

# CURRICULUM VITAE

## PREMIERE PARTIE

### RENSEIGNEMENTS GENERAUX

#### 1. Identification



**Nom & Prénom:** CHALLAL Mouloud / **اللقب والاسم:** شعلال مولود

**Date et lieu de naissance :** 06/03/1976 à El- Harrach, Alger.

**Situation familiale :** Marié, deux enfants.

**Grade actuel :** PROFESSEUR.

**Fonction :** Enseignant-Chercheur et Directeur de l'Institut de Génie Electrique et Electronique de l'Université M'Hamed BOUGARA.

**E-mail:** [mchallal@univ-boumerdes.dz](mailto:mchallal@univ-boumerdes.dz)

**Prof. Mouloud CHALLAL, IEEE Senior Member**

**Page Web:** <http://igee.univ-boumerdes.dz/Biographie.php?teacher=E032>

**Citations Google Scholar (h-index):** 11 (Février 2020) **Researchgate:** 21.11 (Février 2020)

#### 2. Structure de rattachement

**Etablissement :** Université M'Hamed BOUGARA - Boumerdès, Institut de Génie Electrique et Electronique, Laboratoire Signaux et Systems, Département d'Electronique, 10, Avenue de l'indépendance 35000, Boumerdès, Algérie.

#### 3. Promotion académique/Diplômes académiques acquis

**3.1 Promu au Grade de PROFESSEUR en Télécommunications :** Université M'Hamed BOUGARA Boumerdès (UMBB), Institut de Génie Electrique et Electronique (IGEE), Département d'Electronique.

**3.2 Habilitation Universitaire en Génie Electrique et Electrotechnique (option: Télécommunications) :** UMBB. IGEE, Département d'Electronique.

**3.3 Doctorat ès sciences en Génie Electrique et Electrotechnique (option: Télécommunications) :** UMBB. IGEE, Département d'Electronique.

**3.4 Magister en Electronique (option: Télécommunications) :** Ecole Nationale Polytechnique (ENP), Département d'Electronique,

**3.5 Ingénieur d'Etat en Electronique (option: Télécommunications) :** Université des Sciences et de la Technologie Houari Boumediene (USTHB), Institut d'Electronique, Département d'Electronique.

**3.6 Baccalauréat en Fabrication Mécanique (FM) :** Technicum El-Beyrouni, Beaulieu, El-Harrach, Alger.

#### 4. Expériences Professionnelles/Responsabilités Administratives et Scientifiques

##### 4.1 Depuis le 01/12/2004 à ce jour

Enseignant permanent à l'Université M'hamed Bougara de Boumerdès (UMBB), Institut de Génie Electrique et Electronique (IGEE), Département d'électronique, Boumerdès, Algérie.

#### **4.2 Depuis le 03/09/2018 à ce jour**

Directeur de l'Institut de Génie Electrique et Electronique par intérim, UMBB, Algérie.

#### **4.3 Du 16/07/2018 à ce jour**

Membre du Comité de Formation Doctorale (CFD), Filière: Electronique (Options: Electronique des Systèmes Embarqués, Instrumentation et Microélectronique), IGEE, UMBB, Algérie.

#### **4.4 Du 12/07/2015 à ce jour**

Membre du Comité de Formation Doctorale (CFD), Filière: Génie Electrique (Option: Telecommunications and Computer Engineering), IGEE, UMBB, Algérie.

#### **4.5 Du 28/10/2014 à ce jour**

Membre du Conseil Scientifique de l'Institut (CSI), IGEE, UMBB, Algérie.

#### **4.6 Du 15/05/2017 au 02/09/2018**

Directeur Adjoint chargé des études et des questions liées aux étudiants par intérim à l'IGEE, UMBB, Boumerdès, Algérie.

#### **4.7 Du 19/10/2016 au 14/05/2017**

Responsable de l'équipe de la spécialité Master en Télécommunications à l'IGEE, UMBB, Boumerdès.

#### **4.8 Du 01/09/2012 au 30/06/2017**

Enseignant vacataire à l'Ecole Supérieure de la Défense Aérienne du Territoire (ESDAT), Reghaia, Alger.

#### **4.9 Du 01/10/2009 au 15/03/2010**

Adjoint Chef de Département de Génie Electrique et Electronique (DGEE), Faculté des Sciences de l'Ingénieur (FSI), UMBB, Boumerdès.

#### **4.10 Du 05/10/2008 au 30/03/2010**

Membre du Conseil Scientifique du département (CSD) de Génie Electrique et Electronique, FSI, UMBB.

#### **4.11 Du 02/10/1999 au 31/01/2002**

Enseignant vacataire à l'INSFP (Ex-ITEEM), Beaulieu, El-Harrach : Chargé de cours et de travaux pratiques en Informatique et Télémétrie.

#### **4.12 Du 05/11/1998 au 31/12/1999**

Ingénieur dans une entreprise privée (INFO PC), El-Harrach, Alger : Chargé de maintenance des ordinateurs, installation des systèmes informatiques et réseaux locaux (LANs).

### **5. Bourse d'étude**

**5.1 Octobre 2007 :** Obtention d'une Bourse d'étude de 24 mois avec 04 billets aller/retour Alger-Bruxelles délivrés par l'Université catholique de Louvain (UCL), Louvain-La-Neuve, Belgique.

### **6. Formations/Stages**

**6.1 Mars 2008 à Aout 2008 - Mars 2009 au Sept. 2009 - Mars 2010 au Sept. 2010 - Mars 2011 au Sept. 2011 :** Stages scientifiques au Laboratoire d'hyperfréquence (EMIC) financés par une bourse d'étude obtenue en octobre 2007 par l'Université catholique de Louvain (UCL), Louvain-La-Neuve, Belgique.

**6.2 30 Juin 2009 :** Participation à l'atelier de simulation 3-D Electromagnétique, Agilent Technologies, Massy, Paris, France.

**6.3 16 Juin 2009 :** Participation à la conférence Agilent «ADS Users' Group Meeting», Agilent Technologies, Massy, Paris, France.

**6.4 Avril/Mai 2009 :** Formation de troisième cycle (Doctorat), FSA 3010, Principes de la Communication Scientifique (15-0-15), UCL, Louvain la neuve, Belgique.

- 6.5 Juin/Juillet 2007 :** Stage scientifique au laboratoire d'hyperfréquence (EMIC), UCL, Louvain-La-Neuve, Belgique.
- 6.6 Année 1997–1998 :** Stage pratique dans le service Télécom, Direction Technique de la Navigation Aérienne (DTNA), H. Dey, Alger, Algérie.
- 6.7 Juillet/Août 1997 :** Stage pratique de deux mois en maintenance audio visuelle, Electronic Technology (ET), Rouiba, Alger, Algérie.

## 7. Membre d'Associations professionnelles

- 7.1 Depuis 2012:** Membre fondateur de l'Association Algérienne de Génie Electrique et Electronique (AAGEE), <http://www.aagee.dz/>. L'agrément de l'AAGEE est délivré par le Ministère de l'Intérieur en date du 26 Octobre 2015.
- 7.2 Depuis 2011:** Membre fondateur de la Section IEEE Algérie (*IEEE Algeria Section*). <http://www.ieee-dz.org/>
- 7.3 Depuis 2009:** Membre d'IEEE : N° 90426458.
- 7.4 Depuis 2009:** Membre d'IAENG (*International Association of Engineers*): N° 110680.
- 7.5 Depuis 2008:** Membre de EuMA (*European Microwave Association*): N° AM1184.

## 8. Domaines d'intérêt

- Dispositifs et circuits RF/Micro-onde, Antennes et propagation des ondes électromagnétiques (EM), Télécommunication d'une manière générale.

## DEUXIEME PARTIE

### 1. Enseignement

#### 1.1 Enseignement à l'UMBB (DEUA/Ingénieur/Master)

Module	Promotion	Volume horaire			Année
		Cours	TD	TP	
Radio wave propagation (EE463)	1 <sup>ere</sup> année	1h30	-	-	2019/2020
Electrical Network Analysis (EE442)	Master	03h	1h30	-	
Advanced electromagnetic field theory, AEMFT (EE461)	1 <sup>ere</sup> année	03h	1h30	-	2018/2019
Radio wave propagation (EE463)	Master	1h30	-	-	
Electromagnetic field theory, EMF (EE262)	2 <sup>eme</sup> année Licence	03h	-	-	
Advanced electromagnetic field theory, AEMFT (EE461)	1 <sup>ere</sup> année	03h	1h30	-	2017/2018
Radio wave propagation (EE463)	Master	1h30	-	-	
Electromagnetic field theory, EMF (EE262)	2 <sup>eme</sup> année Licence	03h	-	-	
Advanced electromagnetic field theory, AEMFT (EE461)	1 <sup>ere</sup> année	03h	1h30	-	2016/2017
Radio wave propagation (EE463)	Master	1h30	-	-	
Electromagnetic field theory, EMF (EE262)	2 <sup>eme</sup> année Licence	03h	-	-	
Advanced electromagnetic field theory, AEMFT (EE461)	1 <sup>ere</sup> année	03h	1h30	-	2015/2016
Radio wave propagation (EE463)	Master	1h30	-	-	
Antenna Lab. (EE416L)		-	-	03h	
RF and Microwave circuits design Lab. (EE541L)	2 <sup>eme</sup> année Master	-	-	03h	
Electromagnetic field theory, EMF (EE262)	2 <sup>eme</sup> année Licence	03h	-	-	
Advanced electromagnetic field theory, AEMFT (EE461)	1 <sup>ere</sup> année	03h	1h30	-	2014/2015
Radio wave propagation (EE463)	Master	1h30	-	-	
Antenna Lab. (EE416L)		-	-	03h	
RF and Microwave circuits design Lab. (EE541L)	2 <sup>eme</sup> année Master	-	-	03h	
Electromagnetic field theory, EMF (EE262)	2 <sup>eme</sup> année Licence	03h	-	-	
Advanced electromagnetic field theory, AEMFT	1 <sup>ere</sup> année	03h	1h30	-	2013/2014

(EE461)	Master				
Radio wave propagation (EE463)		1h30	-	-	
Antenna Lab. (EE416L)		-	-	03h	
High frequency amplifiers (EE544)	5 <sup>eme</sup> année Ing.	03h	-	-	
Electromagnetic field theory, EMF (EE262)	3 <sup>eme</sup> année Licence	03h	1h30	-	2012/2013
Electromagnetic field theory, EMF (EE262)	2 <sup>eme</sup> année Licence	03h	1h30	-	
Communication systems (TE312)	3 <sup>eme</sup> année DEUA	03h	-	03h	2011/2012
Electromagnetic field, EMF (EE361)	3 <sup>eme</sup> année Ing.	-	1h30	-	
Communication systems (TE312)	3 <sup>eme</sup> année DEUA	03h	-	03h	2010/2011
Electrical engineering (EE101)	1 <sup>ere</sup> année Licen.	-	-	1h30	
Communication systems (TE312)	3 <sup>eme</sup> année DEUA	03h	-	03h	2009/2010
Active devices I (EE241)	2 <sup>eme</sup> année Ing.	-	-	03h	
Communication systems (TE312)	3 <sup>eme</sup> année DEUA	03h	-	03h	2008/2009
Active devices I (EE241)	2 <sup>eme</sup> année Ing.	-	-	03h	
Active devices (TE241/TE242)	2 <sup>eme</sup> année DEUA	03h	1h30	1h30	2007/2008
Active devices I (EE241)	2 <sup>eme</sup> année Ing.	-	-	03h	
Communication systems (TE312)	3 <sup>eme</sup> année DEUA	03h	-	03h	
Active devices I et II (EE241/EE242)	2 <sup>eme</sup> année Ing.	-	-	03h	2006/2007
Active devices I et II (EE241/EE242)	3 <sup>eme</sup> année DEUA	03h	1h30	03h	
Communication systems (TE312)	3 <sup>eme</sup> année DEUA	03h	-	03h	2005/2006
Applied physics (TE172)	1 <sup>ere</sup> année DEUA	03h	1h30	-	
Applied physics (TE172)	1 <sup>ere</sup> année DEUA	-	1h30	-	2004/2005 (2 <sup>eme</sup> Sem.)

## 1.2. Enseignement hors UMBB

### 1.2.1 Enseignement à l'Université KASDI Merbah – Ouargla

**Du 17 au 19 Juin 2012:** Cours accéléré qui est offert sous forme d'un séminaire sur le Logiciel de Conception et Simulation de Circuits Radio Fréquences et Micro Ondes, dénommé « *Advanced Design Systems (ADS)* », dispensé aux étudiants en première année Magistère, Département de Génie Electrique de la Faculté des Sciences et Technologie et Sciences de la Matière, Université KASDI Merbah – Ouargla.

### 1.2.2 Enseignement à l'Ecole Supérieure de la Défense Aérienne du Territoire (ESDAT), Reghaia – Alger

**Du Sep. 2012 au Juin 2017 :** Cours enseignés sur Champ et Onde Electromagnétiques, Antennes, et Hyperfréquences.

## 2. Activités d'encadrement

### 2.1 Encadrement à l'UMBB

#### 2.1.1 Thèses de DOCTORAT dirigés et/ou soutenus

N°	Nom et prénom	Intitulé de la Thèse de Doctorat	Année d'inscription	Date de soutenance
[05]	LAHMISSI Ahmed	High Performance Printed Dual-Band Bandpass Filters for Wireless Communications	Oct. 2016	Prévue Jan. 2021
[04]	FERTAS Fouad	Design and Performance Study of Miniaturized Multiband Antennas	Oct. 2016	Prévue Déc. 2020
[03]	LOUAZENE Hassiba	Microstrip Bandpass Filters Analysis and Design for UWB Applications	Oct. 2014	Fev. 2020
[02]	DJAFRI Kahina	Contribution to the Study and Design of Miniaturized Microstrip Antennas	Oct. 2014	Mai 2019
[01]	GUICHI Fella	Study and Design of Microstrip Antennas for UWB Applications	Jan. 2016 (3 <sup>ème</sup> Cycle D-LMD)	Décembre 2018

#### 2.1.2 Mémoire de projet de fin d'étude en MASTER

- Dix (10) Mémoires de Master soutenus avec succès et Deux (02) autres sont en cours.

#### 2.1.3 Mémoire de projet de fin d'étude en DEUA et INGENIORAT

- Dix (10) Mémoires d'Ingénieur et trois (03) Mémoires de DEUA soutenus avec succès.

### 2.2 Encadrement hors UMBB

#### 2.2.1 Encadrement de Thèse de DOCTORAT à l'Ecole Militaire Polytechnique (EMP)

- Une (01) Thèse en cours.

## 2.2.2 Co-Encadrement de Thèse de DOCTORAT à l'Université Bab-Ezzouar

- Une (01) Thèse en cours.

## 2.2.3 Co-Encadrement de Mémoires de MAGISTER à l'Université KASDI Merbah – Ouargla : Department of Electronics and Communication, Faculty of New Technologies of Information and Communication

- Deux (02) Mémoires de Magister soutenus avec succès.

## 2.2.4 Encadrement à l'ESDAT, Reghaia – Alger

### 2.2.4.1 Mémoire de fin d'études pour l'obtention du diplôme de MASTER

- Quatre (04) Mémoires de Master soutenus avec succès.

### 2.2.4.2 Mémoire de projet de fin d'études (PFE) : Diplôme d'Ingénieur d'Etat en Défense Aérienne, Option DETECTION.

- Cinq (05) Mémoires de PFE soutenus avec succès.

## 3. Membre examinateur (Habitations Universitaires, Thèses de Doctorat et Mémoires de Magister)

### 3.1 Membre expert/examinateur/président (Habitations Universitaires)

- Cinq (05) dossiers examinés des enseignants-chercheurs candidats à l'habilitation universitaire.

### 3.2 Membre examinateur/président (Thèses de Doctorat)

- Neuf (09) thèses de doctorat examinées.

### 3.3 Membre examinateur (Mémoires de Magister)

- Trois (03) Mémoires de Magister examinés.

## 4. Animations Scientifiques

### 4.1 Organisation de Manifestations Scientifiques

08. Membre du comité d'organisation local de la conférence internationale sur le génie électrique avancé (*International Conference on Advanced Electrical Engineering - ICAEE 2019*, <http://www.aagee.dz/icaee2019/committees.php>), du 19 au 21 Novembre 2019, Bibliothèque nationale d'Elhamma" Alger, Algérie.

07. Membre du comité d'organisation local de la 1<sup>ère</sup> conférence sur le génie électrique (*The 1<sup>st</sup> Conference on Electrical Engineering – CEE 2019* (<http://www.emp.mdn.dz/events/cee/committees.html>), du 22 au 23 Avril 2019, EMP, Alger, Algérie.

06. Membre du comité d'organisation local de la conférence internationale sur le génie électrique (*International Conference on Electrical Engineering - ICEE 2017*, <http://icee2017.univ-boumerdes.dz>), du 29 au 31 Octobre 2017, Institut de génie électrique et électronique, Université de Boumerdès, Boumerdès, Algérie.

05. Membre du comité d'organisation local de la conférence internationale de génie électrique (*International Conference on Electrical Engineering - ICEE 2015*, <http://icee2015.univ-boumerdes.dz>), du 13 au 15 Décembre 2015, Institut de génie électrique et électronique, Université de Boumerdès, Boumerdès, Algérie.

04. Membre du comité d'organisation scientifique de la conférence internationale de génie électrique (*7th International Conference on Electrical Engineering - ICEE 2012*, <http://cee2012.univ-batna.dz/>), du 08 au 10 Octobre 2012, Université de Batna, Batna, Algérie.

03. Membre du comité d'organisation scientifique du Workshop sur l'innovation dans le génie électrique et les technologies de l'information, organisé le dimanche 27 Mai 2012, Université Mentouri de Constantine, Constantine, Algérie.

02. Membre du comité d'organisation local de la conférence internationale de génie électrique (*International Conference on Electrical Engineering - ICEE 2009*), du 05 au 07 Décembre 2009, Université de Boumerdès, Boumerdès, Algérie.

01. Membre du comité d'organisation local de l'école d'été sur le traitement du signal et ses applications (*The 4th International Summer School on Signal Processing & its Applications- ISSSPA 2007*), du 30 Juin au 04 Juillet 2007, Université de Boumerdès, Boumerdès, Algérie.

## 4.2 Participation aux Comités de Lecture (*Technical program committee*)/ Comité de Rédaction

### 4.2.1 Membre du comité de rédaction des Journaux (*Editorial board member*)

03. Advanced Electrical & Electronics Engineering and Scientific Journal (AEEESJ): <http://www.aeesj.com/editorial-board/>

02. International Journal of Electronics and Electrical Engineering Systems (IJEEES): <https://ijeees.com/index.php/editorial-boards/>

01. Algerian Journal of Signals and Systems (AJSS, Boumerdes, Algérie): <http://ajss.univ-boumerdes.dz/comitees.php>

### 4.2.2 Membre du Comité de Lecture dans des Journaux (*Reviewer member in international Journals*)

15. Electronics Letters: <https://publons.com/author/1498428/dr-mouloud-challal#profile>

14. AEÜ - International Journal of Electronics and Communications: <https://publons.com/author/1498428/dr-mouloud-challal#profile>

13. Advanced Electromagnetics: <https://publons.com/author/1498428/dr-mouloud-challal#profile>

12. Journal of Instrumentation: <https://publons.com/author/1498428/dr-mouloud-challal#profile>

11. Wireless Personal Communications: <https://publons.com/author/1498428/dr-mouloud-challal#profile>

10. Turkish Journal of Electrical Engineering & Computer Sciences (Turk J Elec Eng & Comp Sci), <https://publons.com/author/1498428/dr-mouloud-challal#profile>

09. Advanced Electrical & Electronics Engineering and Scientific Journal (AEEESJ): <https://publons.com/author/1498428/dr-mouloud-challal#profile>

08. Algerian Journal of Signals and Systems (AJSS, Boumerdes, Algérie): <https://publons.com/author/1498428/dr-mouloud-challal#profile>

07. International Journal of Engineering Science and Technology (IJESTCH): <https://publons.com/author/1498428/dr-mouloud-challal#profile>

06. IEEE Microwave and Wireless Components Letters: <https://publons.com/author/1498428/dr-mouloud-challal#profile>

05. IEEE Transactions on Microwave Theory and Techniques, <https://publons.com/author/1498428/dr-mouloud-challal#profile>

04. Applied Computational Electromagnetics Society (ACES) Journal: <https://publons.com/author/1498428/dr-mouloud-challal#profile>

03. Progress in Electromagnetic Research (PIER): <https://publons.com/author/1498428/dr-mouloud-challal#profile>
02. Journal of Electromagnetic Waves and Applications (JEMWA): <https://publons.com/author/1498428/dr-mouloud-challal#profile>
01. International Journal of Electronics: <https://publons.com/author/1498428/dr-mouloud-challal#profile>

#### **4.2.3 Membre du Comité de Lecture dans des Conférences Internationales (*Reviewer member in Internationals Conferences*)**

12. The 6<sup>th</sup> International Conference on Multimedia Computing and Systems Marrakech - ICMCS'20 (<http://www.med-space.org/icmcs20/>), Oct. 1-3, 2020, Tangier, Morocco.
11. The International Conference on Advanced Electrical Engineering - ICAEE 2019 (<http://www.aagee.dz/icaee2019/committees.php>), November 19 -21 2019, Bibliothèque nationale d'El-hamma" Algiers, Algeria.
10. The 1<sup>st</sup> Conference on Electrical Engineering – CEE 2019 (<http://www.emp.mdn.dz/events/cee/committees.html>), April 22-23, 2019, EMP, Algiers, Algeria.
09. The International Conference on Electrical Engineering - ICEE'18 (<http://www.univ-eloued.dz/icce18/>), December 17-18, 2018, El-Oued, Algeria.
08. The International Conference on Applied Smart Systems - ICASS 2018 (<http://www.univ-medea.dz/committees>), November 24 – 25, 2018, Medea, Algeria.
07. The International Conference on Electrical Sciences and Technologies in Maghreb - CISTEM2018 (<http://www.usthb.dz/CISTEM2018/>), 28 - 29 October 2018, Mazafran Hotel, Algiers, Algeria.
06. The 6<sup>th</sup> International Conference on Multimedia Computing and Systems Marrakech - ICMCS'18 (<http://www.med-space.org/icmcs18>), May 10-12, 2018, Marrakech, Morocco.
05. The 5<sup>th</sup> International Conference on Multimedia Computing and Systems Marrakech - ICMCS'16 ([www.med-space.org/icmcs16](http://www.med-space.org/icmcs16)), 29 September – 1 October, 2016, Marrakech, Morocco.
04. The Mediterranean Conference on Information & Communication Technologies - MedICT'15 (<http://www.asdtic.org/medict2015>), May 7-9, 2015, Saïdia, Morocco.
03. The International Workshop on Microwave & Emerging Wireless Technologies – IWMEWT 2014 (<http://med-space.org/icmcs14/iwmewt/>), April 14 – 16, 2014, Marrakesh, Morocco.
02. The 2<sup>nd</sup> International Conference on Electronics & Oil: From Theory to Applications - ICEO 2013, ([www.univ-ouargla.dz](http://www.univ-ouargla.dz)), March 05 - 06, 2013, University of Ouargla, Ouargla, Algérie.
01. The International Conference on Digital Information and Communication Technology and its Applications DICTAP 2011 ([http://www.sdiwc.net/fr/Program\\_Committees.php](http://www.sdiwc.net/fr/Program_Committees.php)), June 21-23, 2011, University of Bourgogne, Dijon, France.

#### **5. Participation aux Projets de Recherche**

##### **Membre d'équipe de recherche au niveau de l'IGEE/UMBB:**

04. **Janvier 2019 - Décembre 2022** : "Development of Planar Antennas for Smart Grid Application", N° A25N01UN350120190001, PRFU 2019 agréé le : 01 Janvier 2019.
03. **Janvier 2015 - Décembre 2018**: "Contribution to the Analysis and Design of Miniaturized Planar Structures for Modern Communication Systems ", N° J0200320140002, Projet achevé avec bilan jugé positif par le CNEPRU.

**02. Janvier 2012 - Décembre 2014:** "Analysis and Design of Telecommunication Circuits in Microwaves and Millimeters Waves", N° J0200320110035, Projet achevé avec bilan jugé positif par le CNEPRU.

**01. Janvier 2008 - Décembre 2010:** "Wireless Communication Systems/MIMO Links and Channels", N° J0200320070026, Projet achevé avec bilan jugé positif par le CNEPRU.

## 6. Ouvrages/participation à la rédaction d'un ouvrage

<b>Ouvrage</b>	<ul style="list-style-type: none"><li>• <b>Auteur(s)</b> : Mouloud CHALLAL, Ammar BOUKHELFA and Bilal MEKATI</li><li>• <b>Titre de l'Ouvrage</b> : Design of Multiband Microstrip BSFs with and without SMD Capacitors</li><li>• <b>Editeur</b> : LAP LAMBERT Academic Publishing</li><li>• <b>ISSN</b> : 978-613-9-95508-4</li><li>• <b>Nombre de pages</b> : 84</li><li>• <b>Année</b> : 2018</li></ul>
----------------	---

## 7. Autres responsabilités

**03. Depuis Novembre 2015 à ce jour** : Trésorier, à titre bénévole, de l'Association Algérienne de Génie Electrique et Electronique (AAGEE, Membre fondateur).

**02. Mars 2012 - Mars 2014** : Trésorier, à titre bénévole, de IEEE Algeria Subsection (Membre fondateur).

**01. Octobre 1997 - Octobre 1998** : Président du club CELEC 'Club Electronique' à l'Institut d'électronique, Université des Science et de la Technologie Houari Boumediene (USTHB), Bab-Ezzouar, Alger, Algérie.

## 8. Divers

**01. Sport (Mars 2012 - Février 2014)**: Président de la Section Subaquatique (plongée sous marine, chasse sous marine et nage avec palme) du Club ASCOS, El-Harrach, Alger (Membre fondateur depuis 2008).

**02. Informatique** : Logiciels de programmations (Pascal, C++, Matlab), Logiciels de Simulations (Workbench, Agilent ADS, Zeland IE3D) et Logiciel de caractérisation (Agilent ICCAP).

# TROISIEME PARTIE

## TRAVAUX SCIENTIFIQUES

### 1. Publications

#### 1.1 Publications dans des Revues Internationales avec Comité de Lecture

- [38] F. Fertas, **M. Challal** and K. Fertas, “A Compact Slot-Antenna with Tunable-Frequency for WLAN, WiMAX , LTE, and X-Band Applications, ” Progress In Electromagnetics Research C, vol. 102, pp. 203-212, Jan. 2020. DOI: [10.2528/PIERC20020304](https://doi.org/10.2528/PIERC20020304) , Publisher: [EMW Publishing](#)
- [36] F. Fertas, **M. Challal** and K. Fertas, “Miniaturized Quintuple Band Antenna for Multiband Applications, ” Progress In Electromagnetics Research M, vol. 89, pp. 83-92, Jan. 2020. DOI: [10.2528/PIERM19111905](https://doi.org/10.2528/PIERM19111905) , Publisher: [EMW Publishing](#)
- [35] **M. Challal**, K. Hocine and A. Mermoul, “A Novel Design of Compact Dual-band Bandpass Filter for Wireless Communication Systems, ” International Journal of Wireless Personal Communications 109, pp. 1713–1726, Sep. 2019. DOI: [10.1007/s11277-019-06648-9](https://doi.org/10.1007/s11277-019-06648-9) , Publisher: [Springer](#)
- [34] K. Fertas, F. Ghanem, **M. Challal** and R. Aksas, “Design and Development of Compact Reconfigurable Tri-Stopband Bandstop Filter using Hexagonal Metamaterial Cells for wireless, ” Progress In Electromagnetics Research M, vol. 80, pp. 93–102, Apr. 2019. DOI: [10.2528/PIERM18102305](https://doi.org/10.2528/PIERM18102305), Publisher: [EMW Publishing](#)
- [33] K. Djafri, **M. Challal**, R. Aksas, F. Mouhouche and M. Dehmas, “Miniaturized Concentric Hexagonal Fractal Rings Based Monopole Antenna for WLAN/WiMAX Applications, ” Radioengineering Journal, vol. 27, issue 1, pp. 39-44, Apr. 2019. DOI: [10.13164/re.2019.0039](https://doi.org/10.13164/re.2019.0039), Publisher: [Radioengineering Society](#)
- [32] A. Lahmissi and **M. Challal**, “Design and Analysis of a Compact Dual-Band Bandpass Filter using V- and W- shaped Microstrip Open Lines, ” MOTL - Microwave and Optical Technology Letters, vol. 61, issue 4, pp. 920-925, Apr. 2019. DOI: [10.1002/mop.31653](https://doi.org/10.1002/mop.31653) , Publisher: [John Wiley & Sons](#).
- [31] M. Guardiola, K. Djafri, **M. Challal**, M. A. Ballester, G. Fernandez-Esparrach, O. Camara and J. Romeu, “Design and Evaluation of an Antenna Applicator for a Microwave Colonoscopy System, ” IEEE Transactions on Antennas and Propagation, Jan. 2019. DOI: [10.1109/TAP.2019.2896703](https://doi.org/10.1109/TAP.2019.2896703) , Publisher: [IEEE](#).
- [30] A. Boutejdar, **M. Challal**, S. Das, and S. El Hani, “Design and Manufacturing of a Novel Compact 2.4 GHz LPF using a DGS-DMS Combination and Quasi Octagonal Resonators for Radar and GPS Applications, ” Progress In Electromagnetics Research C, vol. 90, pp. 15-28, Jan. 2019. DOI: [10.2528/PIERC18092107](https://doi.org/10.2528/PIERC18092107) , Publisher: [EMW Publishing](#).
- [29] K. Djafri, **M. Challal**, M. Dehmas, F. Mouhouche and R. Aksas, “A Compact ACS-Fed Tri-band Microstrip Monopole Antenna for WLAN/WiMAX Applications, ” AEM J - Advanced Electromagnetics Journal, vol. 7, issue 5, pp. 87-93, Nov. 2018. DOI: <https://doi.org/10.7716/aem.v7i5.853> , Publisher: [Gif-sur-Yvette : LGEP-SUPELEC](#).
- [28] A. Boutejdar, **M. Challal**, S. El Hani, “ Design of New Broad Stop Band (BSB) Lowpass Filter using Compensated Capacitor and  $\Pi$ -H- $\Pi$  DGS Resonator for Radar Applications, ” Progress In Electromagnetics Research M, vol. 73, pp. 91-100, Oct. 2018. DOI: [10.2528/PIERM18062605](https://doi.org/10.2528/PIERM18062605) , Publisher: [EMW Publishing](#)
- [27] K. Djafri, **M. Challal** and J. Romeu, “A Compact Dual-Band Planar Monopole Antenna using Fractal Rings and a Y-Shaped Feeding Transmission Line, ” Frequenz Journal of RF-Engineering and Telecommunications, vol. 72, issue 11-12, pp. 1-12, Oct. 2018. DOI: [10.1515/freq-2018-0097](https://doi.org/10.1515/freq-2018-0097) , Publisher: [Walter de Gruyter GmbH](#)

- [26] A. Boutejdar, M. Salami, **M. Challal**, S. Das, S. El Hani, S. D. Bennani, P. P. Sarkar, "A Compact Wideband Monopole Antenna using Single Open Loop Resonator for Wireless Communication Applications, " *TELKOMNIKA (Telecommunication Computing Electronics and Control) Journal*, vol. 16, issue 5, pp. 2023-2031, Oct. 2018. DOI: [10.12928/telkomnika.v16i5.10454](https://doi.org/10.12928/telkomnika.v16i5.10454) , Publisher: [Universitas Ahmad Dahlan \(UAD\)](http://www.uad.ac.id)
- [25] K. Djafri, **M. Challal**, A. Azrar, M. Dehmas, F. Mouhouche and R. Aksas, "Compact Dual Band Fractal Hexagonal Ring Monopole Antenna for RFID and GSM Applications, " *MOTL - Microwave and Optical Technology Letters*, vol. 60, issue 11, pp. 2656-2659, Oct. 2018. DOI: [10.1002/mop.31497](https://doi.org/10.1002/mop.31497) , Publisher: [John Wiley & Sons](http://www.wiley.com).
- [25] F. Guichi, **M. Challal** and T. A. Denidni, "A Novel Dual Band-Notch Ultra-Wideband Monopole Antenna using Parasitic Stubs and Slot, " *MOTL - Microwave and Optical Technology Letters*, vol. 60, issue 7, pp. 1737-1744, Jul. 2018. DOI: [10.1002/mop.31231](https://doi.org/10.1002/mop.31231) , Publisher: [John Wiley & Sons](http://www.wiley.com).
- [24] F. Guichi and **M. Challal** "A Modified Circular Monopole UWB Antenna with WiMAX/WLAN Dual Band Notch Function, " *IJEEES - International Journal of Electronic and Electrical Engineering Systems*, vol. 1, issue 2, pp. 13-16, Jun. 2018. Website: <https://ijeees.com/index.php/issue-n2/> , Publisher: [AAGEE](http://www.aagee.com).
- [23] H. Louazene, **M. Challal** and M. Boulakroune, "Compact UWB BPF with notch-band using SIR and DGS, " *The International Journal of High Performance Computing and Networking*, vol. 11, No. 02, pp. 167-172, Jan. 2018. DOI: [10.1504/IJHPCN.2018.10010945](https://doi.org/10.1504/IJHPCN.2018.10010945) , Publisher: [Inderscience publishers](http://www.inderscience.com)
- [22] M. Dehmas, A. Azrar, F. Mouhouche, K. Djafri and **M. Challal**, "Compact Dual Band Slotted Triangular Monopole Antenna for RFID Applications, " *MOTL - Microwave and Optical Technology Letters*, vol. 60, issue 2, pp. 432-436, Jan. 2018. DOI: [10.1002/mop.30984](https://doi.org/10.1002/mop.30984) , Publisher: [John Wiley & Sons](http://www.wiley.com).
- [21] **M. Challal**, A. Mermoul and K. Hocine, "High-Frequency Microstrip Dual-Band Bandpass Filter Fabricated using FR-4 Glass Epoxy Material, " *Journal of Physics D: Applied Physics*, vol. 50, No. 49, pp. 1-7, Nov. 2017. DOI: [10.1088/1361-6463/aa95a7](https://doi.org/10.1088/1361-6463/aa95a7) , Publisher: [IOP Publishing Ltd and Sissa Medialab srl](http://www.iop.org).
- [20] A. Boutejdar, **M. Challal**, F. Mouhouche, K. Djafri and S. D. Bennani, "Design and Fabrication of a Novel Quadruple-Band Monopole Antenna Using a U-DGS and Open-Loop-Ring Resonators, " *AEM J - Advanced Electromagnetics Journal*, vol. 6, No. 3, pp. 59-63, Oct. 2017. DOI: [10.7716/aem.v6i3.573](https://doi.org/10.7716/aem.v6i3.573) , Publisher: [Gif-sur-Yvette : LGEP-SUPELEC](http://www.gif-sur-yvette.fr).
- [19] **M. Challal**, A. Badaoui and F. Hachour, "Design and Fabrication of Wide and Deep Rejection Band Microstrip Low-pass Filter, " *JINST- Journal of Instrumentation*, vol. 12, pp. 1-10, Jan. 2017. DOI: [10.1088/1748-0221/12/01/P01023](https://doi.org/10.1088/1748-0221/12/01/P01023) , Publisher: [IOP Publishing Ltd and Sissa Medialab srl](http://www.iop.org).
- [18] **M. Challal**, M. Dehmas, A. Azrar, R. Aksas and M. Trabelsi, "Compact Down-Conversion Mixer Design Employing a Wide and Deep Stop-Band DGS-LPF, " *IJEEE - International Journal of Electronics and Electrical Engineering*, vol. 4, No. 6, Dec. 2016. DOI: [10.18178/ijeeec.4.6.520-524](https://doi.org/10.18178/ijeeec.4.6.520-524) , Publisher: [IJEEE](http://www.ijeee.com).
- [17] **M. Challal** and M. Boulakroune, "Sharp-Rejection, Wide and Deep Stopband Low Pass Filter Design using Open Stubs and DGS Patterns, " *ACTA Physica Polonica A*, vol. 130, No. 1, pp. 9-10, Jul. 2016. DOI: [10.12693/APhysPolA.130.9](https://doi.org/10.12693/APhysPolA.130.9) , Publisher: [Institute of Physics, Polish Academy of Sciences](http://www.pan.fizyka.umk.pl).
- [16] A. Boutejdar, W. Abd Ellatif, A. A. Ibrahim and **M. Challal**, "A simple transformation from lowpass to bandpass filter using a new quasi-arrow head defected ground structure resonator and gap-J-inverter, " *MOTL - Microwave and Optical Technology Letters*, vol. 58, issue 4, pp. 947-953, Apr. 2016. DOI: [10.1002/mop.29705](https://doi.org/10.1002/mop.29705) , Publisher: [John Wiley & Sons](http://www.wiley.com).

- [15] **M. Challal**, M. Dehmas, A. Azrar, R. Aksas and M. Trabelsi, "Circuit Modeling and EM Simulation Verification of DGS based Low-Pass Filter Employing Transmission Line Model along with Microstrip-Slotline Transitions," *Journal of MATEC Web of Conferences*,\_ Chapter 1: Modeling and Simulation (accepted and presented article in 2016 International Conference on Design Engineering and Science – ICDES 2016, Kuala Lumpur, Malaysia), vol. 52, No. 01003, pp. 1–6, Apr. 2016. DOI: [10.1051/matecconf/20165201003](https://doi.org/10.1051/matecconf/20165201003) , Publisher: [EDP Sciences](http://www.edpsciences.org).
- [14] H. Louazene, **M. Challal** and M. Boulakroune, "Compact Ultra-Wide Band Bandpass Filter Design Employing Multiple-Mode Resonator and Defected Ground Structure," *Procedia Computer Science - Journal - Elsevier*, vol.73, pp. 376–383, Dec. 2015. DOI: [10.1016/j.procs.2015.12.006](https://doi.org/10.1016/j.procs.2015.12.006) , Publisher: [Elsevier](http://www.elsevier.com).
- [13] **M. Challal**, M. Dehmas, A. Azrar, R. Aksas and M. Trabelsi, "Wide Stopband Microstrip Bandpass Filter Based on a Compact Slotted Ground Structure," *ACTA Physica Polonica A*, vol. 128, No. 2B, pp. B-71-B-72, Aug. 2015. DOI: [10.12693/APhysPolA.128.B-71](https://doi.org/10.12693/APhysPolA.128.B-71) , Publisher: [Institute of Physics, Polish Academy of Sciences](http://www.pau.edu.pl).
- [12] B. Semmar, R. Aksas, **M. Challal**, A. Azrar and M. Trabelsi, "Numerical Determination of Permittivity and Permeability Tensors of a Dielectric Metamaterial Composed of an Infinite Number of Split Ring Resonators , " *International Journal of Wireless Personal Communications* 83, pp. 2925-2947, Aug. 2015. DOI: [10.1007/s11277-015-2574-0](https://doi.org/10.1007/s11277-015-2574-0) , Publisher: [Springer](http://www.springer.com)
- [11] K. Fertas, H. Kimouche, **M. Challal**, H. Aksas, R. Aksas and A. Azrar, " Design and Optimization of a CPW-Fed Tri-band Patch Antenna using Genetic Algorithms," *ACES Journal- Applied Computational Electromagnetics Society Journal* , vol. 30, n° 7, pp. 754-759, Jul. 2015. Website: <http://www.aces-society.org/search.php?vol=30&no=7&type=2> , Publisher: [Applied Computational Electromagnetics Society](http://www.aces-society.org)
- [10] M. Boulakroune, **M. Challal**, H. Louazene and S. Fentiz, " Design and Synthesis of two Tunable Bandpass Filters based on Varactors and Defected Ground Structure," *International Journal of Computer and Information Engineering*, vol. 9, No. 3, pp. 320-324, 2015. Website: <https://waset.org/abstracts/23038> , Publisher: [World Academy of Science, Engineering and Technology](http://www.waset.org)
- [09] S. Fentiz, M. Boulakroune and **M. Challal**, "A Novel Tunable Circular Bandpass Patch Filter," *Asian Academic Research Journal of Multidisciplinary*, vol. 2, issue. 7, pp. 164-170, Dec. 2015. Website: <http://www.asianacademicresearch.org/> , Publisher: [Asian Academic Research Associates](http://www.asianacademicresearch.org/)
- [08] **M. Challal**, M. Dehmas, A. Azrar, R. Aksas and M. Trabelsi, "Novel Design of Miniaturized Broad Stopband Bandpass Filter using Defected Ground Structure," *IJMOT-International Journal of Microwave and Optical Technology*, vol. 9, No. 6, pp. 415-420, Nov. 2014. Website: <http://www.ijmot.com/VOL9NO6.ASPX> , Publisher: [Electrical Engineering Department, University of Nevada](http://www.ijmot.com)
- [07] **M. Challal**, A. Boutejdar, A. Azrar and D. Vanhoenacker-Janvier, "Design of Compact Low Pass Filter with Large Reject Band Using Open Circuit Stubs and Two Cascaded DGS-Quasi-Triangular Resonators," *MOTL - Microwave and Optical Technology Letters*, vol. 55, issue 1, pp.122-127, January 2013. DOI: [10.1002/mop.27260](https://doi.org/10.1002/mop.27260) , Publisher: [John Wiley & Sons](http://www.wiley.com)
- [06] **M. Challal**, A. Boutejdar, M. Dehmas, A. Azrar and A. Omar "Compact Microstrip Low-Pass Filter Design with Ultra-Wide Reject Band using a Novel Quarter-Circle DGS Shape," *ACES Journal- The Applied Computational Electromagnetics Society*, vol. 27, n° 10, pp. 808-815, Oct. 2012. Website: <http://www.aces-society.org/search.php?q=++challal&search=Search> , Publisher: [Applied Computational Electromagnetics Society](http://www.aces-society.org)
- [05] **M. Challal**, F. Labu, M. Dehmas and A. Azrar, "Comparative Study of Three Shapes of DGS Pattern and Design of Compact Microstrip Low-Pass and Band-Pass Filters," *Wseas Trans. on*

Circuits and Systems, vol. 10, issue 12, pp. 413- 422, December 2011. Publisher: [World Scientific and Engineering Academy and Society](#)

[04] **M. Challal** and A. Azrar, "A Good Conversion Loss and a Very High LO-to-RF Isolation of 24 GHz Single Balanced Mixer for RF front-end Receiver," Maejo International Journal of Science and Technology, vol. 5, issue 3, pp. 350- 357, October 2011. , DOI: [10.14456/mijst.2011.3](#) , Publisher: Maejo University.

[03] **M. Challal**, A. Azrar, M. Dehmas, "Rectangular Patch Antenna Performances Improvement Employing Slotted Rectangular shaped for WLAN Applications," IJCSI- International Journal of Computer Science Issues, vol. 8, issue 3, pp. 254- 258 , May 2011. Publisher: [IJCSI Press](#)

[02] A. Boutejdar, **M. Challal** and A. Azrar, " A Novel Band-Stop Filter Using Octagonal- Shaped Patterned Ground Structures along with Interdigital and Compensated Capacitors," ACES Journal- The Applied Computational Electromagnetics Society, vol. 26, no 4, pp. 312-318, April 2011. Publisher: [Applied Computational Electromagnetics Society](#)

[01] A. Racioui, A. Azrar, H. Bentarzi, M. Dehmas and **M. Challal**, "Synthesis of Linear Arrays with Sidelobe Level Reduction Constraint using Genetic Algorithms," IJMOT - International Journal of Microwave and Optical Technology, vol. 3, no. 5, pp. 524-530, Nov. 2008. DOI: [IJMOT-2014-8-625](#), ISSN: [1553-0396](#). Publisher: [Electrical Engineering Department, University of Nevada](#)

## 1.2 Publications dans des Revues Nationales

[01] **M. Challal**, M. Trabelsi and R. Aksas, "Etude et Conception d'une Antenne Active en Technologie Microruban," AJOT - Algerian Journal of Technology, Série B, vol. 15, no. 1, pp. 03-16, 2002.

## 2. Communications Internationales

- [55] **M. Challal**, “Design and Fabrication of a Compact UWB Filter with WLAN Stopband Rejection Characteristic,” The 4<sup>th</sup> International Conference on Recent Advances in Electrical Systems - ICRAES'19, 23-25 December 2019, Hammamet, Tunisia. ISBN: 978-9938- 9937-2-1.
- [54] F. Fertas, **M. Challal** and K. Fertas “Design and Implementation of a Multiband Quasi-Yagi Antenna,” IEEE – 2019 The International Conference on Advanced Electrical Engineering – ICAEE, 19-21 November 2019, Algiers, Algeria. DOI: [10.1109/ICAEE47123.2019.9014652](https://doi.org/10.1109/ICAEE47123.2019.9014652) , Publisher: [IEEE](https://www.ieee.org/)
- [53] F. Fertas, **M. Challal** and K. Fertas “ Multi-L Slots Antenna for Multiband Applications,” IEEE – 2019 The International Conference on Advanced Electrical Engineering – ICAEE, 19-21 November 2019, Algiers, Algeria. DOI: [10.1109/ICAEE47123.2019.9014757](https://doi.org/10.1109/ICAEE47123.2019.9014757), Publisher: [IEEE](https://www.ieee.org/)
- [52] A. Lahmissi and **M. Challal**, “ A Novel Microstrip Dual-Band Bandpass Filter Design with Harmonic-Suppression,” IEEE – 2019 The International Conference on Advanced Electrical Engineering – ICAEE, 19-21 November 2019, Algiers, Algeria. DOI: [10.1109/ICAEE47123.2019.9015193](https://doi.org/10.1109/ICAEE47123.2019.9015193), Publisher: [IEEE](https://www.ieee.org/)
- [51] F. Guichi, **M. Challal** and T. A. Denidni, “A Modified Circular Monopole UWB Antenna with WiMAX/WLAN Dual Band Notch Function,” The 1<sup>st</sup> Conference on Electrical Engineering – CEE2019, April 22-23, 2019, Algiers, Algeria.
- [50] F. Guichi and **M. Challal**, “2-Elements Diversity/MIMO Antenna with Orthogonal Feed for UWB Systems,” Second International Conference on Electrical Engineering – ICEEB'18, 2-3 December 2018, Biskra, Algeria.
- [49] K. Djafri, **M. Challal**, F. Mouhouche, M. Dehmas and R. Aksas, “Miniaturization using Combinations of First Order Hexagonal Fractal Shaped Rings,” International Conference on Electronics and Electrical Engineering – IC3E'18, 12-13 November 2018, Bouira, Algeria.
- [48] K. Djafri, **M. Challal**, F. Mouhouche, M. Dehmas and R. Aksas, “Miniaturized Multi-band Shorted Antenna for Wireless Communication Applications,” International Conference on Electronics and Electrical Engineering– IC3E'18, 12-13 November 2018, Bouira, Algeria.
- [47] K. Fertas, F. Fertas and **M. Challal**, “Dual-Band and Wideband Planar Antenna Array,” The 2nd International Conference on Automatic control, Telecommunication and Signals – ICATS, 11-12 December 2017, Annaba, Algeria.
- [46] K. Djafri, **M. Challal**, F. Mouhouche and M. Dehmas, “Miniaturized Concentric Fractal Ring Microstrip Patch Antenna for Wireless Applications,” The 2<sup>nd</sup> International Conference on Automatic control, Telecommunication and Signals – ICATS, 11-12 December 2017, Annaba, Algeria.
- [45] K. Djafri, **M. Challal**, R. Aksas, M. Dehmas and F. Mouhouche, “A Compact ACS-Fed Tri-band Microstrip Monopole Antenna for WLAN/WiMAX Applications,” International Conference on Electronics and New Technologies – ICENT, 14-15 November 2017, M'sila, Algeria.
- [44] **M. Challal**, F. Mouhouche, K. Djafri and A. Boutejdar, “Quad-band Microstrip Patch Antenna for WLAN/WiMAX/C/X Applications,” IEEE – 2017 5th International Conference on Electrical Engineering – ICEE-B, 29-31 October 2017, Boumerdes, Algeria. DOI: [10.1109/ICEE-B.2017.8192065](https://doi.org/10.1109/ICEE-B.2017.8192065) , Publisher: [IEEE](https://www.ieee.org/)
- [43] F. Guichi and **M. Challal**, “Compact UWB Monopole Antenna with WiMAX/ITU Band Notch Characteristics,” IEEE – 2017 5th International Conference on Electrical Engineering – ICEE-B, 29-31 October 2017, Boumerdes, Algeria. DOI: [10.1109/ICEE-B.2017.8192109](https://doi.org/10.1109/ICEE-B.2017.8192109) , Publisher: [IEEE](https://www.ieee.org/)
- [42] F. Fertas, **M. Challal** and K. Fertas, “Design and Implementation of a Miniaturized CPW-Fed Microstrip Antenna for Triple-Band Applications,” IEEE – 2017 5th International Conference on Electrical Engineering – ICEE-B, 29-31 October 2017, Boumerdes, Algeria. DOI: [10.1109/ICEE-B.2017.8192103](https://doi.org/10.1109/ICEE-B.2017.8192103) , Publisher: [IEEE](https://www.ieee.org/)
- [41] A. Lahmissi and **M. Challal**, “Microstrip Dual-Band Bandpass Filter Design using Folded Coupled Lines,” IEEE – 2017 5th International Conference on Electrical Engineering – ICEE-B,

- 29-31 October 2017, Boumerdes, Algeria. DOI: [10.1109/ICEE-B.2017.8192145](https://doi.org/10.1109/ICEE-B.2017.8192145) , Publisher: [IEEE](http://www.ieee.org)
- [40] H. Louazene, **M. Challal** and M. Boulakroune, “Band-Notched Ultra-Wideband Bandpass Filter Design using Multiple-Mode Resonator and Stepped Impedance Stub Loaded, ” IEEE – 2017 5th International Conference on Electrical Engineering – ICEE-B, 29-31 October 2017, Boumerdes, Algeria. DOI: [10.1109/ICEE-B.2017.8192151](https://doi.org/10.1109/ICEE-B.2017.8192151) , Publisher: [IEEE](http://www.ieee.org)
- [39] A. Lahmissi and **M. Challal**, “A Novel Microstrip Dual-Band BandPass Filter with Wide and Deep Stopband using Modified SIRs, ” IEEE – 2017 5th International Conference on Electrical Engineering – ICEE-B, 29-31 October 2017, Boumerdes, Algeria. DOI: [10.1109/ICEE-B.2017.8192146](https://doi.org/10.1109/ICEE-B.2017.8192146) , Publisher: [IEEE](http://www.ieee.org)
- [38] K. Djafri, **M. Challal**, , M. Dehmas, F. Mouhouche, R. Aksas and J. Romeu, “A Novel Miniaturized Dual-band Microstrip Antenna for WiFi/WiMAX Applications, ” IEEE – 2017 5th International Conference on Electrical Engineering – ICEE-B, 29-31 October 2017, Boumerdes, Algeria. DOI: [10.1109/ICEE-B.2017.8192084](https://doi.org/10.1109/ICEE-B.2017.8192084) , Publisher: [IEEE](http://www.ieee.org)
- [37] K. Fertas, H. Kimouche, **M. Challal**, F. Ghanem, F. Fertas and R. Aksas, “Development of a Novel UWB Planar Antenna using a Genetic Algorithm, ” IEEE – 2017 5th International Conference on Electrical Engineering – ICEE-B, 29-31 October 2017, Boumerdes, Algeria. DOI: [10.1109/ICEE-B.2017.8192102](https://doi.org/10.1109/ICEE-B.2017.8192102), Publisher: [IEEE](http://www.ieee.org)
- [36] K. Fertas, F. Ghanem, **M. Challal**, M. Ouahdi and R. Aksas, “Design and Implementation of a Novel Tri-band Bandstop Filter based on Hexagonal Metamaterials Split Ring Resonators, ” IEEE – 2017 5th International Conference on Electrical Engineering – ICEE-B, 29-31 October 2017, Boumerdes, Algeria. DOI: [10.1109/ICEE-B.2017.8192101](https://doi.org/10.1109/ICEE-B.2017.8192101) , Publisher: [IEEE](http://www.ieee.org)
- [35] M. Dehmas, A. A. Hamza, **M. Challal**, I. Benmahdjoub, A. Azrar, K. Djafri and F. Mouhouche, “Analysis of a Printed X-Shaped Monopole Antenna, ” IEEE – 2017 5th International Conference on Electrical Engineering – ICEE-B, 29-31 October 2017, Boumerdes, Algeria. DOI: [10.1109/ICEE-B.2017.8192079](https://doi.org/10.1109/ICEE-B.2017.8192079), Publisher: [IEEE](http://www.ieee.org)
- [34] **M. Challal**, F. Hachour and A. Badaoui, “Ultra-wide Stopband Microstrip Lowpass Filter Design for Communication Systems, ” The 4<sup>th</sup> International Conference on Computational and Experimental Science and Engineering - ICCESSEN’17, 04-08 October 2017, Antalya, Turkey.
- [33] **M. Challal**, A. Mermoul and K. Hocine, “ Design and Fabrication of a Novel Compact Dual-band BPF using Folded Non-Uniform Meander Resonators, ” The 4<sup>th</sup> International Conference on Computational and Experimental Science and Engineering - ICCESSEN’17, 04-08 October 2017, Antalya, Turkey.
- [32] M. Dehmas, A. Azrar, **M. Challal**, F. Mouhouche and K. Djafri, “A Novel Tri-band Microstrip Antenna for GSM and WLAN Applications, ” The 4<sup>th</sup> International Conference on Computational and Experimental Science and Engineering - ICCESSEN’17, 04-08 October 2017, Antalya, Turkey.
- [31] M. Dehmas, A. Azrar, **M. Challal**, K. Djafri and F. Mouhouche, “Bow Shape Microstrip Antenna Analysis and Size Reduction using Defects, ” The 4<sup>th</sup> International Conference on Computational and Experimental Science and Engineering - ICCESSEN’17, 04-08 October 2017, Antalya, Turkey.
- [30] F. Guichi and **M. Challal**, “Ultra Wideband Microstrip Patch Antenna Design using a Modified Partial Ground Plane, ” IEEE - 7<sup>th</sup> Seminar on Detection Systems: Architectures and Technologies – DAT’2017, 20-22 February 2017, Algiers, Algeria. DOI: [10.1109/DAT.2017.7889178](https://doi.org/10.1109/DAT.2017.7889178), Publisher: [IEEE](http://www.ieee.org)
- [29] **M. Challal**, M. Dehmas, A. Azrar, R. Aksas and M. Trabelsi, “Circuit Modeling and EM Simulation Verification of DGS based Low-Pass Filter Employing Transmission Line Model along with Microstrip-Slotline Transitions, ” International Conference on Design Engineering and Science – ICDES 2016, 27-29 February 2016, Kuala Lumpur, Malaysia. DOI: [10.1051/mateconf/20165201003](https://doi.org/10.1051/mateconf/20165201003), Publisher: [EDP Sciences](http://www.edp-sciences.com)
- [28] D. Rabahallah, **M. Challal** and N. Talaharis, “Tri-Band Microstrip Bandpass Filters for GSM and WiMAX Applications, ” IEEE - 2015 4th International Conference on Electrical Engineering – ICEE, 13-15 December 2015, Boumerdes, Algeria. DOI: [10.1109/INTEE.2015.7416830](https://doi.org/10.1109/INTEE.2015.7416830) ,

Publisher: [IEEE](#)

- [27] S. Boudaa, **M. Challal**, R. Mehani and D. Rabahallah, "Miniaturized Ultra-Wide Stopband Microstrip Low Pass Filter Design," IEEE - 2015 4th International Conference on Electrical Engineering – ICEE, 13-15 December 2015, Boumerdes, Algeria. DOI: [10.1109/INTEE.2015.7416715](#) , Publisher: [IEEE](#)
- [26] A. Boutejdar, **M. Challal**, A. A. Wael, A. Ibrahim, P. Burte, "Compact LPF to UWB BPF Transition Employing Quasi-Triangular DGS Resonators and a Discontinuity on the Microstrip Feed Line," IEEE – 2015 4th International Conference on Electrical Engineering – ICEE, 13-15 December 2015, Boumerdes, Algeria. DOI: [10.1109/INTEE.2015.7416726](#) , Publisher: [IEEE](#)
- [25] A. Boutejdar, A. Ibrahim, **M. Challal**, A. A. Wael, P. Burte, "Extracting of Compact Tunable BPF from LPF using Single T-DGS-Resonator and 0.25PF/0.5PF Chip Monolithic Ceramic Capacitors," IEEE - 2015 4th International Conference on Electrical Engineering – ICEE, 13-15 December 2015, Boumerdes, Algeria. DOI: [10.1109/INTEE.2015.7416727](#) , Publisher: [IEEE](#)
- [24] W. Krouka, S. Fenni, **M. Challal** and R. Aksas, "Evaluation of Polarization Diversity Antenna for Wireless Communication Application," IEEE – 2015 4th International Conference on Electrical Engineering – ICEE, 13-15 December 2015, Boumerdes, Algeria. DOI: [10.1109/INTEE.2015.7416790](#) , Publisher: [IEEE](#)
- [23] K. Fertas, H. Kimouche, **M. Challal**, H. Aksas and R. Aksas, "An Optimized Shaped Antenna for Multiband Applications using Genetic Algorithm," IEEE – 2015 4th International Conference on Electrical Engineering – ICEE, 13-15 December 2015, Boumerdes, Algeria. DOI: [10.1109/INTEE.2015.7416757](#) , Publisher: [IEEE](#)
- [22] K. Fertas, H. Kimouche, **M. Challal**, H. Aksas and R. Aksas, "Multiband microstrip antenna array for modern communication systems," IEEE – 2015 4th International Conference on Electrical Engineering – ICEE, 13-15 December 2015, Boumerdes, Algeria. DOI: [10.1109/INTEE.2015.7416756](#), Publisher: [IEEE](#)
- [21] H. Louazene, **M. Challal** and M. Boulakroune, "Compact Ultra-Wide Band Bandpass Filter Design Employing Multiple-Mode Resonator and Defected Ground Structure," The International Conference on Advanced Wireless, Information, and Communication Technologies - AWICT 2015, 01-04 October 2015, Sousse, Tunisia.
- [20] **M. Challal**, M. Dehmas, A. Azrar, R. Aksas and M. Trabelsi, "Sharp-Rejection, Wide and Deep Stopband Low Pass Filter Design using Open Stubs and DGS Patterns," The 2<sup>nd</sup> International Conference on Computational and Experimental Science and Engineering - ICCESN'15, 14-19 October 2015, Antalya, Turkey.
- [19] K. Abdelouahab, C. Bensmail, **M. Challal** and R. Aksas, "Design and Implementation of Electronic Scanning Antenna Array with Programmable Control Phase," The 2<sup>nd</sup> International Conference on Computational and Experimental Science and Engineering - ICCESN'15, 14-19 October 2015, Antalya, Turkey.
- [18] B. Semmar, R. Aksas, **M. Challal**, A. Azrar and M. Trabelsi, "Numerical Analysis of a Microstrip Antenna based on Metamaterial Dielectric Substrate using FDTD Technique," The 2<sup>nd</sup> International Conference on Mathematics and Statistics - ICMS'15, 02-05 April 2015, Sharjah, UAE.
- [17] **M. Challal**, M. Dehmas, A. Azrar, R. Aksas and M. Trabelsi, "Wide Stopband Microstrip Bandpass Filter Based on a Compact Slotted Ground Structure," The 1<sup>st</sup> International Conference on Computational and Experimental Science and Engineering - ICCESN'14, 25-29 October 2014, Antalya, Turkey.
- [16] H. Louazene, M. Boulakroune and **M. Challal**, "The Broadside-coupled Microstrip Structure using Open Loop Resonator DGS," IEEE The International Symposium on Networks, Computers and Communications - ISNCC'14, 17-19 June 2014, Hammamet, Tunisia. DOI: [10.1109/SNCC.2014.6866532](#) , Publisher: [IEEE](#).

- [15] H. Louazene, M. Boulakroune and **M. Challal**, “UWB Microstrip Bandpass Filter using Multiple-Mode Resonator and Rectangular-Shaped DGS,” International Congress on Telecommunication and Application - ICTA'14, 23-24 April 2014, Bejaia, Algeria.
- [14] **M. Challal**, M. Dehmas, A. Azrar, R. Aksas and M. Trabelsi, “A Novel Down-Conversion Mixer using DGS-LPF along with two Couplers and an Open Stub,” The International Conference on Electrical and Electronics Engineering – ICEEE'14, 21-23 April 2014, Antalya, Turkey.
- [13] **M. Challal**, A. Boutejdar, M. Dehmas and A. Azrar, “Compact, Low Insertion Loss and Ultra-Wide Rejection Bandwidth Microstrip Low-Pass Filter,” The International Conference on Electrical and Electronics Engineering, Clean Energy and Green Computing – EEECEGC'13, 11-13 December 2013, Dubai, UAE.
- [12] **M. Challal**, A. Azrar and D. Vanhoenacker-Janvier, “A Novel Ultra-Wide Stopband Microstrip Low-Pass Filter for Rejecting High Order Harmonics and Spurious Response Applications in Wideband Microstrip Circuits and Systems,” IEEE The 24th International Conference on Microelectronics - ICM'12, 17-20 December 2012, Algiers, Algeria. DOI: [10.1109/ICM.2012.6471452](https://doi.org/10.1109/ICM.2012.6471452) , Publisher: **IEEE**.
- [11] **M. Challal**, A. Azrar and D. Vanhoenacker-Janvier, “Two-stage 24 GHz Low Noise Amplifier for Front-End Receiver System” IEEE The 6<sup>th</sup> International Conference on Sciences of Electronics, Technologies of Information and Telecommunication - SETIT'12, 21-24 March 2012, Sousse, Tunisia. DOI: [10.1109/SETIT.2012.6481921](https://doi.org/10.1109/SETIT.2012.6481921) , Publisher: **IEEE**.
- [10] **M. Challal**, A. Azrar and D. Vanhoenacker-Janvier, “K-Band Two Stages Low Noise Amplifier Design In Microstrip Technology” The 8<sup>th</sup> International Multi-Conference on Systems, Signals & Devices - SSD'11, 22-25 March 2011, Sousse, Tunisia.
- [09] **M. Challal**, A. Azrar, and D. Vanhoenacker-Janvier, “A Hybrid Down Conversion Mixer Design for K-Band Application,” The 3<sup>rd</sup> International Conference on Electrical Engineering - ICEE'09, pp. 30-34, 5- 7 December 2009, Boumerdes, Algeria
- [08] **M. Challal**, A. Azrar, M. Dehmas and A. Recioui, “Analysis and Synthesis of a K-Band Microstrip Patch Antenna Array,” IEEE Mediterranean Microwave Symposium - MMS'09, 15- 17 November 2009, Tangiers, Morocco. DOI: [10.1109/MMS.2009.5409821](https://doi.org/10.1109/MMS.2009.5409821) , Publisher: **IEEE**
- [07] M. Dehmas, A. Azrar, A. Recioui and **M. Challal**, “A Semi numerical Approach for Semiconductor Devices Physical Modeling,” IEEE International Conference on Advances in Computational Tools for Engineering Applications - ACTEA'09, 15-17 July 2009, Zouk Mosbeh, Lebanon. DOI: [10.1109/ACTEA.2009.5227928](https://doi.org/10.1109/ACTEA.2009.5227928), Publisher: **IEEE**
- [06] A. Recioui, A. Azrar, H. Bentarzi, M. Dehmas and **M. Challal**, “Combating multiple access interference in wireless communication systems employing Smart Antennas,” IEEE 6<sup>th</sup> International Multi-Conference on Systems, Signals and Devices - SSD '09, pp. 1-4, 7- 9 November 2008, Hammamet, Tunisia. DOI: [10.1109/SSD.2009.4956717](https://doi.org/10.1109/SSD.2009.4956717), Publisher: **IEEE**
- [05] **M. Challal**, A. Azrar, H. Bentarzi and D. Vanhoenacker-Janvier, “Microstrip Design of Low Noise Amplifier for Application in NarrowBand and WideBand,” IEEE 2<sup>nd</sup> International Conference on Signals, Circuits & Systems - SCS'08, pp. 1-4, 7- 9 November 2008, Hammamet, Tunisia. DOI: [10.1109/ICSCS.2008.4746950](https://doi.org/10.1109/ICSCS.2008.4746950), Publisher: **IEEE**
- [04] **M. Challal**, A. Azrar, H. Bentarzi and D. Vanhoenacker-Janvier, “A 24 GHz Hybrid Low Noise Amplifier Design Using N-CHANNEL HJ-FET,” IEEE Mediterranean Microwave Symposium - MMS'08, pp. 135-139, 14-16 October 2008, Damascus, Syria.
- [03] A. Recioui, A. Azrar, H. Bentarzi, M. Dehmas and **M. Challal**, “Direction of Arrival Estimation for Interference Rejection in Mobile Communication Systems Employing Smart Antennas,” IEEE Mediterranean Microwave Symposium - MMS'08, pp. 1-4, 14-16 October 2008, Damascus, Syria.
- [02] **M. Challal**, A. Azrar, H. Bentarzi, A. Recioui and M. Dehmas, D. Vanhoenacker-Janvier, “On Low Noise Amplifier Design for Wireless Communication Systems,” IEEE 3<sup>rd</sup> International Conference on Information & Communication Technologies - ICTTA'08, 12-16 April 2008,

Damascus, Syria. DOI: [10.1109/ICTTA.2008.4530265](https://doi.org/10.1109/ICTTA.2008.4530265), Publisher: [IEEE](https://www.ieee.org/)

- [01] A. Recioui, A. Azrar, M. Dehmas, **M. Challal** and H. Bentarzi, "Traveling Wave Antennas Optimization using Genetic Algorithms," IEEE 3rd International Conference on Information & Communication Technologies - ICTTA'08, 12-16 April 2008, Damascus, Syria. , DOI: [10.1109/ICTTA.2008.4530136](https://doi.org/10.1109/ICTTA.2008.4530136), Publisher: [IEEE](https://www.ieee.org/)

Fait à Boumerdès, Février 2020

Prof. M. CHALLAL