



# BOUMAZA Abdecharif

Professor

## PROFIL

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## LANGUES

Arabic 

French 

English 



## FORMATION

1978 - 1983

Constantine, Algeria

**Higher studies in solid state physics DIPLOMA**

*University of Constantine*

1983 - 1987

Paris, France

**Doctor of sciences DIPLOMA**

*Paris XI-Orsay University*

### **Laarbi Ben Mhidi-Oum El Bouaghi University**

University teacher (Assistant professor-lecturer)

- vice rector in charge of post-graduation *and scientific research.*

### **Abbes Laghrour Khenchela University**

Maître de conférences, Professeur

- *Institute director (science and technology)*
- *Vice-rector in charge of post-graduation and scientific research.*
- *President of the scientific council of the ST faculty.*
- *Director of the university of continuing education-Khenchela*
- *Responsible for the quality assurance unit*

Date 16/03/2024



scholar.google <https://scholar.google.fr/citations?user=isoox2oAAAAJ&hl=fr>  
researchgate <https://www.researchgate.net/profile/Abdecharif-Boumaza>

## Scientific Productions:

### Book chapter

Cathodoluminescence, ISBN: 978-953-51-0362-2

Peculiarity of the Cathodoluminescence of  $\gamma$ - Alumina Prepared by Calcination of Gibbsite Powder or Generated by Oxidation of a Metallic FeCrAl Alloy

By Djelloul Abdelkader and Boumaza Abdecharif

<http://www.intechopen.com/articles/show/title/peculiarity-of-the-cathodoluminescence-of-alumina-prepared-by-calcination-of-gibbsite-powder-or-gene>

Transition alumina phases induced by heat treatment of boehmite: an X-ray diffraction and infrared spectroscopy study

A Boumaza, L Favaro, J Lédion, G Sattonnay, JB Brubach, P Berthet, ...  
Journal of solid state chemistry 182 (5), 1171-1176

XPS, FTIR, EDX, and XRD Analysis of  $\text{Al}_2\text{O}_3$  Scales Grown on PM2000 Alloy

K Djebaili, Z Mekhalif, A Boumaza, A Djelloul  
Journal of spectroscopy 2015

Experimental and ab initio infrared study of  $\chi$ -,  $\kappa$ -and  $\alpha$ -aluminas formed from gibbsite

L Favaro, A Boumaza, P Roy, J Lédion, G Sattonnay, JB Brubach, ...  
Journal of Solid State Chemistry 183 (4), 901-908

Specific signatures of  $\alpha$ -alumina powders prepared by calcination of boehmite or gibbsite

A Boumaza, A Djelloul, F Guerrab  
Powder Technology 201 (2), 177-180

Calcination products of gibbsite studied by X-ray diffraction, XPS and solid-state NMR

A Malki, Z Mekhalif, S Detriche, G Fonder, A Boumaza, A Djelloul  
Journal of Solid State Chemistry 215, 8-15

Characterization of precipitates in a 7.9 Cr–1.65 Mo–1.25 Si–1.2 V steel during tempering

H Djebaili, H Zedira, A Djelloul, A Boumaza  
Materials characterization 60 (9), 946-952

Relation between the residual stresses and the high-temperature oxidation resistance of superalloys protected by plasma-sprayed coatings. II

AM Huntz, JL Lebrun, A Boumaza  
Oxidation of metals 33, 321-355

Crystal structure and spectral of new hydrazine-pyran-dione derivative:  
DFT enol $\leftrightarrow$ hydrazone tautomerization via zwitterionic intermediate,  
hirshfeld analysis and optical ...

A Guerraoui, A Djedouani, E Jeanneau, A Boumaza, A Alsalmé, ...  
MOLSTR 1220 (128728), 1-10

Parameters affecting oxide adherence in nickel based alloys and techniques  
allowing estimation of adherence

AM Huntz, JG Zhao, A Boumaza, G Moulin  
Materials science and technology 4 (5), 470-478

Complex of 4-(2-aminophenyl)- 1, 2, 3-thiadiazole with 2, 3-dichloro-5,  
6-dicyano-1, 4-benzoquinone: Experimental study and investigation  
at different exchange-correlation ...

H Bougherara, R Kadri, M Kadri, M Yekhlef, A Boumaza  
Journal of Molecular Structure 1223, 128855

Estimation of the intrinsic stresses in  $\alpha$ -alumina in relation with its elaboration mode

A Boumaza, A Djelloul  
Journal of Solid State Chemistry 183 (5), 1063-1070

Peculiarity of the Cathodoluminescence of  $\alpha$ -Alumina Prepared by Calcination  
of Gibbsite Powder or Generated by Oxidation of a Metallic FeCrAl Alloy

D Abdelkader, B Abdecharif  
Cathodoluminescence

The effect of the natural raw barite and the dolomite material on borate glass formation

K Abdellaoui, A Ratep, A Boumaza, I Kashif, H Donya  
Journal of Fundamental and Applied Sciences 10 (1), 281-300

Characterization by Photoluminescence and Raman Spectroscopy of the  
Oxide Scales Grown on the PM2000 at High Temperatures

S Hakkar, S Achache, F Sanchette, Z Mekhalif, N Kamoun, A Boumaza  
Journal of Molecular and Engineering Materials 7 (01n02), 1950003

Improvement of the oxidation resistance of superalloys by low-pressure,  
plasma-sprayed MCrAlYTa coatings. I

AM Huntz, A Boumaza, G Moulin  
Oxidation of metals 30, 141-183

A rhodanine derivative as a potential antibacterial and anticancer agent:

Crystal structure, spectral characterization, DFT calculations,  
Hirshfeld surface analysis, in silico ...

A Guerraoui, M Goudjil, A Direm, A Guerraoui, İY Şengün, C Parlak, ...  
Journal of Molecular Structure 1280, 135025

Characterization and antibacterial activity of gelatin-based film  
incorporated with *Arbutus unedo* L. fruit extract on *Sardina pilchardus*

TI Imane Bouhanna, Abdelhalim Boussaa, Abdecharif Boumaza, Daniela Rigano ...  
J Food Process Preserv. 45 (45(1)), 1-11

**Novel high/ultrahigh pressure structures of TiO<sub>2</sub> with low band gaps**

AB D. Bedghioua, F. Hamza Reguig  
Computational Materials Science 166, 303–310

**Oxidation Behaviour of Superalloys Protected by Plasma Sprayed MCrAlYTa Coatings**

AM Huntz, A Boumaza, G Moulin, JL Lebrun  
Key Eng. Mater. 20 (4), 3565-3576

**Comparative study of thermal and compositional properties of Aïn M'lila dolomite, CaCO<sub>3</sub>, and MgCO<sub>3</sub> using TG and FTIR analyses**

K Abdellaoui, D Bedghiou, A Boumaza  
Journal of Advanced Research in science and Technology 7, 42-53

**Structural, optical and thermal characterizations of lithium borate glasses containing the barite**

K Abdellaoui, IZ Hager, HA Othman, A BOUMAZA, NT Kamoun  
Defect and Diffusion Forum 397, 24-38

**Fatigue life prediction of welded box structures**

H Zedira, J Gilgert, A Boumaza, P Jodin, Z Azari, G Pluvinage  
Strength of materials 36, 558-564

**Relation between the oxidation behaviour of superalloys protected by plasma sprayed NiCoCrAlYTa coatings and metallurgical or mechanical parameters**

AM Huntz, A Boumaza, G Moulin, JL Lebrun  
Advanced Materials and Processing Techniques for Structural Applications ...

**Oxydation de superalliages protégés par des revêtements MCrAlYTa projetés sous plasma. Effet des éléments mineurs et relation avec les contraintes**

A Boumaza, AM Huntz,  
Thèse, 1987, Orsay

**Electrochemical urea biosensor based on *Proteus mirabilis* urease immobilized over polyaniline PANi-Glassy carbon electrode**

S Atailia, A Baraket, S Rabai, M Benounis, N Jaffrezic, H Araar, ...  
Electroanalysis 35 (9), e202200502

**Effects of olive mill wastewater and olive mill pomace on soil physicochemical properties and soil polyphenols**

N Mekersi, D Addad, K Kadi, S Casini, DK Hackenberger, A Boumaza, ...  
Journal of Material Cycles and Waste Management 25 (3), 1404-1416

**Performance of self-compacting concrete in hot arid climate**

AB Hachemi BENADDI, Bouzidi MEZGHICHE, Mohamed SALHI  
építôanyag - Journal of Silicate Based and Composite Materials 74 (3), 97- 107

**Study of Chemical and Physical Characterization of the Natural Dolomite of Ain Mlila-Algeria**

K Abdellaoui, A Boumaza, N Kamoun  
Defect and Diffusion Forum 406, 481-491

Crystal structure and spectral of new hydrazine-pyran-dione derivative:  
DFT enol $\leftrightarrow$  hydrazone tautomerization via zwitterionic intermediate,  
hirshfeld analysis and optical ...

G Abdenour, A Djedouani, E Jeanneau, A Boumaza, A Alsalmé, ...

Journal of Molecular Structure, Volume 1220, 15 November 2020, 128728

Complex of 4-(2-aminophenyl)-1,2,3-thiadiazole with 2,3-dichloro-5,  
6-dicyano-1,4-benzoquinone: Experimental study and investigation  
at different exchange-correlation ...

AB Hadjer Bougherara, Rayene Kadri, Mekki Kadri, Mohamed Yekhlé

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**CORROSION BEHAVIOR OF API N80 STEEL MATERIAL IN ALBIEN WATER**

F Chelgham, N Bouzid, M Saidi, A Boumaza, A Taabouche, S Boudjema

Journal of Fundamental and Applied Sciences 10 (3), 300-319

Etude et calcul des déformations thermoélastiques dans un solide anisotrope  
par la méthode des éléments finis

S Bouzid, A Boumaza

université Oum-El-Bouaghi

Temperatures field calculation in an anisotropic solid through finite elements  
method, tridimensional case

S Bouzid, AC Boumaza, M Zaabat

JOURNAL OF NEW TECHNOLOGY AND MATERIALS 7 (2), 117-122