

CURRICULUM VITAE

Mostafa A. El-Aasser, Professor of Optoelectronics

SHORT BIOGRAPHY

Prof. El-Aasser is a highly experienced physics/electrical engineering professor with over 33 years of teaching experience at both undergraduate and postgraduate levels. Throughout his career, he has made significant contributions to the field of physics, working with esteemed universities in the USA and Egypt, including the University of Connecticut, Eastern Connecticut State University, Ain Shams University, American University in Cairo, Nile University, and Galala University.

Prof. El-Aasser has a distinguished record of publication in academic journals, with more than sixty publications to his name. His group research interests span across various areas of physics/engineering, including plasmonics, optoelectronics, nanoelectronics, materials, and photovoltaics/solar systems. Their research findings have been widely recognized and have contributed to the advancement of these areas.

As a research group leader, Prof. El-Aasser has shown exceptional leadership skills and a strong commitment to fostering the development of his students. He holds a strong philosophy of teaching and utilizes diverse methods to motivate his students to excel and develop their expertise. Prof. El-Aasser is known for his dedication to helping students reach their full potential in their studies and providing guidance and mentorship to aspiring physicists.

Prof. El-Aasser's passion for applied physics/engineering and his expertise in different research areas have earned his group members a well-deserved reputation as respected academics in their fields. They continue to inspire and educate the next generation of physicists while making valuable contributions to the world of applied physics through their research and teaching.

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The fifth settlement, New Cairo, Cairo, EGYPT

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CONTACT INFORMATION

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EDUCATION

B.Sc., 1989	Physics	Physics Department, Faculty of Science, Ain Shams University, Cairo, Egypt.
M.Sc. 1995	Theoretical Physics	Physics Department, Faculty of Science, Ain Shams University, Cairo, Egypt.
Ph.D. 2002	Optoelectronics	Electrical and Computer Engineering Department, University of Connecticut, Storrs, Connecticut, USA.
Associate Prof. 2012	Physics	Physics Department, Faculty of Science, Ain Shams University, Cairo, Egypt.
Full Professor 2019	Optoelectronics and Computational physics	Physics Department, Faculty of Science, Ain Shams University, Cairo, Egypt.

REFERENCES

NAME	TITLE	EMAIL	PHONE
Shoukry S. Hassan	(Retired) Professor of Applied Mathematics D.Sc., Ph.D (Manchester - UK), Ex: FintP, CPhys, FIMA, CMath (London - UK)	shoukryhassan@hotmail.com shoukryhassan@gmail.com	01000588271
Diaa A. Khalil	Prof. of photonics, Faculty of Engineering, Ain Shams University, Egypt	diaa_khalil@eng.asu.edu.eg	01222380371
Mohamed Kotkatah	Prof. of physics, D.Sc., Faculty of Science, Ain Shams University, Egypt	mfkotkata@sci.asu.edu.eg	01005145131
Mohamed Rashad	Acting President, Central Metallurgical Research and Development Institute	rashad133@yahoo.com	01117901877

EXPERIENCES

2019-Present	Professor of Physics, Faculty of Science, Ain Shams University, Cairo, Egypt.
2023-2025	Adjunct Professor, Physics Department, Galala University, Egypt.
2020-2021	Adjunct Professor, Electronics and Computer Engineering Department, Nile University, Egypt.
2018-2019	Adjunct Faculty, Physics Department, American University in Cairo (AUC), Cairo, Egypt.
2012-2019	Associate Professor of Physics, Faculty of Science, Ain Shams University, Cairo, Egypt.

2012-2015	Associate Professor of Physics, Northern Border University, Arar, KSA.
2005-2012	Assistant Professor of Physics, Northern Border University, Arar, KSA.
2005-2006	Consultant for the Minister in E-Government Projects, Ministry of Local Development, Cairo, Egypt.
2002-2005	Assistant Professor of Physics and Associate Director of Telecommunication and Information Technology Center at Faculty of Science, Ain Shams University, Cairo, Egypt.
2001-2002	Adjunct Professor (Part-time), Computer Science Department, Eastern Connecticut State University, Willimantic, CT, USA.
1998-2002	Research Assistant at Photonics and Fiber Optic Communication Centre, and PhD Student at Electrical Engineering Department, University of Connecticut, Storrs, CT, USA.
1990-1998	Teaching Assistant at Physics Department, Faculty of Science, Ain Shams University, Cairo, Egypt.

PROFESSIONAL ACTIVITIES

- Former member of International Society for Optical Engineers (SPIE).
- Former associate Director of Telecommunication and Information Technology Center at Faculty of Science, Ain Shams University, Cairo, Egypt, 2002 – 2005.
- Reviewer for some peer-reviewed journals as Plasmonics – Springer, and Progress in Electromagnetics Research (PIER).
- International and domestic referee for several MSc and PhD thesis.
- **Advisory Committee Member (<https://magazine.arabphysicalsociety.org/>):**
Physics articles in Arabic:

1. [الخلايا الشمسية - طاقة المستقبل النظيفة والمستدامة](#)

2. [تطور أجيال الخلايا الشمسية: مواد وتقنيات وتطبيقات](#)

TEACHING

I have been teaching many courses in diverse programs, regular and electronic, such as:

Undergraduate courses	Graduate courses
<ul style="list-style-type: none"> - General physics - Electricity and Magnetism - Thermodynamics - Electromagnetics - Electrodynamics - Modern physics - Atomic Physics - Quantum mechanics - Mathematical physics - Electric Circuits - Analog/Digital Electronics 	<ul style="list-style-type: none"> - Solid State Electronics - Semiconductor Devices - Renewable Energies - Quantum Electronics - Quantum Optics - Nonlinear Optics - Nanoelectronics - Spintronics - Optoelectronics - Optical Communications

RESEARCH

My research interests include optoelectronics, plasmonics, photonics, materials, and electromagnetics. I am also interested in renewable energy research particularly photovoltaics (organic, inorganic, hybrid), concentrated power systems, and smart materials. I am a research group leader and a supervisor of several postgraduate MSc and PhD Students in different areas:

Photovoltaics:

- Organic:
Shaimaa Sanad (MSc-graduated), Mahmoud Fekry (MSc-graduated).
- Inorganic:
Alaa Tarek (MSc-graduated), Eman Mohamed (MSc).
- Perovskites:
Alaa Elshahat (MSc-graduated), Hager Zeeneldeen (MSc-graduated),
Menna Mabrook (MSc).

Concentrated Solar Power Systems (CSPs):

M Elsayed (MSc), Nada Ragab (MSc).

Materials:

Faten Fouad (PhD), Mamdouh Elsayed (PhD).

Photonics: Ehab Ali (MSc - graduated), Alaa Sultan (MSc), Mayar Magdy (MSc).

Electromagnetics:

Faten Fouad (MSc - graduated), Mamdouh Elsayed (MSc-graduated), Mai Gaber (MSc-graduated), Alaa Yossry (MSc-graduated).

RESEARCH COOPERATION

Our group has been in a research cooperation with some Universities and Institutes such as:

Faculty of Engineering, Ain Shams University: Prof. Dr. Daa Khalil – Dr. Alaa – Dr. Hussein – Dr. Yaser Sabry

Faculty of Education, Ain Shams University: Prof. Dr. Mahmoud Yasin El Bakry

Al-Azhar University: Prof. Dr. Eid Abdel Khalek, Dr. Zakaria El Degwy

Menoufia University: Prof. Dr. Meawad Mohamed Meawad Elkholy, Prof. Lobna Mohamed Sharaf El Dein

Central Metallurgical Research & Development Institute (CMRDI): Prof. Dr. M Rashad – Dr. Ahmed Murtada

Kafr El Sheikh University, Nano Science and Technology Institute: Dr. Khaled Kilany, Dr. Noamany Hanafy

FEATURED PROJECTS

Funded student projects

- As a supervisor

1. My MSc student, Mayar Magdy Abdelrazik Elashry Nassar, has secured competitive research funding for her proposal titled: "High-Performance Optical 3D Printer Based on Both Single- and Two-Photon Excitation Phenomena" (Proposal ID: 50698, STDF Post Graduate Support Grant - PGSG).
2. My PhD student, Faten Fouad Ismail Lasheen, has received funding approval for her research proposal (ID: 51196) entitled "High-Performance Lead-Free Piezoelectric Materials for Energy Harvesting," which was submitted to the Science, Technology and Innovation Funding Authority (STDF) under the Post Graduate Support Grant (PGSG) framework (2024).
3. Alaa Elshahat, my graduate student, has been successfully accepted for the STDF-funded project number 48379 under the Post Graduate Support Grant-Call 2. The project, titled "*Optoelectronic Properties Investigation of Perovskite Materials for Photovoltaic Applications*", commenced in 2023.
4. Mayar Magdy, my undergraduate student, has been successfully accepted for graduation projects program 2021/2022 - Mashroey Bedaity under the Academy of Scientific Research & Technology (ASRT) Support. The project, titled "*EEG Mind-Controlled Smart Prosthetic Arm*"

- As a researcher

- *Colliding pulse mode-locked laser* by H. Fan, C.Wu, M. El-Aasser, N. K. Dutta, U. Koren, A. B. Piccirilli, Connecticut State University, Storrs, USA, 1999.
- *80Gb/s optical demultiplexing using modulators* by Niloy Dutta and M. El-Aasser, Connecticut State University, Storrs, USA, 2000.
- *Dispersion-managed communication systems* by Niloy Dutta and M. El-Aasser, Connecticut State University, Storrs, USA, 2001.

- As a PI

The grant no. 05-06-1436-05 from the Deanship of Scientific Research in Northern Border University, Arar, KSA, 2015.

- As a Co-PI

-The grant no. 04-03-1434-04 from the Deanship of Scientific Research in Northern Border University, Arar, KSA, 2013.

- The grant no. 5-92-1436-5 from the Deanship of Scientific Research in Northern Border University, Arar, KSA, 2015.
- Funds by the Deanship of Scientific Research, Northern Border University, Arar, under grant No. (SCI2017-1-8-F7-7340), 2017.

AWARDS

1. National Encouragement in the High School in Cairo, Egypt, in 1986.
2. Incentive award of the first-ranked student in natural sciences from Ain Shams University, Egypt in 1987.
3. Incentive award of the first-ranked student in physics from Ain Shams University, Egypt in 1988.
4. Award of excellence in research from Ain Shams University, from 2018 to 2025.

BOOKS

M. A. El-Aasser, Fundamentals of Electronics (written in Arabic), Publisher: Al-Rushd, 1 Jan. 2008, Riyadh, KSA, www.rushd.com. ISBN: 6281140008079, noor-book.com/6owtyr

BOOK CHAPTERS

1. Alaa Abd El-Samad, Radwa Mostafa, Hager Zeenelabden, Menahtullah Mabrouk, Ahmed Elseman, Nasr Gad, Mostafa El-Aasser, and Mohamed Rashad, Mixed 2D-3D halide perovskite solar cells, IntechOpen, 2021.

PUBLICATIONS

1. K Ali, Mayar Magdy, K El-Seherawy, A Negm, A Yamany, M Abdelsalam, Alaa Fathy, Hussien Kotb, Mostafa El-Aasser, and Diao Khalil (2025). Telecentric DLP optical engine for an optical-based 3D printer, Appl. Opt. **64**, 4701-4709. <https://doi.org/10.1364/AO.562402>.
2. Alaa A. Sery, Alaa E. Abd El-Samad Ahmed Mourtada Elseman, Sajid Sajid, Radwa S. Mostafa, Hager H. Zeenelabden, Mohamed M. Rashad, Mostafa El-Aasser (2025). Toward high-performance carbon-based perovskite solar cells, Solar Energy 287, 113261. <https://doi.org/10.1016/j.solener.2025.113261>
3. S Sanad, AbdelRahman M. Ghanim, Nasr Gad, M El-Aasser, Ashraf Yahia, Mohamed A. Swillam (2024). Broadband PM6Y6 Core shell Hybrid Composites for Photocurrent Improvement and Light Trapping. Sci Rep. Jun 12;14(1):13578. <https://doi.org/10.1038/s41598-024-63133-5>.
4. Hager Z. Elabden, Ahmed Mourtada Elseman, Mostafa A El-Aasser, Nasr Gad, Mohamed M. Rashad (2023). Observation on Structural and Optical Features of New Nanostructured Lead-free Methylammonium Zinc or

- Cobalt Iodide Perovskites for Solar Cells Applications. Journal of SN Applied Sciences, 5, 335.
<https://doi.org/10.1007/s42452-023-05562-x>
5. Maie A. Gaber, Mostafa El-Aasser, Ashraf Yahia, and Nasr Gad (2023). Characteristic modes of a slot antenna design based on defected ground structure for 5G applications. Journal of Scientific Reports, 13, 15327.
<https://doi.org/10.1038/s41598-023-42130-0>
 6. Alaa Elshahat Abd Elsamad, Mostafa El-Aasser, Nasr Gad, Ahmed Mourtada Elseman (2023). Simulation of cobalt/zinc doped methyl ammonium lead iodide solar cells. Egyptian Journal of Pure and Applied Science EJAPS 61 (2):19-27.
ejpasa.journals.ekb.eg/article_309733_602d5ea5e4ae5fdc838401800db95d39.pdf
 7. Sultan, A., Sabry, Y. M., Samri, A., El-Aasser, M. A., & El-Aasser, M. A. (2023). Mirror-Terminated Mach-Zehnder Interferometer Based on SiNOI Slot and Strip Waveguides for Sensing Applications Using Visible Light. Frontiers in Nanotechnology, 5, 17. <https://doi.org/10.3389/fnano.2023.1121537>
 8. Sanad, S., Ghanim, A., Gad, N., Elaasser, M., Yahia, A., & Swillam, M. (2023, April). Enhanced light harvesting in PM6:Y6 organic solar cells using plasmonic nanostructures. Paper presented at the SPIE Optics + Optoelectronics Conference, Prague, Czech Republic. <https://doi.org/10.1117/12.2323323>
 9. Said, A., Salama, E., Radi, A., Khedr, H. I., & El-Aassar, M. (2023). Desktop plastic scintillator detector as a potential single replacement for both neutron and Gamma-ray detectors. AIP Conference Proceedings, 2620(1), 030020.
<https://doi.org/10.1063/5.0120693>
 10. Yossry, A., El-Aasser, M., Yahia, A. S. E., & Gad, N. (2023). Plus-Shaped Dielectric Resonator Antenna with Parasitic Rectangular Elements for Multiband Applications. Egyptian Journal of Pure and Applied Science. Advance online publication. <https://doi.org/10.1016/j.ejaps.2023.1053>
 11. Abd El-Samad, A. E., Gad, N., El-Aasser, M., Rashad, M. M., & Elseman, A. M. (2022). Optoelectronic investigation and simulation study of zinc and cobalt doped lead halide perovskite nanocrystals. Solar Energy, 247, 553-563.
<https://doi.org/10.1016/j.solener.2022.10.061>
 12. Ismail, F. F., El-Aasser, M. A., & Gad, N. H. (2022). A Parasitic Hat for Microstrip Antenna Design Based on Defected Structures for Multiband Applications. The Applied Computational Electromagnetics Society Journal (ACES), 37(5), 568–575. <https://doi.org/10.13052/2022.ACES.J.37>
 13. Ramadan, R., Ali, E. M., El-Aasser, M. A., Yahia, A., & Gaber, A. (2022, May). Imaging the Future Threats of the Sand Dunes along the Northwestern Coast of Nile Delta Using SAR. Paper presented at the First International Conference of Remote Sensing and Space Science Applications (ICRSSSA), Hurgada, Egypt.
<https://icrsssa.conferences.ekb.eg/paper>
 14. Fekry, M., Sanad, S., Hashem, H., Hassanien, A., Gad, N., shaaban, M., Yahia, A., & El-Aasser, M. (2021). Plasmonic Photocurrent Improvement in P3HT:PCBM Organic Solar Cells. European Journal of Science and Technology, 28, 1508-1516. <https://doi.org/10.31590/ejosat.1022871>
 15. Gaber, M., Fouad, F., Yahia, A., El-aasser, M., & Gad, N. (2021). A Printed Antenna Design with Defected Ground Structure for Multiband Applications.

- Avrupa Bilim ve Teknoloji Dergisi, (28), 1528-1533.
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 17. Gaber, M. A., Fouad, F., Yahia, A., El-Aasser, M., & Gad, N. (2021). A Printed Antenna Design with Defected Ground Structure for Multiband Applications. European Journal of Science and Technology, (28), 1528-1533.
 18. El-Samad, A. A., Mostafa, R., Zeenelabden, H., Mabrouk, M., Elseman, A., Gad, N., El-Aasser, M., & Rashad, M. (2021). Mixed 2D-3D halide perovskite solar cells. IntechOpen.
 19. Fouad, F., Gaber, M. A., El-Aasser, M., & Gad, N. (2021). Design of a Mirror Stairs Multiband Microstrip Antenna Using Defected Structures. In 38th National Radio Science Conference (NRSC 2021) (pp. 1-6). IEEE.
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 20. El-Sayed, M., Yossry, A., Yahia, A., El-Aasser, M., & Gad, N. (2021). Printed Monopole Antenna Design with Parasitic Element for Multi-band Applications. In IEEE 2021 International Conference on Electronic Engineering (ICEEM) (pp. 1-4). IEEE. <https://ieeexplore.ieee.org/document/9480643>
 21. Yossry, A., El-Sayed, M., Yahia, A., El-Aasser, M., & Gad, N. (2021). Hybrid-Shape Dielectric Resonator Antennas for Multiband Applications. In IEEE 2021 International Conference on Electronic Engineering (ICEEM) (pp. 1-4). IEEE.
<https://ieeexplore.ieee.org/document/9480387>
 22. Said, A., Salama, E., Khayrat, A., Khadr, H., & El-Aasser, M. (2021). Desktop plastic scintillator detector for potential replacement of both neutron and gamma-ray monitors. In International Conference on Pure and Applied Physics (ICPAP2021) (pp. 040014). AIP Publishing. <https://doi.org/10.1063/5.0120693>
 23. El-Sayed, M., Gad, N., El-Aasser, M., & Yahia, A. (2020). Slotted Rectangular Microstrip-Antenna Design for Radar and 5G Applications. In 2020 International Conference on Innovative Trends in Communication and Computer Engineering (ITCE'2020) (pp. 1-5). IEEE. <https://ieeexplore.ieee.org/document/9047754>
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 25. El Ghandoor, H., Youssef, G.M., El-Aasser, M.A., & Ahmed, A.T. (2019). Investigation of Laser Speckle Patterns of Solar Cells. International Journal of Advanced Research, 7(8), 61-70. <http://dx.doi.org/10.21474/IJAR01/9473>
 26. El-Aasser, M.A., Gad, N.H., Rashad, M., & Yahia, A. (2019). Ultraviolet Broadband Plasmonic Absorbers. In 2nd International conference in Materials Science and Engineering (pp. ICMSE-RAC2-2019) Cairo, Egypt.
 27. Mahmoud, S.A., El-Aasser, M.A., Attia, M.S. (2019). Spectrofluorometric Determination of Alpha Fetoprotein in different serum samples of Liver Cancer by Tb-acetyl acetone complex embedded in Polymethylmethacrylate optical sensor. Egyptian Journal of Chemistry, 63, 1518-1529.
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31. El-Aasser, M.A. (2016). Performance Optimization of Bilayer Organic Photovoltaic Cells. *Journal of Optoelectronics and Advanced Materials*, 18(7-8), 618-627. <https://joam.inoe.ro/articles/performance-optimization-of-bilayer-organic-photovoltaic-cells/>
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33. Ibrahim, A. A., & El-Aasser, M. A. (2014). Performance analysis of γ -radiation test monitor using monocrystalline n+pp++ silicon solar cell: CsI(Tl) scintillator. *Advances in Materials Science and Engineering*, 2014, 345831. <https://doi.org/10.1155/2014/345831>
34. El-Aasser, M. A. (2014). Design optimization of nanostrip metamaterial perfect absorbers. *Journal of Nanophotonics*, 8(1), 083085. <https://doi.org/10.1117/1.JNP.8.083085>
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https://www.academia.edu/33774096/Quasi_TEM_Analysis_of_Strip_Conductors_Centered_between_Ground_Planes
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48. El-Aasser, M.A., & Abdel-Raouf, M.A. (2007). Least-squares variational treatment of positron (electron)-diatomic molecule scattering. Journal of Physics B Atomic Molecular and Optical Physics, 40(10), 1801-1819. <https://doi.org/10.1088/0953-4075/40/10/015>
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CURRENT RESEARCH WORK

1. Karim Ali, Mayar Magdy, Karim El-Seherawy, Ahmed Moustafa Negm El Din, Mohamed Abdelsalam, Alaa Fathy, Hussien Kotb, Mostafa El-Aasser, Daa Khalil (2024). *Modeling Coherence and Diffraction Effects in Digital Light Processing (DLP) Systems: A Computational Approach*, *Nuclear Instruments and Methods in Physics Research A*, under review. Will be sent soon.
2. M Sayed, Mostafa A. El-Aasser, Nasr Gad, Hany Mohamed Hashim, A. M. Massoud (2024). *Melting Point and Heat Capacity Amendment of $\text{LiNO}_3\text{-KNO}_3$ Molten Salt using Nanosilica and Nanoalumina for Concentrated Solar Power Applications*. Under review.
3. Mayar Magdy, Alaa, Daa Khalil, Mostafa El-Aasser. *Digital light processing using two-photon absorption*. Going on.
4. Mennah Mabrook, Mostafa El-Aasser, Nasr Gad, Ashraf Yahia. *Performance Enhancement of Efficient Nanostructured Perovskite Solar Cells*. Going on.
5. Eman Mohamed, Nasr Gad, Ashraf Yahia, Mostafa El-Aasser. *Design Investigation of Transparent Solar Cells*. Going on.

TEACHING PHILOSOPHY

MOSTAFA A. ELAASSER, PROFESSOR

With over 30 years of teaching experience, I have had the opportunity to instruct undergraduate and postgraduate students at various institutions including the University of Connecticut, Eastern Connecticut State University, Ain Shams University, American University in Cairo (AUC), Nile University, and Galala University. My experiences at these institutions have contributed to my expertise in teaching and have helped shape my approach to education.

As an educator, my primary objective is to help students attain their full potential in their academic pursuits and engage in the classroom. To be an effective instructor, I believe that it is essential to have a personal philosophy of teaching and to possess knowledge of a wide range of strategies that can be used to motivate and inspire students. Through my extensive academic journey, I have taught an extensive variety of courses in various programs, which has enabled me to develop a comprehensive range of pedagogical strategies that can be tailored to diverse subject areas and student populations.

I am dedicated to creating a supportive and positive learning environment that encourages students to explore and articulate their ideas. I seek to instill in my students a sense of curiosity and critical thinking and equip them with the necessary knowledge and skills to succeed in their respective fields of study.

I firmly believe that by providing students with the tools and guidance they need to achieve their objectives, I can empower them to become accomplished, confident, and lifelong learners. Some of the courses I have developed are found above.

RESEARCH STATEMENT

With over three decades of academic research experience, I have taught postgraduate courses and conducted research at various institutions in Egypt and abroad. I have a robust record of scholarly publications, having published more than 55 papers in related fields, which demonstrate my ability to conduct and disseminate research. I am of the view that research should be directed towards resolving real-world problems to serve local and global societies, driving economic and industrial development. While research is essential for the advancement of human knowledge, it is equally crucial for improving the lives of people and societies.

Throughout my career, I have participated in several research projects as a Principal Investigator, Co-Principal Investigator, and research member at universities in the USA, KSA, and Egypt. At present, I am supervising 15 Master and PhD students whose research encompasses Photovoltaics, Concentrated solar power systems, Materials, and Electromagnetics. My research interests focus on optoelectronics, plasmonics, electromagnetics, smart materials, and Photovoltaics.

In the future, my research will focus on renewable energy, which is widely recognized as the principal future source of energy. Specifically, I intend to concentrate on photovoltaics and concentrated solar power systems, which are among the most active and rapidly developing areas of research, attracting significant investments from governments and industries.

I am particularly interested in research on organic solar cells, which have already achieved over 18% efficiency and are constantly improving. I also plan to focus on perovskite solar cells, which have the potential to be a competitive alternative to traditional inorganic solar cells such as silicon. However, their performance and stability must be improved. My research will strive to find methods and strategies that can enhance their performance, leading to the development of high-efficiency, stable, and cost-effective devices. I believe that Density Functional Theory (DFT) can play a significant role in this regard.

I am delighted at the prospect of joining your university that is dedicated to research and teaching excellence. I believe that I can contribute to the research community significantly and work collaboratively with other faculty members to form a strong research team.



Ain Shams University
Faculty of Science
Department of Physics
Abbasia, Cairo 11566
Egypt

To the Selection Committee

I am writing this letter to provide a reference for Prof. Mostafa El-Aasser, who is applying for Professor position in Physics. I am pleased to give Prof. El-Aasser my highest recommendation to support his application. I have known him as a student and then as a colleague in the Physics Department, Faculty of Science, Ain Shams University, Egypt.

Prof. El-Aasser received his bachelor's degree in physics from our university, graduated with distinction with honor in May 1989, and obtained his M.Sc. in theoretical physics in 1995. He pursued his Ph.D. degree, May 2002, from the University of Connecticut, USA. Since 2019, he is a full professor at the Physics Department, Faculty of Science, Ain Shams University.

Prof. El-Aasser is dedicated as a researcher with strong work ethic and intellectual integrity; accomplishing ~50 published articles beside a book on “Fundamentals of Electronics” as well as a book chapter on “2D/3D perovskite solar cells”. He is leading different research groups at various Egyptian institutions in the field of “electromagnetics/photonics”. Many M.Sc. & Ph.D. students have been awarded their degrees under his supervision. Besides, He served as the principal and co-principal investigator in a number of research projects in both USA and Sudi Arabia. In fact, I have witnessed his outstanding performance in teaching and research.

Indeed, his persistence and enthusiasm make him a good candidate for the announced position. For the above reasons and more, I highly recommend Prof. El-Aasser to occupy a professor position at your esteemed university.

Please do not hesitate to contact me if you need any further information.

Sincerely,

Prof. Dr. Sc.
Mohamed Kotkata

Physics Department, Faculty of Science,
Ain Shams University, Cairo-11566, Egypt
mfkotkata@sci.asu.edu.eg
+20-100-514-5131

Dear Selection Committee Members,

I am writing to provide a reference letter for Prof. Dr. Mostafa A. El-Aasser, who has applied for the physics position at your university. I have known Prof. El-Aasser for about five years in my capacity as a collaborator and a colleague in the field of physics. Prof. El-Aasser received his Ph.D. from the University of Connecticut in May 2002, and he is currently a full Professor at the Physics Department, Faculty of Science, Ain Shams University in Cairo, Egypt. During this time, I have witnessed his commitment to teaching and research, and I have no hesitation in providing him with the highest possible recommendation for this position.

I have had the pleasure of working with Prof. El-Aasser as an advising committee for a couple of master's students working on perovskite materials and solar cells. We published a book chapter on 2D/3D perovskite solar cells in 2021, and we are currently collaborating on three articles on perovskite solar cells. In addition, Prof. El-Aasser has published more than 55 papers in the fields of Photovoltaics, Plasmonics, and electromagnetics. He has also served as the principal advisor for several Master's and Ph.D. students, and he has been involved in several research projects funded by various organizations, including the University of Connecticut, USA, and Northern Borders University, KSA.

Prof. El-Aasser's teaching philosophy emphasizes clarity in presenting the material, detailing expectations, and expressing educational goals. He encourages students to develop their own picture of the physical system under study at both macroscopic and atomic levels and couples that picture with the mathematical formulation by which they study, explain, and predict the system's physical behavior. He engages students in the classroom and encourages them to ask questions and participate in the learning process.

During my collaboration with Prof. El-Aasser, I found him to be a hard-working, honest, open-minded, and friendly person who gets along well with his colleagues and staff. I am confident that his experience and enthusiasm make him an excellent candidate for this position, and he would be an asset to your institution.

I recommend Prof. El-Aasser very strongly for the available prof. position, and I would be happy to provide additional information or answer any questions you may have.

Sincerely,

M. M. Rashad

Prof. Dr. M. M. Rashad
Dean of Advanced Materials
Central Metallurgical Research and Development Institute
Egypt

rashad133@yahoo.com

+20-111-790-1877

University of Connecticut

We it known that

Moustafa Abdel Hattah El-Azzar

having satisfied the requirements for the Degree of

Doctor of Philosophy

in

Electrical Engineering

has been admitted to that degree with all the related honors, privileges, and obligations.

In recognition we present the seal of the University and the signatures as authorized by the Board of Trustees.

Given at Storrs, in the State of Connecticut,
on the Nineteenth day of May, Two Thousand
and One.

L. H.

Dean, Graduate School



Livingston
President of the University

John G. Rowell
President of the Board of Trustees



University of Connecticut
Graduate School

May 23, 2002

To Whom It May Concern:

RE: Mostafa Abdel Fatah El-Aasser

I am pleased to certify that Mostafa Abdel Fatah El-Aasser has completed graduate degree requirements as follows:

Degree: **Doctor of Philosophy**

Field: **Electrical Engineering:**
Electromagnetics and Physical Electronics

Date of Completion: **May 1, 2002**

Date of Conferral: **May 19, 2002.**

Sincerely,

Thomas B. Peters, Ph.D.
Assistant Dean for Graduate
Student Affairs

cc: Dr. El-Aasser

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