Supplementary information

Effect of Cobalt Doping on the Physicochemical and Photocatalytic Properties of Cu_2BaSnS_4 thin films

Adel Chihi*

Photovoltaic Laboratory, Research and Technology Centre of Energy, Borj-Cedria Science and Technology Park, BP 95, 2050 Hammam Lif-Tunisia.

Corresponding author: Phone: + 21654350506, Fax: +216 79325825

Email: adel.chihi@crten.rnrt.tn

Raman shift (cm^{-1})	Intensity (a.u.) (theory)	Symmetry (theory)
42.5	2096	A
47.6	1	E
54.5	0.3	A
59.2	1	A
66.6	670	E
73.0	2441	E
74.5	947	E
79.1	763	A
80.5	407	E
86.4	9110	A
88.8	672	E
89.8	672	A
91.5	454	E
93.4	0.1	A
103.1	313	E
125.2	0.4	A

127.6	233	E
135.7	122	A
136.1	107	E
140.1	0.5	A
140.6	19	E
166.1	687	E
172.0	515	A
174.8	0.1	A
180.9	713	E
190.4	32020	A
255.0	6903	A
255.3	279877	A
265.1	1870	E
266.2	66449	E
267.2	10648	A
292.9	4371	E
293.0	4	A
306.8	11204	E
310.4	1114066	A
328.3	72594	E
331.3	11	A
340.1	6313	A
341.1	8	A
342.2	2682	E

41.6	45	A
47.3	46	E
53.5	402	A
58.7	0.2	A
69.4	3004	E
70.3	558	E
71.2	603	A
73.2	83	E
120.8	17	A
77.7	2914	A
82.4	730	A
82.5	443	E
87.1	454	E
90.4	16	A
92.9	544	E
93.4	2	A
100.3	236	E
116.6	1001	E
111.4	1431	A

Tab.S1: Cu_2BaSnS_4 Raman peak [1].

References

[1] A. Crovetto, Z. Xing, M. Fischer, R. Nielsen, C. N. Savory, T. Rindzevicius, N. Stenger, D. Scanlon, I. Chorkendor, P. C. K. Vesborg, Experimental and First-Principles Spectroscopy of Cu_2SrSnS_4 and Cu_2BaSnS_4 Photoabsorbers, ACS Appl. Mater. Interfaces **12 (45)** (2020) 50446-50454, https://doi.org/10.1021/acsami.0c14578.