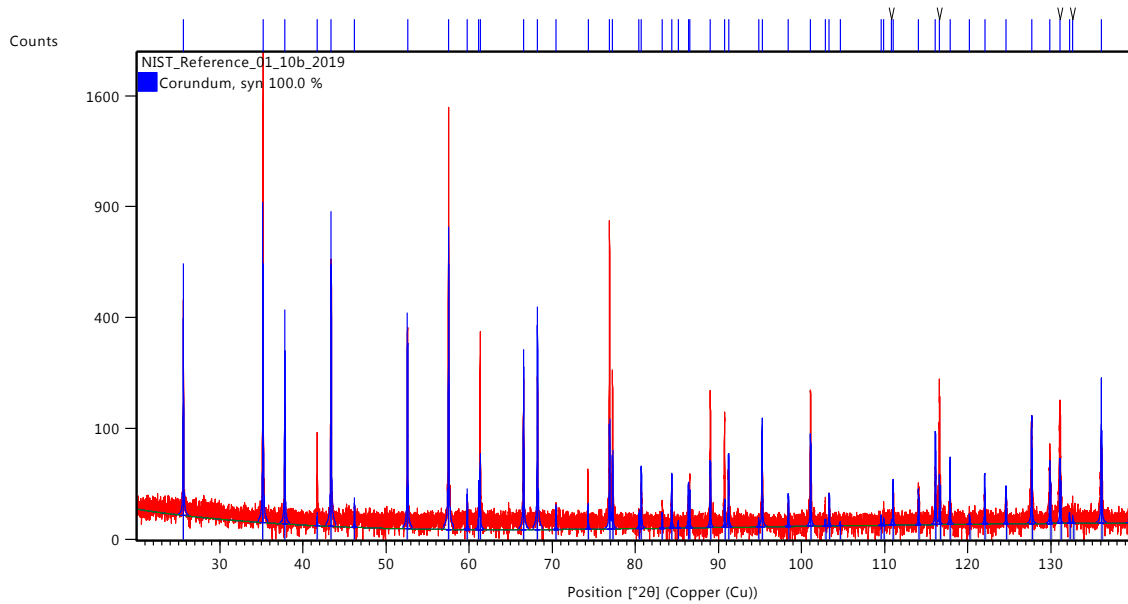


The NIST 1976B standard was run on the Alpha-1 on January 10, 2019. The unit cell parameters for a and b were 0.4759 and for the c parameter was 1.299 from Reitveld and from NIST the parameters are the same. The peak position and relative intensity (noted below) also match the NIST 1976b.

Measurement Conditions: (Bookmark 1)

Dataset Name NIST_Reference_01_10b_2019
File name C:\Users\User-1\Desktop\NIST_Reference_01_10b_2019.xrdml
Comment Configuration=Sample Spinner, Owner=User-1, Creation date=11/1/2006 2:23:59 PM
Goniometer=PW3050/60 (Theta/2Theta); Minimum step size 2Theta:0.001; Minimum step size Omega:0.001
Sample stage=Spinner PW3064
Diffractometer system=XPERT-PRO
Measurement program=C:\PANalytical\Data Collector\Programs\NIST_Reference.xrdmp, Identifier={937D76BB-8184-4FFD-B032-2B4C339E7253}
PHD Lower Level = 6.20 (keV), PHD Upper Level = 12.80 (keV)
Measurement Start Date/Time 1/10/2019 2:12:04 PM
Operator User-1
Raw Data Origin XRD measurement (*.XRDML)
Scan Axis Gonio
Start Position [$^{\circ}2\theta$] 20.0042
End Position [$^{\circ}2\theta$] 139.9962
Step Size [$^{\circ}2\theta$] 0.0080
Scan Step Time [s] 10.1600
Scan Type Continuous
PSD Mode Scanning
PSD Length [$^{\circ}2\theta$] 2.12
Offset [$^{\circ}2\theta$] 0.0000
Divergence Slit Type Fixed
Divergence Slit Size [$^{\circ}$] 0.2500
Specimen Length [mm] 10.00
Measurement Temperature [$^{\circ}\text{C}$] 25.00
Anode Material Cu
K-Alpha1 [\AA] 1.54060
Generator Settings 40 mA, 45 kV
Diffractometer Type 0000000067011063
Diffractometer Number 0
Goniometer Radius [mm] 240.00
Dist. Focus-Diverg. Slit [mm] 100.00
Incident Beam Monochromator Yes
Spinning No

Main Graphics, Analyze View: (Bookmark 2)**Peak List:** (Bookmark 3)

Pos. [°2θ]	Height [cts]	FWHM Left [°2θ]	d-spacing [Å]	Rel. Int. [%]
25.6142	392.48	0.0567	3.47499	63.71
35.1868	614.75	0.0567	2.54847	99.79
37.8146	287.62	0.0567	2.37719	46.69
41.7121	2.69	0.0567	2.16363	0.44
43.3905	613.69	0.0567	2.08375	99.61
46.2152	9.34	0.0567	1.96275	1.52
52.5868	311.49	0.0567	1.73895	50.56
57.5333	616.06	0.0567	1.60064	100.00
59.7764	15.83	0.0567	1.54583	2.57
61.1654	20.48	0.0567	1.51401	3.32
61.3344	46.84	0.0567	1.51024	7.60
66.5522	243.32	0.0567	1.40393	39.50
68.2441	372.41	0.0567	1.37319	60.45
70.4493	7.87	0.0567	1.33551	1.28
74.3310	9.29	0.0567	1.27508	1.51
76.9025	107.15	0.0567	1.23872	17.39
77.2651	56.89	0.0567	1.23381	9.24
80.4487	4.65	0.0567	1.19282	0.76
80.7318	41.57	0.0567	1.18934	6.75
83.2470	2.43	0.0567	1.15968	0.39
83.2470	2.43	0.0567	1.15968	0.39
84.3878	33.79	0.0567	1.14689	5.48
85.1718	1.82	0.0567	1.13833	0.30
86.3832	24.91	0.0567	1.12544	4.04
86.5316	17.89	0.0567	1.12389	2.90
89.0240	49.62	0.0567	1.09877	8.05

90.7336	11.98	0.0567	1.08246	1.94
91.2182	58.82	0.0567	1.07797	9.55
94.8480	1.34	0.0567	1.04606	0.22
95.2770	118.05	0.0567	1.04248	19.16
98.4225	15.68	0.0567	1.01740	2.55
101.0996	88.71	0.0567	0.99757	14.40
102.8470	1.99	0.0567	0.98532	0.32
103.3444	16.02	0.0567	0.98193	2.60
104.6657	1.12	0.0567	0.97312	0.18
109.5677	3.31	0.0567	0.94286	0.54
109.8823	2.24	0.0567	0.94104	0.36
110.8549	1.08	0.0567	0.93550	0.18
111.0134	27.45	0.0567	0.93461	4.46
114.0922	19.01	0.0567	0.91800	3.09
116.1246	93.26	0.0567	0.90770	15.14
116.6205	32.31	0.0567	0.90527	5.24
117.8767	53.31	0.0567	0.89924	8.65
120.2362	3.29	0.0567	0.88841	0.53
122.0602	16.67	0.0567	0.88047	2.71
122.0602	16.67	0.0567	0.88047	2.71
124.6176	21.35	0.0567	0.86994	3.47
127.7014	122.37	0.0567	0.85813	19.86
129.8944	24.29	0.0567	0.85030	3.94
129.8944	24.29	0.0567	0.85030	3.94
131.1156	50.95	0.0567	0.84613	8.27
132.2370	3.68	0.0567	0.84242	0.60
132.6382	2.52	0.0567	0.84112	0.41
136.0974	105.67	0.0567	0.83051	17.15
136.0974	105.67	0.0567	0.83051	17.15
139.3845	1.35	0.0567	0.82135	0.22

Pattern List: (Bookmark 4)

Visible	Ref.Code	Score	Compound Name	Displ.[°2 θ]	Scale Fac.	Chem. Formula
*	04-007-9906	61	Aluminum Oxide	0.000	0.474	Al ₂ O ₃