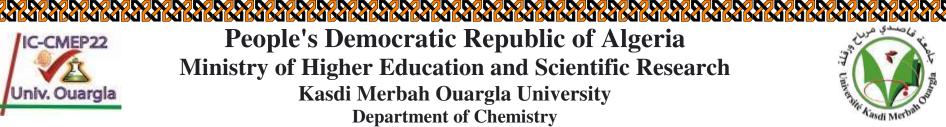


## **People's Democratic Republic of Algeria** Ministry of Higher Education and Scientific Research Kasdi Merbah Ouargla University **Department of Chemistry**



1<sup>st</sup> international conference on chemical matters and environment preservation IC-CMEP'22 March 09-10, 2022, Ouargla, Algeria (vertual conferences)

N°:CP-226









# Certificate of participation

The organizing committee of the 1st international Conference on Chemical matters and Environment Preservation IC-CMEP'22 March 09-10, 2022, Ouargla – Algeria, certifies that:

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#### 1st International Conference on Chemical Maters and Environment Preservation

Univ. Ouargia

IC-CMEP'22 February 22 – 23, 2022, Ouargla, ALGERIA

# Structural, morphological and optical properties of Cu-doped ZnO thin films prepared by Sol-Gel spin coating method

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#### Abstract.

In this work, 8.5% Cu-doped ZnO thin film was fabricated on glass substrate using sol-gel spin coating method, in order to investigate the structural, optical and morphological properties. XRD result exhibited that the deposited thin film has a hexagonal wurtzite structure with a preferential orientation along the (0 0 2) c-axis orientation. The grain size, lattice constants, FWHM and strain of the film were calculated. To characterize the electronic and optical properties, UV-Vis spectra were used. The results indicate that the average transmittance is 74.68% in the visible range. The optical band gap energy was found to be 3.317 eV. The surface morphology showed a mixer of spheroid-like and rod-like nanoparticles (granules) randomly distributed.

Keywords: Cu-doped ZnO, Sol- Gel, XRD, UV-Visible, surface morphology.

#### References

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## Peoples' Democratic Republic of Algeria

### Ministry of Higher Education and scientific Research

General Direction For scientific and technological development



<sup>1st</sup> International conference on Chemical maters and environment preservation

IC-CMEP'22 March 09 – 10, 2022, ALGERIA

**Virtual Presentation** 







## **Organized by**

#### **Ouargla University**



**BMD Laboratory** 



Ouargla PTAPC-CRAPC





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# **Conference program**

1st International conference on Chemical maters and environment preservation IC-CMEP'22 March 9 – 10, 2022, ALGERIA

Conference Day 1: Wednesday March 09, 2022		Time GMT+1
	General Conference Chair	08 :30
	Dr. HADEF Derradji,	
	Univ. Ouargla (Algeria)	
	https://meet.google.com/yyf-cqgu-hap	
Opening ceremony	Pr. BECHKI Djamal, Dean of Mathematics &	08 :45
Opening ceremony	Matter Sciences Faculty (Algeria)	
	Pr. HALILAT Med Tahar, Ouargla University Rector (Algeria)	08 :55

## **Keynote speakers session**

	Session Chair				
Dr. BELFAR Med Lakhdar					
Ouargla University, Algeria					
Prof. BELKHALFA Hakim PTAPC-CRAPC- Ouargla	https://meet.google.com/yyf-cqgu-hap	09 :00			
Prof DEKMOUCHE Messaouda Ouargla University, Algeria	https://meet.google.com/yyf_cqgu-hap	10 :00			
	Session Chair				
	Dr. SAIDAT Mostapha				
	Ouargla University, Algeria				
Prof. LEGHSEIR Belgacem Université Badji Mokhtar Annaba	https://meet.google.com/yyf-cqgu-hap	11 :00			
Prof. MOUSSAOUI Younes Universté Gasfa tunisie	https://meet.google.com/yyf_cqgu-hap	11 :30			
Session Chair					
	Dr. Mazouz Mihoub				
Ouargla University, Algeria					
Prof. LANEZ Touhami Eloued University, Algeria	https://meet.google.com/yyf_cqgu-hap	12 :00			
Prof ZENKHRI Louiza Ouargla University, Algeria	https://meet.google.com/yyf_cqgu-hap	12 :30			

	Session Chair	Session Topic	Start discussion	Link (Google meet)
1	Pr. MOUSSAOUI Yassine	Eliminate environmental pollution (air, water and soil).	14:00	yacine.moussaoui@gmail.com
2	Dr. NDJIMI Mohammed Said	Nanomaterial's and the environment		nedjimi2011@gmail.com
3	Dr. Zerrouki hayat	Green chemistry and the environment Wastewater depollution.		zerroukih2020@gmail.com
4	Dr. Chaouch khaoula	Treat waste and preserve the environment		khaoula.chaouche@yahoo.fr
5	Dr. Rahmani zhor	Computational materials technique.		saouliibtissam@yahoo.fr
6	Dr. Ben Ali Moustapha	Crystalline structure modeling and optimization		meet.google.com/mdg-gded-sqg
7	Dr Saidat mustapha	Simulation and modeling of the physical and chemical properties of materials.		https://meet.google.com/yyf-cqgu-hap
8	Dr. DAKMOUCHE Messaouda	Plants for the environment.		meet.google.com/eyb-hcdn-dpx
9	Dr. BOUZIANE Mebarka	Design of a new material synthesis technique.		bmebarka@yahoo.fr
10	Dr. Allaoui messaouda	Maters for optoelectronics.		https://meet.google.com/itf-vrvp-udp
11	Dr. BEN ZAHI Khadidja	Dielectric and magnetic maters		https://meet.google.com/oyo-ijfb-obb
12	Dr Allaoui abdelfetteh	Characterizations and applications of materials.		allaoui313@gmail.com
13	Dr Allaoui abdelfetteh	Materials for renewable energy.		allaoui313@gmail.com
14	Dr. SMARA Ouanissa	Organic and inorganic maters		ouanissasm@gmail.com
16	Dr. Mkhalfi tarek	Waste water depollution		https://meet.google.com/mzn-yfhh-vbs
17	Dr. Zaoui manel	Medical applications of new biomaterials and Nano- biotechnology.		https://meet.google.com/vwa-yycu-ocd
18	Dr. Hamada djamila	Nanotechnology and Nanomaterials.		https://meet.google.com/dod-iwzu-qks

Conference Day 2 :Thursday March 10 , 2022			
closing Session			
Session Chair			
Prof ZENKHRI Louiza, Ouargla University, Algeria			
Google meet Link			
Or			
Presentation Youtube Link			
	09 :00		
Closingremarks	09 :30		