

CURRICULUM VITAE ABREVIADO (CVA)

IMPORTANT – The Curriculum Vitae cannot exceed 4 pages. Instructions to fill this document are available in the website.

Part A. PERSONAL INFORMATION

First name	Eva		
Family name	Rajo Iglesias		
Gender (*)		Birth date (dd/mm/yyyy)	
Social Security, Passport, ID number			
e-mail	Eva.rajo@uc3m.es	URL Web https://eva.webs.tsc.uc3m.es/	
Open Researcher and Contributor ID (ORCID) (*)	0000-0002-8012-9802		

(*) Mandatory

A.1. Current position

Position	Full Professor		
Initial date	28/11/2018		
Institution	Universidad Carlos III de Madrid		
Department/Center	Signal Theory and Communications		
Country	Spain	Teleph. number	916248774
Key words	Antennas, metasurfaces, gap waveguide technology, microwaves		

A.2. Previous positions (research activity interruptions, indicate total months)

Period	Position/Institution/Country/Interruption cause
2008-2018	Assoc. Professor/Univ. Carlos III of Madrid/Spain
2002-2008	Lecturer /Univ. Carlos III of Madrid/Spain

A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Ing. Telecomunicación	Universidade de Vigo	1996
Doctor Ing. Telecomunicación	Universidad Carlos III de Madrid	2002

Part B. CV SUMMARY (max. 5000 characters, including spaces)

Eva Rajo Iglesias (Monforte de Lemos, 1972) is a Full Professor at the Dpt. of Signal Theory and Communications at the Carlos III University of Madrid since 2018. She has been an Affiliated Professor at the Antenna Group at Chalmers University (Sweden) between 2009 and 2016. She is Head of the Radio Technologies and Applications research group of the UC3M (<https://gea.webs.tsc.uc3m.es/>).

Her research activity is related to printed antennas, artificial surfaces and periodic structures, higher symmetries, gap waveguide technology, and MIMO systems. In the topic of gap waveguide technology, she has published 35 journal articles, a book chapter, two patents and she has organized special sessions in the main international conferences of antennas. She has also given short courses about this topic in conferences like EuCAP or IEEE APS and in the European School of Antennas. She has been plenary speaker in the conference in EuCAP 2017 with the talk: "Antenna designs based on Gap Waveguide Technology". More recently she gave an Opening talk in the European Microwave Week 2021 in the EuRAD conference about the same topic and a keynote talk in ISAP 2022.



She has been Associate Editor of IEEE Antennas and Propagation Magazine from 2009-2019 and of the IEEE Antennas and Wireless Propagation Letters from 2011-2016 and currently is Associate Editor of IEEE Transactions Antennas and Propagation. She is now the national delegate of the COST-18223 ACTION “ *Future communications with higher-symmetric engineered artificial materials*” (<https://symat-cost.eu/>).

She is co-author of more than 100 papers at JCR journals and more than 180 in international conferences (many of them invited in Convened Sessions), 4 book chapters and 9 patents. Her h-index is 41 according to Google (with more than 6650 citations) and 32 according to Web of Science (with more than 3800 citations). More than half of her papers have international co-authors.

She has participated in more than 25 competitive research projects with public funding (6 as IP) and more than 20 contracts with companies like Nokia or Airbus.

She has 5 *sexenios* (one of them of technological transfer). She has supervised 4 doctoral theses at the Carlos III University and co-supervised 3 more at the Univ. of Chalmers.

She has been a co-chair of the Department of Signal Theory and Communications of the University Carlos III of Madrid from January 2011 to June 2012 and from October 2016 to April 2021.

She has been a permanent collaborator in the Ministry for the research national plan in the TEC area for 4 years and is a regular project evaluator for the European Comision (ERC, Flagship, FET programs...), and also for other countries sporadically (Italy, Holland, Portugal, Belgium, South Africa...). She regularly collaborates with ANECA and with regional agencies in all kinds of evaluation programs (projects, research groups, etc.).

She has been a member of more than 35 PhD thesis committees (more than 10 of them in foreign universities). She has been (co)-Chair of three conferences (CONATEL 2011, LAPC 2016 and 3rd International Workshop of Metamaterials by Design 2018) and has participated in the organization of EuCAP 2022, EuCAP 2021, EuCAP 2019, EuCAP 2013 and IEEE AP-S 2012. She is currently TPC Chair of EuCAP 2023. She is a regular member of the TPC of the EuCAP, IEEE AP-S, NEMO, MMS, URSI...

She has also been a member of the award committees at LAPC 2014, IEEE AP-S 2016, EuCAP 2018, EuCAP 2020, InCAP 2019 and EuRAAP (2015 to present being now the chair). Her work has received several awards as some Best Paper Awards at international conferences (Metamaterials 2009, LAPC 2007, ISAP 2021, National URSI 2021), the First National Prize Arquímedes Award 2010 as a tutor, an Award of Excellence for Young Researchers from the Carlos III University in 2014 and the Third Bell Labs Award in 2014. She has carried out research stays in universities of Sweden (Chalmers, KTH), Italy (Siena, Trento), France (Nice, Paris) or Chile (PUCV).

She is currently the 2022 Euraap Ambassador (<https://www.euraap.org/blog/news-1/auraap-ambassador-program-2>).

She is listed in the World's Top 2% Scientists list elaborated by Stanford University.

Part C. RELEVANT MERITS (*sorted by typology*)

C.1. Publications (*see instructions*)

She is the author of more than 100 papers in international journal in JCR and more than 180 contributions in international conferences. Her work has been **cited more than 6650 times** with **an h-index of 41** (according to Google Scholar). Some of the relevant publications related to the project are:

- M. Ebrahimpouri, **E. Rajo-Iglesias**, Z. Sipus, and O. Quevedo-Teruel, *Cost-Effective Gap Waveguide Technology Based on Glide-Symmetric Holey EBG Structures*, IEEE Transactions on Microwave Theory and Techniques Vol. 66, pp. 927-934, February 2018. **(171 citations)**
- **E. Rajo-Iglesias**, M. Ferrando-Rocher, A. U. Zaman, *Gap Waveguide Technology for Millimeter Wave Antenna Systems*, in IEEE Communications Magazine, vol. 56, no. 7, pp. 14-20, July 2018. **(107 citations)**
- E. Pucci, **E. Rajo-Iglesias**, J.-L. Vazquez-Roy, P.S. Kildal, *Planar Dual-Mode Horn Array With Corporate-Feed Network in Inverted Microstrip Gap Waveguide*, IEEE Trans. on Antennas and Propagation, vol. 62, no. 7, pp. 3534-3542, July 2014. **(101 citations)**
- M. Ebrahimpouri, O. Quevedo-Teruel, **E. Rajo-Iglesias**, *Design Guidelines for Gap Waveguide Technology Based on Glide-Symmetric Holey Structures*, IEEE Microwave and Wireless Component Letters, 2017. 27(6), 542-544. **(145 citations)**
- **Eva Rajo-Iglesias**, Zvonimir Sipus, Ashraf Uz Zaman, *Gap Waveguide Technology in "Surface Electromagnetics: With Applications in Antenna, Microwave, and Optical Engineering"* Cambridge University Press ISBN: 9781108470261, 2019.
- P. Kildal, E. Alfonso, A. Valero-Nogueira, and **E. Rajo-Iglesias**, "Local Metamaterial-Based Waveguides in Gaps Between Parallel Metal Plates," IEEE Antennas Wirel. Propag. Lett., vol. 8, pp. 84–87, 2009. **(764 citations)**
- E. Rajo-Iglesias, M. Ebrahimpouri, and O. Quevedo-Teruel, "Wideband Phase Shifter in Groove Gap Waveguide Technology Implemented With Glide-Symmetric Holey EBG," IEEE Microw Wirel Compon Lett, vol. 28, no. 6, pp. 476–478, Jun. 2018 **(100 citations)**
- L. Wang, J. L. Gómez-Tornero, E. Rajo-Iglesias, and O. Quevedo-Teruel, "Low-Dispersive Leaky-Wave Antenna Integrated in Groove Gap Waveguide Technology," IEEE Trans. Antennas Propag., vol. 66, no. 11, pp. 5727–5736, Nov. 2018 **(77 citations)**
- J. M. Poyanco, F. Pizarro, and **E. Rajo-Iglesias**, "Wideband Hyperbolic Flat Lens in the Ka-band Based on 3D-Printing and Transformation Optics," Applied Physics Letters, vol. 118, no. 12, p. 123503, 2021
- O. Quevedo-Teruel, G. Valerio, Z. Sipus, and **E. Rajo-Iglesias**, "Periodic Structures with Higher Symmetries: Their Applications in Electromagnetic Devices," IEEE Microwave Magazine, vol. 21, no. 11, pp. 36–49, 2020

C.2. Congress, indicating the modality of their participation (invited conference, oral presentation, poster)

She has more than 180 contributions in international conferences, many of them in convened sessions. Following are the Keynote/Plenary talks in the last years:

- Keynote talk: "New Trends in Antenna Design using Gap Waveguide Technology", ISAP 2022.
- Keynote talk: "Gap Waveguide Technology using Periodic Structures with Higher Symmetries", Advanced Electromagnetic Symposium 2022, Marrakesh
- Opening talk: "Emerging antenna technologies for millimeter and submillimeter wave radar systems" EuRAD conference 2021, European Microwave Week 2021, London
- Plenary talk: "Antenna designs based on Gap Waveguide Technology", EuCAP 2017, Paris

C.3. Research projects, indicating your personal contribution. In the case of young researchers, indicate lines of research for which they have been responsible.

- *STEERCOMM - Antena con control de apuntamiento para comunicaciones por satélite en movimiento* Agencia Estatal de Investigación (2020-2023). **PDC2022-133811-C22** PI: Eva Rajo Iglesias
- *“Sistemas de antena eficientes para las futuras redes de comunicación”* (INMA), Agencia Estatal de Investigación (2020-2023). **PID2019-107688RB-C21**. PI: Eva Rajo Iglesias
- *“Antenna for Mobile Satellite Communications (SATCOM) in Ka-Band by means of metasurfaces”* (2016-2019) **TEC2016-79700-C2-2-R** Spanish Ministry of Science and Innovation (MINECO). PI: Eva Rajo Iglesias
- *“High-capacity Textile Device based on Massive MIMO Techniques”* (2015-2018) **TEC2014-61776-EXP** Spanish Ministry of Science and Innovation (MINECO). PI: Matilde Sánchez Fernández
- *“Space Debris Radar”* (2014-2018) **S2013/ICE3000** (SPADERadar-CM) Comunidad de Madrid. PI of UC3M team: Eva Rajo Iglesias
- *“Development of components and antennas in Gap-Waveguide technology for the improvement of transceiver performance in millimeter bands”* (2014-2017) **TEC2013-44019-R**. Spanish Ministry of Science and Innovation. PI: Eva Rajo Iglesias

C.4. Contracts, technological or transfer merits, Include patents and other industrial or intellectual property activities (contracts, licenses, agreements, etc.) in which you have collaborated. Indicate: a) the order of signature of authors; b) reference; c) title; d) priority countries; e) date; f) Entity and companies that exploit the patent or similar information, if any

Contracts with industry:

- *“Antenas 5G para acceso fijo a internet con mejora de capacidad”*, 5G-AFIANCE, **Nokia Spain SA** (2020-2022). PI: Eva Rajo Iglesias (THD call **TSI-100901-2019-004**). 101.177 €
- *“Tecnologías para la asequibilidad del acceso de banda ancha”*, TREFOIL **Nokia Spain SA** (2020-2022). PI: Eva Rajo Iglesias (EUREKA PROJECT): 60.000 €
- *“SMART-O-LIVE”*, **Digitalanimal S.L.** (2022-2023) PI: Eva Rajo Iglesias (programa Misiones del CDTI). 32.000 €.
- *“Overlapped subarray fed reflector antennas for SAR instrument”*, tender European Space Agency. **Airbus Defence and Space** (2020-2021) PI: Eva Rajo Iglesias 36.000 €
- *“Tecnologías Radio para IoT marítima”* (2019-2021), **Blue Matter Technologies SL**. PI: Eva Rajo Iglesias. 15.000 €

Patents:

- **E. RAJO IGLESIAS**, M. SANCHEZ FERNANDEZ, A. FERNANDEZ, AND T. SANJUAN, “Dense multi-band antenna for fixed wireless,” NOKIA SOLUTIONS & NETWORKS OY European patent with Application Number: 22382543.1. Jun. 2022.
- **RAJO IGLESIAS Eva**, SANCHEZ FERNANDEZ Matilde, FERNANDEZ Alfonso, “Small Form Factor Multiband Antenna” NOKIA SOLUTIONS & NETWORKS OY. European **Patent application n. 21383242.1** submitted 30/12/2021
- MARTÍN BARTRINA, Álvaro VÁZQUEZ ROY, José, Luis DE INCIÁN SÁNCHEZ, Luis, Fernando, **RAJO IGLESIAS, Eva**, “Antenna Array Module”, MARITIME IOT SOLUTIONS BV 23.09.2021 WO/2021/185970, EP3883051 A1
- FERNANDEZ Alfonso, TOUCHARD Gloria, INCLAN SANCHEZ, Luis, **RAJO IGLESIAS Eva**, “Antenna”, NOKIA SOLUTIONS & NETWORKS OY 25.12.2019 **EP3584884, US20190386386 A1**
- KILDAL, Per-Simon, KISHK, Ahmed, **RAJO-IGLESIAS, Eva**, “Packaging Of Active And Passive Microwave Circuits Using A Grid Of Planar Conducting Elements On A Grid Of Vertically Arranged Substrates”, GAPWAVES AB 19.12.2013 **WO/2013/185807**
- KILDAL Per-Simon, KISHK Ahmed, **RAJO IGLESIAS Eva**, “Packaging of active and passive microwave circuits using lid or bed of curved posts”. KILDAL ANTENN CONSULTING Nov, 30 2011: **EP2390953 A1**