# My pic*Curriculum Vita*

# Shaker Ebrahim, Ph.D.

Professor of Materials Physics

Department of Materials Science

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Alexandria University

Alexandria, Egypt

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# Name: Shaker Mabrouk Ebrahim, Ph.D.

Date and Place of Birth: 20 October 1973, Behera – EGYPT.

Nationality: Egyptian

# Current Academic Rank: Associate Professor of Materials Physics

Academic Qualifications: 1- B.Sc. in Physics and chemistry, 1996.

2- M.Sc. in Materials Science, 2002.

3- Ph.D. in Materials Science, 2006-2011.

4. Associate professor of physics, 2011-2017.

5. Professor or physics, 2017-

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***Education***

#### Alexandria University Duration Degree

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1. Physics and chemistry Dept. 1992-1996 B.Sc. (very good)

Faculty of Science

2. Diploma in Materials Science 1999 Diploma, very good

Institute of Graduate Studies plus project

& Research

*Project Title:*

“Electrical properties of composite materials”

3. Materials Science Dept. 1999-2002 M.Sc. post graduate

Institute of Graduate Studies plus thesis

& Research

*Thesis Title:*

“Preparation and characterization of certain conductive

polymers”

4. Materials Science Dept. 2003-2006 PhD post graduate

Institute of Graduate Studies plus thesis

& Research

*Thesis Title:*

“Preparation and characterization of conducting polymer films for certain electronic devices”

***Membership***

* Member of the Arab Society of Materials Science,

Alexandria, Egypt (1998-now).

* Egyptian Syndicate for Scientific Professions in Egypt (1996-now).
* American Nano Society, 2012-till now.

***Training***

* Nanoparticles and Nanomaterilas Workshop, Moubark City, Egypt, 2005.
* Micro & Nanofabrication Workshop ( Chemistry Bond: Cornell University), Alexandria , Egypt, March 18-25, 2007.
* Nanotechnology Workshop, Bibliotheca Alexandrina, Center for Special Studies and Programs, 2-3/9/2007.
* Training of Trainers Program, Alexandria University (FLDC), March 31th to April 4th , 2011.
* Product and Development course, Clathstal University, Germany 2013,

***Teaching course***

Postgraduate

1. Materials for renewable energy (Master)
2. Nanoscience (Master)
3. Physics of Semiconductors (Master)
4. Materials Structure (Master)
5. Recent trend in fuel cell (PhD)
6. Sensors (PhD)
7. Conducting polymers and their applications

Undergraduate

1. Applied Electronic
2. Laser
3. Nanoscience
4. Statistical Physics
5. Solid State

***Conferences and workshops***

1. M.B.Soliman, M.A.El-Gamal, A.B.Kashyout, **Sh. M. Ebrahim** “Electrochemical Activity of polyaniline in buffer solution for rechargeable battery” 8 th international conference of Materials and energy", Arab Associated and Materials science, March, 2004.
2. M.B.Soliman, M.A.El-Gamal, A.B.Kashyout, **Sh. M. Ebrahim**" The effect of dopants on the parameters of polyaniline Schottky devices”, 8th world conference on technology advanced and renewable energy workshop”, Cairo, Egypt, Sep. , 2004.
3. **Sh. M. Ebrahim**, M.B.Soliman, and A.B.Kashyout “Polyaniline-Cellulose Triacetate Blend Films with Low Percolation Threshold, The 9 th Arab International Conference on Materials Science, Materials & Maritime Transport, 20-23, January, 2007.
4. **Shaker Ebrahim**, Moataz Soliman, Marwa Khalil, Abdel-Hady Kashyout, Preparation and Characterization of Soluble Polyaniline Using Emulsion Technique, Third Physics and Materials Science conference, 20-22/10/2009, Bibliotheca of Alexandria, Egypt.
5. **Sh. Ebrahim**, A. Kashyout, L. Hamam, M. Soliman, Thermal Stability of some locally available coatings for solar applications, Third Physics and Materials Science conference, 20-22/10/2009, Bibliotheca of Alexandria, Egypt.
6. A. Sweyllam, O. El-Shazly, N. Kassem, M.M. Abd-El Latif1, M. Adel, **Sh. M. Ebrahim**, The effect of dopant size on the structural and electrical properties of polypyrrole, Third Physics and Materials Science conference, 20-22/10/2009, Bibliotheca of Alexandria, Egypt.
7. **Sh. M. Ebrahim**, M. M. Soliman, A. Ahmed, I. Morsi, Preparation of Cu-In-S Compound Electrochemically for Thin Film Solar Cells, 36th Conference of the Association of Egyptian American Scholars, Cairo, Egypt, December 28-29, 2009.
8. **Sh. Ebrahim**, M. Soliman, M. Feteha, Preparation and Characterization of CuInS2 electrochemically for thin film solar cell, First European Energy Conference, Barcelona, 20-24 April, 2010.
9. **S Ebrahim**, I Morsi, MM Soliman, [A novel CuInS2/polyaniline base heterojunction solar cell](http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=5670165), Control Automation conf. proceeding, South Korea, 2010 - ieeexplore.ieee.org
10. M. Raoof , K. Jans, G. Bryce, **Sh. Ebrahim**, L. Lagae, A. Witvrouw, Improving the selectivity by using different blocking agents in DNA hybridization assays for SiGe bio-molecular sensors, MNEA Conference, Paris, 2012.
11. Tarek Abdel-Fattah, **Shaker Ebrahim**, and Moataz Soliman. Organic Solar cell based on polyaniline - Single Waller Carbon Nanotubes Composite, **October 7-12,** 222nd ECS Meeting - Honolulu, Hawaii.
12. Feteha M., El-Gamal M., El-Tawansi A**., Ebrahim Sh**., Preparation and Characterization of Conducting Polyaniline Film to be used as a layer in the Solar cell Structure “Proceeding of 6th International Conference on Solar Energy and Applied photochemistry “ ,Cairo, Egypt, April, 2001.
13. Feteha M., El-Tawansi A. , El-Gamal M., **Ebrahim Sh.** “Conductive p-type polyaniline /poly(vinylidene floride) film for polymer / semiconductor heterojunction solar cell” 2 th world Conference on technology advanced and renewable energy workshop” , Cairo, Egypt, March 11-14 , 2002.
14. M.B.Soliman, M.A.Ei-Gamal, A.B.Kashyout, **Sh. M. Ebrahim**" Characterization of Polyaniline Schottky Barrier “19 th European Photovoltaic solar energy conference and exhibition”, Palais des Congres Paris, France 7-11/ June, 2004.
15. **Sh. M. Ebrahim**, I.Morsi, M. M. Soliman, M. Alshrkawy, A. A. Elzaem, A Novel CuInS2/Polyaniline Base Heterojunction Solar Cell, ICROS conference, South Korea, 19-23/10/2010.
16. **Shaker Ebrahim**, Tarek M. Abdel-Fattah, Moataz Soliman, Mostafa Hafez, Novel Organic Solar Cell Based on Polyaniline - Carbon Nanotubes Composite, Electrochemical Society conf, 2011.
17. M. Soliman, W. Ramdan, M. Feteha, M. Raoof, **Sh. Ebrahim**, Qiquan Qiao, Effects of MPA stabilizing agent and Cd :Te ion ratio on CdTe and CdHgTe Quantum Dots Properties, 5th Meeting on Developments in Materials, Processes and Applications of Emerging Technologies 27-29 June 2011(in Portugal).
18. M. Soliman, W. Ramdan, M. Feteha, M. Raoof**, Sh. Ebrahim**, Qiquan Qiao, Enhancement of light harvesting and performance of hybrid organic-inorganic solar cell, 5th Meeting on Developments in Materials, Processes and Applications of Emerging Technologies 27-29 June 2011(in Portugal).
19. M. Feteha, **Sh. Ebrahim**, W. Abdel Aleem, A. Eldemrdash, M.Soliman, F. Abulfotuh, M. El-Sherbiny, L. Saad, Characterization and Testing of the Locally Fabricated Encapsulants in Egypt for Commercial Photovoltaic Modules Production, 2013, International Conference on Materials Science and Chemical Engineering.
20. Hanaa Hegab, M. Soliman, **Sh. Ebrahim**, Tim Stakenborg, Paolo.Fiorini, Silanization of Micro-Pillar Filter Array on a Solid Phase Chip for DNA Extraction, The 2nd Saudi International Nanotechnology Conference, November 11-13, 2012 Riyadh, Saudi Arabia.
21. Ahmed El-Shaer, Ahmed Aboulseoud, Moataz Soliman, and **Shaker Ebrahim**, Fabrication of IR detector based on of Polyaniline/Polyvinylidene Fluoride Blend Films and their Pyroelectric Measurement, 3rd International Conference on Materials and Applications for Sensors and Transducers, IC-MAST, Sept. 13-17, 2013, Prague, Czech Republic.
22. **Sh. Ebrahim**, R. El-Raey, A. Hefnawy, H. Ibrahim, M. Soliman, A Novel Chloropyrifos Electrochemical Sensor Based on Polyaniline/Carbon Nanotubes Composite, 3rd International Conference on Materials and Applications for Sensors and Transducers, IC-MAST, Sept. 13-17, 2013, Prague, Czech Republic.
23. Invited speaker in Materials for Biomedical Application Conference, Overview on Sensors and Biosensors and Their Biomedical Applications, April, 2013
24. Invited speaker in Materials and Water Conference "Reverse Osmosis Membranes Based on Polymeric Materials and Clays for Water Desalination" Dec. 2014.
25. Invited speaker in Nanotechnology and Water Desalination workshop, Institute of Marine Sciences, Oct, 2014.
26. M.Y. Feteha, **Shaker Ebrahim** and Laila Saad, Low Cost and Free TCO Porous Coal as a Counter Electrode (CE) for Dye Sensitized Solar Cell (DSSC), Nanotech France 2016, NanoMetrology France 2016, NanoMatEn 2016 and European Graphene Forum - EGF 2016 Joint Conferences Proceeding.
27. Invited speaker in Materials and Society Conference, Alexandria University, Dec. 2016
28. EMRS-conference Spring 2016, France.
29. Electrochemical Society,  The Impacts of Zirconia As a Spacer Layer on Fill Factor of Hole-Free Perovskite Solar Cells, The Impacts of Zirconia As a Spacer Layer on Fill Factor of Hole-Free Perovskite Solar Cells, ECS and SMEQ Joint International Meeting September 30 – October 4, 2018 | Cancun, Mexico
30. Enhancement Supercapacitive Behavior of Electrodeposited Doped Polypyrrole for Supercapacitor Applications, ECS and SMEQ Joint International Meeting September 30 – October 4, 2018 | Cancun, Mexico.

***Publications***

1. M.B.Soliman, A.B.Kashyout, M.A.El-Gamal, **Sh. M. Ebrahim**, The Use of Zinc Metal as Rectifying Contact for Polyaniline Schottky Devices, International Alex. Eng. J, 2,177-183, 2, 45, 2006.
2. **Sh. M. Ebrahim**, A.B.Kashyout and M.B.Soliman, Electrical and Structural Properties of Polyaniline/Cellulose Triacetate Blend Films, J. Polymer Research, 2007, 14, 423-429.
3. **Sh. M. Ebrahim** “Conduction of polyaniline/formvar blend films”, High performance polymer, **21:** 468–483, 2009.
4. **Sh. M. Ebrahim,** Fabrication of Schottky diode based on Zn electrode and polyaniline doped with 2-acrylamido-2-methylpropane sulfonate sodium salt, J. Polym. Research, (2009) 16:481–487.
5. **Sh. M. Ebrahim**, M.B.Soliman, and A.B. Kashyout “Ac and dc Conductivities of Polyaniline/Poly vinyl formal Blend Films, Current Applied Physics, 9 (2009) 448–454.
6. **Sh. M. Ebrahim**, M.M. Abd El Latif, M.M. Soliman, Blend of Nylon 6 and Polyaniline Doped with Sulfanilic Acid and its Schottky Diode, High Performance Polymer, **22:** 377–391, 2010.
7. **Sh.M. Ebrahim**, M.M. Abd El Latif, M.M. Soliman, Cyclic voltammetry and impedance analysis of 2-acrylamido-2-methyl-1-propanesulfonic acid sodium salt- doped polypyrrole nanoparticles, Thin Solid Film, 518 (2010) 4100–4105 .
8. **Sh. Ebrahim**. A. Gad, A. Morsy, Highly Crystalline and Soluble Dodecylbenzene Sulfonic Acid Doped Poly(o-toluidine), Synth. Met. 160 (2010) 2658–2663.
9. **Sh. M. Ebrahim,** M.M. Soliman, T.Abd El-Fatah, Inorganic-Organic Heterojunction Solar Cell Based on Polyaniline Base, Journal of electronic materials, 40, 2033-2042, 2011.
10. **Sh. Ebrahim**, I. Morsi, M. Soliman, M. Elsharkawi, A. Elzaem, Preparation and Characterization of Chalcopyrite Compound for Thin Film Solar Cells, International Alex. Eng. J, (2011) 50, 35–42.
11. **Sh. Ebrahim**, Impedance spectroscopy of heterojunction solar cell based on polyaniline base-equivalent circuit analysis, Polymer Science series A, 2011, Vol. 53, No. 12, pp. 1217–1226.
12. **Shaker Ebrahim**, Moataz Soliman, Wageh Sadik, Mohamed Said, A Novel Atenolol Sensor Based on Polypyrrole Electrode and Using Differential Pulse Voltammetry, Sensor Letter, 9, 1–7, 2011.
13. **Shaker Ebrahim**, Tarek M. Abdel-Fattah, Moataz Soliman, Mostafa Hafez, Novel Organic Solar Cell Based on Polyaniline-Carbon Nanotubes Composite, ECS Transactions, 41 (4) 135-140 (2011).
14. **Sh. Ebrahim**, M. Soliman, I. Morsi, S. Ibrahim, Pyroelectric properties of nanocomposite of polyvinyldene fluoride and BaTiO3, Proceedings of 2011 International Conference on Mechanical Engineering and Technology ICMET 2011, November 24-25, 2011, London, UK.
15. **Shaker Ebrahim**, Moataz Soliman, Mahmoud Shabana, Kamal Mahmoud, Mohamed Salah, Electrodeposited CuInS2 using dodecylbenzene sulphonic acid as a suspending agent for thin film solar cell, International Journal of Photoenergy, 6-12, 2012.
16. M. Feteha, **Sh. Ebrahim**, M. Soliman, W. Ramdan, M. Raoof, Effects of Mercaptopropionic Acid as a Stabilizing Agent and Cd:Te Ion Ratio on CdTe and CdHgTe Quantum Dots Properties, J Mater Sci: Mater Electron (2012) 23:1938–1943.
17. I. Morsy, **Sh. Ebrahim**, M. Soliman, Construction and Study of Hetrojunction Solar Cell Based on Dodecylbenzene Sulfonic Acid Doped Polyaniline/n-Si, International Journal of Photoenergy, 2012, 6 pages.
18. Qiliang Chen, Lianjie Zhang, **Shaker Ebrahim**, Moataz Soliman, Cheng Zhang, and Qiquan Qiao, Synthesis and Structure Study of Copolymers from Thiadiazole Fused Indolocarbazole and Dithienosilole, Polymer 54 (2013) 223-229.
19. M. Raoof, K. Jans, G. Bryce, **Sh. Ebrahim**, L. Lagae, A. Witvrouw, Improving the selectivity by using different blocking agents in DNA hybridization assays for SiGe bio-molecular sensors, Microelectronics Reliability 52 (2012) 2272–2277.
20. Shangke Pan, **Shaker Ebrahim**, Moataz Soliman and Qiquan Qiao, Seed-mediated Direct Growth of CdSe Nanoclusters on Substrates" Journal of Nanoparticle Research, (2013) 15:1420.
21. M. Raoof, K. Jans, G. Bryce, **Sh. Ebrahim**, L. Lagae, A. Witvrouw  
     Improving the selectivity by using different blocking agents in DNA hybridization assays for SiGe bio-molecular sensors, Microelectronic Engineering, 111 (2013) 421–424.
22. Wegdan Ramadan, Parvez A. Shaikh, Sh. Ebrahim, Abdallah Ramadan and Satishchandra Ogale, Enhanced Photocatalysis by BiFeO3/α-Fe2O3 Nano p/n Junctions Formed by Dopant Induced Phase Separation, Journal of Nanoparticle Research, (2013) 15:1848.
23. M. Feteha, Sh. Ebrahim, W. Abdel Aleem, A. Eldemrdash, M. Soliman, F. Abulfotuh, M. El-Sherbiny, L. Saad, Characterization and Testing of the Locally Fabricated Encapsulants in Egypt for Commercial Photovoltaic Modules Production, Advanced Materials Research, 699 (2013)535-540.
24. Tarek M. Abdel-Fattah, Shaker Ebrahim, Moataz Soliman, and Mostafa Hafez, Dye-Sensitized Solar Cells Based on Polyaniline-Single Wall Carbon Nanotubes Composite, ECS Journal of Solid State Science and Technology, 2 (6) M13-M16 (2013).
25. Shaker Ebrahim, Moataz Soliman, M. Anas, Mostafa Hafez, and Tarek M. Abdel-Fattah, Dye-Sensitized Solar Cell Based on Polyaniline/Multiwalled Carbon Nanotubes Counter Electrode, International Journal of Photoenergy, 2013, 6 pages, 2013.
26. Hanaa M Hegab, Soliman M, Ebrahim S and Op de Beeck M, In-Flow DNA Extraction Using on-Chip Microfluidic Amino-Coated Silicon Micropillar Array Filter, J Biosens Bioelectron, Volume 4 • Issue 4 • 1000140, 2013.
27. **Shaker Ebrahim**, Radwa El-Raey, Ahmed Hefnawy, Hesham Ibrahim, Moataz Soliman, Tarek Abdel-Fatah, Electrochemical Sensor Based on Polyaniline Nanofibers/Single Wall Carbon Nanotubes Composite for Detection of Malathion, Synthetic Metals, 190, 13-19, 2014.
28. **Sh. Ebrahim**, R. El-Raey, A. Hefnawy, H. Ibrahim, M. Soliman, A Novel Chloropyrifos Electrochemical Sensor Based on Polyaniline/Carbon Nanotubes Composite, Key Engineering Materials, 605 (2014) 99-102.
29. A. M. El-Shaer, A. K. Aboulseoud, M. Soliman, and **Sh. Ebrahim**, Fabrication of Infrared Detector Based on of Polyaniline/Polyvinylidene Fluoride Blend Films and their Pyroelectric Measurement, Key Engineering Materials, 605 (2014) 103-106.
30. Mohamed E. Harb, **Shaker Ebrahim**, Moataz Soliman, Mahmoud Shabana, Fabrication of organic field effect transistor as ammonia gas sensor based on polyaniline channel, International Journal of Chemical and Applied Biological Sciences, 1, Special Issue: Materials for Biomedical Applications 2014.
31. [Laila Saad](http://jss.ecsdl.org/search?author1=Laila+Saad&sortspec=date&submit=Submit), [M. Y. Feteha](http://jss.ecsdl.org/search?author1=M.+Y.+Feteha&sortspec=date&submit=Submit), [**Sh. Ebrahim**](http://jss.ecsdl.org/search?author1=Sh.+Ebrahim&sortspec=date&submit=Submit), [Moataz Soliman](http://jss.ecsdl.org/search?author1=Moataz+Soliman&sortspec=date&submit=Submit) and [Tarek M. Abdel-Fattah](http://jss.ecsdl.org/search?author1=Tarek+M.+Abdel-Fattah&sortspec=date&submit=Submit), Dye Sensitized Solar Cell Based on Polyaniline-Carbon Nanotubes/Graphite Composite, ECS J. Solid State Sci. Technol., 3, M55 (2014).
32. [M. Y. Feteha](http://ecst.ecsdl.org/search?author1=M.+Y.+Feteha&sortspec=date&submit=Submit), [Shaker Ebrahim](http://ecst.ecsdl.org/search?author1=Shaker+Ebrahim&sortspec=date&submit=Submit), [Moataz Soliman](http://ecst.ecsdl.org/search?author1=Moataz+Soliman&sortspec=date&submit=Submit), [Laila Saad](http://ecst.ecsdl.org/search?author1=Laila+Saad&sortspec=date&submit=Submit) and [Tarek M Abdel-Fattah](http://ecst.ecsdl.org/search?author1=Tarek+M+Abdel-Fattah&sortspec=date&submit=Submit), Nanocomposite Dye Sensitized Solar Cell (DSSC) Based on Titanium Oxide/Tungsten Oxide Photoelectrode, ECS Trans. 2014, 61, 22, 61-66.
33. A. M. ElShaer, A. Abouseoud, **Sh. Ebrahim**, M. Soliman, Electrical chopped frequency circuit for characterizing pyroelectric sensor, Journal of Electrical Engineering, 2015.
34. **Sh. Ebrahim**, M. Reda, A. Hussien, D. Zayed, CdTe Quantum Dots as a Novel Biosensor for Serratia Marcescens and Lipopolysaccharide, Spectrochimica Acta Part A:150 (2015) 212.
35. Tarek M. Abdel-Fattah, **S. Ebrahim**, M. Soliman, M. Anas, and E. Moustafa, Fabrication and Characterization of Hybrid Solar Cells Based On Perovskite Materials , ECS Transactions, 69 (4) 31-34 (2015)
36. [**Shaker Ebrahim**](http://www.sciencedirect.com/science/article/pii/S1658365515001247), [Mohamed Harb](http://www.sciencedirect.com/science/article/pii/S1658365515001247), [Moataz Soliman](http://www.sciencedirect.com/science/article/pii/S1658365515001247), [Mazhar Tayel](http://www.sciencedirect.com/science/article/pii/S1658365515001247), Preparation and characterization of a pseudocapacitor electrode by spraying a conducting polymer onto a flexible substrate, [Journal of Taibah University for Science](http://www.sciencedirect.com/science/journal/16583655), 2015.
37. Mazhar B. Tayel, Moataz M. Soliman, **Shaker Ebrahim**, and Mohamed E. Harb, An Introduced Hybrid Graphene/Polyaniline Composites for Improvement of Supercapacitor, Journal of Electronic Materials, 45 (2016) 820-828. (IF= 1.579)
38. **Sh. Ebrahim**, A. Mosry, E. Kanawy, T. Abdel-Fattah & S. Kandil, Reverse osmosis membranes for water desalination based on cellulose acetate extracted from Egyptian rice straw, Desalination and Water Treatment, 57(2016) 20738-20748. (IF= )
39. **Sh Ebrahim**, A.M. Elshaer, M. Soliman, M.B. Tayl, Pyroelectric Infrared Detector Based on Polyaniline/Polyvinylidene Fluoride Blend, Sensors and Actuators A: Physical, [238](http://www.sciencedirect.com/science/journal/09244247/238/supp/C) (2016) 389–396. (IF=2.478)
40. Morsy, Sh. Ebrahim, S. Kandil, E. Kanawy, T. Abdel Fettah, Reverse Osmosis Membrane Based on Functionalized Cellulose Acetate Using 2-acrylamidopropane-2-methyl Sulfonic Acid, Water Science and Technology: Water Supply, 16.4 (2016) 1046-1056. (IF=0.573)
41. A. Kashyout, J. Elnady, Sh. Ebrahim, M. Soliman, Nanoparticles Ni electroplating and black paint for solar collector applications, Alex. Eng. J, 55 (2016) 723-729. (IF=
42. **Sh. Ebrahim,** A. Shokry, H. Ibrahim, M. Soliman, Polyaniline/Akaganéite Nanocomposite for Detoxification of Noxious Cr(VI) from Aquatic Environment, J. Polymer Research, (2016) 23: 79. (IF= 1.615)
43. Marwa Fathy, J. Elnady, A. Kashout, **Sh. Ebrahim**, M. Soliman, Electrospun Polymethylacrylate Nanofibers Membranes for Quasi-Solid-State Dye Sensitized Solar Cells, Alexandria Engineering Journal, (2016) 55, 1737–1743.
44. [**Sh. Ebrahim**](http://www.sciencedirect.com/science/article/pii/S0167931716301289), [M. Raoof](http://www.sciencedirect.com/science/article/pii/S0167931716301289), [W. Ramadan](http://www.sciencedirect.com/science/article/pii/S0167931716301289), [M. Soliman](http://www.sciencedirect.com/science/article/pii/S0167931716301289), New self-assembled monolayer onto SiGe as a high selective biosensor for single strand DNA, Microelectronic Engineering 160 (2016) 87–93. (IF=1.806)
45. **Sh. Ebrahim**, W. Ramadan, M. Ali, Structural, optical and ferromagnetic properties of cobalt doped CdTe quantum dots, J Mater Sci: Mater Electron, 27 (2016) 3826-3833. (IF= 2.019)
46. M. Reda, **S. Ebrahim**, A. Hussien, Novel Impedimetric and Voltammetric Sensors for Tetracycline Based on Polyaniline Modified Electrode, Sensor Letter, 1 4, 4 8 4 – 4 8 9, 2 0 1 6.
47. Mazhar Tayel, M. Soliman, **Shaker Ebrahim**, M. Harb, Sprayed Polyaniline Layer onto Chemically Reduced Graphene Oxide as Electrode for High Performance Supercapacitor, Synthetic Metals, 217 (2016) 237–243. (IF=2.435)
48. Marwa Fathy, Jehan El Nady,, Mamoun Muhammed, **Shaker Ebrahim**, Moataz B. Soliman, Abd El-Hady B. Kashyout, Quasi-solid-state Electrolyte for Dye Sensitized Solar Cells Based on Nanofiber PMA-PVDF and PMA-PVDF / PEG Membranes, Int. J. Electrochem. Sci., 11 (2016) 6064-6077. (IF= 1.469)
49. **Shaker Ebrahim**, Mohamed Labeb, Tarek Abdel-Fattah, Moataz Soliman, CdTe Quantum Dots Capped with Different Stabilizing Agents for Sensing of Ochratoxin A, Journal of Luminescence,182 (2017)154–159. (IF=2.558)
50. **Shaker Ebrahim**, Mohamed. Said, Ali Gad, Sherif Kandil, Toward Energy Efficient Reverse Osmosis Polyamide Thin Film Composite Membrane Based on Diaminotoulene, Desalination and Water Treatment, 71 (2017) 261–270. (IF=)
51. M. Shehab, **Shaker Ebrahim**, M. Soliman, Garphene Quantum Dots prepared from Glucose as Optical Sensor for Glucose, Journal of Luminescence, 184 (2017) 110–116. (IF=2.558)
52. M. Anas, **Shaker Ebrahim**, I.G.Eldeen, R. Awad, A. I. Abou-Aly, Comparative Studies Between The Influence of Single and Multi-Walled Carbon Nanotubes Addition on Gd-123 Superconducting Phase, Modern Physics Letters B, 30, 1650418 (2016). (IF=1.)
53. M Aiman, **S Ebrahim**, F Abulfotuh , [Thermal properties of composites of octadecane/carbon imbedded with graphite derivatives thermal energy storage](http://ieeexplore.ieee.org/abstract/document/7983936/), [Renewable and Sustainable Energy Conference (IRSEC)](http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=7973314)**, DOI:**[10.1109/IRSEC.2016.7983936](https://doi.org/10.1109/IRSEC.2016.7983936), 2017 - ieeexplore.ieee.org.
54. E Hamdy**, S Ebrahim**, F Abulfotuh, [Effect of multi-walled carbon nanotubes on thermal properties of nitrate molten salts](http://ieeexplore.ieee.org/abstract/document/7983997/), [Renewable and Sustainable Energy Conference (IRSEC)](http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=7973314)**, DOI:**[10.1109/IRSEC.2016.7983997](https://doi.org/10.1109/IRSEC.2016.7983997), 2017- ieeexplore.ieee.org.
55. [Karim Amer,](http://ieeexplore.ieee.org/search/searchresult.jsp?searchWithin=%22Authors%22:.QT.Karim%20Amer.QT.&newsearch=true)[**Shaker Ebrahim**](http://ieeexplore.ieee.org/search/searchresult.jsp?searchWithin=%22Authors%22:.QT.Shaker%20Ebrahim.QT.&newsearch=true),[Mohamed Feteha,](http://ieeexplore.ieee.org/search/searchresult.jsp?searchWithin=%22Authors%22:.QT.Mohamed%20Feteha.QT.&newsearch=true) [Moataz Soliman,](http://ieeexplore.ieee.org/search/searchresult.jsp?searchWithin=%22Authors%22:.QT.Moataz%20Soliman.QT.&newsearch=true)[Ahmed El-Shaer](http://ieeexplore.ieee.org/search/searchresult.jsp?searchWithin=%22Authors%22:.QT.Ahmed%20El-Shaer.QT.&newsearch=true), Organic field effect transistor based on polyaniline - dodecylbenzene sulphonic acid for humidity sensor, [Radio Science Conference (NRSC), 2017, 34th National](http://ieeexplore.ieee.org/xpl/mostRecentIssue.jsp?punumber=7890540), DOI:[10.1109/NRSC.2017.7893514](https://doi.org/10.1109/NRSC.2017.7893514), **IEEE Xplore:**6 April 2017.
56. Rafik Abbas, Nehal Elkhoshkhany, **Shaker Ebrahim**, Aya Rahal and Ahmed Hefnawy, High stability performance of Superhydrophobic modified fluorinated graphene films on Copper Alloy substrates", Advances in Materials Science and Engineering, Volume 2017 (2017), Article ID 6197872, 8 pages. (IF=1.299)
57. Mohamed Harb, **Shaker Ebrahim,** Moataz Soliman, Mahmoud Shabana, Fabrication of Organic Transistor Using Nanomaterials for Sensing Applications, Journal of Electronic Materials, online. (IF= 1.579)
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*Patents*

1. **Shaker Ebrahim**, Hassan EL-Nagar Hassan Ebrahim , Mosaad A. EL-Kasaby , Sherif Hussein Kandil, Moataz Bella Mohamed Soliman, Production of novel polymer based on aniline as pour point depressant for crude oil, Arab Republic of Egypt, Ministry of Scientific Research Academy of scientific Research & Technology, 2013, accepted.

***Awards and Prizes***

* Prize of Professor Salah Morse in Materials Chemistry “Application of Conducting polymers in Rechargeable Batteries” Ministry of Higher Education, Egypt, 2006.
* Prize of Alexandria University for Recent and development Research, 2010.
* Postdoctoral at Electrical and Computer Department, South Dakota State University, USA, for 3 months (27-3-2012 to 20-6-2012) in Field of Polymer Solar Cell.
* Prize of Alexandria University for Scientific encouragement, 2012.

Research Interests

* Preparation and characterization of polyaniline, polypyrrole, polythiophene and their blends chemically and electrochemically.
* Fabrication and characterization of Schottky diode, Schottky diode solar cell and polymer solar cell.
* Application of conducting polymers as gas and bio-sensors
* Reverse osmosis membrane for water desalination
* Thin film solar cells
* Synthesis of quantum dots for photovoltaic and biological applications
* Peroviskite Solar Cells
* Infrared Detector

***Current projects***

* 1. PI of Novel Hybrid Thin film Solar Cells project funded from Research Enhancement Program (ALEX REP) 2009-2011. Finished
  2. Member in "New low-emissivity and long-lasting paints for cost-effective solar collectors” project, fund from Europe United (FP6) 2006-2010. (finished)
  3. Member in "Preparation and Characterization of Nanomaterials for drug delivery system, sensor and photovoltaic applications, project, fund from Alexandria University, Egypt, 2008-2010. (finished)
  4. Postdoct in Hybrid Multi-Junction High Efficiency Polymeric Photovoltaic Cells project, Funded from US-Egypt Joint, 2010-2012.
  5. Member in "Production of Inexpensive Photovoltaic Modules based on Local Materials and Know How" Project, Funded from STDF, 2010-2013.
  6. Co-PI of "Nanocomposite Thin Film Membranes Based on Polymers and Clays for Reverse Osmosis Utilizations" Project, Funded from STDF, 2012-2016.
  7. Member in *Tempus Prokect - Product Development and Innovation, 2013-2016.*
  8. Member in Euro-Mediterranean on Cooperation on Research Training in Sun Based Renewable Energy, FP7, 2013-2017.
  9. Member in JAMILA – Joint master of Mediterranean Initiatives on renewable and sustainable energy, 544339-TEMPUS-1-2013-1-IT-TEMPUS-JPCR project 2013-2018.

***Editing and Refereeing Many Articles in International Journals***

1. ***Refereeing Many Articles in International Journals***

Journal of Synthetic Metals Physica D European Polymer Journal

Journal of Polymer Research Journal of Materials Science; Materials in Electronic Journal of Materials Chemistry and Physics Nanotechnology Journal

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