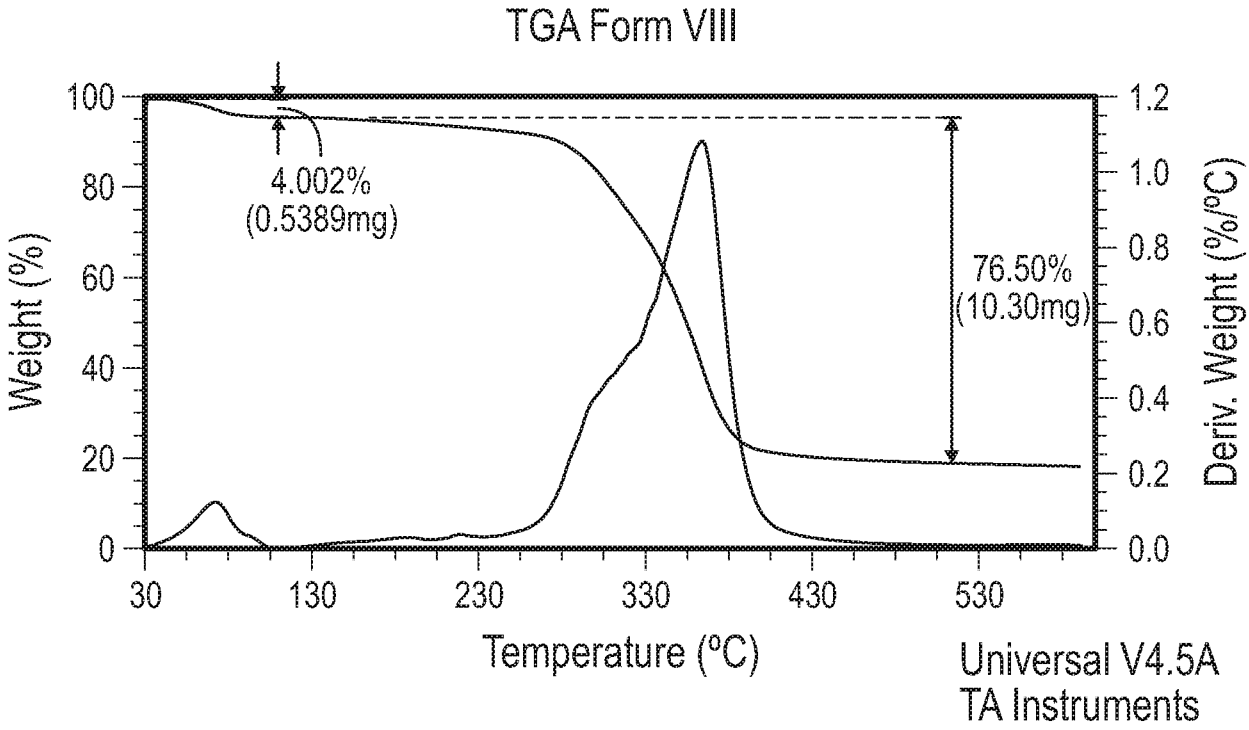
TGA Form VIII
Weight (%)
Deriv. Weight (%/°C)
Temperature (°C)
4.002%
(0.5389mg)
76.50%
(10.30mg)
Universal V4.5A
TA Instruments

FIG. 43

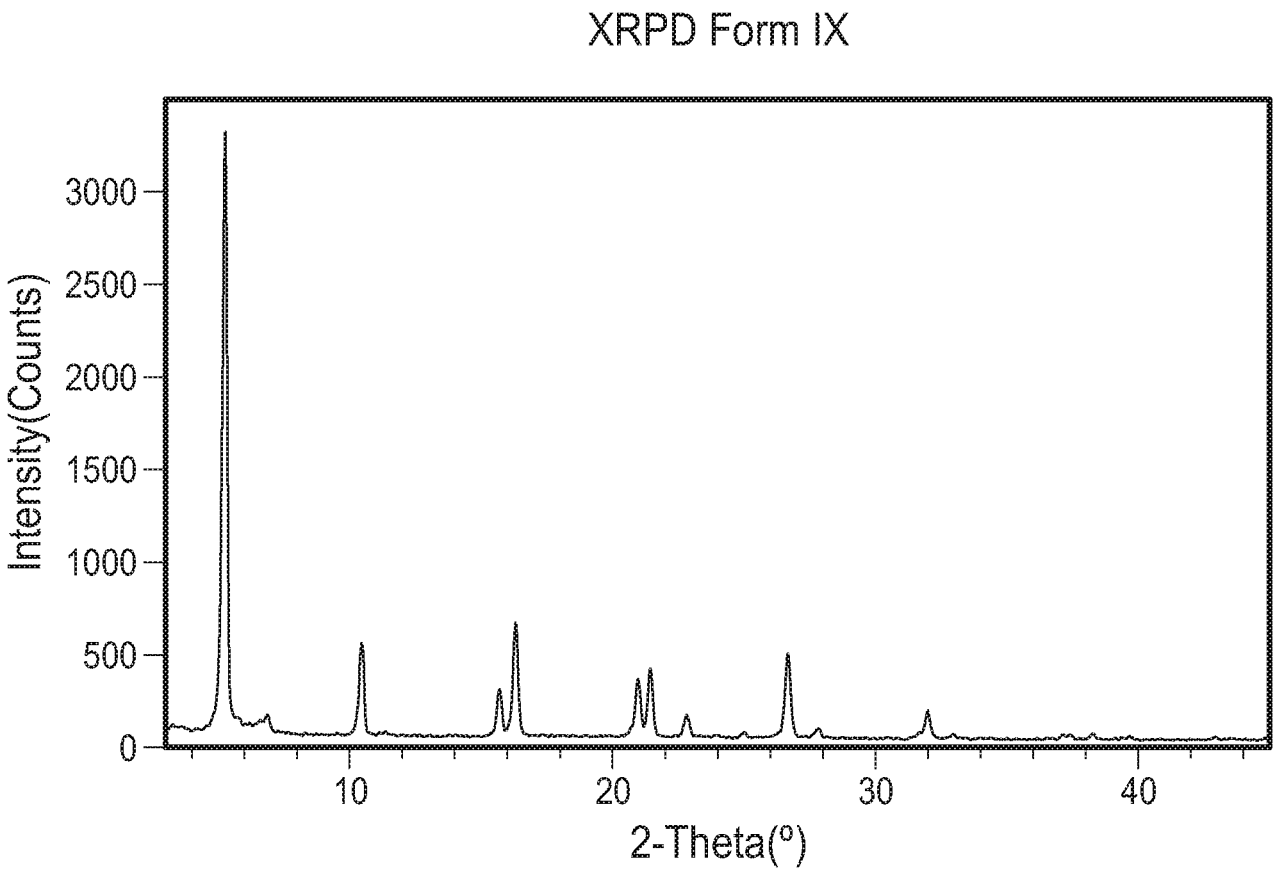
XRPD Form IX
Intensity(Counts)
3000
2500
2000
1500
1000
500
0
10
20
30
40
2-Theta(°)

FIG. 44

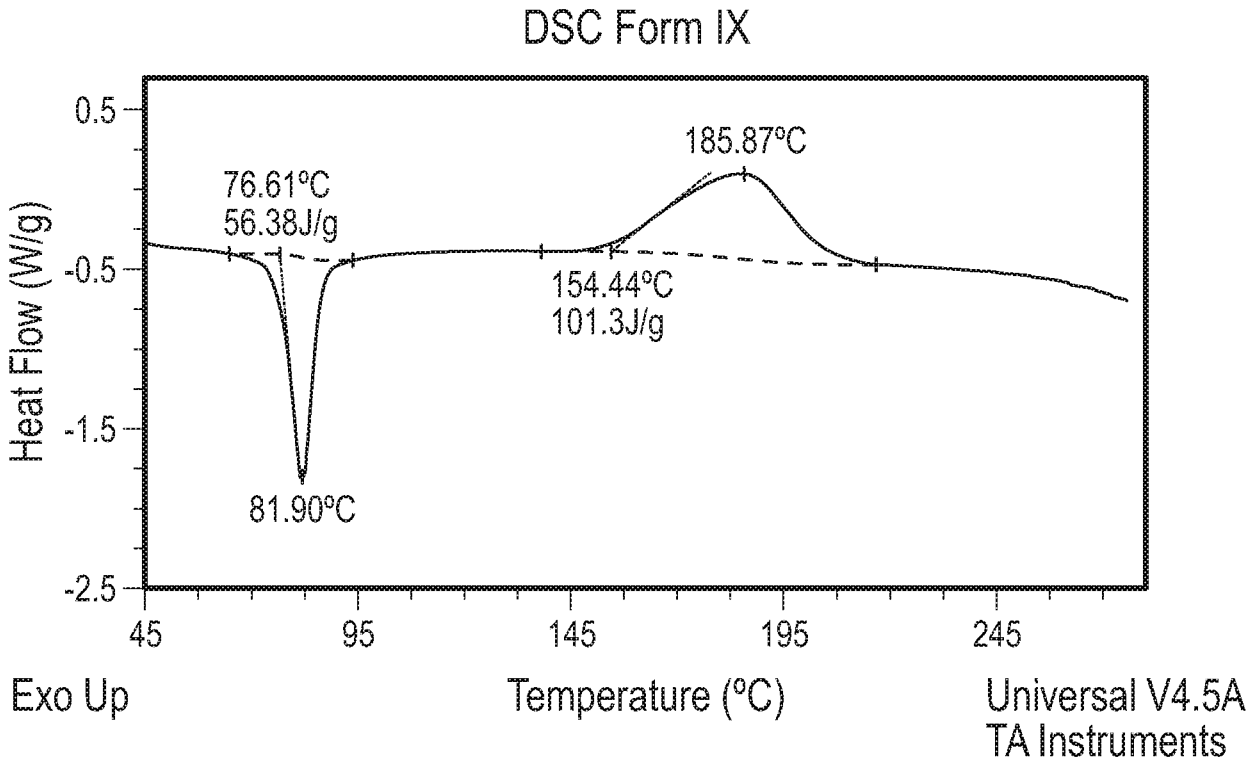
DSC Form IX
0.5
-0.5
-1.5
-2.5
Heat Flow (W/g)
76.61°C
56.38J/g
81.90°C
154.44°C
101.3J/g
185.87°C
45
95
145
195
245
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 45

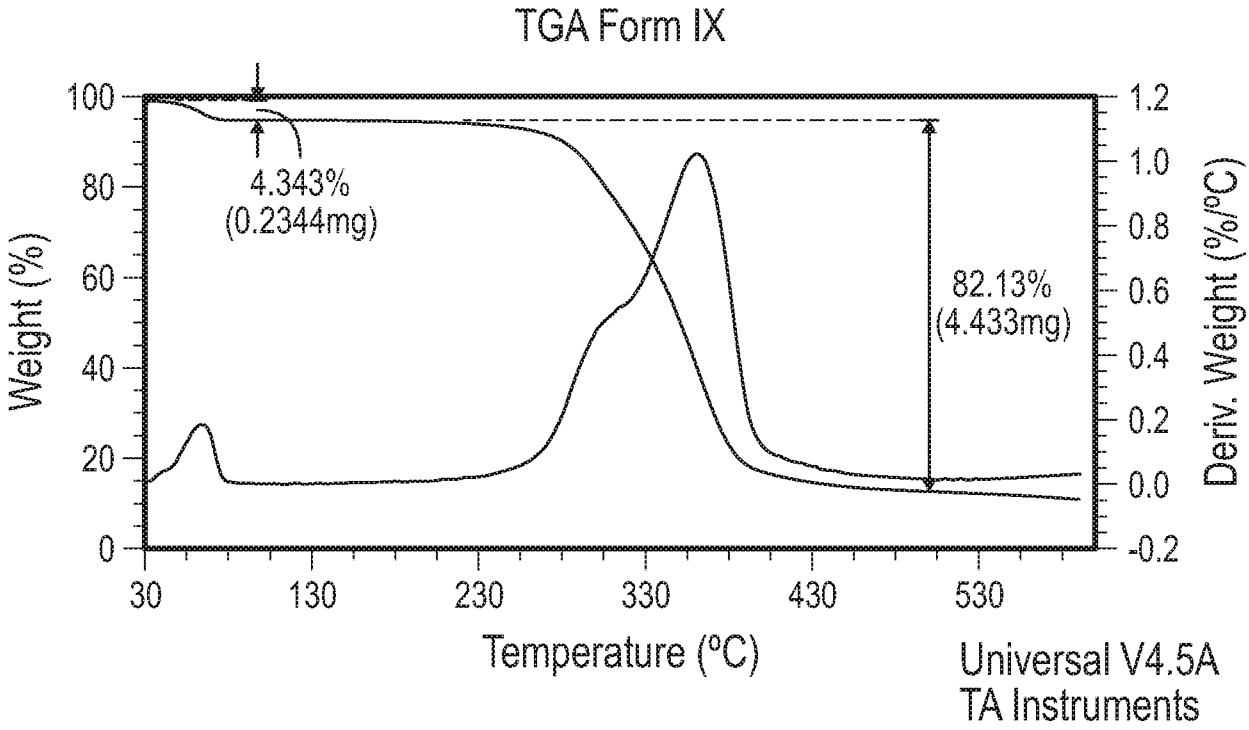
TGA Form IX
Weight (%)
Deriv. Weight (%/°C)
Temperature (°C)
4.343%
(0.2344mg)
82.13%
(4.433mg)
Universal V4.5A
TA Instruments

FIG. 46

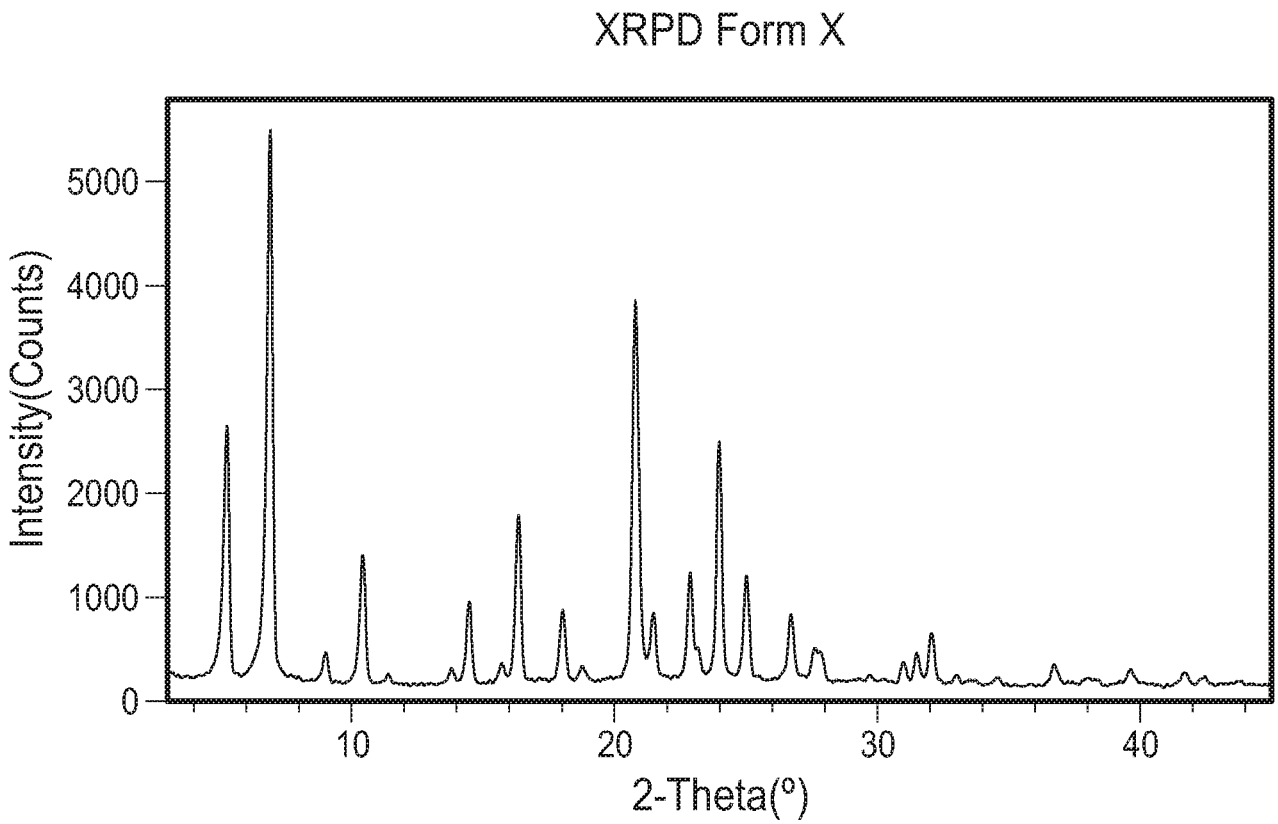
XRPD Form X
Intensity(Counts)
5000
4000
3000
2000
1000
0
10
20
30
40
2-Theta(°)

FIG. 47

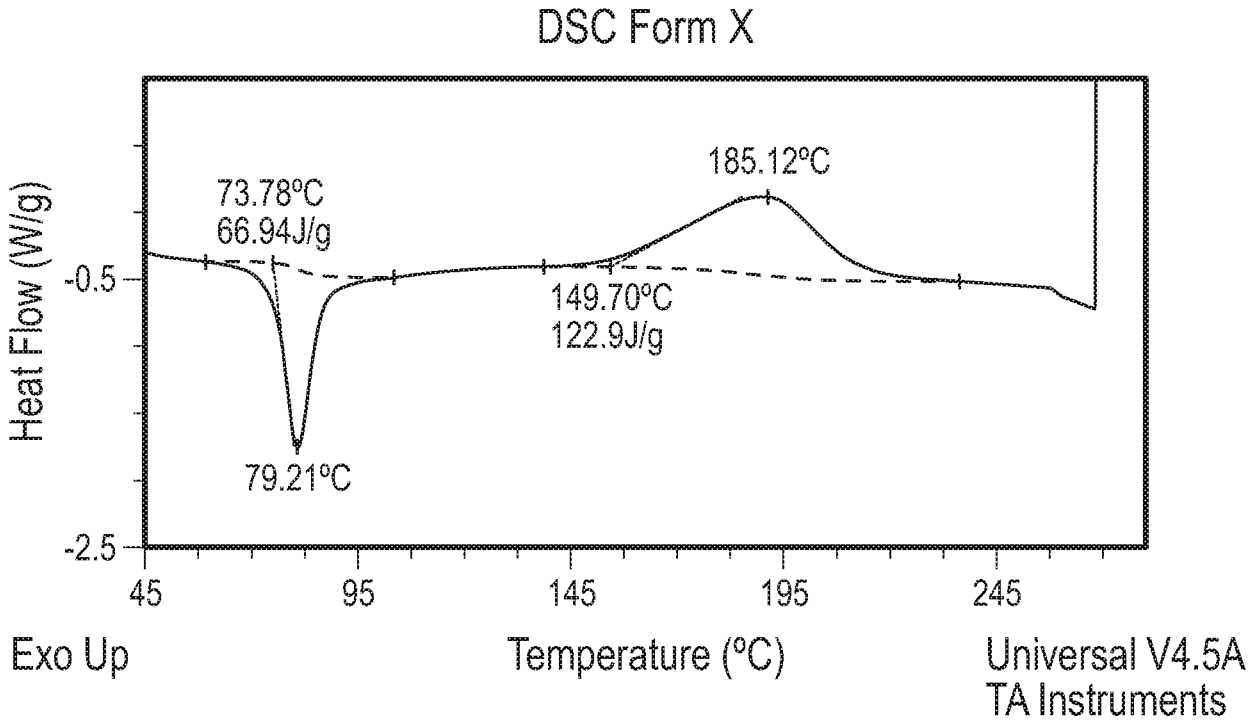
DSC Form X
185.12°C
73.78°C
66.94J/g
149.70°C
122.9J/g
79.21°C
Heat Flow (W/g)
-0.5
-2.5
45
95
145
195
245
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 48

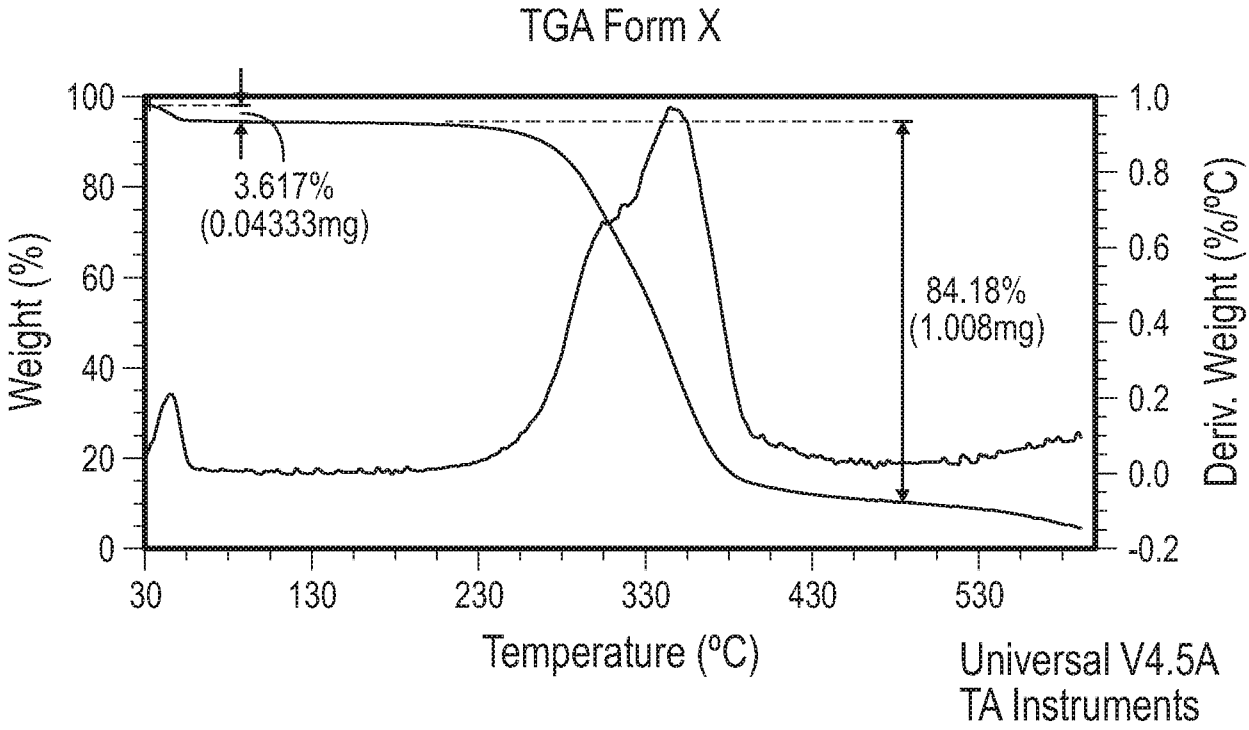
TGA Form X
Weight (%)
Deriv. Weight (%/°C)
Temperature (°C)
3.617%
(0.04333mg)
84.18%
(1.008mg)
Universal V4.5A
TA Instruments

FIG. 49

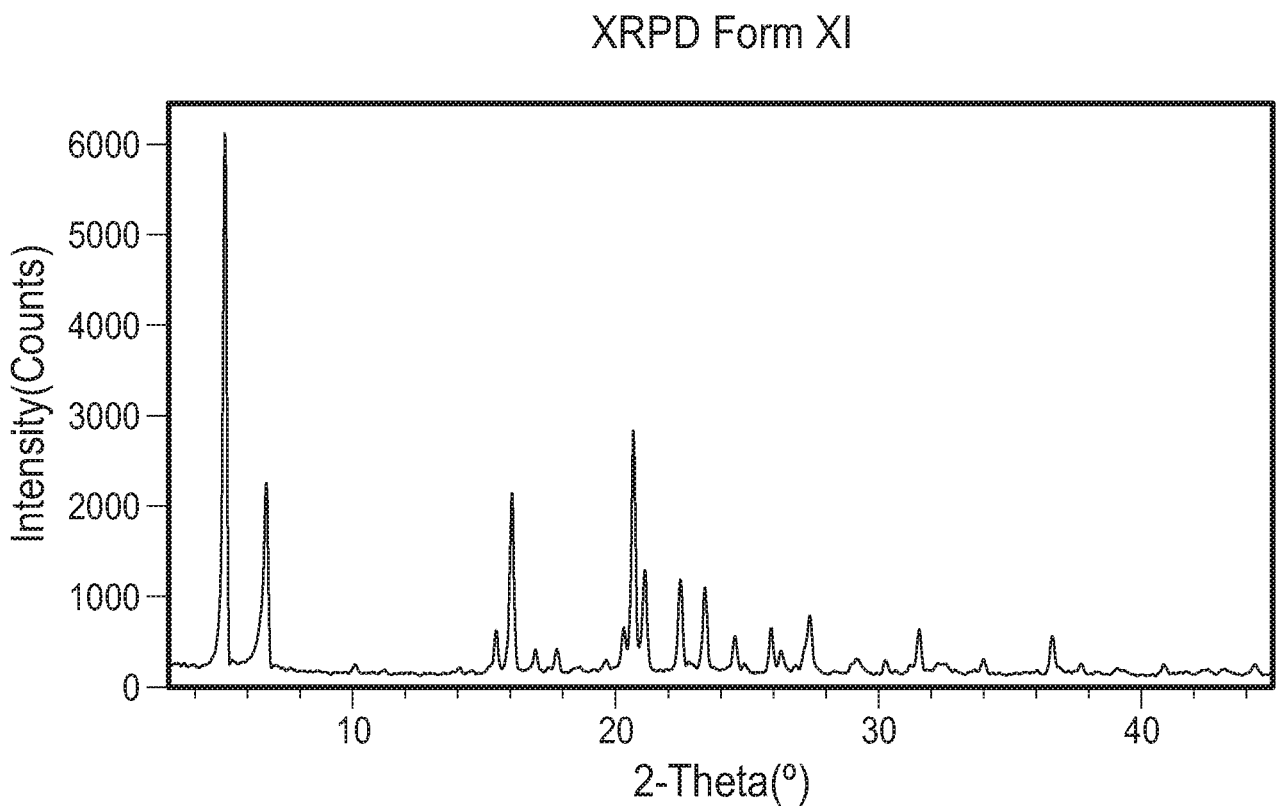
XRPD Form XI
Intensity(Counts)
6000
5000
4000
3000
2000
1000
0
10
20
30
40
2-Theta(°)

FIG. 50

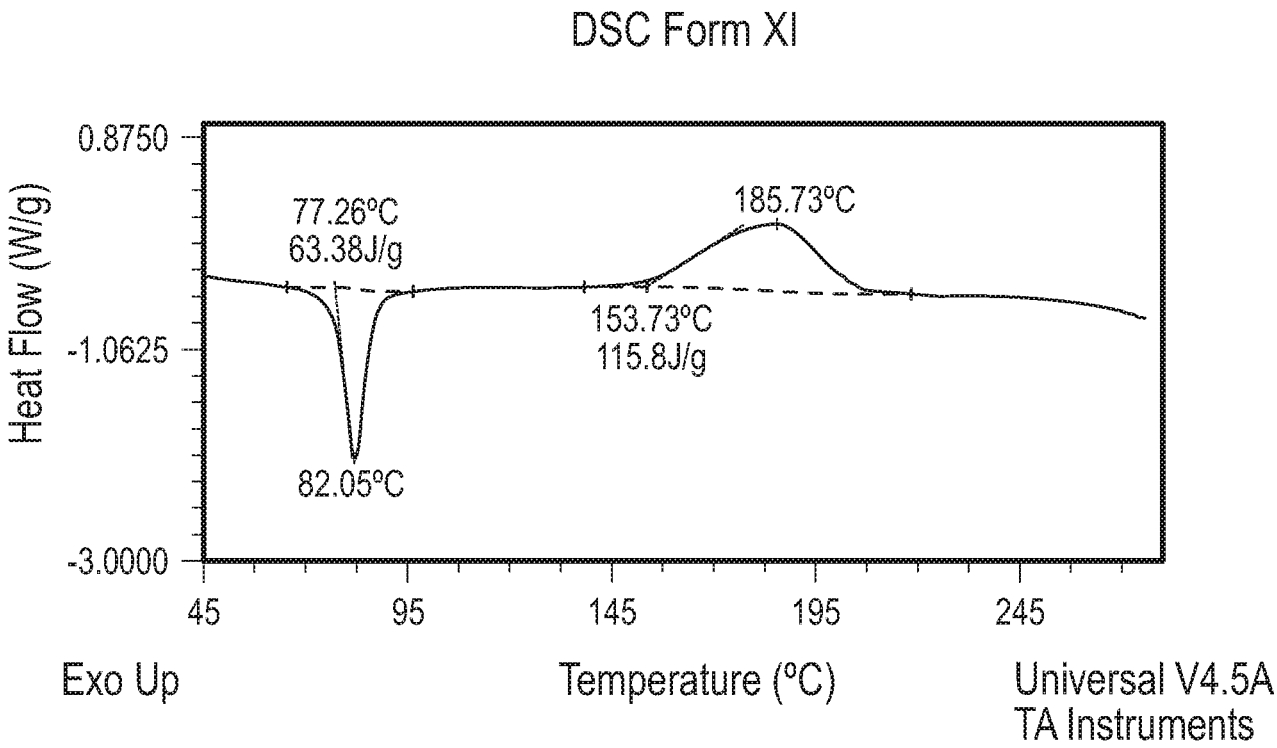
DSC Form XI
0.8750
-1.0625
-3.0000
Heat Flow (W/g)
77.26°C
63.38J/g
82.05°C
153.73°C
115.8J/g
185.73°C
45
95
145
195
245
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 51

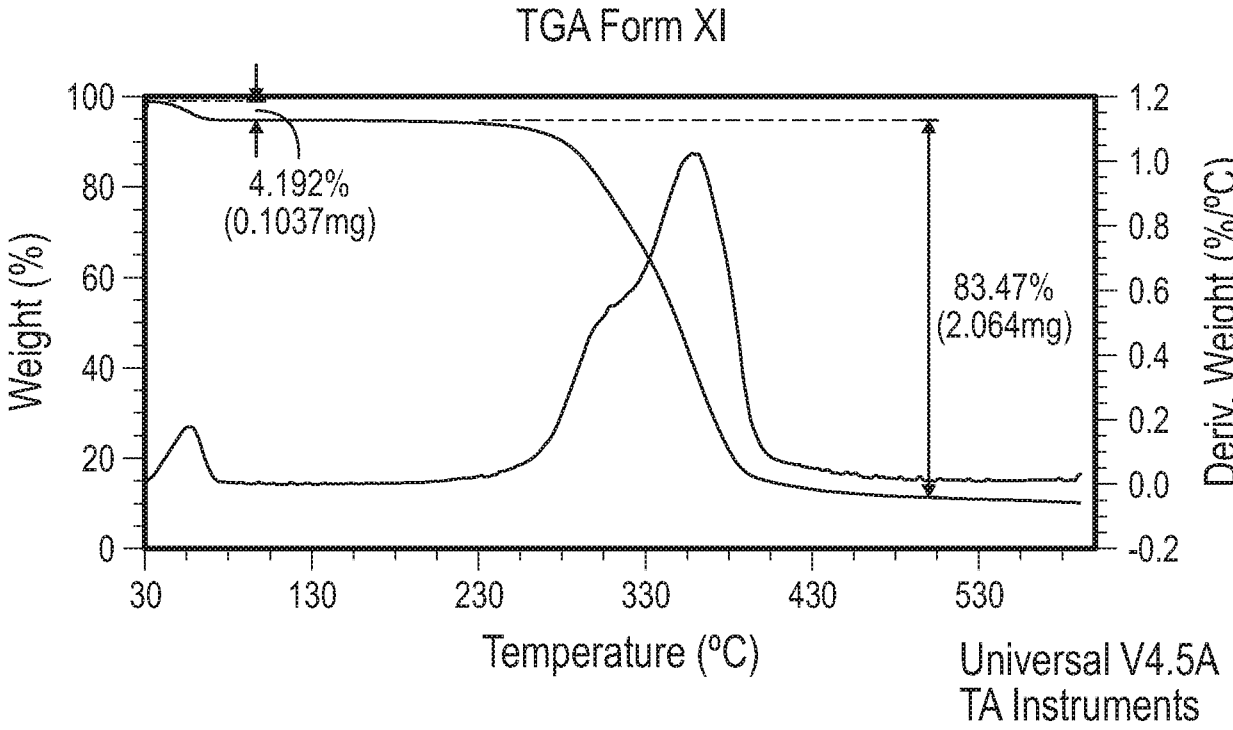
TGA Form XI
Weight (%)
Deriv. Weight (%/°C)
Temperature (°C)
4.192%
(0.1037mg)
83.47%
(2.064mg)
Universal V4.5A
TA Instruments

FIG. 52

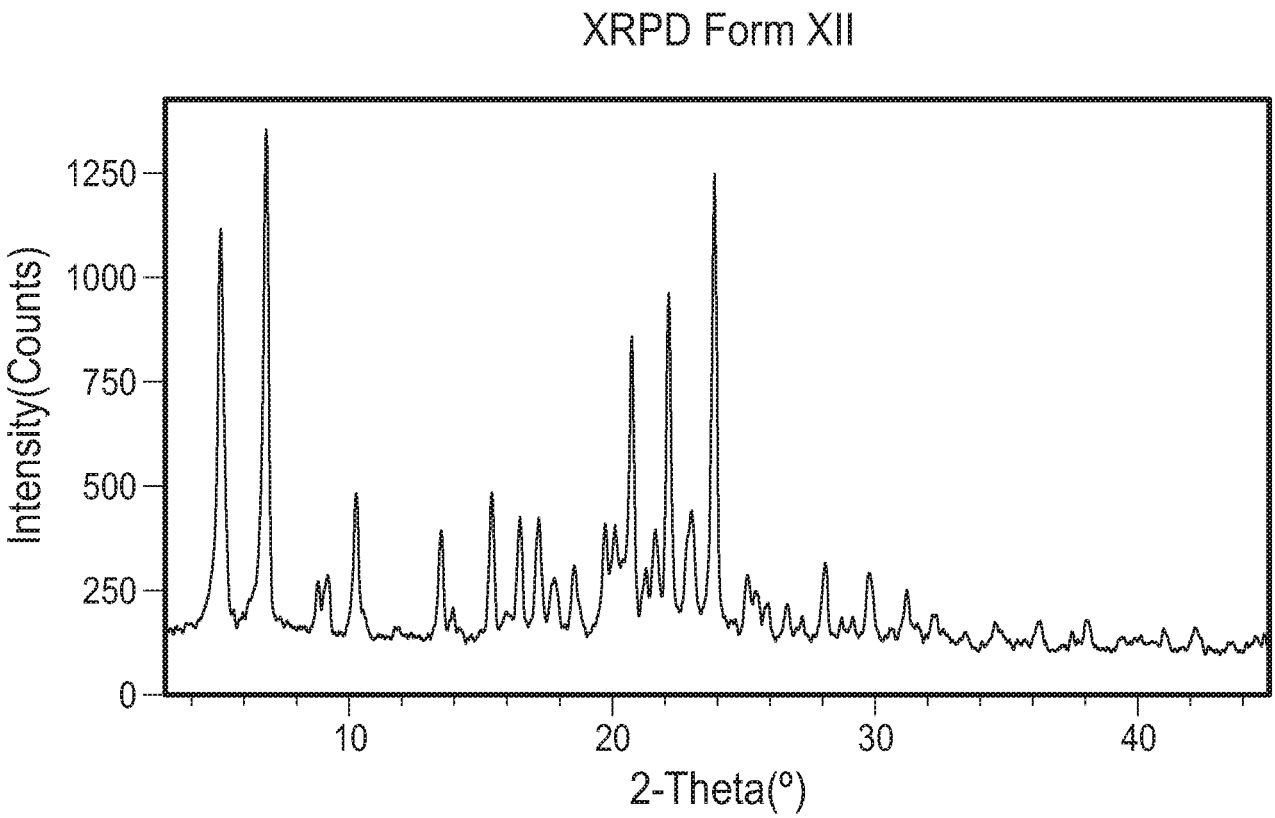
XRPD Form XII
Intensity(Counts)
1250
1000
750
500
250
0
10
20
30
40
2-Theta(°)

FIG. 53

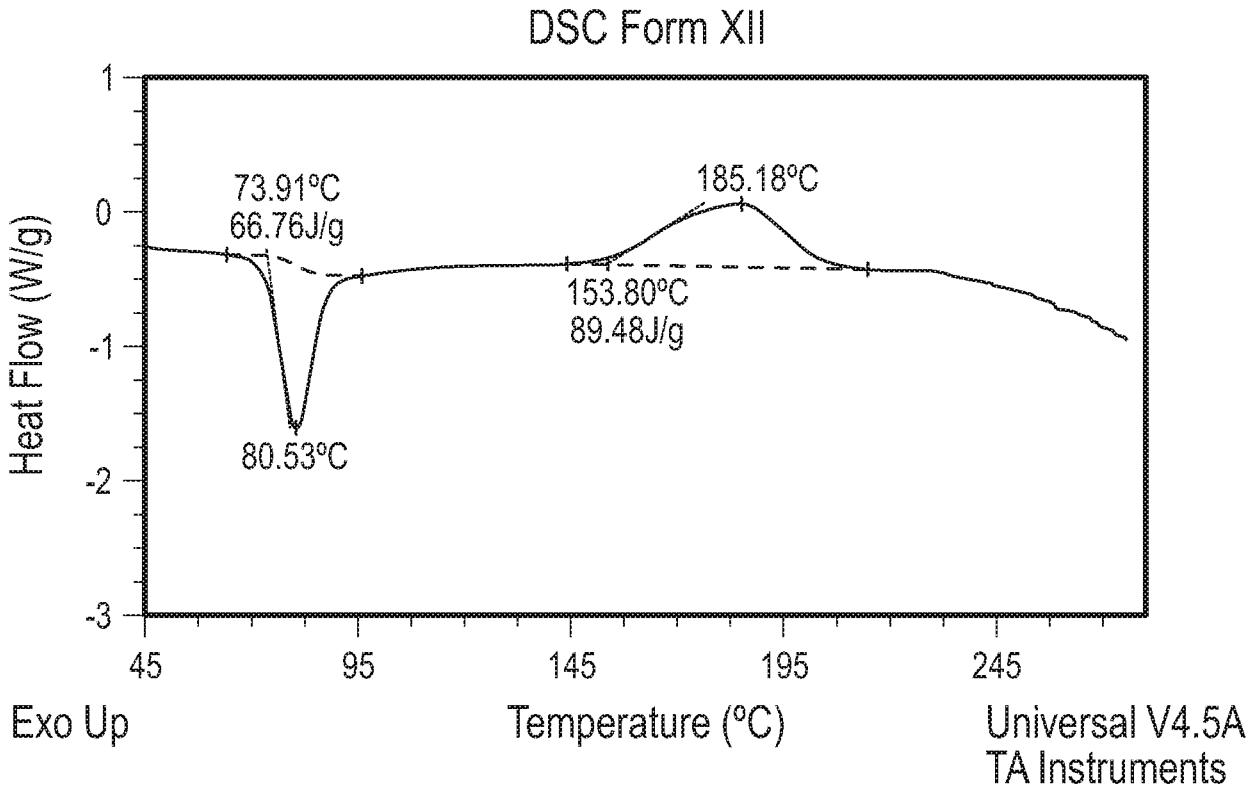
DSC Form XII
Heat Flow (W/g)
1
0
-1
-2
-3
73.91°C
66.76J/g
80.53°C
185.18°C
153.80°C
89.48J/g
45
95
145
195
245
Exo Up
Temperature (°C)
Universal V4.5A
TA Instruments

FIG. 54

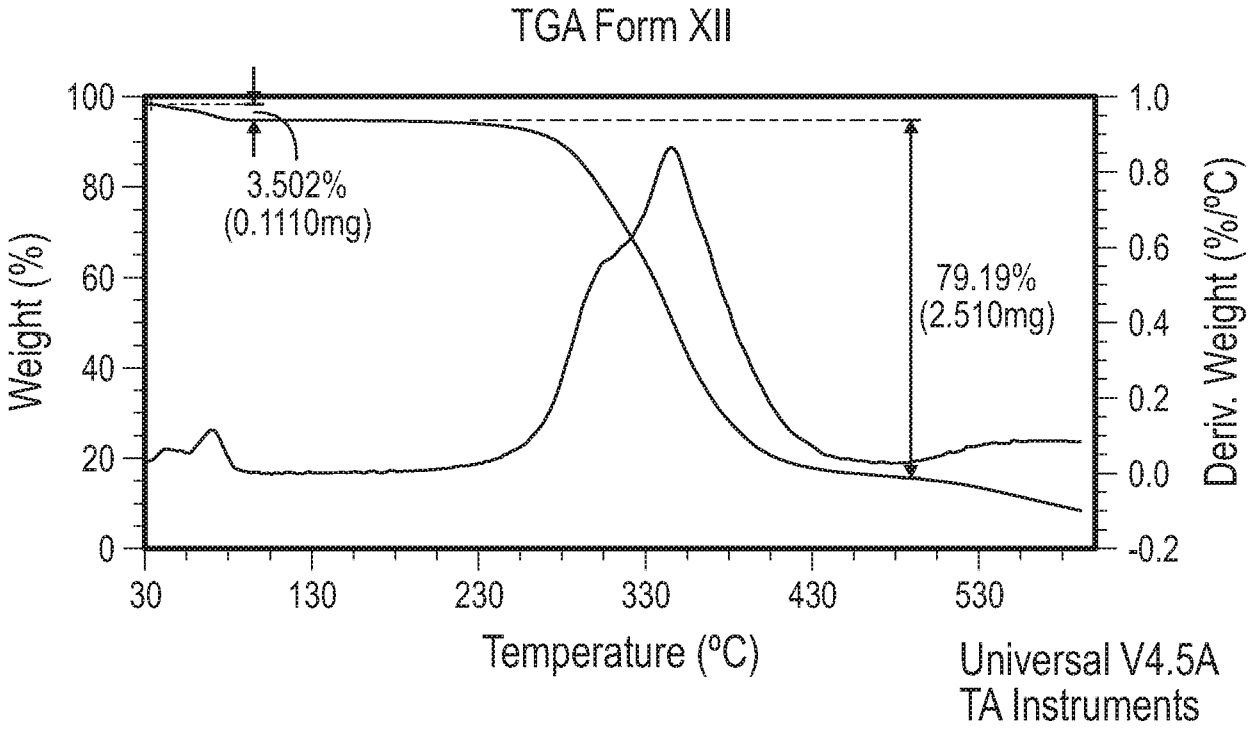
TGA Form XII
Weight (%)
Deriv. Weight (%/°C)
Temperature (°C)
3.502%
(0.1110mg)
79.19%
(2.510mg)
Universal V4.5A
TA Instruments

FIG. 55

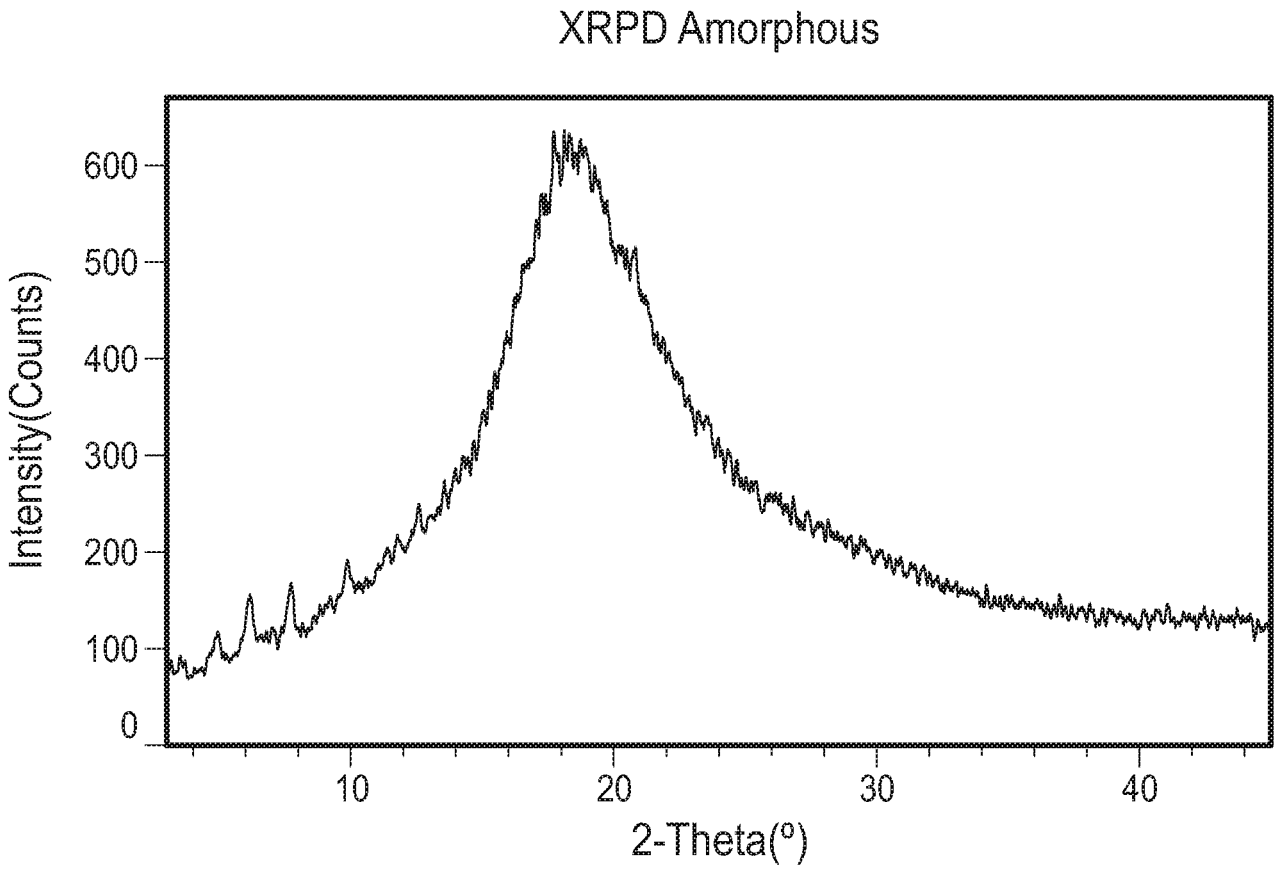
XRPD Amorphous
Intensity(Counts)
600
500
400
300
200
100
0
10
20
30
40
2-Theta(°)

FIG. 56