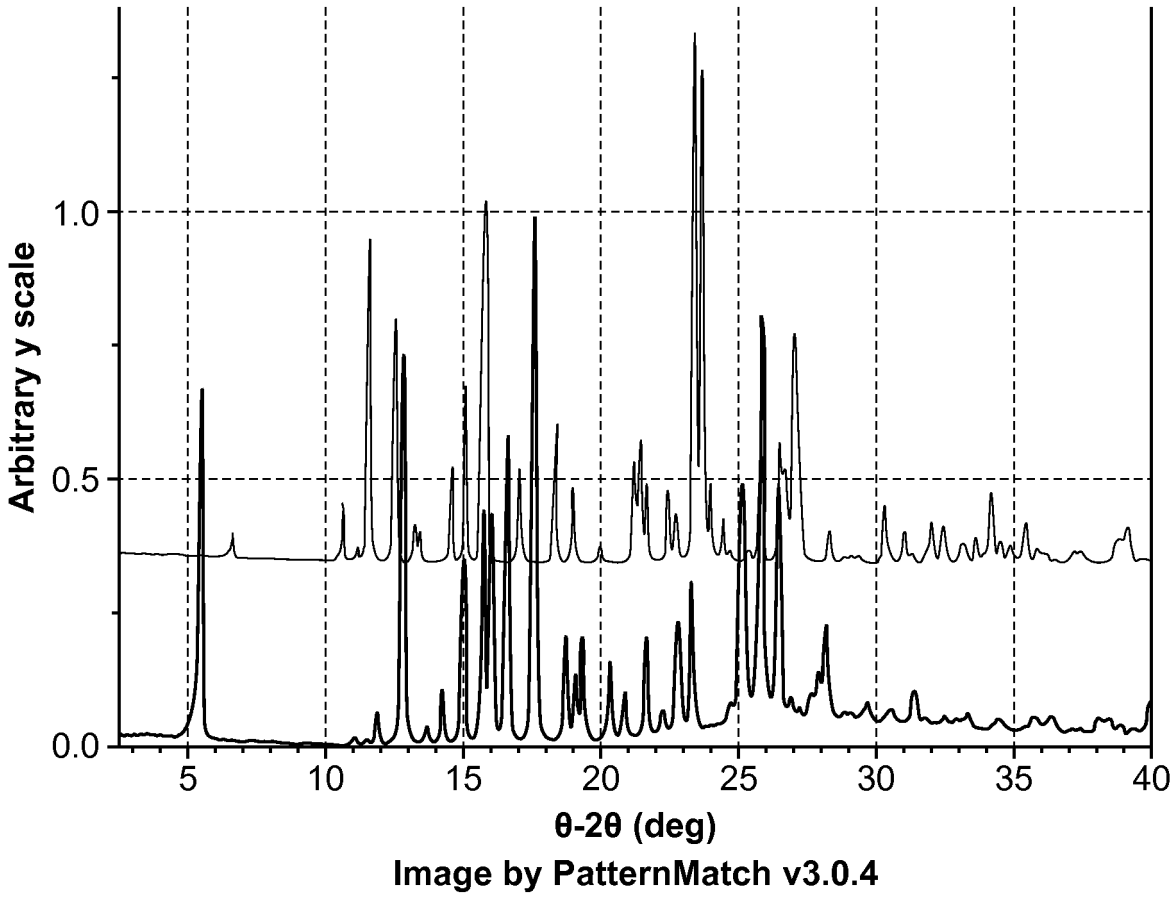

Arbitrary y scale
1.0
0.5
0.0
5
10
15
20
25
30
35
40
θ-2θ (deg)
Image by PatternMatch v3.0.4

FIG. 1

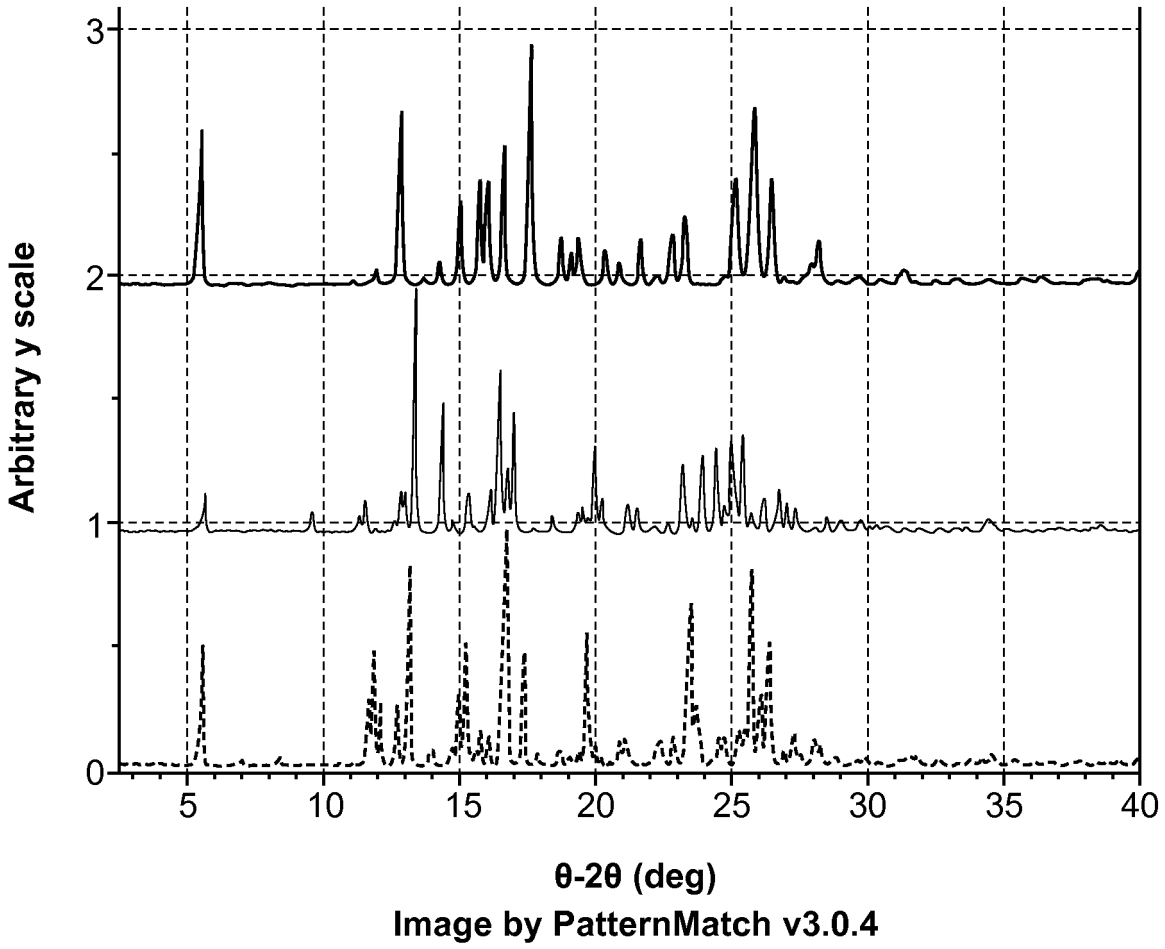
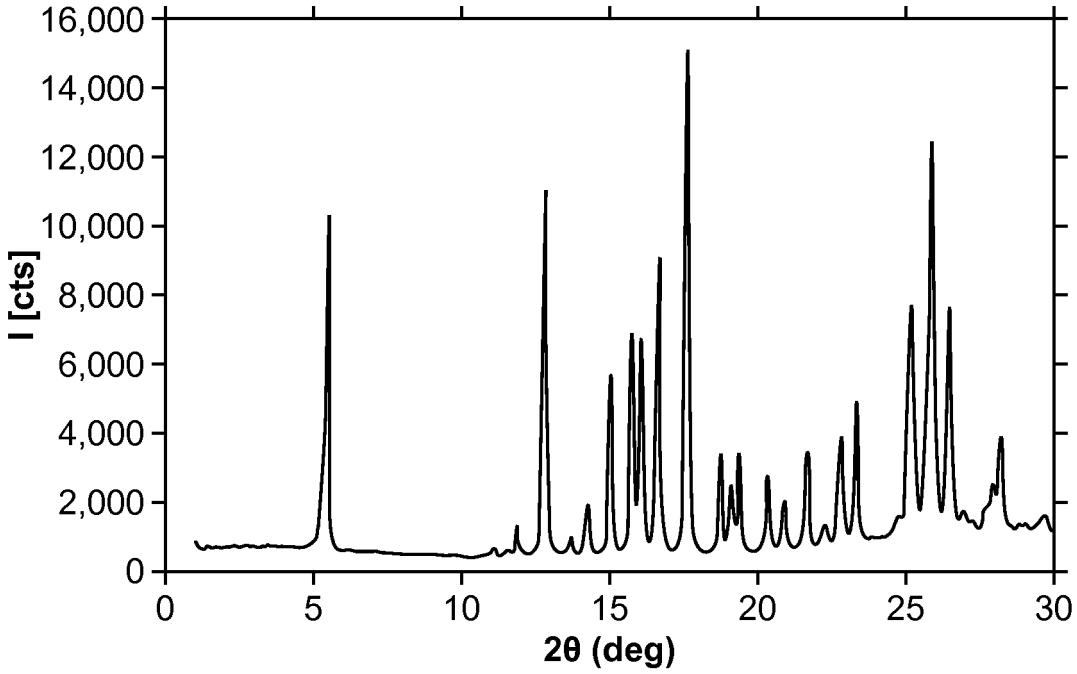

Arbitrary y scale
0
1
2
3
5
10
15
20
25
30
35
40
θ-2θ (deg)
Image by PatternMatch v3.0.4

FIG. 2



Bravais Type	Primitive Monoclinic
a [Å]	7.760
b [Å]	31.978
c [Å]	7.177
α [deg]	90
β [deg]	100.16
γ [deg]	90
Volume [$Å^3$/cell]	1,753.0
Chiral Contents?	Achiral
Extinction Symbol	P 1 2_1/c 1
Space Group(s)	$P2_1$/c (14)
Source	Manual Input

FIG. 3

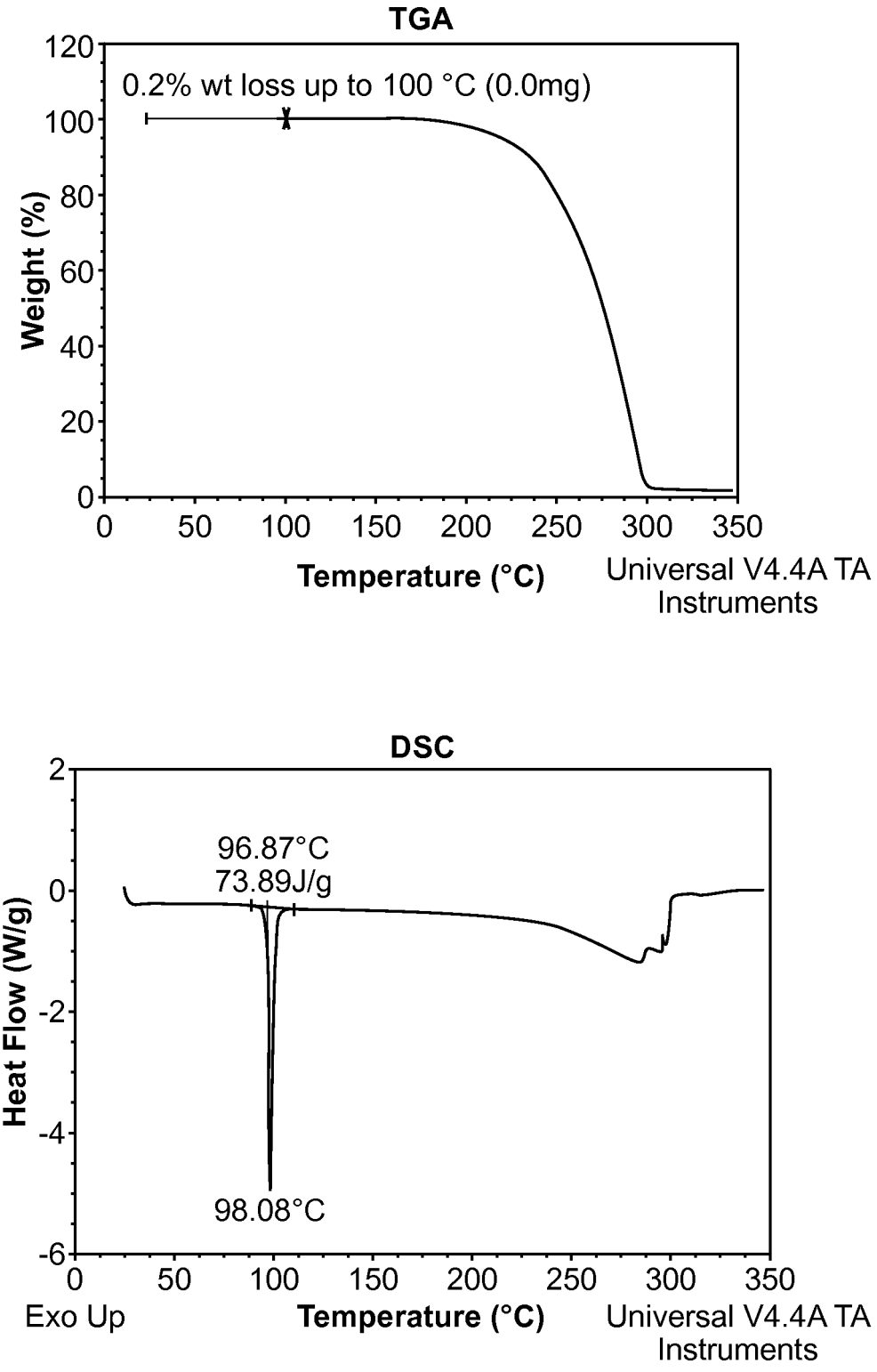
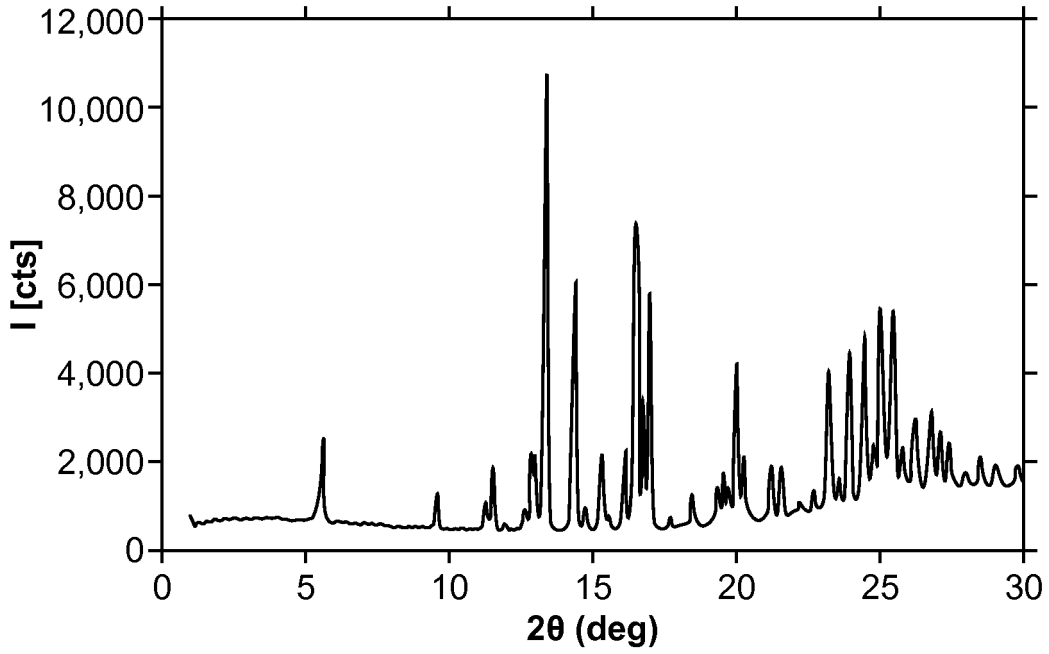

TGA
0.2% wt loss up to 100 °C (0.0mg)
Weight (%)
120
100
80
60
40
20
0
0
50
100
150
200
250
300
350
Temperature (°C)
Universal V4.4A TA Instruments
DSC
96.87°C
73.89J/g
98.08°C
Heat Flow (W/g)
2
0
-2
-4
-6
Exo Up
Temperature (°C)
Universal V4.4A TA Instruments

FIG. 4



Bravais Type	Triclinic
a [Å]	7.876
b [Å]	14.555
c [Å]	16.281
α [deg]	104.23
β [deg]	92.96
γ [deg]	101.38
Volume [$Å^3$/cell]	1,763.8
Chiral Contents?	Not Specified
Extinction Symbol	P -
Space Group(s)	P1 (1)$P\bar{1}$(14)
Source	Triads Algorithm

FIG. 5

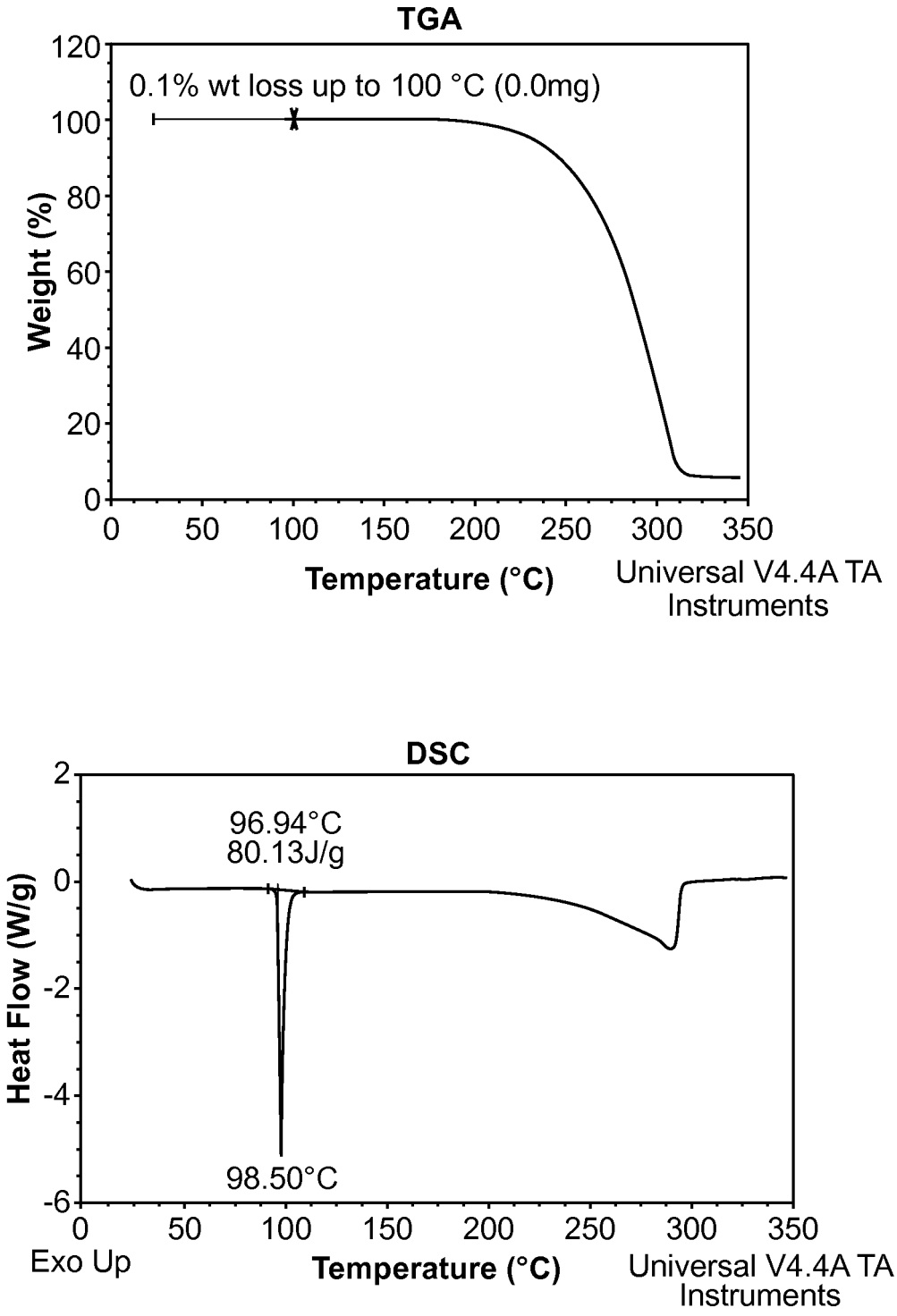

TGA
0.1% wt loss up to 100 °C (0.0mg)
Weight (%)
Temperature (°C)
Universal V4.4A TA Instruments
DSC
96.94°C
80.13J/g
98.50°C
Heat Flow (W/g)
Exo Up
Temperature (°C)
Universal V4.4A TA Instruments

FIG. 6

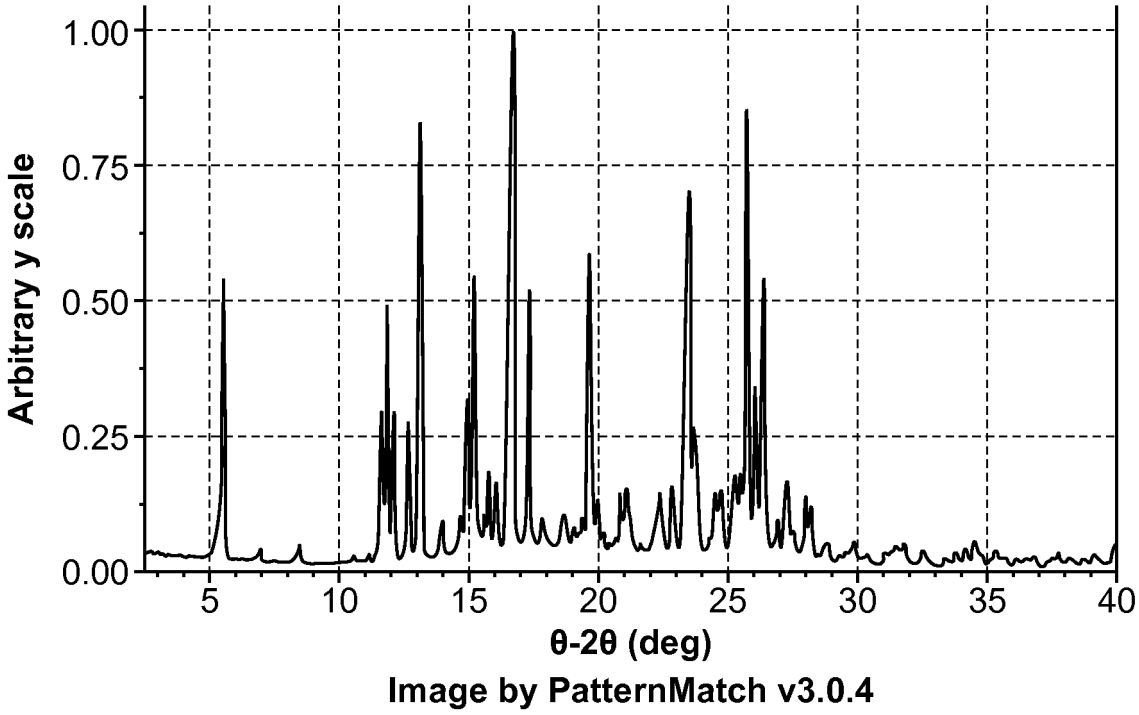

1.00
0.75
0.50
0.25
0.00
Arbitrary y scale
5
10
15
20
25
30
35
40
θ-2θ (deg)
Image by PatternMatch v3.0.4

FIG. 7

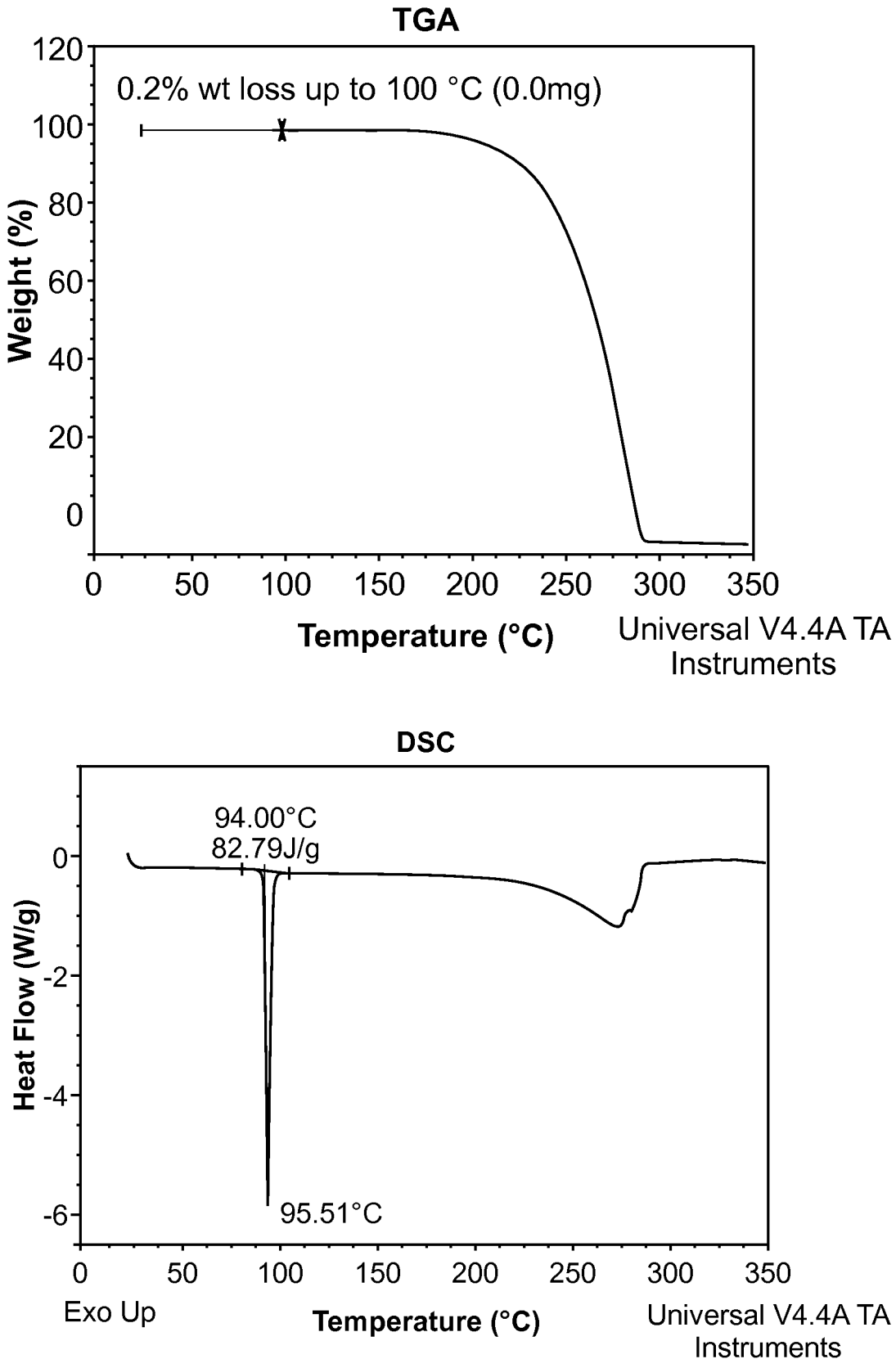

TGA
0.2% wt loss up to 100 °C (0.0mg)
Weight (%)
120
100
80
60
40
20
0
0
50
100
150
200
250
300
350
Temperature (°C)
Universal V4.4A TA Instruments
DSC
94.00°C
82.79J/g
95.51°C
Heat Flow (W/g)
0
-2
-4
-6
Exo Up
Temperature (°C)
Universal V4.4A TA Instruments

FIG. 8

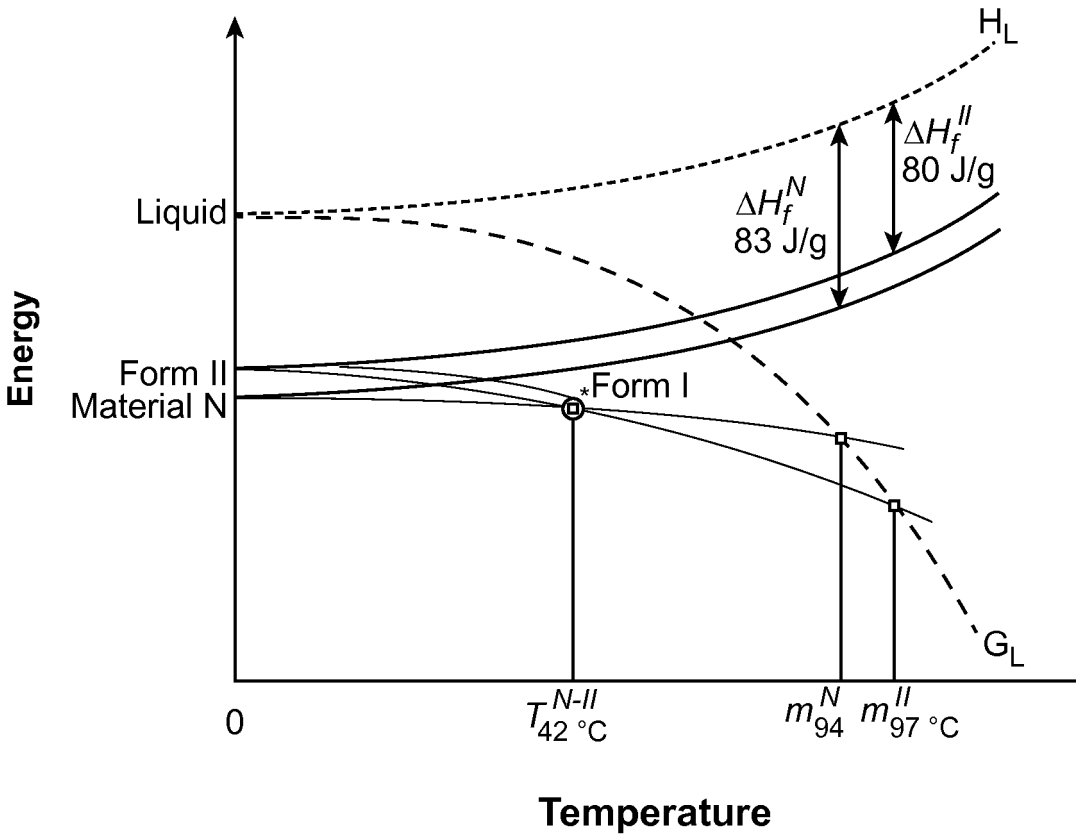

H_L
ΔH_f^II
80 J/g
ΔH_f^N
83 J/g
Liquid
Energy
Form II
Material N
*Form I
G_L
0
T_42 °C^N-II
m_94^N
m_97 °C^II
Temperature

FIG. 9

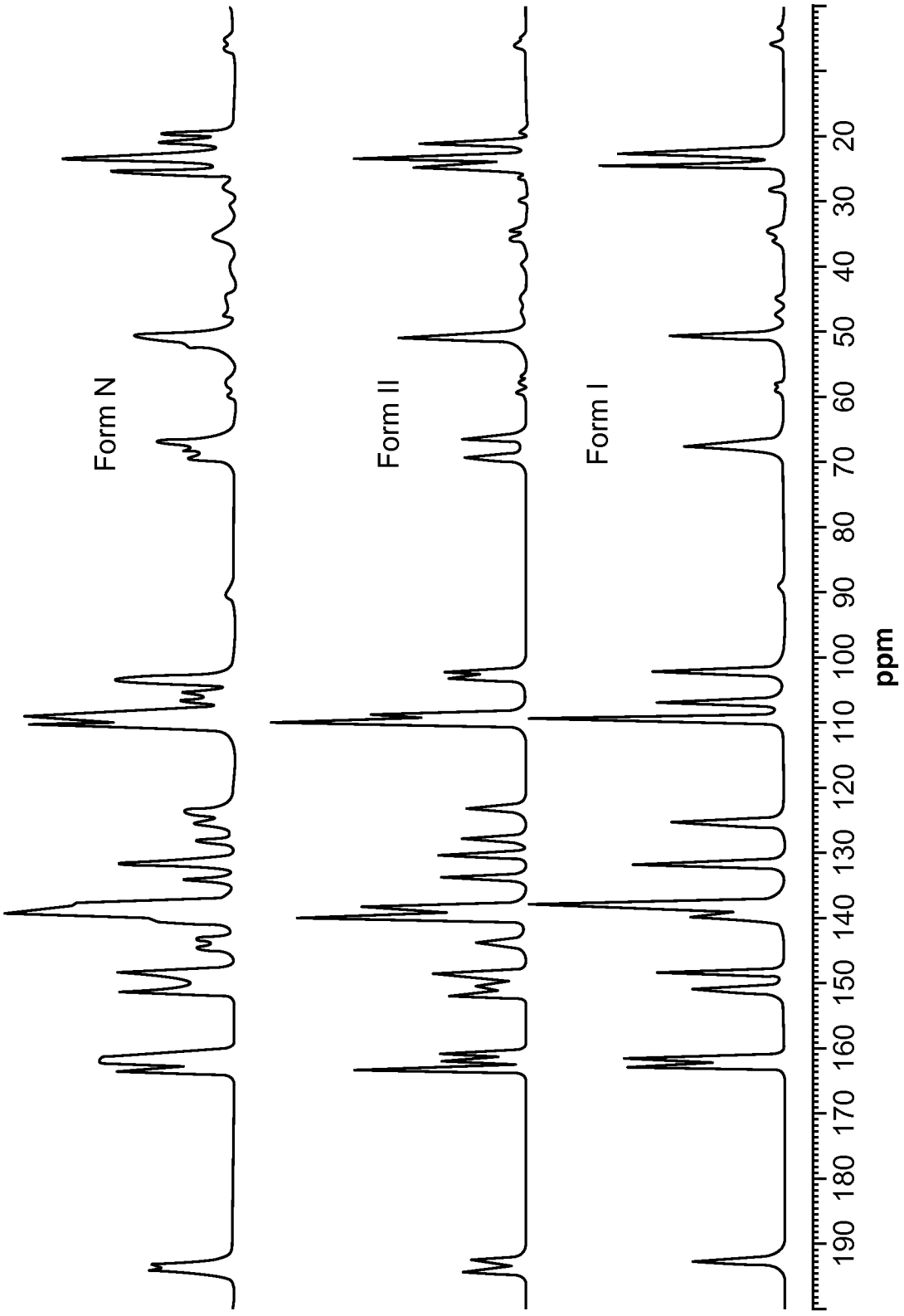

Form N
Form II
Form I
190 180 170 160 150 140 130 120 110 100 90 80 70 60 50 40 30 20
ppm

FIG. 10

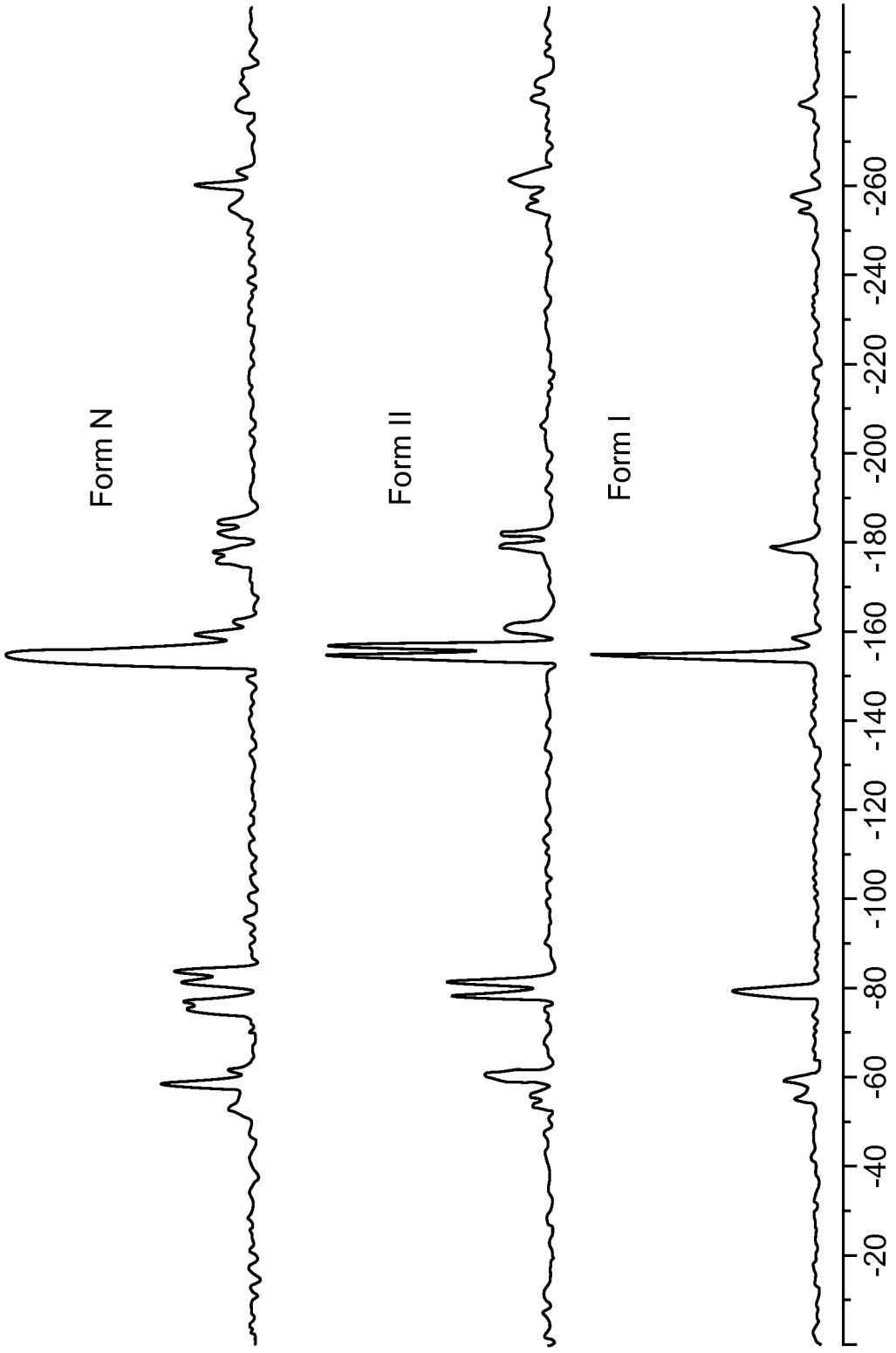

Form N
Form II
Form I
-20
-40
-60
-80
-100
-120
-140
-160
-180
-200
-220
-240
-260
ppm

FIG. 11

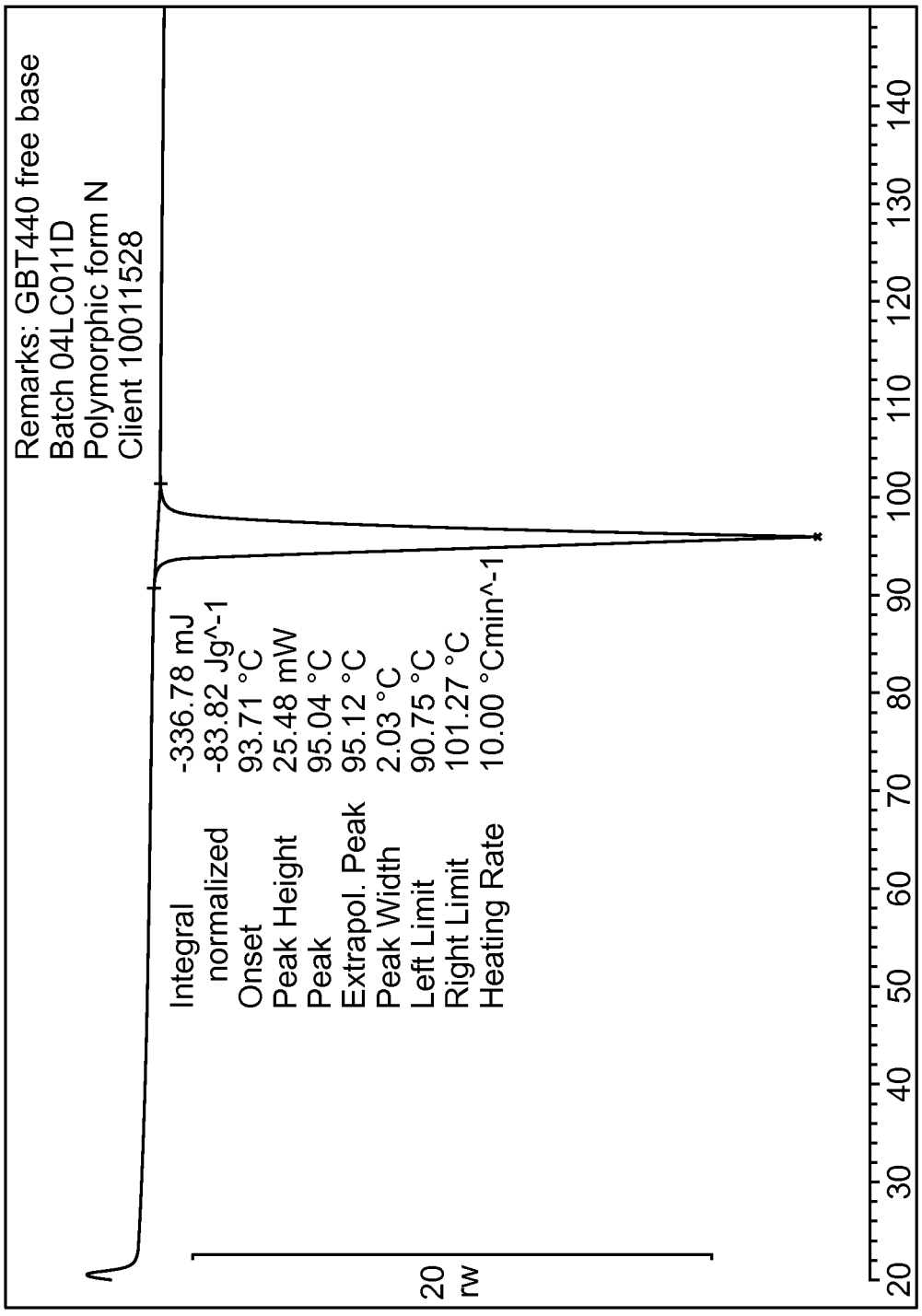

Remarks: GBT440 free base
Batch 04LC011D
Polymorphic form N
Client 10011528
Integral -336.78 mJ
normalized -83.82 Jg^-1
Onset 93.71 °C
Peak Height 25.48 mW
Peak 95.04 °C
Extrapol. Peak 95.12 °C
Peak Width 2.03 °C
Left Limit 90.75 °C
Right Limit 101.27 °C
Heating Rate 10.00 °Cmin^-1
20
mW
20 30 40 50 60 70 80 90 100 110 120 130 140
°C

FIG. 12

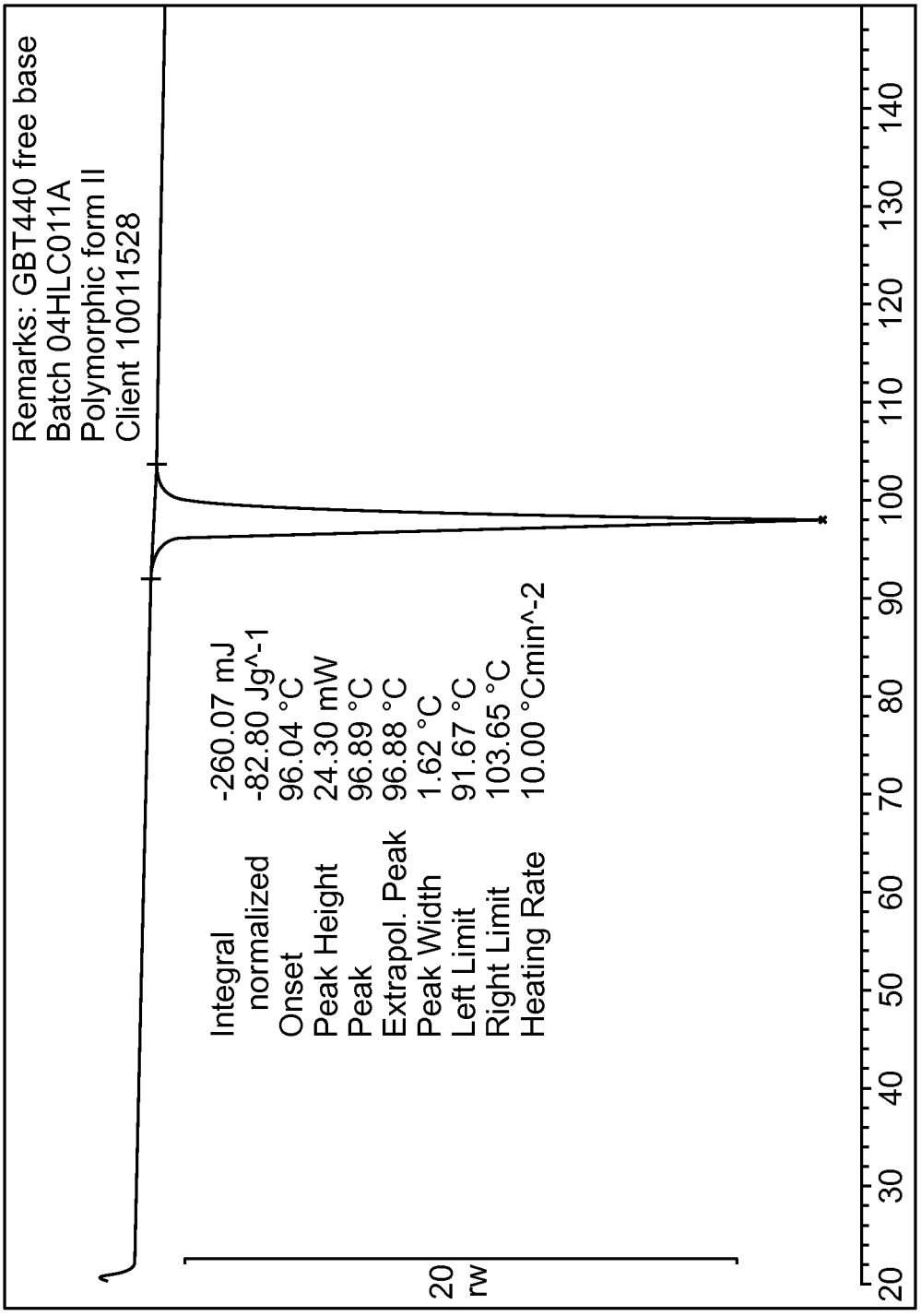

Remarks: GBT440 free base
Batch 04HLC011A
Polymorphic form II
Client 10011528
Integral -260.07 mJ
normalized -82.80 Jg^-1
Onset 96.04 °C
Peak Height 24.30 mW
Peak 96.89 °C
Extrapol. Peak 96.88 °C
Peak Width 1.62 °C
Left Limit 91.67 °C
Right Limit 103.65 °C
Heating Rate 10.00 °Cmin^-2
20
mW
20 30 40 50 60 70 80 90 100 110 120 130 140
°C

FIG. 13

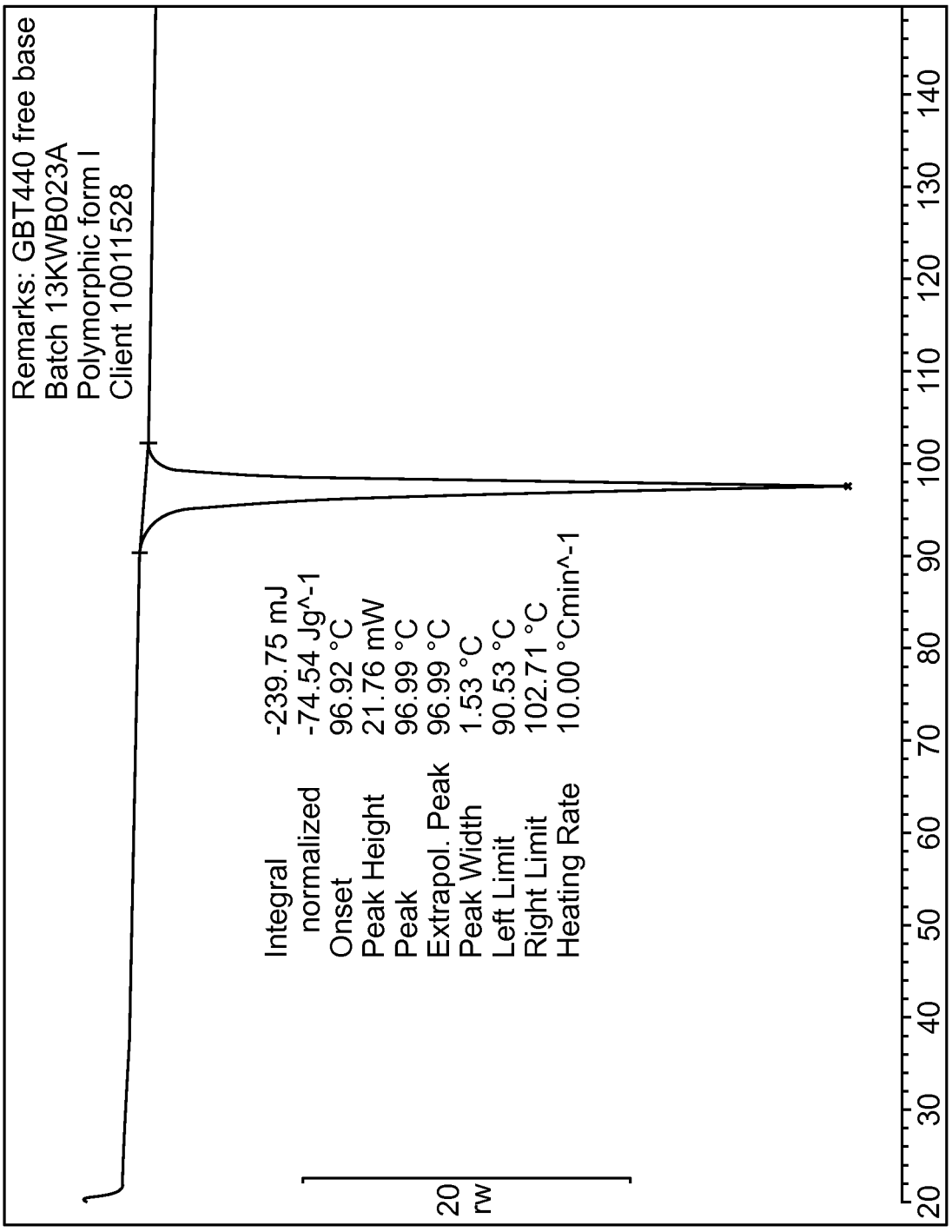

Remarks: GBT440 free base
Batch 13KWB023A
Polymorphic form I
Client 10011528
Integral -239.75 mJ
normalized -74.54 Jg^-1
Onset 96.92 °C
Peak Height 21.76 mW
Peak 96.99 °C
Extrapol. Peak 96.99 °C
Peak Width 1.53 °C
Left Limit 90.53 °C
Right Limit 102.71 °C
Heating Rate 10.00 °Cmin^-1
20
mW
20 30 40 50 60 70 80 90 100 110 120 130 140
°C

FIG. 14

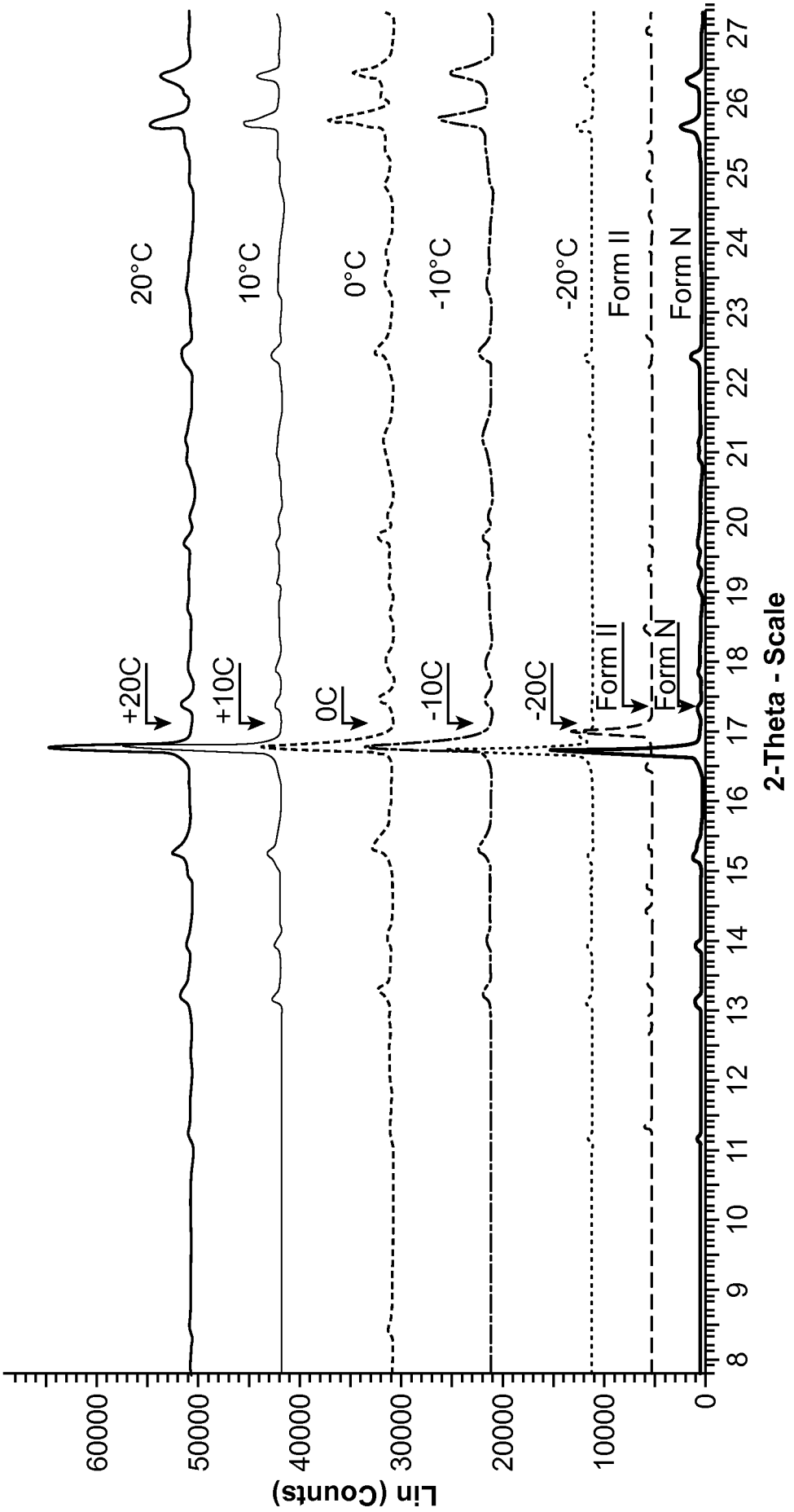
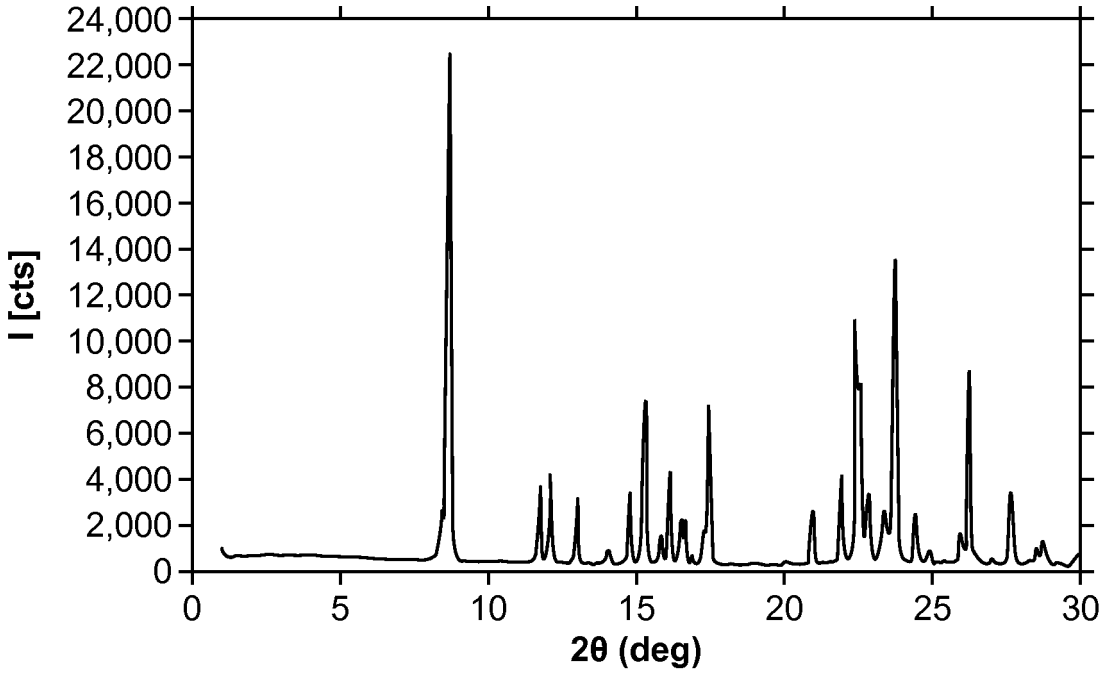
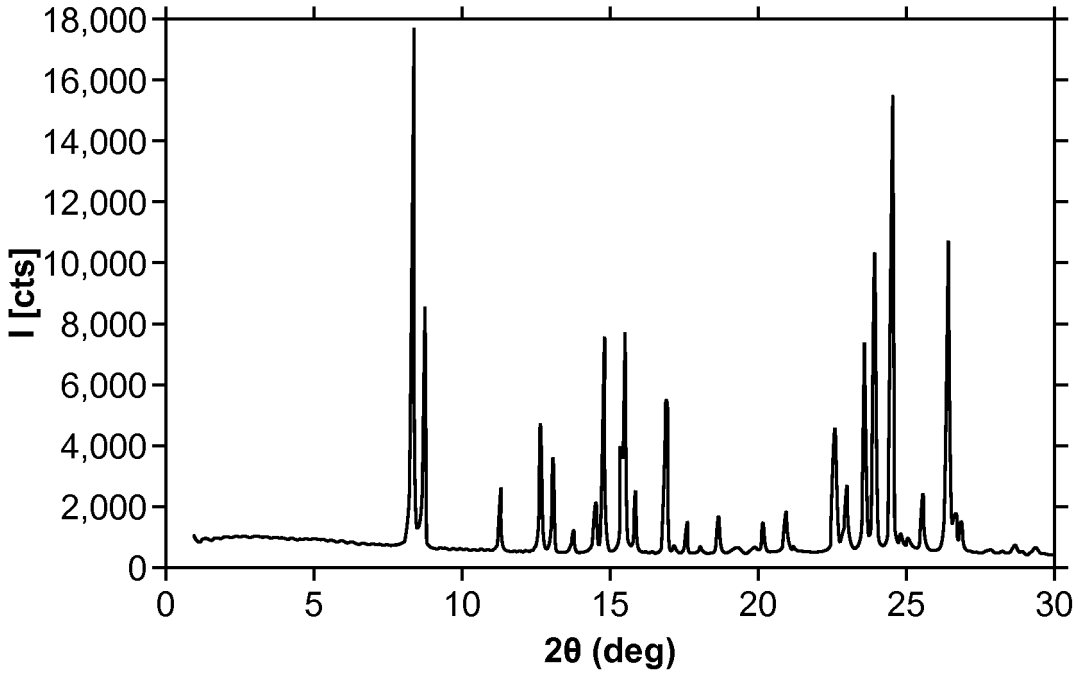

20°C
10°C
0°C
-10°C
-20°C
Form II
Form N
+20C
+10C
0C
-10C
-20C
Form II
Form N
Lin (Counts)
60000
50000
40000
30000
20000
10000
0
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
2-Theta - Scale

FIG. 15



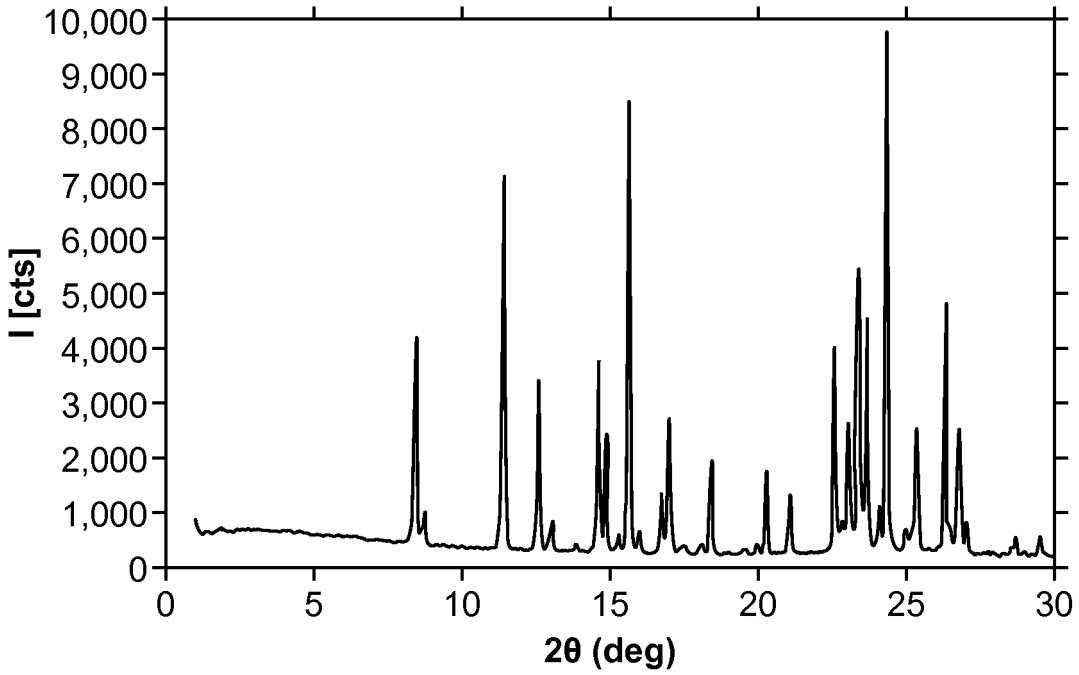
Bravais Type	Triclinic
a [Å]	7.966
b [Å]	11.609
c [Å]	12.382
α [deg]	116.67
β [deg]	104.16
γ [deg]	94.58
Volume [$Å^3$/cell]	968.1
Chiral Contents?	Achiral
Extinction Symbol	P -
Space Group(s)	P1 (1), $P\bar{1}$ (2)
Source	Manual Input

FIG. 16



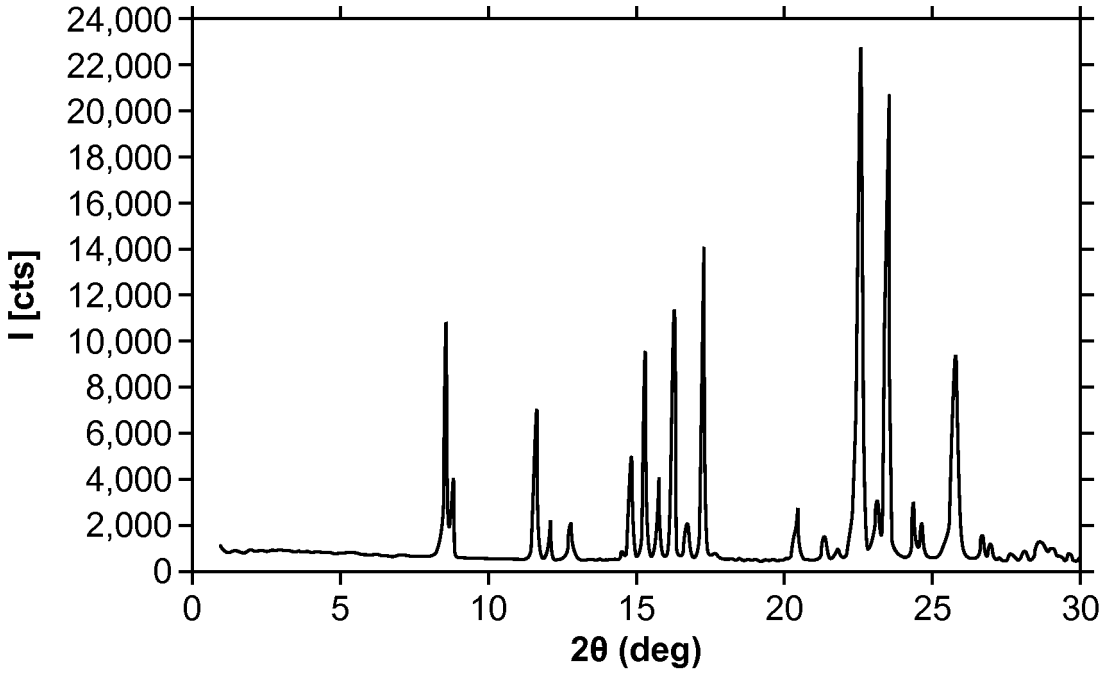
Bravais Type	Triclinic	Triclinic
a [Å]	7.966	7.966
b [Å]	11.726	11.891
c [Å]	11.891	12.031
α [deg]	61.25	121.30
β [deg]	86.34	99.19
γ [deg]	76.79	93.66
Volume [$Å^3$/cell]	946.7	946.6
Chiral Contents?	Achiral	Achiral
Extinction Symbol	P -	P -
Space Group(s)	P1 (1), $P\bar{1}$ (2)	P1 (1), $P\bar{1}$ (2)
Source	Manual Input	Manual Input

FIG. 17



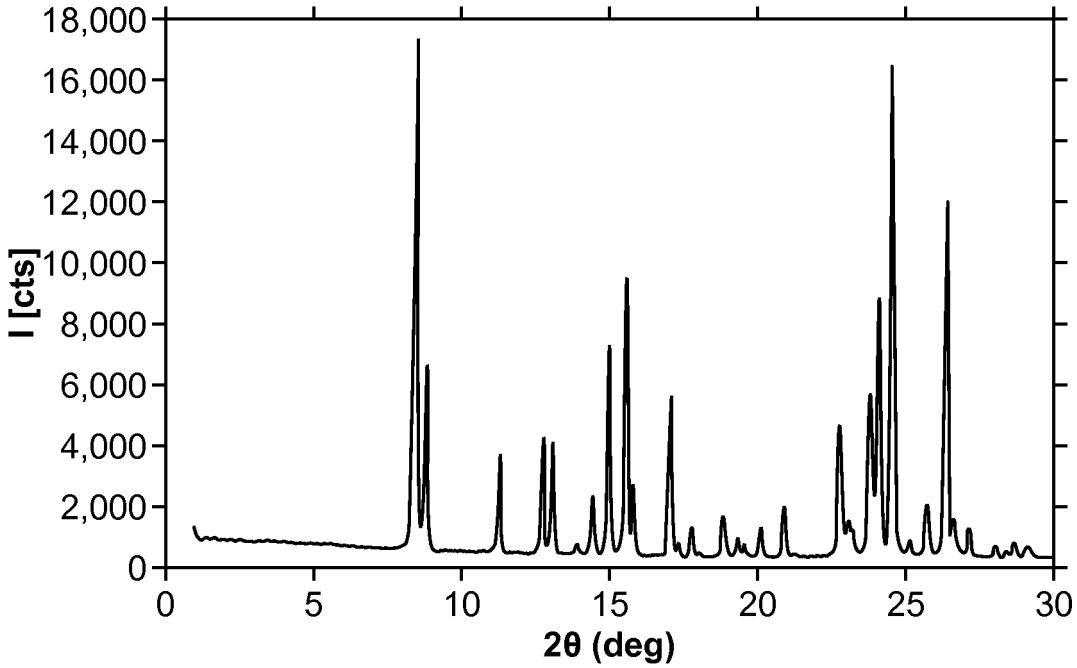
Bravais Type	Triclinic	Triclinic
a [Å]	7.971	7.971
b [Å]	11.901	11.901
c [Å]	11.914	12.131
α [deg]	61.25	120.57
β [deg]	75.84	99.94
γ [deg]	86.05	93.95
Volume [Å^3/cell]	959.2	959.2
Chiral Contents?	Achiral	Achiral
Extinction Symbol	P -	P -
Space Group(s)	P1 (1), P$\bar{1}$ (2)	P1 (1), P$\bar{1}$ (2)
Source	Manual Input	Manual Input

FIG. 18



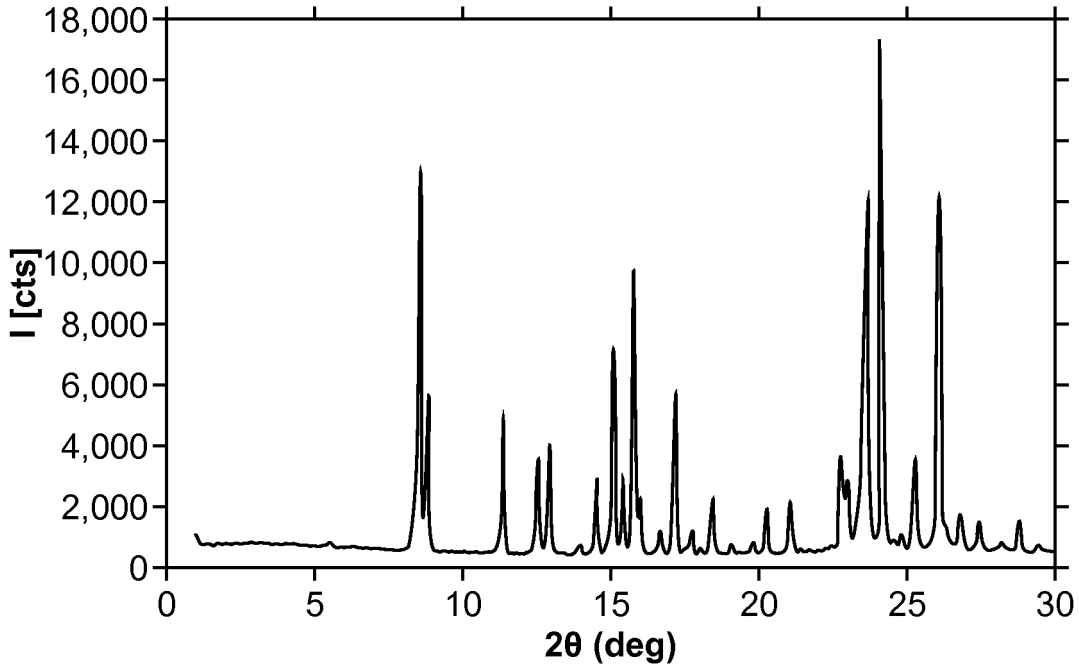
Bravais Type	Triclinic
a [Å]	8.011
b [Å]	11.633
c [Å]	12.471
α [deg]	117.30
β [deg]	102.75
γ [deg]	96.36
Volume [Å^3/cell]	976.7
Chiral Contents?	Not Specified
Extinction Symbol	P -
Space Group(s)	P1 (1), P$\bar{1}$ (2)
Source	Triads Algorithm

FIG. 19



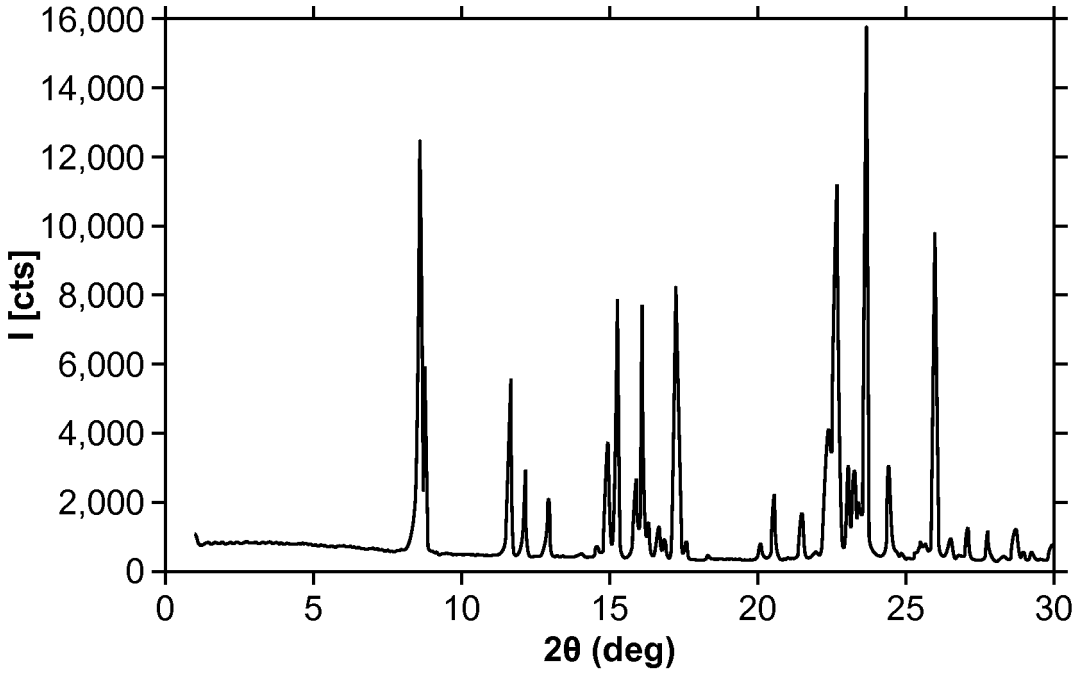
Bravais Type	Triclinic	Triclinic
a [Å]	8.005	8.005
b [Å]	11.676	11.812
c [Å]	11.812	11.974
α [deg]	61.30	121.21
β [deg]	85.79	98.35
γ [deg]	77.10	94.21
Volume [Å^3/cell]	943.2	943.2
Chiral Contents?	Achiral	Achiral
Extinction Symbol	P -	P -
Space Group(s)	P1 (1), P$\bar{1}$ (2)	P1 (1), P$\bar{1}$ (2)
Source	Manual Input	Manual Input

FIG. 20



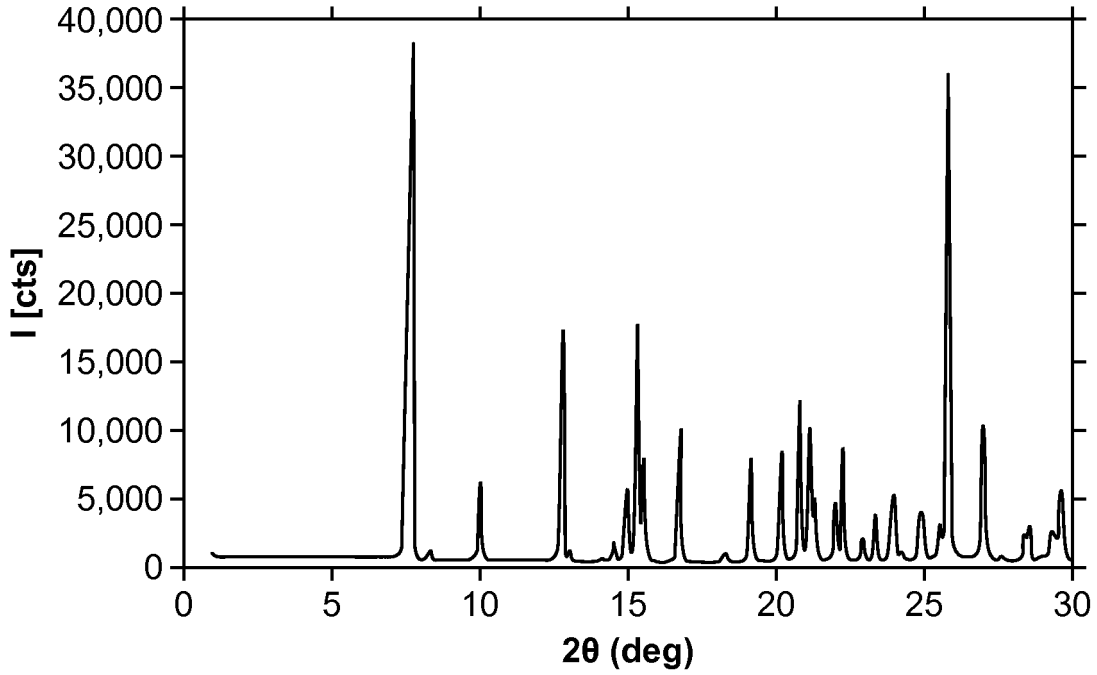
Bravais Type	Triclinic	Triclinic
a [Å]	8.067	8.067
b [Å]	11.820	11.820
c [Å]	11.935	12.096
α [deg]	61.22	120.14
β [deg]	75.17	99.57
γ [deg]	84.93	95.07
Volume [$Å^3$/cell]	963.4	963.4
Chiral Contents?	Achiral	Achiral
Extinction Symbol	P -	P -
Space Group(s)	P1 (1), $P\bar{1}$ (2)	P1 (1), $P\bar{1}$ (2)
Source	Manual Input	Manual Input

FIG. 21



Bravais Type	Triclinic
a [Å]	7.976
b [Å]	11.642
c [Å]	12.429
α [deg]	117.58
β [deg]	102.82
γ [deg]	95.26
Volume [$Å^3$/cell]	971.9
Chiral Contents?	Achiral
Extinction Symbol	P -
Space Group(s)	P1 (1), $P\bar{1}$ (2)
Source	Manual Input

FIG. 22



Bravais Type	C-Centered Orthorhombic	Primitive Monoclinic
a [Å]	13.561	13.801
b [Å]	21.137	13.560
c [Å]	13.790	21.138
α [deg]	90	90
β [deg]	90	90.08
γ [deg]	90	90
Volume [$Å^3$/cell]	3,952.8	3,955.8
Chiral Contents?	Not Specified	Not Specified
Extinction Symbol	C c - -	P 1 2_1/n 1
Space Group(s)	$Ccm2_1$ (36)*, Cc2m (40)*, Ccmm (63)*	$P2_1/n$ (14)
Source	Triads Algorithm	Manual Input

* = Unconventional space group setting.

FIG. 23

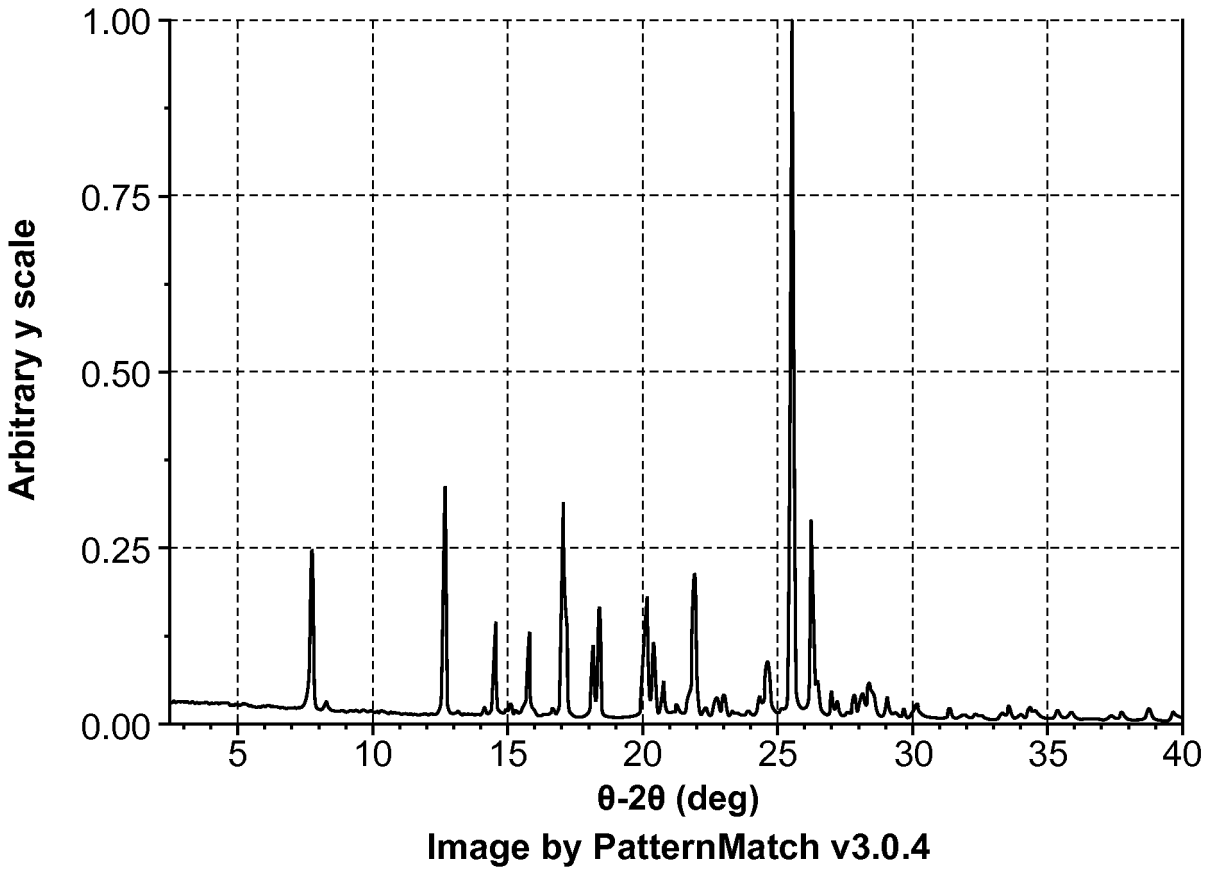

1.00
0.75
0.50
0.25
0.00
Arbitrary y scale
5
10
15
20
25
30
35
40
θ-2θ (deg)
Image by PatternMatch v3.0.4

FIG. 24

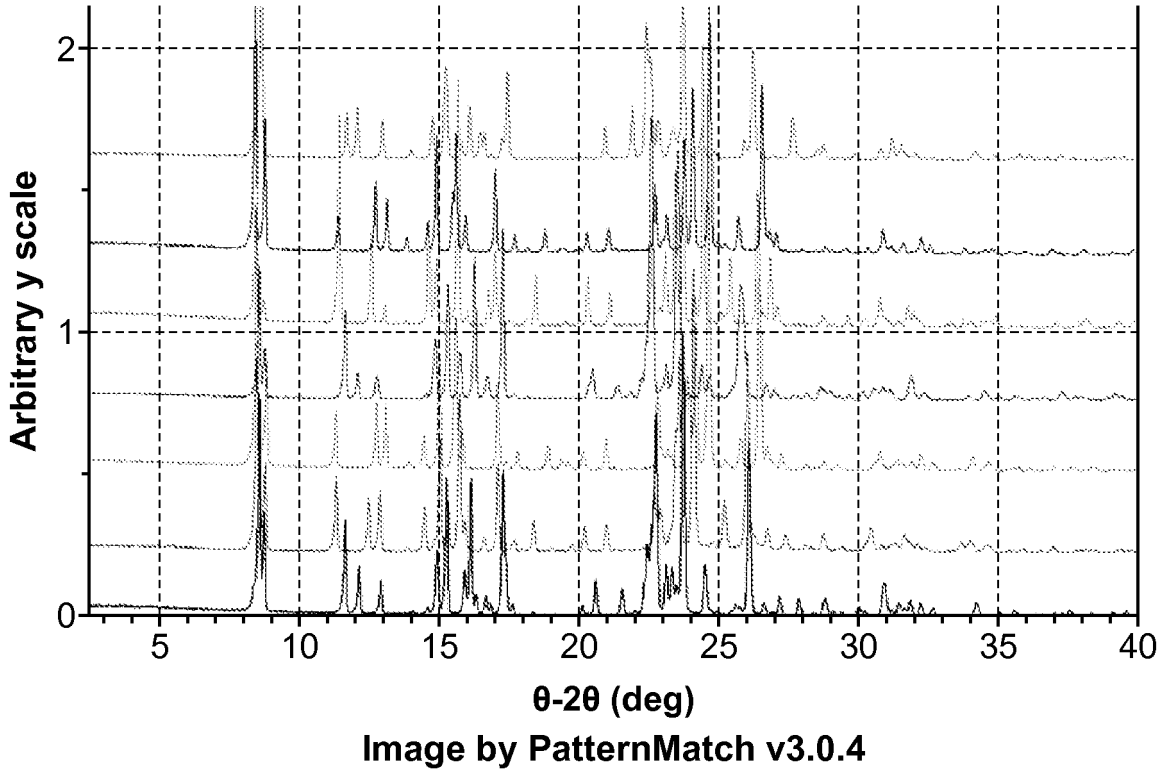

Arbitrary y scale
0
1
2
5
10
15
20
25
30
35
40
θ-2θ (deg)
Image by PatternMatch v3.0.4

FIG. 25