### Curriculum vitae

## Personal information

Mohamed Talaat Mohamed Moustafa

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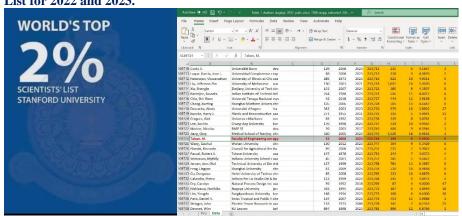
Google Scholar https://scholar.google.com.eg/citations?user=Jwd8yQIAAAAJ&hl=en

### Research interests:

Renewable energy integration techniques, Energy conversion (solar-wind-wave energies) to electrical power generation, Artificial intelligence applications in power systems, IoT, and hybrid cloud-based data processing for power system monitoring in smart and microgrids.

## Research Impact:

According to Stanford University, my name (M. Talaat) is on the World's Top 2% Scientists' List for 2022 and 2023.





#### **Publications**

- [1]. A. El-Zein and M. Talaat "New Experimental Study of an Injected Air Bubble Deformation in Dielectric Liquid under Applied High D.C. Voltage Using Photographic Recording", IEEE, Ninth International Middle East power systems conference, MEPCON' 2003, pp. 869-873 Shebin El-Kom, Egypt, December 16-18, 2003.
- [2]. A. El-Zein and M. Talaat "Pre-Breakdown Analysis during the Deformation of an Artificial Air Bubble in Transformer Dielectric Liquid under High DC Negative Applied Voltage" IEEE, Tenth International Middle East power systems conference, MEPCON' 2005, pp. 113-117, Port-said, Egypt, December 13-15, 2005.
- [3]. A. El-Zein, M.M. El Bahy and **M. Talaat** "Types of Electrical Tree in Solid Insulation Under Electrical and Mechanical Energy Basis" **IEEE**, Power System Conference **MEPCON' 2008**, pp. 80-84, Aswan, **Egypt, 2008**.
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- [9]. A. El-zein and **M. Talaat**, "A Numerical Model of Investigating the Electric Field in Dielectric Liquid" **IEEE MELECON** Conference 2010, pp. 393-397, **2010**.
- [10]. **M. Talaat** "A Simulation Model of Fluid Flow and Streamlines Induced by Non-Uniform Electric Field" **IEEE**, 14th International Middle East Power Systems Conference **MEPCON'10**, pp. 371-375, Cairo University, **Egypt**, **2010**.
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- [12]. **M. Talaat** "Charge Simulation Modeling for Calculation of Electrically Induced Human Body Currents" **IEEE** Annual Report Conference on Electrical Insulation and Dielectric Phenomena **CEIDP 2010**, pp. 644-647, **USA**, October 17-20, **2010**.
- [13]. **M. Talaat** "Influence of Transverse Electric Fields on Electrical Tree Initiation in Solid Insulation" **IEEE** Annual Report Conference on Electrical Insulation and Dielectric Phenomena **CEIDP 2010**, pp. 313-316, **USA**, October 17-20, **2010**.
- [14]. **M. Talaat** "Electric Field Simulation along Silicone Rubber Insulators Surface" Proceedings of the 17th International Symposium on High Voltage Engineering, (ISH **2011) Germany**, paper A-22, pp. 1-6, **2011**.

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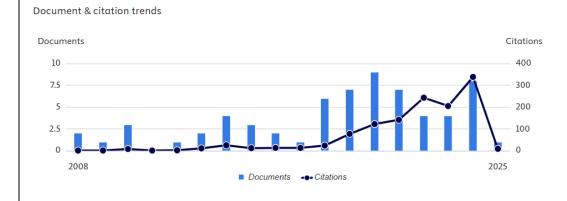
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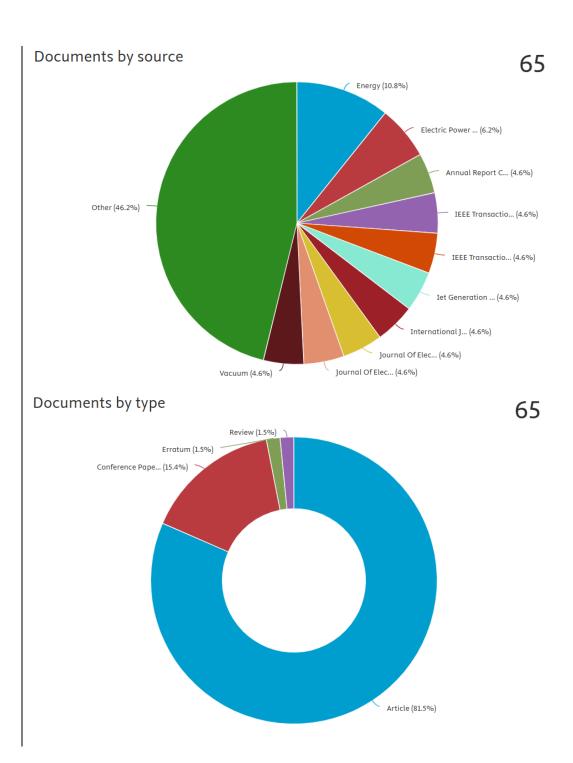
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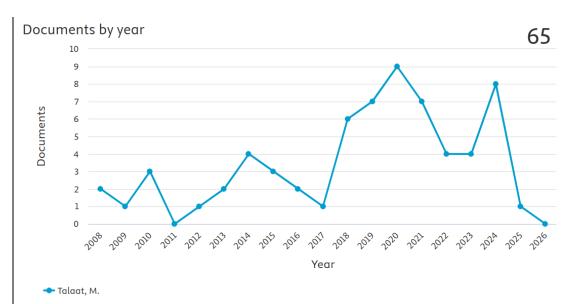
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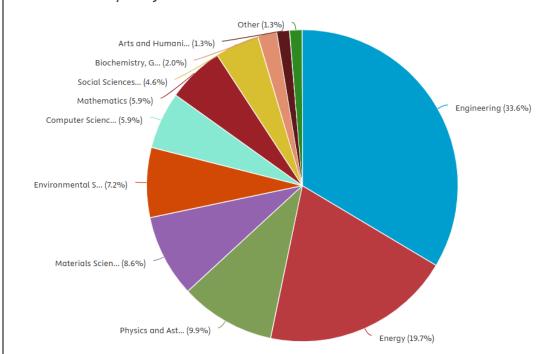
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#### Documents by subject area



## Work experience.

Dates
Occupation or
position

#### 1 September 2023→ Present

Professor – **Dean of Engineering and Technology** – Faculty of Engineering and Technology – Egyptian Chinese University – Cairo – Egypt.

Dates 15

**15 October 2022**→ **31 August 2023** 

Occupation or position

Professor – Vice Dean for Education and Students' Affairs – Faculty of Engineering and Technology – Egyptian Chinese University – Cairo – Egypt.

Occupation or

Professor – **Head of Energy and Renewable Energy Program** – Faculty of Engineering and Technology – Egyptian Chinese University – Cairo – Egypt.

Dates

position

1 September 2021 → 31 August 2023

Occupation or

Professor – **Head of Mechatronics Program** – Faculty of Engineering and Technology – Egyptian Chinese University – Cairo – Egypt.

Dates

position

position

27 April 2018→ 31 August 2021

Occupation or

Professor – **Head of Electrical Department** – College of Engineering -Shaqra University – KSA

And Head of ABET accreditation team of EE Program (accredited from ABET for 8 years)

**Dates** 

position

**10 July 2021** → **Present** 

Occupation or

**Full Professor** – Electrical Power and Machines Department – Faculty of Engineering - Zagzaig University - Egypt

Main activities

responsibilities

. . .

and

Teaching the following subjects

Power System Analysis.

- Electrical Power Eng.
- Power System Dynamics & control.
- High Voltage Eng.
- Electrical Measurements.
- Utilization of power systems.
- Computer Design of Electrical Power System.
- Electromagnetic Fields.
- Electrical and Electronics Engineering.
- Electrical Power & Machines Eng.
- Introduction to Mechatronics.
- Mechatronics Measurements.
- Computer applications in Electromagnetic Fields.
- Modern Trends in High Voltage and DC Transmission Line.

Name and

address of employer

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Dates

**May 2016** → **July 2021** 

Occupation or position held

**Associate professor** – Electrical Power and Machines Department – Faculty of Engineering -Zagzaig University - Egypt

Main activities Associate professor participating in teaching power, high voltage and machines courses. and responsibilities Name and Zagazig University Electrical Power and Machines Department, Faculty of Engineering, 44519 Zagazig address of Sharkia (Egypt) employer 2009 → May 2016 **Dates** Occupation or Assistant professor - Electrical Power and Machines Department - Faculty of position held Engineering -Zagzaig University - Egypt Main activities Assistant professor participating in teaching power, high voltage and machines courses. and responsibilities Zagazig University Name and Electrical Power and Machines Department, Faculty of Engineering, 44519 Zagazig address of Sharkia (Egypt) employer **Dates** 2005 → July 2009 Occupation or Lecturer - Electrical Power and Machines Department - Faculty of Engineering -Zagzaig position held University - Egypt Main activities Lecturer participating in teaching power and machines courses and Labs. and responsibilities Zagazig University Name and Electrical Power and Machines Department, Faculty of Engineering, 44519 Zagazig address of Sharkia (Egypt) employer **2001** → **2005** Dates Occupation or **Demonstrator** – Electrical Power and Machines Department – Faculty of Engineering position held Zagzaig University - Egypt Main activities Demonstrator participating in teaching power and machines courses and Labs. and responsibilities Name and Zagazig University Electrical Power and Machines Department, Faculty of Engineering, 44519 Zagazig address of

Sharkia (Egypt)

**2010** → **2012** 

employer

Dates

Main activities MIS Consultant - Zagazig University. and responsibilities Name and Zagazig University - Egypt address of employer **Dates 2012** → **2014** Occupation or Project Manager - Communication and Information Technology Center CITC/MIS position held Zagazig University - Egypt Main activities Project Manager - Zagazig University. and responsibilities Name and Zagazig University - Egypt address of employer **Dates** 2014 → 2016 Occupation or Project Manager - Training and Continuing Education Unit -Zagazig University - Egypt position held Main activities Project Manager - Zagazig University. and responsibilities Name and Zagazig University - Egypt address of employer  $2014 \rightarrow 2016$ Dates Occupation or IT Unit Manager - Information Technology Unit - Faculty of Engineering - Zagazig position held University - Egypt Main activities IT Unit Manager - Faculty of Engineering - Zagazig University. and responsibilities Name and Zagazig University - Egypt address of employer

Dates | 2016 → 2017

Occupation or position held | Consultant - Project Management Unit - Higher Education Development - Ministry of Higher Education - Egypt

Main activities

MIS Consultant - Higher Education Development.

and

responsibilities

Name and

Ministry of Higher Education - Egypt

address of

employer

**Dates** 

December 2017 → August 2021

Occupation or

Associate professor – Electrical Engineering Department – College of Engineering -

position held

Shaqra University - KSA

Main activities

Teaching the following subjects

and

Fundamental of Power Systems

responsibilities

- High Voltage Engineering.
- Devices and Measurements.
- Engineering Electromagnetics (1).
- Renewable Energy.

Name and

**Shaqra University** 

address of employer

Electrical Engineering Department, College of Engineering, 11911 Dawadmi - KSA

#### **Education**

Dates

**2005** → **2009** 

Title of

PhD in Electrical Power and Machines Engineering

qualification

awarded

Principal subjects / occupational

Thesis Title: "Electrical Trees in Solid Insulation Analysis"

occupational skills covered Name and type

Zagazig University

of organization providing education and training

Dates

**2001** → **2005** 

Title of

MSc in Electrical Power and Machines Engineering

qualification

awarded

Principal subjects / cupational

Thesis Title: "Electrical Pre-Breakdown Analysis in Dielectric Liquid Using Air Bubble Deformation in the Medium"

occupational skills covered

Page **14** of **19** - Curriculum vitae Mohamed Talaat Moustafa Name and type of organization providing education and training

Zagazig University

Dates

May 2000

Title of

BSc in Electrical Power and Machines Engineering

qualification

awarded

Mark obtained

Very Good with honor

Principal subjects / occupational skills Covered

Electrical Power and Machines Engineering Undergraduate subjects

Name and type of organization

Faculty of Engineering (Zagazig University) 44519 Sharkia - Zagazig (Egypt)

#### **Training**

- Training Mechatronics degree funded by Europe, Poland 2013
- Training Green Innovation and Entrepreneurship Program double MSc degree in GIEP funded by Europe, <u>Italy 2014</u>
- Training Green Innovation and Entrepreneurship Program double MSc degree in GIEP funded by Europe, Graz 2014

#### Training courses attended:

- 1. University teacher preparation (75 hours)
- 2. Exams and Students Evaluation Systems (15 hours)
- 3. International Publishing of Scientific Research (15 hours)
- 4. Research Ethics (15 hours)
- 5. Managing Time and Meetings (15 hours)
- 6. Conference Organization (15 hours)

#### Mother tongue(s)

Arabic

Other

**English** 

language(s)

### Research interests

- Renewable Energy
- Energy conversion (solar-wind-wave energies) to electrical power generation
- Artificial intelligence applications in power systems
- IoT, and hybrid cloud-based data processing
- Power system monitoring
- Smart and microgrids
- Computer Simulation
- Genetic Algorithms
- Plasma Science
- High Voltage
- Electromagnetic fields
- Underground cables
- Transformer oil
- Insulations Material (Dielectric Liquid Gases Solids)
- Charge Simulation Technique

## Thesis supervision

MSc (25) PhD (8)

#### Social skills and competences

Teamwork experienced from my work with my colleagues and interacting with other colleagues and training programs with co-workers in the research.

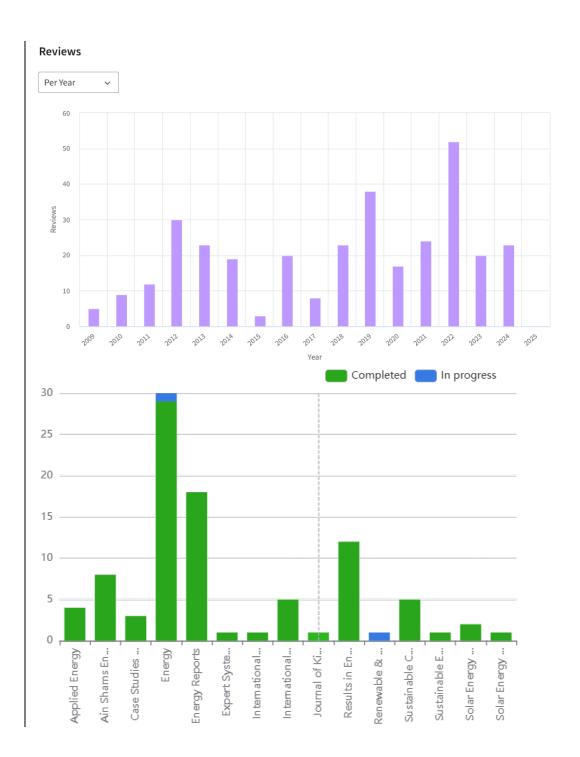


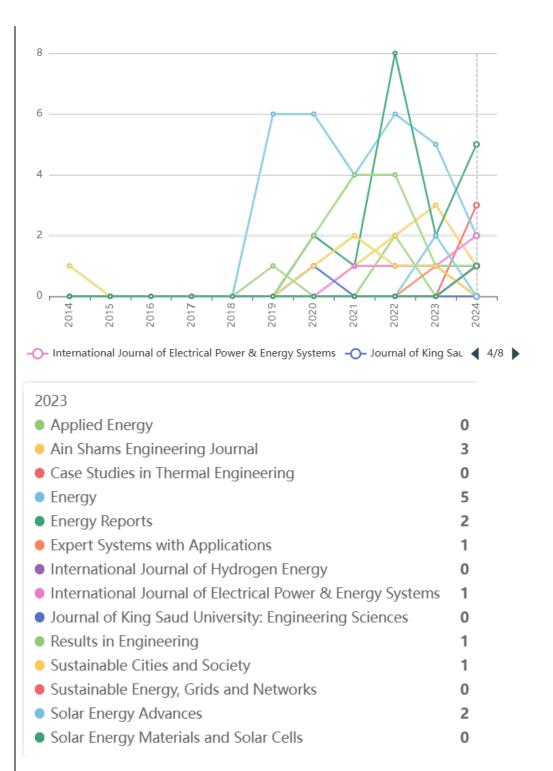
## Society membership

#### **Reviewer Summary**

For manuscripts reviewed from date range April 2018 - April 2023

(32) Journal of Electrical Engineering	(23) Energy
(13) IET Science, Measurement and Technol	(11) Energy Reports
(10) Results in Engineering	(7) IEEE Transactions on Dielectrics and Elec
(7) Energies	(6) Sustainability
(4) Ain Shams Engineering Journal	(4) Sustainable Cities and Society
(4) IEEE Access	(4) Artificial Intelligence Review
(4) Environmental Progress & Sustainable E	(3) IET Generation, Transmission & Distributi
(3) Plasma Science and Technology	(3) Applied Energy
(3) High Voltage	(2) International Journal of Electrical Power
(2) Applied Computational Electromagnetic	(2) Journal of Applied Geophysics
(1) Power Engineering Letters	(1) The Journal of Optics
(1) Advances in Engineering Software	(1) Journal of King Saud University - Engine
(1) Journal of Computational Methods in Sci	(1) IEEE Transactions on Plasma Science
(1) Engineering Computations	(1) IEEE Transactions on Electromagnetic Co





# Organizational skills and competences

Having the ability to organize my own work, setting priorities and taking responsibility, gained during professional experiences devoted to activities scheduling, respecting both deadlines and goals.

Able to work on your own initiative and as part of a team.

Able to manage, develop and motivate my teams to achieve the objectives acquired at work.

Good ability to organize academic work related to quality assurance like:

- Educational Programs specifications,
- · Course specifications,
- · Course reports,
- Course's blueprint,

and other educational quality requirements.

Experience in organization conferences during my work "Annual international conference in Engineering Sciences and Applications".

Work in European projects and task management for educational degrees creation and developments like:

- 1. Green Innovation and Entrepreneurship Programme(GIEP) No. "530611-TEMPUS-1-2012-1-IT-TEMPUS-JPCR"
- 2. JIM2L Development of Joint International master's degree and Lifelong Learning Framework in Mechatronics No. "516686-TEMPUS-1-2011-1-DE-TEMPUS-JPCR"

## skills and

competences

**Technical** 

- Technical skills provided by Electrical Engineering specialization in Renewable Energy, Artificial Intelligence and Electrical Power Insulation.
- Good knowledge of Renewable Energy applications.
- Ability to construct numerical models of power integration problems.
- Good experience of experimental work with visualization problems, measurements using data acquisition systems.

#### Computer

Operating systems:

skills and

Windows: Excellent knowledge Microsoft Office: Excellent knowledge

competences

COMSOL Multiphysics 5

MATLAB, EES: Basic knowledge

LabView: Basic knowledge (Measurement and data analysis)

PROGRAMMING LANGUAGES C, C++: Basic knowledge FORTRAN: Expert knowledge