

CURRICULUM VITAE



Last name : *DJELLOUL*

Date of birth: *1959*

Nationality : *Algerian*

Grade : *Professor*

First name : *ABDELKADER*

In : *Megadda- Khenchela*

(Algeria)

Addresses

Personal	City Bouzid N° 44 40000 -Khenchela, Algeria
Professional	Faculty of Science and Technology, University of Khenchela Email : djelloul.abdelkader@univ-khenchela.dz

FORMATION

Period	Diploma and place
June 24, 1979	Mathematics Baccalaureate, Khenchela
January 26, 1984	D.E.S. (January 26, 1984 D.E. S. (Higher Studies Diploma) at the University of Constantine Solid State Physics option
July 1, 1986	Master Physics Daghestan State University (Russie)
September 19, 1990	Doctor of Philosophy (Ph. D) In Physics and Mathematics Supreme Attestation Commission upon the recommendation of the Council of Rostov State University КДП N° 008489
2006	Habilitation (HDR) University of Batna
2011	Professor

Languages :

Arabic, French, Russian, English (written).

PROFESSIONAL EXPERIENCE	
Period	Function and Location
1990 - 1991	Assistant Professor at the University of M'Sila
1991 - 1993	Assistant professor (ENS) at the Oum El Bouaghi university center
1993 - 2004	Assistant Professor, Department of Physics Institute of Exact Sciences, "Larbi ben M'Hidi" University Center Oum El Bouaghi
2004	Assistant Professor Institute of Exact Sciences, Khenchela University Center
2006	Associate Professor A SET Institute, Khenchela University Center
2011	University Professor Faculty of Science and Technology, University of Khenchela

PEDAGOGICAL EXPERIENCE	
Period	Modules of teaching
1990 - 1991	SEP 200 T.C.T (Mechanics and Electricity) Lectures, tutorials and practical work (1st year Mechanics)
1991 - 1992	SEP 200 (Mechanics and Electricity) Courses (1st year Exact Sciences)
1992 - 1995	1) Wave and vibration Tutorial and Practical Work (2nd year Physics) 2) SEP234 (Thermodynamics and Condensed Matter Physics) Tutorial (3rd year Physics (ENS))
1993 - 1995	SEP234 (Thermodynamics and Condensed Matter Physics) Lectures, tutorials and practical work (3rd year Physics (ENS))
1995 - 2002	SEP 210 (Thermodynamics and Statistical Physics) Lectures, tutorials and practical work (3rd year Physics (DES))
2002 - 2004	Thermodynamics and Statistical Physics Lectures, tutorials and practical work (3rd year Physics (DES))
2004-2006	Thermodynamics 1st year SETI
2007-2008	Physics 1st year SETI
2008-2023	Glass and Ceramics; Thermodynamics (master SM1); Ceramics chemistry (master SM2); Radiation-matter interaction (SM1 physics); Glass and Ceramics physics (SM2 physics); Physical properties of materials; Thin film technology

ADMINISTRATIVE ACTIVITIES	
Period	Function and Location
1991 - 1993	Head of Physics Department ENS. Center Universitaire " Larbi Ben M'hidi ", Oum El Bouaghi.
1993 - 1996	Deputy Director of Studies and Internships, ENS Larbi ben M'Hidi" University Center, Oum El Bouaghi
1998 - 2001	Coordinator of Practical Work and Workshops of the "Larbi ben M'Hidi" University Center, Oum El Bouaghi
2006 - 2009	Chairman of the SETI Scientific Advisory Board at the Khenchela University Centre
2010	Head of the "Matter Science" team at the Khenchela university center
2014	Chairman of the Scientific Advisory Board; Faculty of Science and Technology, University of Khenchela
2016	Laboratory Director; Laboratory of structures, properties and interatomic interactions (LASPI2A).

Number of doctoral theses supervised and defended	05
Number of magisters supervised and defended	03

h-index = 15

SCIENTIFIC WORK

- **Research projects: 09** projects
- Research team head, LASPI2A "Laboratoire des Structures, Propriétés et Interactions Inter Atomiques", Khenchela University, Algeria

N°	Project title	Project Manager	Comments
1	Luminescence of F+ centers in zinc oxide (ZnO) thin films and applications	Djelloul Abdelkader	Project approved from 01 Jan 2000 Duration : 02 years Code : D040/01/2000
2	Zinc oxide (ZnO) varistor design and properties, and application	Mahdjoub Abdelhakim	Project approved from 01.01.2004 Durée: 03 ans

			Code : D0401/01/04
3	Study and characterization of Zinc Oxide semiconducting and transparent thin films deposited by pyrotic sputtering	Hadjris Lazhar	Code: D0401/01/05
4	Application of refractive index gradient thin films in optics and optoelectronics	Mahdjoub Abdelhakim	Project approved from 01/01/2005 Duration: 03 years Code : D0401/51/05
5	Elaboration of ZnTe thin films	Zedira Hamma	Project approved from 2007. Duration: 03 years Code: D03520060017
6	Production of oxide layers	Boumaza Abdecharif	Project approved from 2010. Duration: 03 years
7	ZnAl ₂ O ₄ spinel oxide thin film production, characterization and analysis.	Djelloul Abdelkader	Project approved from 2011. Duration: 03 years Code: D03520100007
8	Production of ZnO oxide layers, doping and co-doping (deposition and heat treatment), characterization and analysis by various techniques (infrared spectroscopy, X-ray diffraction, ATD, ATG, SEM/EDX, etc.).	Djelloul Abdelkader	Project approved from 2014. Duration: 03 years Code: E03520140050
9	Study of Metal Oxide Thin Films and Functional Nanostructured Semiconductor Materials for Gas Detection and Photovoltaics	Djelloul Abdelkader	Project approved from 01/01/2019. Duration: 03 years Code: B00L02UN400120190001

II. PUBLICATIONS

1. **A. Djelloul, K. Bouzid, F. Guerrab**, Role of Substrate Temperature on the Structural and Morphological Properties of ZnO Thin Films Deposited by Ultrasonic Spray Pyrolysis, Turk J Phys 32 (2008) , 49 – 58. ISSN 1300-0101.
2. **K. Bouzid, A. Djelloul, N. Bouzid, J. Bougdira**, Electrical resistivity and photoluminescence of zinc oxide films prepared by ultrasonic spray pyrolysis, Phys. Status Solidi A **206**, No. 1, 106– 115 (2009) / DOI 10.1002/pssa.200824403.
3. **H. Djebaili, H. Zedira, A. Djelloul, A. Boumaza**, Characterization of precipitates in a 7.9Cr–1.65Mo–1.25Si–1.2V steel during tempering, materials characterization 60 (2009) 946 – 952.
4. **A. Boumaza, A. Djelloul F. Guerrab**
Specific signatures of α -alumina powders prepared by calcination of boehmite or gibbsite, Powder Technology, 201 (2010) 177–180.
5. **A. Boumaza, A. Djelloul**
Estimation of the intrinsic stresses in α -alumina in relation with its elaboration mode, Journal of Solid State Chemistry, 183 (2010) 1063–1070.
6. **A. Djelloul, M-S. Aida, J. Bougdira**
Photoluminescence, FTIR and X-ray diffraction studies on undoped and Al doped ZnO thin films grown on polycrystalline α -alumina substrates by ultrasonic spray pyrolysis, Journal of Luminescence, 130 (2010) 2113–2117.
7. **Djelloul Abdelkader and Boumaza Abdecharif** (2012). Peculiarity of the Cathodoluminescence of alpha- Alumina Prepared by Calcination of Gibbsite Powder or Generated by Oxidation of a Metallic FeCrAl Alloy, Cathodoluminescence, Naoki Yamamoto (Ed.), ISBN: 978-953-51-0362-2, InTech,

- 8. S. Roguai, A. Djelloul, C. Nouveau, T. Souier, A.A. Dakhel, M. Bououdina**
Structure, microstructure and determination of optical constants from transmittance data of co-doped Zn_{0.90}Co_{0.05}Mg_{0.05}O (MAl, Cu, Cd, Na) films, *Journal of Alloys and Compounds* 599, (2014), 150-158.
- 9. K. Hoggas, C. Nouveau, A. Djelloul, M. Bououdina**
Structural, microstructural, and optical properties of Zn_{1-x}Mg_xO thin films grown onto glass substrate by ultrasonic spray pyrolysis, *Applied Physics A* 120 (2), (2015), 745-755.
- 10. A. Malki, Z. Mekhalif, S. Detriche, G. Fonder, A. Boumaza, A. Djelloul**
Calcination products of gibbsite studied by X-ray diffraction, XPS and solid-state NMR, *Journal of Solid State Chemistry* 215, (2014), 8-15.
- 11. S. Iaiche, A. Djelloul**
ZnO/ZnAl₂O₄ nanocomposite films studied by X-ray diffraction, FTIR, and X-ray photoelectron spectroscopy, *Journal of Spectroscopy* 2015.
- 12. K. Djebaili, Z. Mekhalif, A. Boumaza, A. Djelloul**
XPS, FTIR, EDX, and XRD analysis of Al₂O₃ scales grown on PM2000 alloy, *Journal of Spectroscopy* 2015.
- 13. L. Aissani, C. Nouveau, M.J. Walock, H. Djebaili, A. Djelloul**
Influence of vanadium on structure, mechanical and tribological properties of CrN coatings, *Surface Engineering* 31 (10), (2015), 779 -788.
- 14. A. Djelloul, R.A. Rabadanov**
Thermochemical and green luminescence analysis of zinc oxide thin films grown on sapphire by chemical vapor deposition, *Turkish Journal of Physics* 28 (5), (2004), 309-323.
- 15. L. Radjehi, A. Djelloul, S. Lamri, M.F. Slim, M. Rahim**
Oxygen effect on structural and optical properties of zinc oxide, *Surface Engineering* 35 (6), (2019), 520-526.
- 16. L. Radjehi, A. Djelloul, M. Bououdina, R. Siab, W. Tebib**
Structural and magnetic properties of copper oxide films deposited by DC magnetron reactive sputtering, *Applied Physics A* 124, (2018), 723.
- 17. N. Merakeb, A. Messai, A. Djelloul, AI Ayesh**
Structural, mechanical, and magnetic properties of ferrite-austenite mixture in evaporated 304 stainless steel thin films, *Applied Physics A* 121 (2), (2015), 739-748.
- 18. S. Roguai, A. Djelloul**
Synthesis and evaluation of the structural, microstructural, optical and magnetic properties of Zn_{1-x}Co_xO thin films grown onto glass substrate by ultrasonic spray, *Applied Physics A* 125 (12), (2019), 816.
- 19. S. IAICHE, D. ALAMARGUY, N. GABOUZE, AI AYESH, A. DJELLOUL**
INFLUENCE OF Zn SOLUTION CONCENTRATION ON THE GROWTH OF Zn-Sn-O NANOSTRUCTURE THIN FILMS, M&Ns-19, Paris, 17-19 July 2019.
- 20. S. Roguai, A. Djelloul**
A Structural and Optical properties of Cu-doped ZnO films prepared by Spray Pyrolysis, *Applied Physics A* (DOI: 10.1007/s00339-020-3301-6), (2020).
- 21. S. Iaiche, C. Boukaous, D. Alamarguy, A. Djelloul, D. Hamana**
Effect of Solution Concentration on ZnO/ZnAl₂O₄ Nanocomposite Thin Films Formation Deposited by Ultrasonic Spray Pyrolysis on Glass and Si(111) Substrates, *Journal of Nano Research* (Volume 63), (2020), 10-30.
- 22. L. Radjehi, L. Aissani, A. Djelloul, S. Lamri, K. Nomenyo, S. Achache, G. Lerondel, F. Sanchette**
Effect of vacuum annealing on the structural and optical properties of sputtered Cu₄O₃ thin films, *Surface Engineering*, (2021), 1-7.
- 23. S. Roguai, A. Djelloul**
Structural and optical analysis of SnO₂ thin films by Spray Pyrolysis, *Algerian Journal of Environmental Science and Technology*, (2020).
- 24. H. Trir, L. Radjehi, N. Sengouga, T. Tibermacine, L. Arab, W. Filali, A. Djelloul, and N. Attaf**
Effect of Annealing on the Dark and Illuminated I(V) Characterization of a ZnO:Ga|Cu₂O Hetero-Junction Prepared by Ultrasonic Spray System. *Semiconductors* 54, 534-542 (2020).
- 25. L Radjehi, L Aissani, A Djelloul**
ZnO Films Elaborated by DC Magnetron Sputtering. *Advances in Green Energies and Materials Technology: Selected Articles from* (2021).
- 26. S. Roguai, A. Djelloul**

Photocatalytic degradation of methylene blue using sprayed Mg diluted ZnO heterostructure thin films photocatalysts. *Reaction Kinetics, Mechanisms and Catalysis* (2021).

27. S. Roguai, A. Djelloul

Roles of Cobalt Doping on Structural and Optical of ZnO Thin Films by Ultrasonic Spray Pyrolysis. *Thin Films Book chapter* (2021).

28. S. Roguai, A. Djelloul

Structural, microstructural and photocatalytic degradation of methylene blue of zinc oxide and Fe-doped ZnO nanoparticles prepared by simple coprecipitation method. *Solid State Communications* (2021).

29. S. Roguai, A. Djelloul

A simple synthesis of CuO NPs for photocatalytic applications and their structural and optical properties. *Journal of New Technology and Materials (JNTM) J. New Technol. Mater.* 11 (02) (2021).

30. S. Roguai, A. Djelloul

Structural and optical analysis of SnO₂ thin films by Spray Pyrolysis. *Algerian Journal of Environmental Science and Technology* 8 (1) (2022).

31. S. Roguai, A. Djelloul

Elaboration, characterization and applications of SnO₂, 2% Gd-SnO₂ and 2% Gd-9% F-SnO₂ thin films for the photocatalytic degradation of MB by USP method. *Inorganic Chemistry Communications*, 109308 (2022).

32. S. Roguai, A. Djelloul

Sn doping effects on the structural, microstructural, Seebeck coefficient, and photocatalytic properties of ZnO thin films. *Solid State Communications* 350, 114740 (2022).

33. S. Roguai, A. Djelloul

Structural, microstructural, and optical properties of ZnO thin films prepared by spray pyrolysis. *Algerian Journal of Renewable Energy and Sustainable Development* 4 (01), 94-100 (2022).

34. S. Roguai, A. Djelloul

Structural, morphological, optical and electrical properties of Ni-doped SnO₂ thin films by pneumatic spray pyrolysis method. *Bulletin of Materials Science* 45 (2022).

35. L. Radjehi, L. Aissani, A. Djelloul, A. Saoudi, S. Lamri, K. Nomenyo,

Air and Vacuum Annealing Effect on the Highly Conducting and Transparent Properties of the Undoped Zinc Oxide Thin Films Prepared by DC Magnetron Sputtering. *Metallurgical and Materials Engineering* 29 (1), 37-51 (2023).

36. S. Roguai, A. Djelloul

Gold coated vertically aligned carbon nanotubes as electrode for electrochemical capacitors. *Thin Solid Films* 777, 139894 (2023).

37. A. Abboudi, S. Iaiche, A. Djelloul, A. Chala, F. Kezzoula, F. Bensouici,

Effect of fluoric acid concentration on the structural, optical, and photocatalytic properties of TiO₂ thin films. *Inorganic Chemistry Communications* 155, 111073 (2023).

38. S. Roguai, A. Djelloul

ZnO and La-doped ZnO films by USP method and their characterizations for ultraviolet photodetectors and photocatalysis applications. *Inorganic Chemistry Communications* 157, 111372 (2023).

39. S. Roguai, A. Lakel, A. Djelloul, K. Lalmi, N. Kamoun-Turki

Enhancement of Titanium Nitride-Specific Capacitance Using Rapid Thermal Sulfurization. *Journal of Materials Engineering and Performance*, 1-7 (2023).

Khenchela le 20/02/2024

Pr. DJELLOUL Abdelkader