

Curriculum Vitae - Simone Quondam Antonio

- **Position**

Since the 1st of November 2019 he is Post-Doctoral Researcher with the University of Perugia - Department of Engineering. His main scientific interests concern:

- Experimental characterization of magnetic components and devices
- Modelling and computer simulation of electrical machines and magnetic circuits
- Non-destructive diagnostics of crystallographic orientations in laminated ferromagnetic alloys
- Neural Network modelling
- Matlab[®] programming

- **University Career**

- 24th July 2011, LAUREA DEGREE in Informatics and Electronics Engineering at the University of Perugia, Perugia - Italy.
- 8th May 2014, MASTER'S DEGREE (summa cum laude) in Electronics and Communications Engineering at the University of Perugia, Perugia, Italy.
- 9th March 2018, DOCTOR OF PHILOSOPHY in "Energy and Sustainable Development", Department of Engineering, University of Perugia, Perugia, Italy.
- 2017, Research Grant, Department of Engineering, University of Perugia, Perugia, Italy.
- 2018, Post-Doctoral Research Grant, Department of Engineering, University of Perugia, Perugia, Italy.
- 2019, Post-Doctoral Research Grant, Department of Engineering, University of Perugia, Perugia, Italy.
- 23rd November 2020, Professional Engineering Qualification: Information Engineering – SEZ. A, University of Perugia.

- **Journal papers and conference contributions**

- **16 PAPERS** published on international journals with impact factor.
- **24 CONTRIBUTIONS** presented at international conferences with peer review process.

- **Bibliometric indices**

- Documents: **40**
- Citations: **152** by **79** documents
- h-index: **7**
- Journals papers divided by journal:
 - 4 IEEE Transactions on Magnetics (ISSN: 0018-9464)
 - 4 Physica B: Condensed Matter (ISSN: 0921-4526)
 - 2 Journal of Magnetism and Magnetic Materials (ISSN: 0304-8853)
 - 1 AIP Advances (E-ISSN: 2158-3226)
 - 2 IEEE Transactions on Industrial Electronics (ISSN: 0278-0046)
 - 1 IEEE Transactions on Electromagnetic Compatibility (ISSN: 0018-9375)
 - 1 International Journal of Numerical Modelling (ISSN: 1099-1204)
 - 1 International Journal of Applied Electromagnetics and Mechanics (ISSN: 1383-5416)

- **Lectures at International Conferences**

- 2020, "On the Use of Feedforward Neural Networks to Simulate Magnetic Hysteresis in Electrical Steels", IEEE 20th Mediterranean Electrotechnical Conference 16th – 18th June, Palermo, Italy.
- 2019, "Optimum Identification of Iron Loss Models in NGO Electrical Steel for Power Electronics", IEEE 5th International forum on Research and Technologies for Society and Industry (RTSI) 9th – 12th September, Firenze, Italy.
- 2019, "*Artificial Intelligence Techniques Applied to the Characterization of Magnetic Materials*", Photonics & Electromagnetics Research Symposium (PIERS), 17th - 20th June, Rome, Italy (**INVITED SPEAKER**).
- 2018, "*Power Losses in Ferromagnetic Steel Sheets for Avionic Environment*", IEEE 4th International forum on Research and Technologies for Society and Industry (RTSI), 13th September, Palermo, Italy.
- 2018, "*Towards Online Evaluation of Goss-texture Properties in Ferromagnetic Laminated Alloys*", IEEE Annual Meeting Magnetic Society - Italy Chapter, 4th June, Gioiosa Marea (ME), Italy (**INVITED SPEAKER**).
- 2018, "*Non-Invasive Testing of Crystal Grain Orientation for Electrical Steels with Goss Texture*", IEEE Advances in Magnetism (AIM), 5th February, La Thuile, Italy.
- 2017, "*Perspectives and New trends in Design of Electrical Machines for Automotive Applications*", IEEE Annual Meeting Magnetic Society - Italy Chapter, 19th May, Messina, Italy (**INVITED SPEAKER**).
- 2017, "*In-plane magnetic anisotropy detection for crystal grain orientation in Goss-textured ferromagnets*", IEEE International Magnetic Conference (INTERMAG), 24th-28th April, Dublin, Ireland.
- 2017, "*Non-destructive diagnostic of crystal grain orientation in Goss-textured ferromagnets*", Frontiers in magnetism III - Workshop in Recent Advances in Magnetism and Spintronics, 23rd March, Perugia, Italy (**INVITED SPEAKER**).
- 2016, "*On the Effects of the Average Grain Size in GO Fe-Si Alloys: Magnetic Measurements and Simulations via the Single Hysteron Model*", IEEE 2nd International Forum on Research and Technologies for Society and Industry (RTSI), 9th September, Bologna, Italy.
- 2016, "*A challenging hysteresis operator for the simulation of Goss-textured magnetic materials*", Advances in Magnetism (AIM), 15th March, Bormio, Italy.
- 2015, "*Modeling of the magnetocrystalline cubic anisotropy in Fe-Si electrical steels*", AEIT Annual Conference, 15th October, Naples, Italy.
- 2015, "*On the Accuracy of Vector Magnetization Measurements for FeSi Steel Sheets with Different Thicknesses and Different Grain Sizes*", AEIT Annual Conference, 15th October, Naples, Italy.
- 2015, "*Magnetization Processes of Non Oriented Electrical Steels: Vector Hysteresis and Energy Losses Measurements*", IEEE 1st International Forum on Research and Technologies for Society and Industry (RTSI), 17th September, Turin, Italy.
- 2015, "*Some Remarks about the Magnetization Processes in Electrical Steels via a Micromagnetic Approach*", IEEE 1st International Forum on Research and Technologies for Society and Industry (RTSI), 17th September, Turin, Italy.

- **Poster Presentations at International Conferences**

- 2017, "Dynamic Magnetization Processes in Soft Magnetic Materials for Automotive Applications: Modelling and Experimental Verifications", 5th Italian Conference on Magnetism (MAGNET), 13th-15th September, Assisi, Italy.
- 2017, "Energy Losses in Non-Oriented Silicon Steels for E-Mobility", 23rd Soft Magnetic Materials Conference (SMM), 10th-13th September, Seville, Spain.

- 2015, “Vector Hysteresis Model Identification for Iron-Silicon Thin Films from Micromagnetic Simulations”, 10th International Symposium on Hysteresis Modeling and Micromagnetics (HMM), 18th-20th May, Iasi, Romania.
- **Reviewer for International Journals**
 - International Journal of Magnetism and Electromagnetism.
- **Reviewer for International Conferences**
 - IEEE International Magnetic Conference (INTERMAG).
 - IEEE International Forum on Research and Technologies for Society and Industry (RTSI).
 - Advances in Magnetism Conference (AIM).
- **Session Chair at International Conferences**
 - Special Session: “*Enhanced Modeling, Simulation, Design and Testing of Magnetic Components and Innovative Architectures for Power Converters*”, @ IEEE 5th International Forum on Research and Technologies for Society and Industry (RTSI).
- **Teaching Activities**
 - 2015/2016, TUTORING ACTIVITY for the course of Physics (degree course of Mechanical Engineering), University of Perugia, Perugia, Italy.
 - 2015/2016 - 2016/2017, TUTORING ACTIVITY for the courses of Physics (degree courses of Mechanical Engineering and Electronics Engineering), University of Perugia, Perugia, Italy.
 - Doctorate Course: “*Magnetic Materials: Modelling, Properties and Applications*”, for the Doctorate of Philosophy in Information and Industrial Engineering (cycle XXXIV^o), University of Perugia.
 - For the academic year 2020-2021 he holds the Course of Electrical Circuits – part I (3 CFU) for the degree courses of Mechanical Engineering and Internet Engineering at the University “Tor Vergata” of Rome, Rome, Italy

Perugia, 25th November 2020.

Simone Quondam Antonio