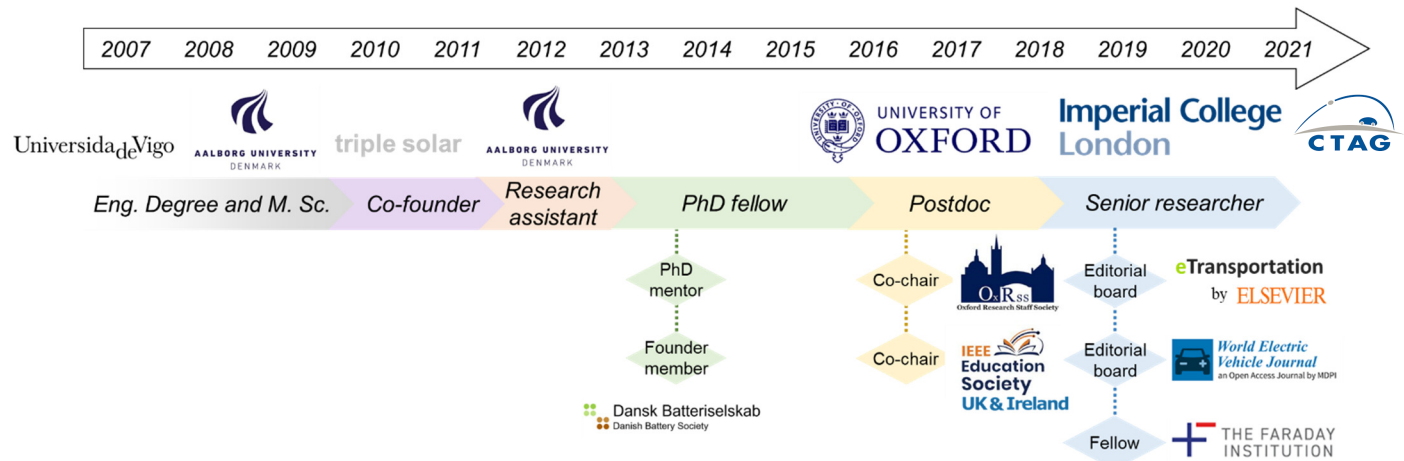
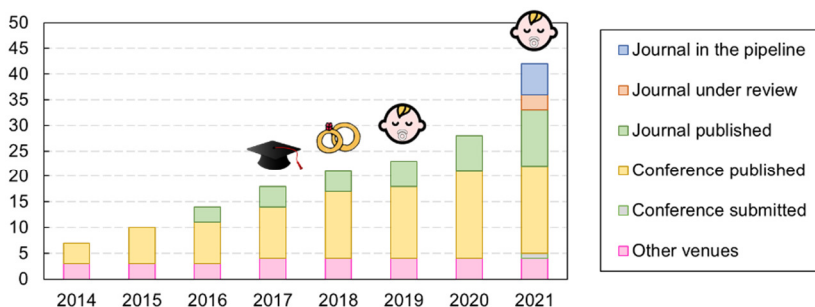


Short bio and timeline

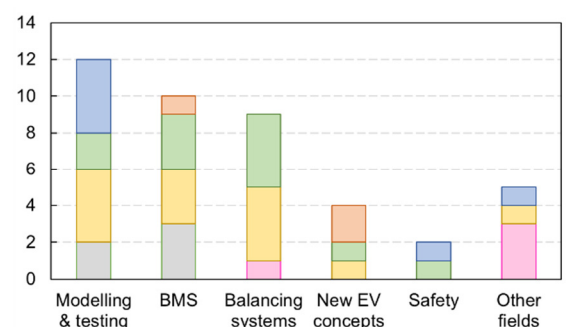
Jorge combines an academic role as battery researcher in Imperial College London, with an industrial role as electric vehicle (EV) expert at CTAG (Spain) and battery safety expert at the Faraday Institution (UK). He is involved in the community as joint chairman of IEEE UK & Ireland Education Society, and editorial board member of eTransportation by Elsevier and World Electric Vehicle Journal by MDPI. Previously, he was a postdoc at the University of Oxford, co-chairman of the Oxford Research Staff Society, founder member of the Danish Battery Society, and co-founder of an engineering consulting company. He received the degree in Electrical Engineering from the University of Vigo (Spain), the M.Sc. degree in Power Electronics from Aalborg University (Denmark) and the Ph.D. degree in battery management systems also from Aalborg in 2017. He was a visiting researcher at RWTH ISEA Aachen, INESC TEC, and the University of Sfax. He has worked in 16 international research projects with a total budget over 75 million euros, and industry partners such as Panasonic, Jaguar and Land Rover, Aston Martin, JCB, Continental, Horiba Mira or McKinsey. He has co-authored 31 peer-reviewed scientific papers, including 14 journal papers and 2 book chapters. His interests include EVs, energy storage systems, batteries, and battery management systems.



Publications timeline



Field of publication



Publication record

- 5 journal articles in the pipeline
- 3 journal articles under review
- 11 journal articles published
- 17 articles in conferences
- 4 other publications
- 1 patent under review

Selected awards

- **World Winner of IEEE Industrial Engagement Competition**, IEEE UK & Ireland Section, US, 2020
- **Tutorial speaker**, IEEE VPPC, Spain, 2020
- **Plenary speaker**, 6th BMS conf., Germany, 2019
- **Plenary speaker**, 3rd automobile conf., Germany, 2017
- **Tutorial speaker**, VPPC, France, 2017
- **STFC Batteries Early Career**, UK, 2017
- **Best Special Session**, IEEE EVER, Monaco, 2016
- **Finalist Falling Walls Lab**, Spain, 2015
- **Best Paper Award**, IEEE EVER, Monaco, 2015

Key contributions

- New EV architecture based on fixed and swappable battery packs
- Conception of a new generation of active balancing systems
- Pioneering works in BMS testing on hardware-in-the-loop simulators
- Field-testing of 1000V BMS prototype
- New methods for electro-thermal modelling
- EV battery safety training courses for emergency response services and industry
- Advising Faraday Institution on giga-factories

Google scholar stats¹

- Citations: 318
- h-index: 11
- i10-index: 13

(27/7/2021)

ResearchGate stats²

- Research interest: 515.9 (87th percentile)
- RG score: 18.97 (70th percentile)
- 39k reads, 154 recommendations

Publons record³

- 35 reviews (93rd percentile)
- 9 reviews last 12 months (92nd percentile)
- 5 editor records

¹ https://scholar.google.co.uk/citations?user=O_c6vLkAAAAJ&hl=en

² https://www.researchgate.net/profile/Jorge_Varela_Barreras

³ <https://publons.com/researcher/1527173/jorge-varela-barreras>

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