Date of the CVA	14/11/2019

Section A. PERSONAL DATA

Name and Surname	Iñigo González de Arrieta Martínez		
DNI	22758442B	Age	26
Researcher's identification number	Researcher ID		
	Scopus Author ID	57189063991	
	ORCID	0000-0001-6984-5149	

A.1. Current professional situation

Institution	Gobierno Vasco			
Dpt. / Centre	Física Aplicada II / Universidad del País Vasco			
Address	Avenida Zumalacárregui 111 9 C, 48007, Bilbao			
Phone	(0034) 667247260	Email	inigo.gonzalezdearrieta@ehu.eus	
Professional category	Personal investigador no doctor en formación		Start date	2019
UNESCO spec. code	220914 - Optical properties of solids; 220920 - Radiometry			
Keywords				

A.2. Academic education (Degrees, institutions, dates)

Bachelor/Master/PhD	University	Year
MS New Materials	Universidad del País Vasco	2016
BS Physics	Universidad del País Vasco	2015

A.3. General quality indicators of scientific production

- 7 papers in JCR-indexed international journals (3 Q1, 1 T1)

- 1 paper in a SJR-indexed international journal

- 2 papers in non-JCR-indexed journals (in Basque language)

- 2 popular science articles in Basque language

- 16 contributions to international congresses (10 orals, 6 posters)

- 4 contributions to national congresses with publications in Basque language (2 orals, 2 posters)

- 1 prize for dissemination of scientific knowledge

- Number of citations: 5 (h=1)

Section B. SUMMARY OF THE CURRICULUM

Predoctoral researcher at the University of the Basque Country (UPV/EHU). My main topics of study include thermal radiation and materials science. Current interests include materials for high-temperature applications, solar and nuclear energy, metallurgy and aeronautics, among other topics.

I obtained a BS in Physics in 2015 at the University of the Basque Country (UPV/EHU), with a speciality in Solid State Physics, and a MS in New Materials in 2016 as part of a joint

programme by the UPV/EHU and the University of Cantabria. I started my PhD project on September 2016 and I am currently working on the high-temperature optical properties of pure metals, advanced alloys and solar selective coatings. These properties are essential not only for the study of radiative heat transfer in the energy and manufacturing sectors, but also for fundamental studies of the infrared dielectric function of materials. This work is currently being performed in collaboration with research groups from DLR Cologne (Germany), Bangalore (India), San Diego (USA), Chengdu (China) and Orléans (France); as well as samples supplied by the Karlsruhe Institute of Technology. A proposed predoctoral stay at PTB Berlin has also been planned for the study of the optical properties of pure metals and learning instrumental design and construction at a leading research centre in the field. Some results of the PhD project have already been sent for publication and presented in international conferences.

Section C. MOST RELEVANT MERITS (ordered by typology)

C.1. Publications

1 **Scientific paper**. I. González de Arrieta; et al. 2019. Infrared emissivity of copper-alloyed spinel black coatings for concentrated solar power systems Solar Energy Materials and Solar Cells. Elsevier. 200-15, pp.109961.
2 **Scientific paper**. G.A. López; et al. 2019. Combining strategies to make General Physics lectures more attractive and to improve students' performances Journal of Physics: Conference Series. 1287, pp.012027.
3 **Scientific paper**. I. González de Arrieta; et al. 2019. Evolution of the infrared emissivity of Ni during thermal oxidation until oxide layer opacity Infrared Physics & Technology. Elsevier. 97, pp.270-276.
4 **Scientific paper**. T. Echániz; et al. 2018. Thermal radiative properties of electron-beam-melted and mechanically alloyed V-4Cr-4Ti based alloys between 200 and 750 ºC Journal of Nuclear Materials. 513, pp.86-93.
5 **Scientific paper**. T. Echániz; et al. 2018. Sensitivity of thermal emission spectroscopy for the study of structural phase transitions Infrared Physics and Technology. Elsevier. 93, pp.16-19.
6 **Scientific paper**. T. Echániz; et al. 2018. Eguzki-energia termikoa metatzeko materialetako emisibitate-esperimentuak Ekaia. EHUko Zientzia eta Teknologia aldizkaria. Universidad del País Vasco/Euskal Herriko Unibertsitatea (UPV/EHU). 34, pp.199-210.
7 **Scientific paper**. A. Dan; et al. 2018. Effects of environmental and operational variability on the spectrally selective properties of W/WAlN/WAlON/Al2O3 -based solar absorber coating Solar Energy Materials and Solar Cells. Elsevier. 185, pp.342-350.
8 **Scientific paper**. I. González de Arrieta; et al. 2017. Mid-infrared optical properties of pyrolytic boron nitride in the 390 - 1050 oC temperature range using spectral emissivity measurements Journal of Quantitative Spectroscopy and Radiative Transfer. Elsevier. 194, pp.1-6.
9 **Scientific paper**. I. González de Arrieta; et al. 2016. Thermo-radiative and optical properties of a cutting tool based on polycrystalline cubic boron nitride (PCBN) Materials Research Express. IOP Publishing. 3, pp.045904.
10 **Popular science article**. I. González de Arrieta; I. González Cubiella. 2019. Dysonen esferen bila Elhuyar Aldizkaria.
11 **Popular science article**. I. Urcelay-Olabarria; et al. 2018. Dirdai berezia daukazu gaur Elhuyar Aldizkaria.

C.2. Participation in R&D and Innovation projects

C.3. Participation in R&D and Innovation contracts

1 Infrared emissivity measurements in two samples of black paints Sener Ingenieria y Sistemas, S.A.. Gabriel A. López. 15/12/2017-15/01/2018.
2 Medidas de emisividad infrarroja en muestra de pintura sobre acero al carbono Repsol YPF, S.A.. Gabriel Alejandro López. 01/09/2017-P3D.

3 Medidas de emisividad infrarroja en muestras de acero 316L con diferentes acabados superficiales ESS Bilbao. Gabriel Alejandro López. 06/06/2017-P3M24D.

4 Medidas de emisividad infrarroja en muestra de alúmina – Las medidas se utilizarán para contrastar las medidas llevadas a cabo con un prototipo de dispositivo industrial desarrollado por ArcelorMittal/Tecnalia ArcelorMittal; Tecnalia. Gabriel Alejandro López. 01/06/2017-P3M29D.

5 Medidas de emisividad infrarroja en muestra de nitruro de boro – Las medidas se utilizarán para contrastar las medidas llevadas a cabo con un prototipo de dispositivo industrial desarrollado por ArcelorMittal/Tecnalia ArcelorMittal; Tecnalia. Gabriel Alejandro López. 01/06/2017-P3M29D.

C.4. Patents