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Supporting information for article:

Synthesis, growth, structure and characterization of molybdenum zinc thiourea complex crystals

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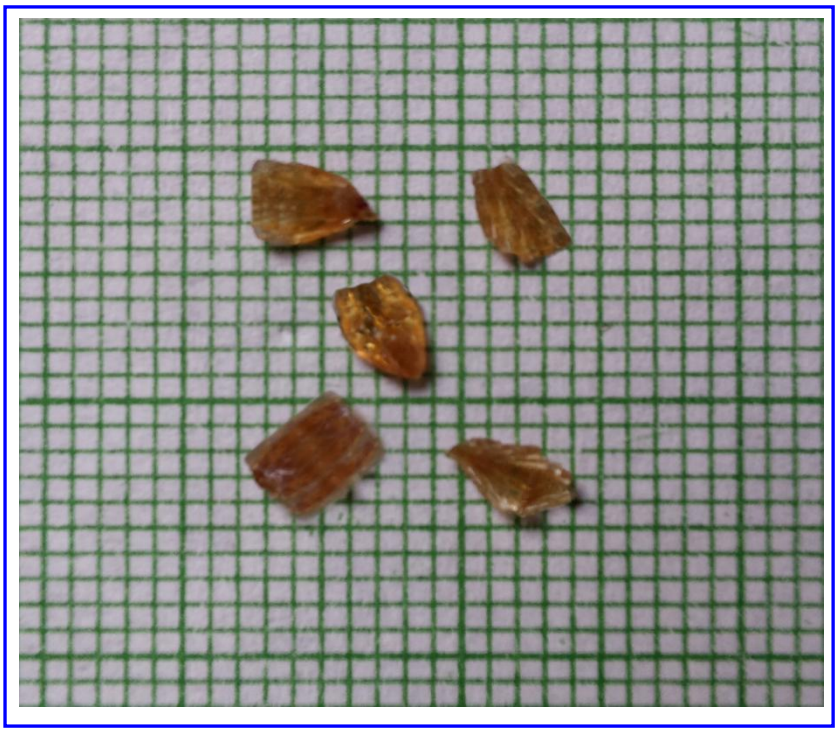

Figure S1 Photographs of as-grown MoZTS crystals.

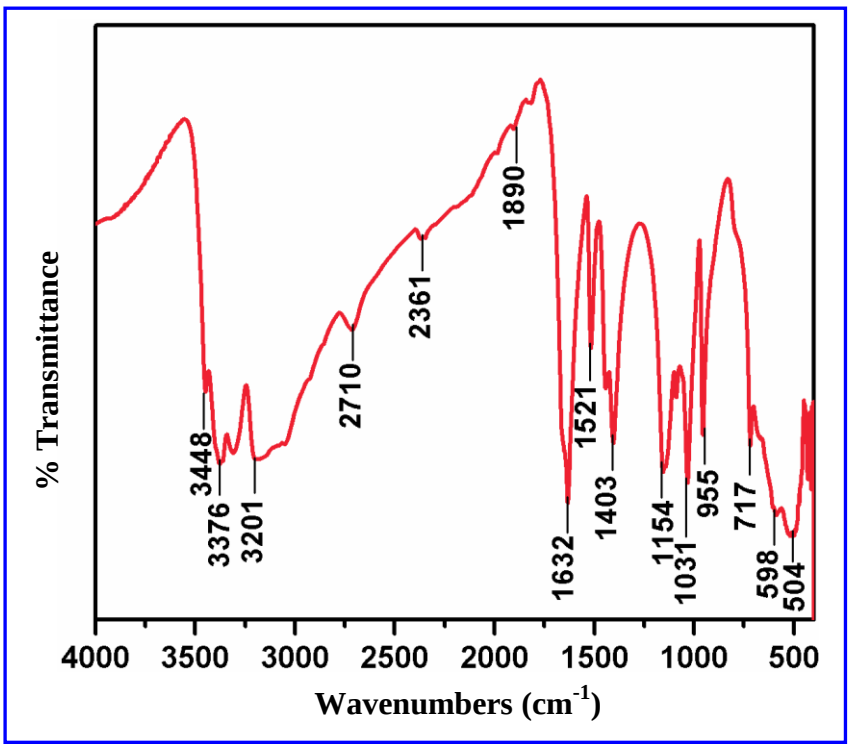

Figure S2 FT-IR spectrum of MoZTS.

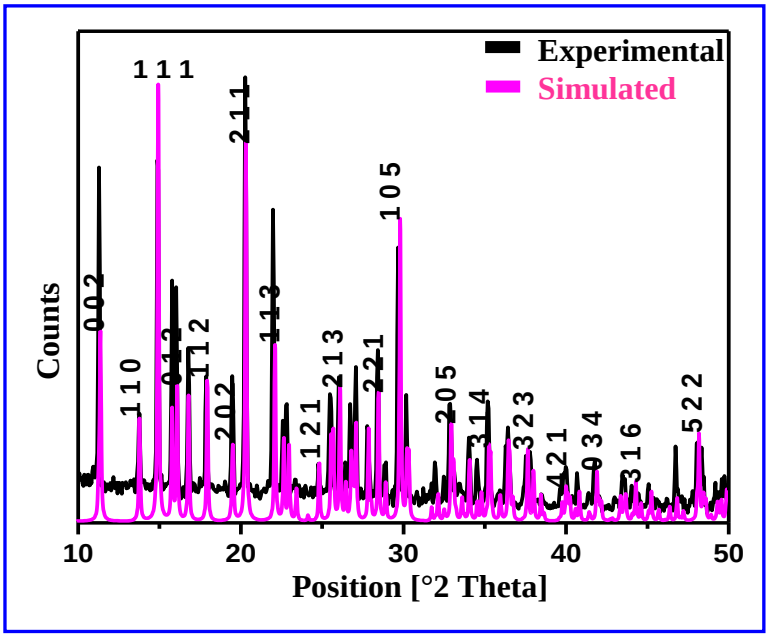

Figure S3 Powder XRD patterns.

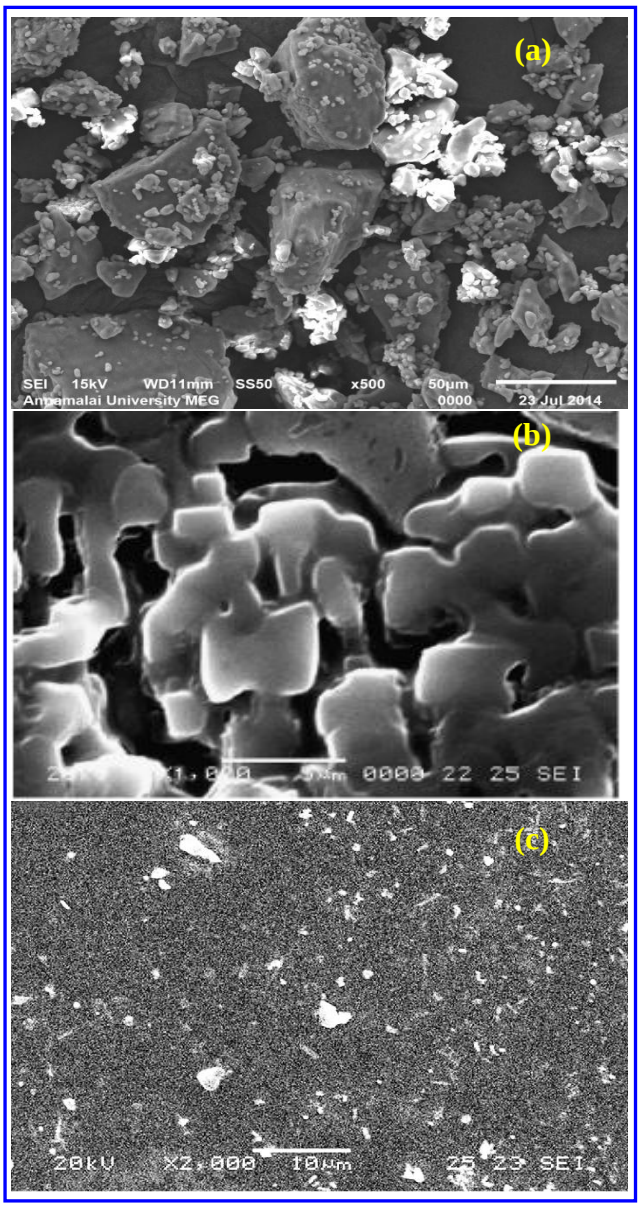

Figure S4 SEM micrographs of (a) MoZTS (b) ZCTS and (c) pure ZTS.

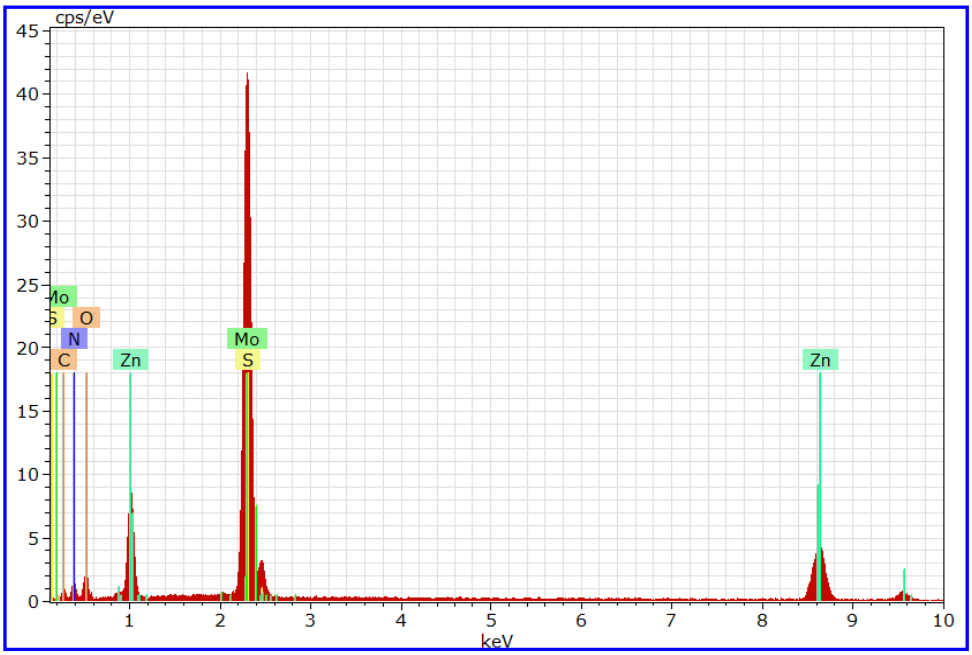

Figure S5 EDS spectrum of MoZTS.

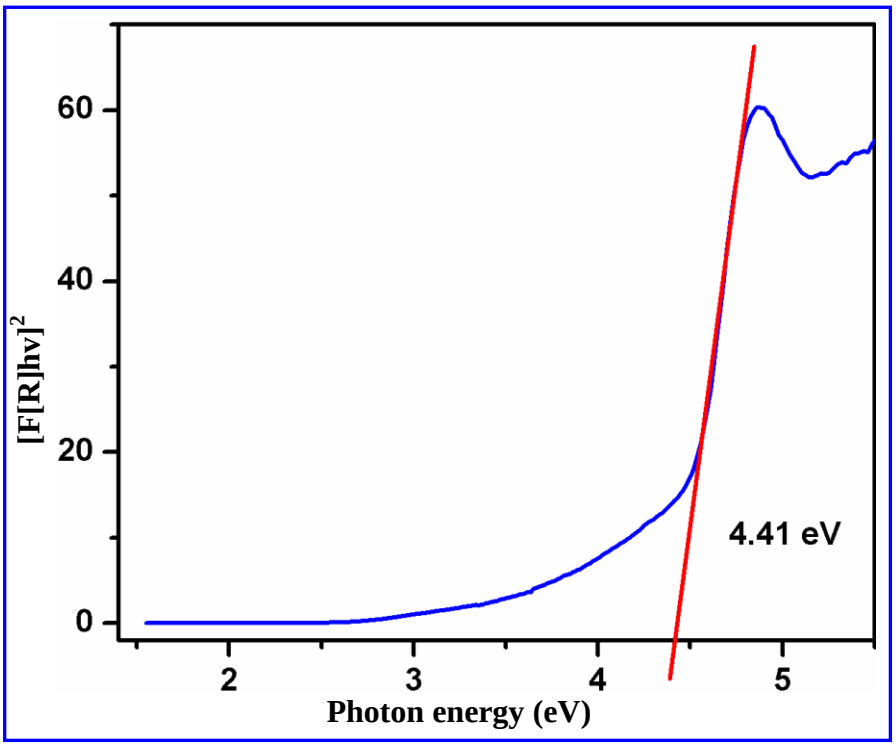

Figure S6 Tauc plot (direct band gap).

Figure S7 TG/DTA curve of MoZTS.

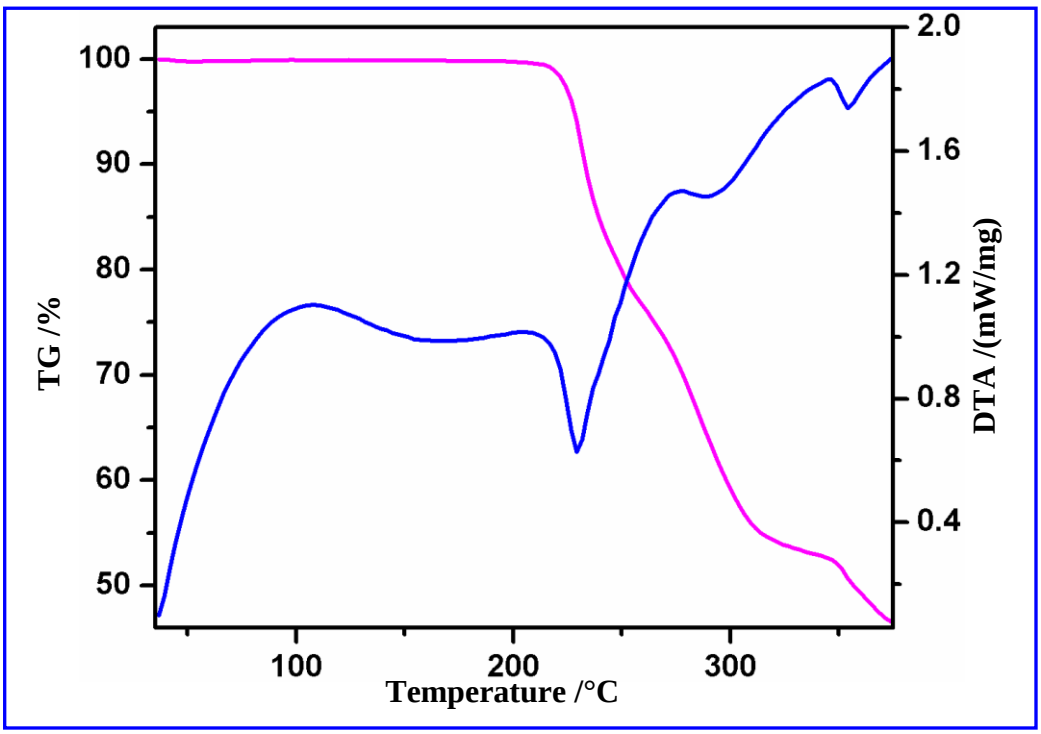

Table S1 Hydrogen bonds for MOZTS [Å and deg.]

D-H...A	d(D-H)	d(H...A)	d(D...A)	<(DHA)
N(5)-H(5A)...S(4)#1	0.86	2.87	3.604(5)	144.6
N(5)-H(5A)...O(3)#1	0.86	1.98	2.834(6)	172.6
N(5)-H(5A)...O(2)#1	0.86	3.07	3.599(7)	122.2
N(5)-H(5A)...O(1)#1	0.86	3.22	3.789(7)	126.1
N(5)-H(5B)...S(1)	0.86	2.66	3.482(6)	160.2
N(5)-H(5B)...S(3)#2	0.86	3.29	3.926(5)	133.3
N(3)-H(3A)...S(4)#3	0.86	2.79	3.637(6)	167.2
N(3)-H(3A)...O(4)#3	0.86	2.07	2.875(7)	155.2
N(3)-H(3A)...O(3)#3	0.86	3.54	4.367(6)	163
N(3)-H(3A)...O(2)#3	0.86	2.68	3.367(7)	137.3
N(3)-H(3A)...N(2)#1	0.86	3.3	3.747(8)	115.2
N(3)-H(3B)...S(1)#4	0.86	3.07	3.613(6)	123.3

Symmetry transformations used to generate equivalent atoms:

#1 x,y-1,z #2 x-1/2,-y-1,z #3 -x-1,-y-1,z+1/2 #4 x+1/2,-y-1,z