

## Allegato A

ELENCO PUBBLICAZIONI PRESENTATE DAL CANDIDATO:  
**Abdelrahman Mohamed Ghanim**

### List of Publications :

- E. Cardell, A. Faba, A. Laudani, Antonio SQ, **AbdelRahman M. Ghanim**, "Comparison between Different Models of Magnetic Hysteresis in the solution of the TEAM 32 Problem", International Journal of Numerical Modelling: Electronic Networks, Devices and Fields, 2023.
- Alsayed, A.E., **Ghanim, A.M.**, Yahia, A. and Swillam, M.A., "Giant Localized Plasmonic Field of All Silicon Nanoantennas at MIR:", Scientific Report (**Accepted**).
- Abdelazeem Atyia, **AbdelRahman M. Ghanim**, "Some considerations on the application of JA models to evaluate the effects of hysteresis in magnetic steels", COMPEL (**under review**)
- **Ghanim, A.M.**, Alsayed, A.E., Yahia, A. and Swillam, M.A., 2022, May. Dielectric Nanoantennas–Enhanced Localized Surface Plasmon Resonance for Sensing Applications. In 2022 Photonics North (PN) (pp. 1-1). IEEE.
- Alsayed, A.E., **Ghanim, A.M.**, Yahia, A. and Swillam, M.A., 2022, September. Silicon-Based Plasmonic Nanoantennas at mid-infrared for Gas Sensing Applications. In 2022 International Conference on Numerical Simulation of Optoelectronic Devices (NUSOD) (pp. 145-146). IEEE.
- **AbdelRahman M. Ghanim**, Ahmad E. Alsayed, Ashraf Yahia and Mohamed A. Swillam, "Dielectric Nanoantennas – Enhanced Localized Surface Plasmon Resonance for Sensing Applications", photonic north conference, 2022, Canada.
- Antonio, S.Q., **Ghanim, A.M.**, Faba, A., Laudani, A., " Numerical Simulations of Vector Hysteresis via Preisach Model and Energy Based Model: State of the Art and Open Questions", J. Magn. Magn. Mater.
- **Ghanim AM**, Hussein M, Hemdan R, Yahia A (2020) Compact Super-Directive Yagi-Uda Antenna Based on Parabolic-Shaped Reflector for Wireless Communications. Int J Electron Device Phys 4:006
- **A. R. M. Ghanim** and H. Rimal, "Efficient and Robust Modeling of Vector Magnetic Hysteresis: An Engineering Approach," 2020 IEEE 20th Mediterranean Electrotechnical Conference (MELECON), Palermo, Italy, 2020, pp. 114-118, doi: 10.1109/MELECON48756.2020.9140705.
- S. Quondam Antonio, F. Riganti Fulginei, H. P. Rimal and **A. M. Ghanim**, "On the Use of Feedforward Neural Networks to Simulate Magnetic Hysteresis in Electrical Steels," 2020 IEEE 20th Mediterranean Electrotechnical Conference (MELECON), Palermo, Italy, 2020, pp. 119-124, doi: 10.1109/MELECON48756.2020.9140585.
- Antonio, S.Q., LoZito, G.M., **Ghanim, A.M.**, Laudani, A., Rimal, H., Faba, A., Chilosi, F. and Cardelli, E., 2020. Analytical formulation to estimate the dynamic energy loss in electrical steels: Effectiveness and limitations. Physica B: Condensed Matter, 579, p.411899.
- Rimal HP, **Ghanim AM**, Antonio SQ, Lozito GM, Faba A, Cardelli E. Modelling of dynamic losses in soft ferrite cores. Physica B: Condensed Matter. 2020 Feb 15;579:411811.
- **Ghanim AM**, Rimal HP, Cutugno F. Dynamic Losses Prediction in NOG Electrical Steels for Electrical Machines. In 2019 IEEE 5th International forum on Research and Technology for Society and Industry (RTSI) 2019 Sep 9 (pp. 415-420). IEEE.
- Rimal HP, Antonio SQ, **Ghanim AM**, Cutugno F. Characterization of Soft Ferrite Cores in Power Electronic Applications. In 2019 IEEE 5th International forum on Research and Technology for Society and Industry (RTSI) 2019 Sep 9 (pp. 411-414). IEEE.
- Rimal HP, Antonio SQ, **Ghanim AM**. Preisach model identification for the prediction of static hysteresis loops in ferrite cores. In 2019 IEEE 5th International forum on Research and Technology for Society and Industry (RTSI) 2019 Sep 9 (pp. 194-197). IEEE.
- Rimal HP, **Ghanim AM**, Antonio SQ, Faba A, Cardelli E. Time domain modelling of soft ferrite inductors for power converters applications. In 2019 26th IEEE International Conference on Electronics, Circuits and Systems (ICECS) 2019 Nov 27 (pp. 847-850). IEEE.
- **Ghanim AM**, Hussein M, Hameed MF, Obayya SS. Design considerations of super-directive

nanoantennas for core-shell nanowires. JOSAB. 2018 Jan 1; 35(1):182-8.

- **Ghanim, A.M.**, Hussein, M., Hameed, M.F.O., Yahia, A. and Obayya, S.S., 2016. Highly directive hybrid Yagi-Uda nanoantenna for radiation emission enhancement. *IEEE Photonics Journal*, 8(5), pp.1-12.
- **AbdelRahman M. Ghanim**, MOHAMED HUSSEIN, MOHAMED FARHAT. O. HAMEED, ASHRAF YAHIA, AND S. S. A. OBAYYA "Novel Design of High Directivity Hybrid Yagi-Uda Antenna", in *The 4th Advanced Electromagnetics Symposium Conference, Spain, 2016.*

ELENCO PRIME 12 PUBBLICAZIONI NUMERATE DALLA COMMISSIONE PER IL CANDIDATO:

### **Abdelrahman Mohamed Ghanim**

1. E. Cardell, A. Faba, A. Laudani, Antonio SQ, **AbdelRahman M. Ghanim**, "Comparison between Different Models of Magnetic Hysteresis in the solution of the TEAM 32 Problem", *International Journal of Numerical Modelling: Electronic Networks, Devices and Fields*, 2023.
2. Alsayed, A.E., **Ghanim, A.M.**, Yahia, A. and Swillam, M.A., "Giant Localized Plasmonic Field of All Silicon Nanoantennas at MIR:", *Scientific Report (Accepted)*.
3. Atyia, **AbdelRahman M. Ghanim**, "Some considerations on the application of JA models to evaluate the effects of hysteresis in magnetic steels", *COMPEL (under review)*
4. **Ghanim, A.M.**, Alsayed, A.E., Yahia, A. and Swillam, M.A., 2022, May. Dielectric Nanoantennas– Enhanced Localized Surface Plasmon Resonance for Sensing Applications. In *2022 Photonics North (PN)* (pp. 1-1). IEEE.
5. Alsayed, A.E., **Ghanim, A.M.**, Yahia, A. and Swillam, M.A., 2022, September. Silicon-Based Plasmonic Nanoantennas at mid-infrared for Gas Sensing Applications. In *2022 International Conference on Numerical Simulation of Optoelectronic Devices (NUSOD)* (pp. 145-146). IEEE.
6. **AbdelRahman M. Ghanim**, Ahmad E. Alsayed, Ashraf Yahia and Mohamed A. Swillam, "Dielectric Nanoantennas – Enhanced Localized Surface Plasmon Resonance for Sensing Applications", *photonics north conference, 2022, Canada*.
7. Antonio, S.Q., **Ghanim, A.M.**, Faba, A., Laudani, A., "Numerical Simulations of Vector Hysteresis via Preisach Model and Energy Based Model: State of the Art and Open Questions", *J. Magn. Mater.*
8. **Ghanim AM**, Hussein M, Hemdan R, Yahia A (2020) Compact Super-Directive Yagi-Uda Antenna Based on Parabolic-Shaped Reflector for Wireless Communications. *Int J Electron Device Phys* 4:006
9. **A. R. M. Ghanim** and H. Rimal, "Efficient and Robust Modeling of Vector Magnetic Hysteresis: An Engineering Approach," *2020 IEEE 20th Mediterranean Electrotechnical Conference (MELECON)*, Palermo, Italy, 2020, pp. 114-118, doi: 10.1109/MELECON48756.2020.9140705.
10. S. Quondam Antonio, F. Riganti Fulginei, H. P. Rimal and **A. M. Ghanim**, "On the Use of Feedforward Neural Networks to Simulate Magnetic Hysteresis in Electrical Steels," *2020 IEEE 20th Mediterranean Electrotechnical Conference (MELECON)*, Palermo, Italy, 2020, pp. 119-124, doi: 10.1109/MELECON48756.2020.9140585.
11. Antonio, S.Q., LoZito, G.M., **Ghanim, A.M.**, Laudani, A., Rimal, H., Faba, A., Chilosi, F. and Cardelli, E., 2020. Analytical formulation to estimate the dynamic energy loss in electrical steels: Effectiveness and limitations. *Physica B: Condensed Matter*, 579, p.411899.
12. Rimal HP, **Ghanim AM**, Antonio SQ, Lozito GM, Faba A, Cardelli E. Modelling of dynamic losses in soft ferrite cores. *Physica B: Condensed Matter*. 2020 Feb 15;579:411811.

## Elenco delle pubblicazioni e della tesi di dottorato presentate da Michele Lo Giudice

- Tesi di Dottorato - Advanced Artificial Intelligence Technology and Brain Computer Interface to Identify Robust Biomarkers of Neurological Disorders
- Pubb 01 - Explainable Deep Learning Classification of Respiratory Sound for Telemedicine Applications
- Pubb 02 - The Next Generation of eHealth A Multidisciplinary Survey
- Pubb 03 - Convolutional Neural Network Classification of Rest EEG Signals among People with Epilepsy, Psychogenic Non Epileptic Seizures and Control Subjects
- Pubb 04 - Visual Explanations of Deep Convolutional Neural Network for eye blinks detection in EEG-based BCI applications
- Pubb 05 - Epilepsy in Cerebrovascular Diseases A Narrative Review
- Pubb 06 - Permutation Entropy-Based Interpretability of Convolutional Neural Network Models for Interictal EEG Discrimination of Subjects with Epileptic Seizures vs. Psychogenic Non-Epileptic Seizures
- Pubb 07 - A Machine Learning Approach Involving Functional Connectivity Features to Classify Rest-EEG Psychogenic Non-Epileptic Seizures from Healthy Controls
- Pubb 08 - 1D Convolutional Neural Network approach to classify voluntary eye blinks in EEG signals for BCI applications
- Pubb 09 A SIMPLE, LOW-COST, SMARTPHONE-BASED GAIT ANALYSIS. PRELIMINARY RESULTS IN HEALTHY SUBJECTS - Abstracts of the 51st Annual Conference of the Italian Society of Neurology

Data 08/03/2023

# Abdelrahman Mohamed Ghanim

Lecturer at *Physics Department, Faculty of Science, Ain Shams University, Cairo, Egypt*

E-mail1: \_\_\_\_\_

E-mail2: \_\_\_\_\_

Permanent Address:

Postal Code:

Telephone



## Personal Details:

Date of Birth:

Gender:

Nationality:

Marital Status:

## Work Experience:

- **Lecturer at Physics department. Faculty of science, Ain Shams university, Egypt** from 2013 till now.
- **Researcher at Photonics group, Physics department, American University in Cairo (AUC), Egypt**, from January 2022 till now.
- **Researcher at Physics department. Faculty of science, Ain Shams university, Egypt** from 2013 till now.
- **Coordinator of the E-learning unit at Faculty of science, Ain Shams university, Egypt** from 2021 till 2022.
- **Assistant of the coordinator of Physics-computer group for quality at Physics department. Faculty of science, Ain Shams university, Egypt** from 2021 till now.
- **PhD Student at Industrial and Information Engineering Department, Faculty of Engineering, Perugia University, Perugia, Italy** from 2017 till 4/6/2021.
- **Research Assistant at RPC Lab, CERN, Switzerland** from 9/2016 to 12/2016.
- **Volunteer Researcher at Center of Photons and smart materials, Zewailcity of Science and Technology, Cairo, Egypt** from 1/4/2015 till 1/9/2017.

## Education:

**2017-2021 Ph.D. in Industrial and Information Engineering (Jointly degree cooperation Funded by TAMURA company)**

**-Thesis Title:** "Theoretical and experimental analysis of magnetic components for power electronics applications"

**2017-2020 Ph.D. Courses in Industrial and Information Engineering**

**-Courses:** Electronics, systems and methodologies for experimental analysis, Bitcoins Blockchain Distributed Ledger Technologies and Smart Contracts, Magnetic Materials: Modeling, Properties and Applications

**2014-2017 M.Sc. in Physics (Electronics)**

**-Thesis Title:** "Design, Simulation and Characterization of tunable directive nanoantennas"

**2012-2013 M.Sc. Courses in Physics (Electronics)** *Physics Department, Faculty of Science, Ain Shams University, Cairo, Egypt.*

**-Courses:** Advanced Quantum Mechanics, Advanced Electrodynamics, Statistical Physics, Computational Physics, Mathematical Physics, Telecommunication and Electronics, Advanced Electronic Circuits, Computational Systems in Electronics, Microwaves, Solid State Electronics.

**2006-2010 B.Sc. in Physics (Electronics)** *Physics Department, Faculty of Science, Ain Shams Univ., Cairo, Egypt.*

**-Specialization:** Electronics/Electromagnetics/Antennas/directional nanoantennas  
**-Overall Grade:** Very Good (Ranked 1st among electronics students in the department of physics)  
**-Project:** Temperature sensor circuit  
**-Project Grade:** Excellent

### Teaching Experience:

#### **From the fall of 2013 until the spring of 2017:**

- I taught in the physics lab for science majors at the Physics Department, Ain Shams University. My responsibilities were similar to those of a Demonstrator: I was in charge of explaining the experiments in the physics labs, teaching theory, and problems, identifying potential Physics majors and students with difficulties, and taking notes.
- In addition, I was a member of a group created by the department chair to rewrite the curriculum for undergraduate courses. Overall, student feedback has been really good (student reports are available upon request).

#### **From 2021 to the present:**

- I have taught a series of circuit lectures to students pursuing an analytical chemistry diploma at the chemistry department, of Ain Shams University.
- I have taught a course on electronic devices and measurements, and a programming language course to undergraduate students in the physics department.
- I am now teaching a course of electric circuits to students of physics-computer department.
- I am now teaching a course of classical mechanics to the 1<sup>st</sup> grade students at the MIU.
- I am now the supervisor of a Master's thesis in the subject of Nanophotonics and a PhD thesis in the same field. I also supervise the fourth-year physics lab, where collaborate with demonstrators to discuss the experiments with students.

### Honors and Awards:

- 2017 Ph.D. Scholarship** from Industrial and Information Engineering Department, Faculty of Engineering, Perugia University, **Perugia, Italy.**
- 2016 3 months scholarship** from the international organization CERN: "Upgrade of resistive plate chamber", **CERN, Switzerland.**
- 2010 Award for the Best Academic Performance Among Physics Majors in Electronics**, *from the Faculty of Science, Ain Shams University, Cairo, Egypt.*

### Academic Training:

- 2021** Center of development and training, "The organization of a scientific conference", Ain Shams University, Cairo, Egypt.
- 2021** Center of development and training, "Credit hours", Ain Shams University, Cairo,

- Egypt.**
- 2021** Center of development and training, "The E-learning with Moodle", Ain Shams University, Cairo, **Egypt.**
- 2021** Center of development and training, "Writing your thesis with MS office", Ain Shams University, Cairo, **Egypt.**
- 2021** Center of development and training, "Applications of Microsoft office 365", Ain Shams University, Cairo, **Egypt.**
- 2021** Center of development and training, "Efficient teaching", Ain Shams University, Cairo, **Egypt.**
- 2019** Gasparini PhD school, " Modeling, Simulation and optimization of circuits and systems for photovoltaic applications, *University of Salerno, Viterbo, Italy*
- 2018** ET PhD summer school, " From graph theory to signal processing on graphs ", *La Sapienza University, Rome, Italy*
- 2018** Summer Course, "Power electronics and applications", *Rome Tre University, Rome, Italy.*
- 2018** Gasparini PhD school, Numerical electromagnetics, *Naples University, Naples, Italy.*
- 2017** The high performance computer training course at Physics department, *Ain Shams University, Cairo, Egypt .*
- 2016** Research Assistant at RPC Lab, CMS group, **CERN, Switzerland.**
- 2015** FDTD and numerical software training, *Zewail city for Science and Technology, Cairo, Egypt.*
- 2015** Research management module", DAAD Cairo, **Cairo, Egypt.**
- 2014** International Publications Course, *Faculty and Leadership Development Center (FLDC), Ain Shams University, Cairo, Egypt.*
- 2010** LAN and Network lab, *Information Technology and Telecom Center (ITTC), Ain Shams University, Cairo, Egypt.*
- 2010** Printed circuit Boards and ORCAD Design and Layout, *Information Technology and Telecom Center (ITTC), Ain Shams University, Cairo, Egypt.*
- 2009** MATLAB Introduction and Programming, *Information Technology and Telecom Center (ITTC), Ain Shams University, Cairo, Egypt.*

### Citations and H-index

<b>Citation N.</b>	69
<b>H-index</b>	5
<b>Google Scholar</b>	<a href="https://scholar.google.com/citations?user=6Qkw5hIAAAAJ&amp;hl=en">https://scholar.google.com/citations?user=6Qkw5hIAAAAJ&amp;hl=en</a>

### Conferences:

- NUSOD 22nd International Conference, Politecnico di Torino, Italy, 2022 (online)
- Photonic north conference, 2022, Niagra, Canada, **Poster**
- 20th Mediterranean Electrotechnical Conference (MELECON), Palermo, Italy, 2020"online", **Talk.**
- 12th International Symposium on Hysteresis Modeling and Micromagnetics (HMM2019) in Crete, Greece, **Talk.**
- 22nd International Conference on the Computation of Electromagnetic Fields, Paris, France,

**Poster.**

- The 4th Advanced Electromagnetics Symposium Conference, Spain, 2016, **Presentation.**

**Computer Skills:**

- Working knowledge of:**
- MATLAB
  - Microwave CST
  - Lumerical FDTD
  - ORCAD
  - Computer Hardware & Microsoft Office
  - Multisim
  - Pspice

**Languages:**

**Arabic:** Fluent (mother tongue)  
**English:** Very Good  
**Italian:** Moderate

**References:**

**Name:** Ermanno Cardelli

**Position:** Prof. of Electrical Engineering

**Address:** CMIT Lab, Industrial and Information Engineering, Faculty of Engineering, Perugia University, Perugia, Italy

**Tel. No.:**            **E-mail:** \_\_\_\_\_

**Name:** Antonino Laudani

**Position:** Ass. Prof. of Electrical Engineering,

**Address:** Electrical Science and Technology LAB, Faculty of Engineering, University Roma Tre, Rome, Italy

**Tel. No.:**            **E-mail:** \_\_\_\_\_

**Name:** Ashraf Shamseldin Yahia

**Position:** Prof. of Electronics, Electromagnetics

**Address:** Ain Shams University, Faculty of Science, Department of Physics, 11566, Abbassia, Cairo, Egypt.

**Tel. No.:**            **E-mail:** \_\_\_\_\_

**Name:** Mostafa A. El-Aasser

**Position:** Prof. of Electronics & Electromagnetics

**Address:** Ain Shams University, Faculty of Science, Department of Physics, 11566, Abbassia, Cairo, Egypt.

**Tel. No.**            **E-mail:** \_\_\_\_\_

# Michele Lo Giudice

Michele Lo Giudice è assegnista di ricerca nel progetto "Sviluppo di algoritmi di elaborazione di segnali biologici basati su metodi di deep learning per la piattaforma iCare" presso l'Università Mediterranea di Reggio Calabria ed è Dottore di Ricerca al in "Biomarcatori delle malattie Croniche e Complesse" con progetto "Advanced Artificial Intelligence Technology and Brain Computer Interface to identify robust biomarkers of neurological disorders" presso il Dipartimento di Scienze Mediche e Chirurgiche dell'Università Magna Græcia di Catanzaro, Italia. Ha conseguito la laurea magistrale in Ingegneria dei Sistemi Informatici e delle Telecomunicazioni (LM-27) presso l'Università Mediterranea di Reggio Calabria nel 2019 discutendo la tesi "Progettazione di Reti Neurali Convolute per la classificazione di eye blinking da segnali BCI e integrazione su microcontrollore STM32 " sviluppata presso STMicroelectronics, Catania. Ha conseguito la laurea triennale in Ingegneria dell'Informazione (L-8) nel 2017 presso la stessa Università. È stato senatore accademico degli studenti e presidente di un'associazione studentesca.

## Attività professionale e formativa

- 2021 – Attuale**    **ASSEGNISTA DI RICERCA PER “SVILUPPO DI ALGORITMI DI BIO-SIGNAL PROCESSING BASATI SU METODI DI DEEP LEARNING PER LA PIATTAFORMA ICARE”**  
Università Mediterranea di Reggio Calabria, Italy
- 2021**                **ABILITAZIONE ALL'INSEGNAMENTO - SCIENZE E TECNOLOGIE INFORMATICHE (A-41) – MIUR**  
– Ministero dell'Istruzione dell'Università e della Ricerca
- 2020**                **ABILITAZIONE ALL'ESERCIZIO DELLA PROFESSIONE DI INGEGNERE DELL'INFORMAZIONE**
- 2019 – 2023**        **DOTTORATO DI RICERCA “LIFE SCIENCES & TECHNOLOGIES – UMG SCHOOL OF PHD” IN “BIOMARCATORI DELLE MALATTIE CRONICHE E COMPLESSE”**  
Magna Græcia University of Catanzaro, Italy
- 2017 -2019**        **LAUREA MAGISTRALE IN INGEGNERIA INFORMATICA E DEI SISTEMI DELLE TELECOMUNICAZIONI (LM-27)**  
Voto finale: 110/110 (con lode) | Università Mediterranea di Reggio Calabria, Italia
- 2013 – 2017**        **LAUREA TRIENNALE IN INGEGNERIA DELL'INFORMAZIONE (L-8)**  
Voto finale: 100/110 | Università Mediterranea di Reggio Calabria, Italia
- 2008 – 2013**        **MATURITÀ SCIENTIFICA – “ALESSANDRO VOLTA” (LICEO SCIENTIFICO STATALE)**  
Voto finale: 96/100 | Reggio Calabria, Italia

## Skills & IT Skills

Teamwork | Data Analyst | Database Management | Machine Learning | Artificial Intelligence | Office |  
Photoshop | Python | MATLAB | EEGlab | Google Colab | Keras | TensorFlow | PyTorch

## Premi e Grants

- Highlights of the EAN Congress 2021
  - Il paper “Convolutional network analysis for interictal EEG discrimination between subjects with epileptic seizures and PNES” è stato selezionato tra gli highlights del Congresso della European Academy of Neurology del 2021
- Full Grant Teaching Revolution (ELIS)
  - selezionato tra i 7 giovani laureandi/neo-laureati o dottorandi da inserire nel progetto “Teaching Revolution” con un full grant per il percorso di formazione.
- IEEE CIS Conference Registration Grant al WCCI 2020
- IEEE CIS Mentoring Program al WCCI 2020

## Lingue

- Italiano: Madrelingua | Inglese: competenza professionale

## Pubblicazioni

- **Lo Giudice, M.**, Mammone, N., Ieracitano, C., Aguglia, U., Mandic, D., & Morabito, F. C. (2023, February). **Explainable Deep Learning Classification of Respiratory Sound for Telemedicine Applications.** In Applied Intelligence and Informatics: Second International Conference, AII 2022, Reggio Calabria, Italy, September 1–3, 2022, Proceedings (pp. 391-403). Cham: Springer Nature Switzerland.
- Suraci, C., De Angelis, V., Lofaro, G., **Lo Giudice, M.**, Marrara, G., Rinaldi, F., ... & Araniti, G. (2022). **The Next Generation of eHealth: a Multidisciplinary Survey.** *IEEE Access*, vol. 10, pp. 134623-134646, 2022, doi: 10.1109/ACCESS.2022.3231446.
- **Lo Giudice M**, Ferlazzo E, Mammone N, Gasparini S, Cianci V, Pascarella A, Mammì A, Mandic D, Morabito FC, Aguglia U. **Convolutional Neural Network Classification of Rest EEG Signals among People with Epilepsy, Psychogenic Non Epileptic Seizures and Control Subjects.** *International Journal of Environmental Research and Public Health*. 2022; 19(23):15733. <https://doi.org/10.3390/ijerph192315733>
- **Lo Giudice, M.**, Mammone, N., Ieracitano, C., Campolo, M., Bruna, A. R., Tomaselli, V., & Morabito, F. C. (2022, July). "Visual Explanations of Deep Convolutional Neural Network for eye blinks detection in EEG-based BCI applications," 2022 International Joint Conference on Neural Networks (IJCNN), Padua, Italy, 2022, pp. 01-08, doi: 10.1109/IJCNN55064.2022.9892567.
- Neri S, Gasparini S, Pascarella A, Santangelo D., Cianci V., Mammì A., **Lo Giudice M.**, Ferlazzo E., Aguglia U. **Epilepsy in Cerebrovascular Diseases: A Narrative Review.** *Current Neuropharmacology*. 2022 Jul. DOI: 10.2174/1570159x20666220706113925. PMID: 35794769.
- **Lo Giudice M**, Varone G, Ieracitano C, Mammone N, Tripodi GG, Ferlazzo E, Gasparini S, Aguglia U, Morabito FC. **Permutation Entropy-Based Interpretability of Convolutional Neural Network Models for Interictal EEG Discrimination of Subjects with Epileptic Seizures vs. Psychogenic Non-Epileptic Seizures.** *Entropy*. 2022; 24(1):102. <https://doi.org/10.3390/e24010102>
- Varone G, Boulila W, **Lo Giudice M**, Benjdira B, Mammone N, Ieracitano C, Dashtipour K, Neri S, Gasparini S, Morabito FC, Hussain A, Aguglia U. **A Machine Learning Approach Involving Functional Connectivity Features to Classify Rest-EEG Psychogenic Non-Epileptic Seizures from Healthy Controls.** *Sensors*. 2022; 22(1):129. <https://doi.org/10.3390/s22010129>
- **Lo Giudice M**, Varone G, Ieracitano C, Mammone N, Bruna A R, Tomaselli V & Morabito F C, **1D Convolutional Neural Network approach to classify voluntary eye blinks in EEG signals for BCI applications"** 2020 International Joint Conference on Neural Networks (IJCNN), Glasgow, UK, 2020, pp. 1-7, doi: 10.1109/IJCNN48605.2020.9207195.
- **Lo Giudice M**, Varone G, Ascoli M, Gasparini S, Cianci V, Mastroianni G, Dattola V, Garcea T, Neri S, Lo Bianco C, Ieracitano C, Morabito F C, Ferlazzo E, Aguglia U., **"A simple, low-cost, smartphone-based gait analysis. Preliminary results in healthy subjects"** 51° Congresso Nazionale Società Italiana Neurologia, Virtual Congress 28-30 Novembre. *Neurol Sci* (2020) 41 (Suppl 1): S179

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