

Influence of the alcohols on the ZnO synthesis and its properties. The photocatalytic and antimicrobial activities

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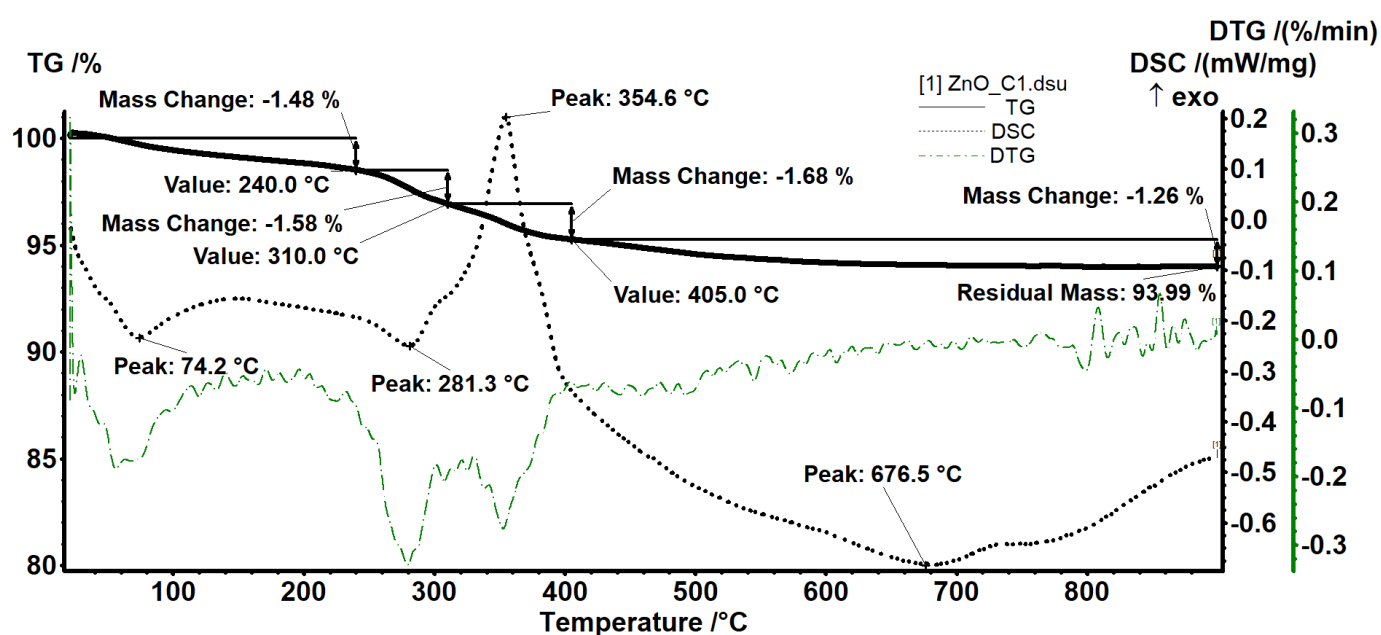


Figure S1. The thermal analysis, TG –DTG – DSC for the sample ZnO_C1 – the nanopowder obtained from zinc acetate by using methanol as solvent.

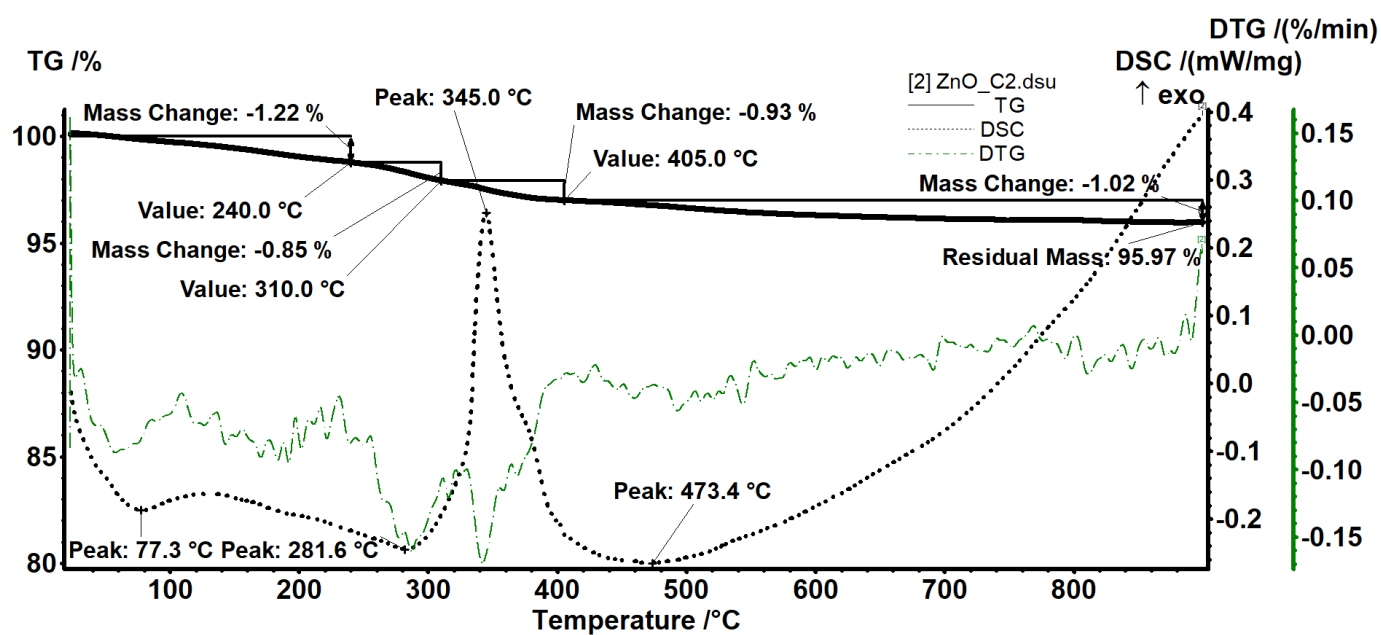


Figure S2. The thermal analysis, TG-DTG-DSC for the sample ZnO_C2 – the nanopowder obtained from zinc acetate by using ethanol as solvent.

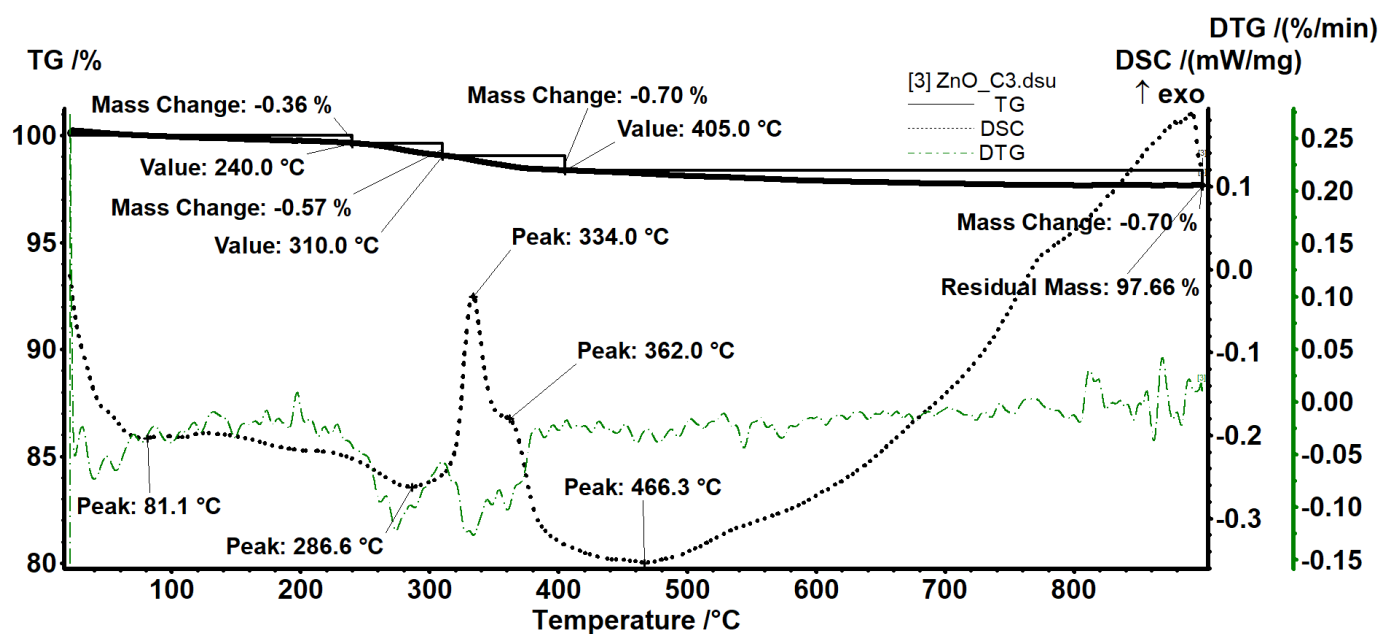


Figure S3. The thermal analysis, TG-DTG-DSC for the sample ZnO_C3 – the nanopowder obtained from zinc acetate by using 1-propanol as solvent.

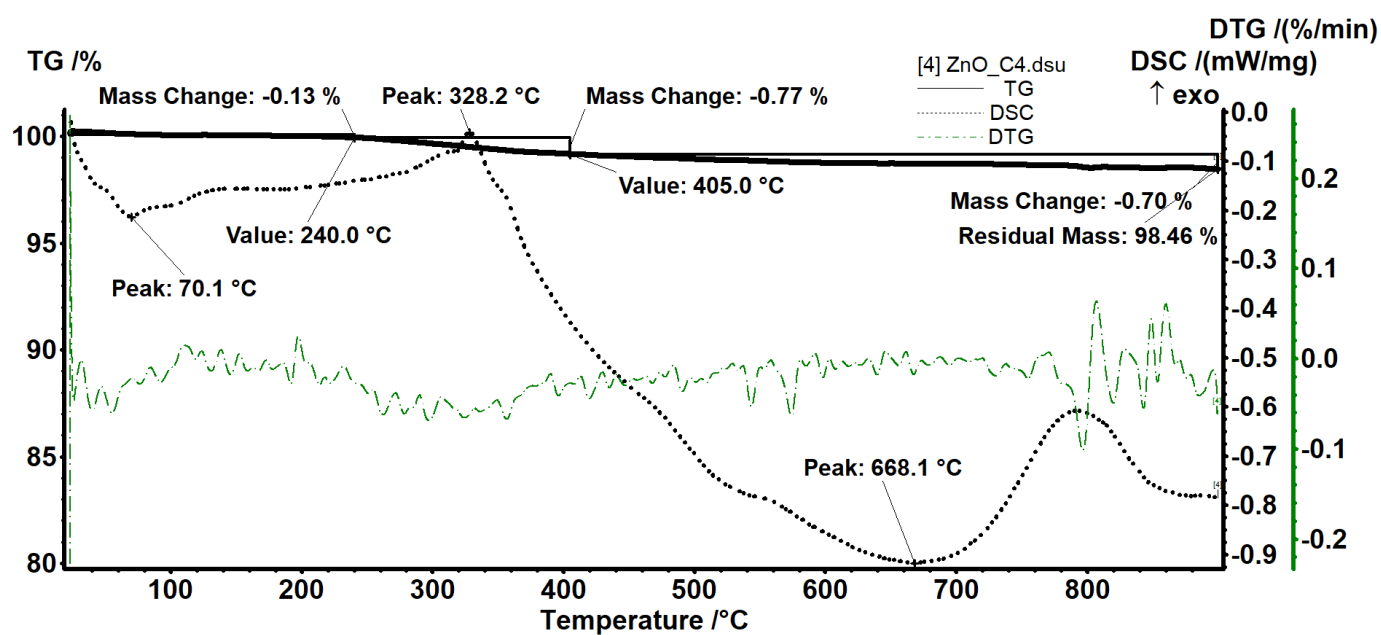


Figure S4. The thermal analysis, TG –DTG – DSC for the sample ZnO_C4 – the nanopowder obtained from zinc acetate by using 1-butanol as solvent.

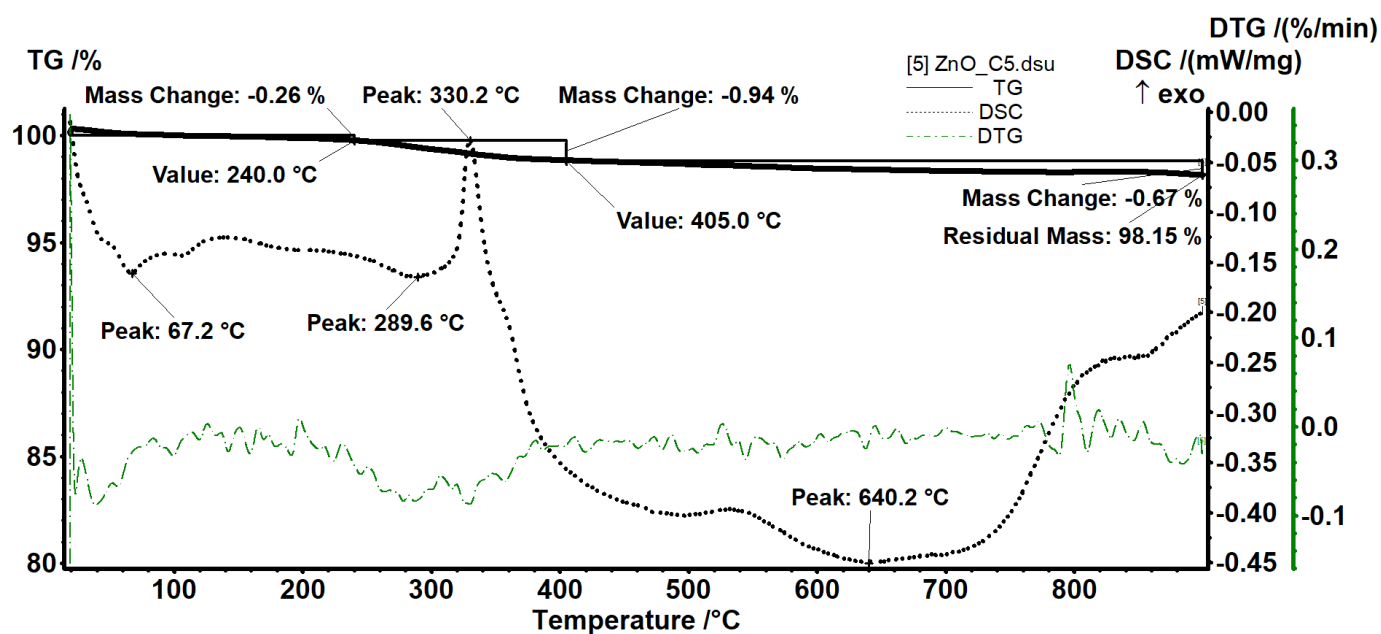


Figure S5. The thermal analysis, TG –DTG – DSC for the sample ZnO_C5 – the nanopowder obtained from zinc acetate by using 1-pentanol as solvent.

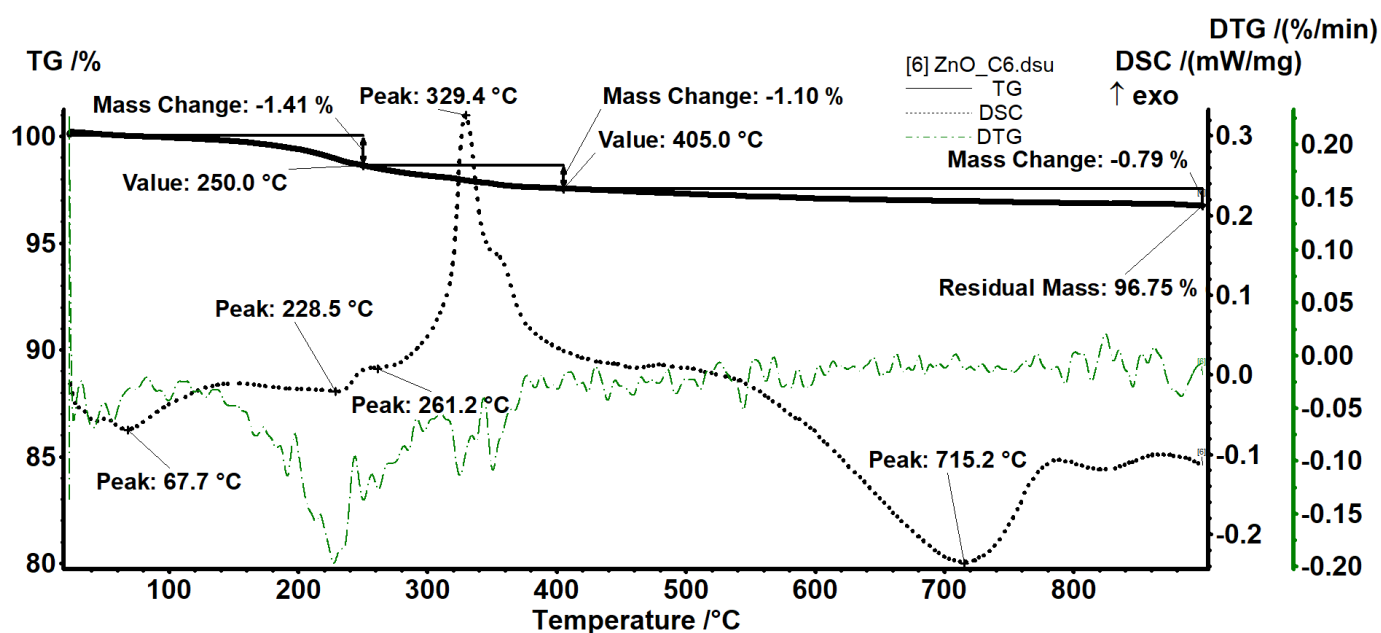


Figure S6. The thermal analysis, TG –DTG – DSC for the sample ZnO_C6 – the nanopowder obtained from zinc acetate by using 1-hexanol as solvent.

Table S1. Principal data obtained from thermal analysis of the nanopowders obtained in primary alcohols (ZnO_C1 in methanol; ZnO_C2 in ethanol; ZnO_C3 in 1-propanol; ZnO_C4 in 1-butanol; ZnO_C5 in 1-pentanol; ZnO_C6 in 1-hexanol).

Sample label	Mass loss (20-240°C)	Endo (°C)	Mass loss 240-310°C	Endo (°C)	Mass loss 310-405°C	Exo (°C)	Mass loss (405-900°C)	Endo (°C)
ZnO_C1	1.48%	74.2°C	1.58%	281.3°C	1.68%	354.6°C	1.26%	676.5°C
ZnO_C2	1.22%	77.3°C	0.85%	281.6°C	0.93%	345.0°C	1.02%	473.4°C
ZnO_C3	0.36%	81.1°C	0.57%	286.6°C	0.70%	334.0°C	0.70%	466.3°C
ZnO_C4	0.13%	70.1°C	a	-	0.77% ^a	328.2°C	0.70%	668.1°C
ZnO_C5	0.26%	67.2°C	a	289.6°C	0.94% ^a	330.2°C	0.67%	640.2°C
ZnO_C6	1.41% ^b	67.7°C	a,b	261.2°C	1.10% ^{a,b}	329.4°C	0.79%	715.2°C

^aFor the samples ZnO_C4, ZnO_C5 and ZnO_C6 the mass loss from 240-310°C is included in the figures from 310-405°C.

^bFor the ZnO_C6 sample the measurement limit for first and second mass loss interval is 250°C.