

Curriculum Vitae



Prof. Mohamad Saleh AlSalhi

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Professionals

Professor and Head, Department of Physics and Astronomy,

Head, Research Chair for Laser Diagnosis of Cancer,

Department of Physics and Astronomy,

King Saud University, College of Science

P.O. Box 2455, Riyadh 11451

Kingdom of Saudi Arabia.

Academic Qualifications

Doctor of Philosophy in laser from Hull University , England, 1988,
Semiconductor laser.

M. Sc., in laser from Essex University, England, 1984, Laser and their
Applications.

B. Sc., in Physics from King Saud University, Riyadh, Kingdom of Saudi
Arabia, 1982.

Research Areas

Quantum Optics – Laser Physics and Applications- Nanophysics

Absorption and fluorescence spectrophotometers

Optical Biopsy of Cancer diagnosis

Spectral Diagnosis of Hemoglobinopathies

Position held on

Head, Department of Physics and Astronomy 2017- Present

Head chair of laser Diagnosis of Cancer 2009 – Present

Vice Dean of King Abdullah Institute for Nanotechnology(KAIN) 2009- 2011

Head of Physics and Astronomy Dept, 2000- 2004

Member of college of science council 2000- 2004

Associate professor in the department of Physics, college of science, King Saud university, 2003.

Assistant Professor in the Department of Physics, college of science, King Saud university, 1988-2003.

Demonstrator in the Department of Physics Dept, college of science, King Saud University, 1981-1982.

Academic Committies

Member of the following Committees: University Community week in college of science Safety and Security in college of science Higher studies in Physics Department

Teaching Experience

I taught different undergraduate courses: general Physics, classical mechanics, mathematical physics, Optics, Electromagnetic Theory, Modern physics, solid state, laser physics

Master courses

Advanced laser Physics, Laser Applications, Atomic and Molecular Spectroscopy
Supervised many third year projects

Research Experience

List of Translated books: I have translated the following books in Arabic with the help of other colleagues

- Laser Principles and Applications by Wilson/ Hawkes
- Elementary Solid State Physics by M. Ali. Omer
- Introduction to Optics by F. L. Pedrotti and J. Pedrotti
- Two books in nanotechnology underpreparation
 - Book Chapter Zinc Oxide Nanostructures : Advances and Applications 2013
by Pan Stanford Publishing
ZnO nanostructures toxicity and phototoxicity characteristics towards biological samples; M. Willander, O. Nur, M. Fakhr-e-Alam, M. Atif, and M. S. AlSalhi

Supervising Master Thesis

Main Supervisor

- 1.Preparence and Planning for Radioactive materials accident, completed 2003.
- 2.Laser Radiation effects on the performance of Silicon Solar Cells, completed 2004.
- 3.The optical characteristics of 5-Aminolevulnic acid used in the treatment of Cancer, completed 2005.
- 4.Biophysical Characteristic of Blood Upon irradiation with low power He-Ne laser, completed 2005.
- 5.Laser radiation Effects on Growth of Wheat, completed 2006.
- 6.Optical diagnosis of patients' blood sickle cells, completed 2007.
- 7.Laser Photodynamic Damage and native autofluorescence of some concerned cell lines, completed 2008.
- 8.Identification of automobile petrol adulteration by using optical methods, completed 2008.
- 9.Amplified spontaneous emission from conjugated MEH-PPV Polymer, completed 2008.
- 10.Spectral properties and laser emission from conjugated PDEHF-PPV polymer, completed 2009.
- 11.Gain and Amplified spontaneous emission properties of MDMO-PPV conjugated polymer, 2011.

Co-Supervisor

- 1.Detection of Cancer By Optical Methods, completed 2003.
- 2.The effect of neutron irradiation on the Characteristics of Vertical cavity semiconductor laser, completed 2004.
- 3.Spectral Properties of Cancer Patients Blood, completed 2004.

Workshops and Meetings

- Workshop in (Nano and Micro Technology), Arab school of science and technology , Syria, Damascus, 11-14/10/ 2003.
- First Scientific Meeting of Saudi Scientific Society of Physical Science 9-10/12/2003, King Khaled University, Abha, Saudi Arabia.

- Second Scientific Meeting of Saudi Scientific Society of Physical Sciences, 22-24/11/ 2005, Um Alqura University, Mecca, Saudi Arabia.
- Chinese Experience in nano-Industry, 26-28 /5/ 2008, King Saud University.
- Nanostructured Advanced Materials Workshop, 11-13 /11/ 2008, Jordan.
- One day training in" Manufacturing and study of Sinanoparticle characteristics" 3/4/6/2008 delivered by Prof Munir Nayfeh.

Patents and Scientific Research Publications

List of Granted Patents

13. M.S. AlSalhi, S. Devanesan, Akram Ahmed Alfuraydi, Mysoon AlAnsari . Green synthesis of silver nanoparticles using sesame (Sesamum indicum) oil cake and cytotoxicity study on MCF-7 Cell Line "Publication number: US 20180333433, Nov 2018.

12. S. Devanesan, M.S.AlSalhi, G. Periyasami and A.K. Aldalbhair "Methods of preparing biologically active derivatives from Calotropis Gigantea flowers". Grant No: US 101119181 B1, OCT 2018

11. M.S.AlSalhi, S.Devanesan "Synthesis of silver nanoparticels from Abelmoschus Esculentus Extract". Grant No: US 10059601 B1, Aug 2018

10. V. Masilamani, M.S.AlSalhi, S.Devanesan Spectral Method For Quantifying Hemoglobin Fragility Caused By Smoking. Grant No: US 9726679 B2, Aug 2017

9.S. Prasad, M.S. AlSalhi, V. Masilamani. Temperature tuned conjugated polymer laser. Grant No: US 9698561 B1, Jul 2017

8. V. Masilamani, M.S.AlSalhi, Karim H. Farhat, Danny Rabah, S. Prasad, S.Devanesan "Method of detecting bladder cancer by optical analysis of bodily fluids" Grant No: US 9733187 B2, Aug 2017

7.M. S. AlSalhi, V. Masilamani, Farjah H. Gahtani "Method of detecting thalassemia by optical analysis of blood components. Grant No: US 9347885 B2, May,24,2016.

6.Munir H Nayfeh, Matthew Stupka, Turki Al Saud, M.S. AlSalhi.Silicon nanoparticle photovoltaic devices. Grant No: US 9263600 B2, Feb, 02,2016

5. Al-Khalid Isam Zuhair, M. S. AlSalhi, V. Masilamani, "Method for Enhancing the Shelf Life of Blood and Donor Blood by Laser Biostimulation" Grant No: US 9011766 B2. April 21, 2015.

4.M.S. AlSalhi, Akram Ahmed Alfuraydi, S. Devanesan “Green Synthesis of Silver Nano Particles from Pimpinella Anisum Seed Extract” Grant No: US 9144544 B1, Sep 29,2015

3.V. Masilamani, M. S. AlSalhi, Danny M. Rabah “Method for Discriminating Between Benign and Malignant Prostate Tumors” **Grant No: US 8213005 , B2. Jul 03, 2012.**

2.V. Masilamani, M. Elangovan, M. S. AlSalhi, Abdulrahman Al-Diab. “Lung Cancer Detection by Optical Analysis of Body Fluids” **Grant No: US 8,208, 142, B2 – June 26, 2012.**

1. A.S. Aldwayyan, M.S. AlSalhi, A.M. Aldukhai, M. S. Alhoshan, M. N. Khan, G. K. AlChaar, Munir H. Nayfeh; "Organosilicon nanosilicon composites and fabrication methods",**Grant No: US20100234204 A1 Sep- 2010.**

Submitted US Patent

1._ V. Masilamani. M.S. AlSalhi, Fatma AlQahtani. Spectrographic Method for Early Diagnosis and Follow-Up Monitoring of Blood Cancer, Acute Leukemia. Docket No. 33007.34 (23-08-2018).

2. M. S. AlSalhi, V. Masilamani, M.Atif.Laser Measurement of Severity of Hemophilia. File No: 052017-00748 (13-5-2017).

Book Chapter

1. K Murugan, Chandrasekar Raman, C Panneerselvam, P Madhiyazhagan, J Subramaniam, D Dinesh, Jiang-Shiou Hwang, Jiang Wei, **M. S. AlSalhi,** S Devanesan"Nano-Insecticides for the Control of Human and Crop Pests". Book:Short Views on Insect Genomics and Proteomics. 229-251. Publisher: Springer International Publishing

List of Research Publications with ISI web Science Journals

2019

173. M S AlSalhi, Wadah Tashish, Safaa Saleh Al-Osaif, M. Atif. Effects of He-Ne laser and argon laser irradiation on growth, germination, and physico-biochemical characteristics of wheat seeds (*Triticumaestivum* L.). Laser Phys. 29 (2019) 015602.

2018

172. M. S. AlSalhi, S. Devanesan, Khalid E AlZahrani, M. AlShebly, F. Al-Qahtani, K. Farhat, V. Masilamani. Impact of Diabetes Mellitus on Human

Erythrocytes: Atomic Force Microscopy and Spectral Investigations. International Journal of environmental research and public health, 15 (11); 2018: 2368.

171. S. Devanesan, **M. S AlSalhi**, R.VishnuBalaji, A.J.A. Ranjitsingh, A. Anis, A. Akram, Y A. Fulwah, S.A. Fadilah H. Ahmed. Antimicrobial and Cytotoxicity Effects of Synthesized Silver Nanoparticles from Punica granatum Peel Extract. Nanoscale Research Letters, 13(15) 2018: 315.

170. R. A. AbuMousa, U. Baig, M. A Gondal, **M. S AlSalhi**, F. Y. Alqahtani, S. Akhtar, F. S. Aleanizy, M. A Dastageer. Photo-catalytic Killing of HeLa Cancer Cells Using Facile Synthesized Pure and Ag Loaded WO₃ Nanoparticles. Scientific reports. 8 (1); 2018: 15224.

169. M Atif, **M. S AlSalhi**, S Devanesan, V Masilamani, K Farhat, D Rabah. A study for the detection of kidney cancer using fluorescence emission spectra and synchronous fluorescence excitation spectra of blood and urine. Photodiagnosis and photodynamic therapy. 23; 2018: 40-44.

168. M. M. Tohari, Andreas Lyras, **M. S AlSalhi**. Giant Self-Kerr Nonlinearity in the Metal Nanoparticles-Graphene Nanodisks-Quantum Dots Hybrid Systems Under Low-Intensity Light Irradiance. Nanomaterials. 8(7);2018:1-8.

167. WA Farooq, Walid Tawfik, M Atif, **M.S Alsalhi**, HY Zahran, AF Abd El-Rehim, IS Yahia, Sarfraz Mansoor. Evaluation of laser Induced Breakdown Spectroscopy for analysis of annealed Aluminum Germanium alloy at different temperatures. Materials Science and Engineering. 383(1);2018: 012012

166. Mariam Tohari, Andreas Lyras, **M. S. Alsalhi**. Ultrafast Energy Transfer in the Metal Nanoparticles-Graphene Nanodisks-Quantum Dots Hybrid Systems. Plasmonics. 2018:1-8.

165. R Saranya, R Azhagu Raj, **MS AlSalhi**, S Devanesan. Dependence of Catalytic Activity of Nanocrystalline Nickel Ferrite on Its Structural, Morphological, Optical, and Magnetic Properties in Aerobic Oxidation of Benzyl Alcohol. Journal of Superconductivity and Novel Magnetism. 31(4); 2018: 1219-1225.

164. G. Benelli, M. Govindarajan, **M. S AlSalhi**, S. Devanesan, Filippo Maggi. High toxicity of camphene and γ -elemene from Wedelia prostrata essential oil against larvae of Spodoptera litura (Lepidoptera: Noctuidae). Environmental Science and Pollution Research. 25(11); 2018: 10383-10391.

163. KH Ibnaouf, AO Elzupir, **M.S. AlSalhi**, Abdulaziz S Alaamer. Influence of functional groups on the photophysical properties of dimethylamino chalcones as laser dyes. Optical Materials. 76; 2018: 216-221.

162. A. Prabhakarn, S Nagarani, S. Prasad, M. S AlSalhi, Abdullah M Al-Mayouf, Sasikala Ganapathy. Facile coprecipitation synthesis of nickel doped copper oxide nanocomposite as electrocatalyst for methanol electrooxidation in alkaline solution. *Materials Research Express*. 5(1);2018: 015512.

161. S. Prasad, D. Durairaj, **M. S. AlSalhi**, J. Theerthagiri, A. Prabhakarn, Govindarajan Durai. Fabrication of cost-effective dye-sensitized solar cells using sheet-like CoS₂ films and phthaloylchitosan-based gel-polymer electrolyte. *Energies*. 11(2); 2018: 281.

160. M Atif, A Ali, **M.S. AlSalhi**, M Willander. Effect of Urea on the Morphology of Fe₃O₄ Magnetic Nanoparticles and Their Application in Potentiometric Urea Biosensors. *Silicon*. 2018:1-6.

159. **M. S. AlSalhi**, A. R. Almotiri, S. Prasad, M. J Aljaafreh, Ahmad HS Othman, V. Masilamai A Temperature-Tunable Thiophene Polymer Laser. *Polymers*. 10(5);2018:470

158. **M. S. AlSalhi**, S. Prasad, M. J. Aljaafreh, Ahmad HS Othman. Broadband Frequency-Tunable Whispering-Gallery-Mode Superradiant Light from Quantum Dots in Colloidal Solution. *Journal of Nanomaterials*. 018, Article ID 3754307,1-9.

157. Saradh Prasad, G Durai, D Devaraj, **M. S. AlSalhi**, J Theerthagiri, Prabhakarn Arunachalam, M Gurulakshmi, M Raghavender, P Kuppusami. 3D nanorhombus nickel nitride as stable and cost-effective counter electrodes for dye-sensitized solar cells and supercapacitor applications. *RSC Advances*, 8(16);2018: 8828-8835

156. A Elzupir, K Ibnaouf, H Idriss, M Ibrahim, S Prasad, M Alrajhi, **M. S. AlSalhi**, A Alaamer. Synthesis and Characterization of an Efficient New Liquid Laser Dye Material-Chalcone (DMAPP). *Acta Physica Polonica A*. 133(1); 2018: 121-125

2017

155. SM El-Bashir, IS Yahia, MA Binhussain, **MS AlSalhi**. Design of Rose Bengal/FTO Optical Thin Film System as a Novel Nonlinear Media for Infrared Blocking Windows. *Results in Physics*. 7;(2017):852-1858.

154. A.A.Yousef, **M. S AlSalhi**, A. A. Elbadawi, Eltayeb M Mustafa. Synthesis and Study of the Effect of Ba²⁺ Cations Substitution with Sr²⁺ Cations on Structural and Optical Properties of Ba_{2-x}Sr_xZnWO₆ Double Perovskite Oxides (x= 0.00, 0.25, 0.50, 0.75, 1.00). *Materials*. 10(5);(2017):469.

153. KH Ibnaouf, MKM Ali, AO Elzupir, MA Ibrahim, H Idriss, AS Alaamer, MA Alrajhi, **M.S. AlSalhi**. Spectral and ase properties of an amino chalcone 1-(4-

chlorophenyl)-3-(4-n, n dimethylamino phenyl)-2-propen-1-one. Digest journal of nanomaterials and biostructures. 12(2);(2017):423-430.

152. V. Masilamani, H.M Ghaithan, Mamduh J Aljaafreh, A. Ahmed, Reem al Thagafi, S. Prasad, **M. S AlSalhi**. Using a Spectrofluorometer for Resonance Raman Spectra of Organic Molecules. Journal of Spectroscopy. 2017(4289830);(2017):1-6.

151. R. Saranya, R Azhagu Raj, **MS AlSalhi**, S Devanesan. Dependence of Catalytic Activity of Nanocrystalline Nickel Ferrite on Its Structural, Morphological, Optical, and Magnetic Properties in Aerobic Oxidation of Benzyl Alcohol. Journal of Superconductivity and Novel Magnetism. 30(12); (2017): 1-6.

150. S. Devanesan, M. AlShebly, R. Kalaivani, K. Sivaji, K. Farhat, **M.S. AlSalhi**, M. AlAtawi, D. Rabah, V. Masilamani. Fluorescence spectral features of blood components of pregnant women. Current Science, 113 (3); (2017):457-461.

149. K. Murugan, J. Anitha, U. Suresh, R. Rajaganesh, C. Panneerselvam, A. Aziz, Li-Chun, K. Kalimuthu, **M. S. AlSalhi**, S. Devanesan, M. Nicoletti, S. Sarkar, G. Benelli, Jiang-Shiou. Chitosan-fabricated Ag nanoparticles and larvivorous fishes: a novel route to control the coastal malaria vector *Anopheles sundaicus*? Hydrobiologia. 797 (1); (2017): 335–350.

148. G. Benelli, M. Govindarajan, **Mohamad S. AlSalhi**, S. Devanesan, F. Maggi. High toxicity of camphene and γ -elemene from *Wedelia prostrata* essential oil against larvae of *Spodoptera litura* (Lepidoptera: Noctuidae). Environmental Science and Pollution Research. 24 (31); (2017): 1-7.

147. R. Azhagu Raja, **M.S. AlSalhi**, S. Devanesan. Microwave-Assisted Synthesis of Nickel Oxide Nanoparticles Using *Coriandrum sativum* Leaf Extract and Their Structural-Magnetic Catalytic Properties. Materials 10(5); (2017) 460, 1-8.

146. YA Alsabah, **M.S. AlSalhi**, AA Elbadawi, EM Mustafa. Influence of Zn^{2+} and Ni^{2+} cations on the structural and optical properties of $Ba_{2-x}Zn_xNi_xWO_6$ ($0 \leq x \leq 1$) tungsten double perovskites. Journal of Alloys and Compounds 701(2017): 797-805

145. SM El-Bashir, IS Yahia, MA Binhussain, **M.S. AlSalhi**. Designing of PVA/Rose Bengal Long-Pass Optical Window Applications. Results in Physics. 7(2017):1238–1244

144. Sara A.A. S. Prasad Wafa Al-Mujammi, D. Devaraj, V. Masilamani, **M.S. AlSalhi**. An Efficient Violet Amplified Spontaneous Emission (ASE) from a Conjugated Polymer (PFO-co-pX) in Solution. Materials, 10 (3) (2017): 265.

143. RA Abumosa, BA Al-Asbahi, **M.S. AlSalhi**. Optical Properties and Amplified Spontaneous Emission of Novel MDMO-PPV/C500 Hybrid. *Polymers*, 9 (2), (2017): 71.

142. SM El-Bashir, WK Alenazi, **M.S. AlSalhi**. Optical dispersion parameters and stability of poly (9, 9'-di-n-octylfluorenyl-2,7-diyl)/ZnO nanohybrid films: towards organic photovoltaic applications. *Materials Research Express*, 4 (2), (2017): 025503.

141. **M.S. Alsalhi**, MR Baig, K Alfaramawi, MG Alrasheedi .Influence of alpha irradiation on pre and post solar exposed PM-355 polymeric nuclear track detector sheets. *Radiation Physics and Chemistry*, 130 (2017): 451-458

140. S Prasad, HS AlHesseny, **M.S. AlSalhi**, D Devaraj, V Masilamai A high power, frequency tunable colloidal quantum dot (cdse/zns) laser. *Nanomaterials*, 7 (2) (2017): 29.

139. Mohammad Qaid, **M.S. AlSalhi**. High aspect ratio and low leakage current carbon nanosheets based high-k nanostructure for energy storage applications. *Microelectronic Engineering*. 169 (2017):1-8.

138. S. Devanesan, **Mohamad S. AlSalhi**, R. Vishnubalaji, Akram A. Alfuraydi, Nehad M. Alajez, Musaad Alfayez, K. Murugan, Shaban R. M. Sayed, Marcello Nicoletti, Giovanni Benelli. Rapid Biological Synthesis of Silver Nanoparticles Using Plant Seed Extracts and Their Cytotoxicity on Colorectal Cancer Cell Lines. *Journal of cluster Science*. 28(1); (2017): 595-605

137. K. Murugan, D. Dinesh, M. Paulpandi, J. Subramaniam, R. Rakesh Pandiyan, C. Panneerselvam, U. Suresh, C. Vadivalagan, **M. S. Alsalhi**, S. Devanesan, Hui Wei, Akon Higuchi, M. Nicoletti, A. Canale, G. Benelli. Mangrove Helps: *Sonneratia alba*-Synthesized Silver Nanoparticles Magnify Guppy Fish Predation Against *Aedes aegypti* Young Instars and Down-Regulate the Expression of Envelope (E) Gene in Dengue Virus (Serotype DEN-2). *Journal of cluster Science*. 28(1); (2017):1-8.

136. **M.S AlSalhi**, MR Baig, K Alfaramawi, Mariam G Alrasheedi. Influence of alpha irradiation on pre and post solar exposed PM-355 polymeric nuclear track detector sheets. *Radiation Physics and Chemistry*. 130(2017): 451-458.

135. K. Murugan, Jiang Wei, **M. S. AlSalhi**, M. Nicoletti, M. Paulpandi, J. Subramaniam, C. Vadivalagan, Hui Wei, P. Amuthavalli, A. Jaganathan, S. Devanesan, D. Nataraj, B. Vaseeharan, A. Canale, G. Benelli. Magnetic nanoparticles are highly toxic to chloroquine-resistant *Plasmodium falciparum*, dengue virus (DEN-2), and their mosquito vectors. *Parasitology Research*, 116 (2); (2017): 495–502.

2016

- 134.** K. Murugan, J. Anitha, J. Subramaniam, J-S. Hwang, Hui Wei, **M.S. AlSalhi**, S. Devanesan, Suresh Kumar, K. Pugazhendy, M. Nicoletti, G. Benelli. Fabrication of nano-mosquitocides using chitosan from crab shells: impact on non-target organisms in the aquatic environment. *Ecotoxicology and Environmental Safety*, 132; (2016): 318-328.
- 133.** Wafa Musa Mujamammi, S. Prasad, **M.S AlSalhi**, V. Masilamani. Relaxation Oscillation with Picosecond Spikes in a Conjugated Polymer Laser. *Polymers* 8;10 (2016):364.
- 132.** P. Madhiyazhagan, K. Murugan, A.Naresh Kumar, T. Nataraj, J.Subramaniam, M. Nicoletti, **M.S. AlSalhi**, S. Devanesan, G.Benelli. One pot synthesis of silver nanocrystals using the seaweed *Gracilaria edulis*: biophysical characterization and potential against the filariasis vector *Culex quinquefasciatus* and the midge *Chironomus circumdatus*. *Journal of Applied Phycology*, (2016): DOI: 10.1007/s10811-016-0953-x.
- 131.** K. Murugan, J.Anitha, D.Dinesh, U.Suresh, R. Rajaganesh, Jiang-Shiou Hwang, Hui Wei, **M.S. AlSalhi**, S. Devanesan, Giovanni Benelli. Fabrication of nano-mosquitocides using chitosan from crab shells: impact on non-target organisms in the aquatic environment. *Ecotoxicology and Environmental Safety*, 132, (2016): 318-328.
- 130.** Hajo Idriss, Kamal K Taha, O Aldaghri, R Alhathloul, **M.S. AlSalhi**, KH Ibnaouf. Amplified spontaneous emission from the exciplex state of a conjugated polymer "PFO" in oleic acid. *Optics & Laser Technology*, 83 (2016):148-152.
- 129.** Bandar Ali Al-Asbahi, Mohammad Hafizuddin Haji Jumali, **M. S. AlSalhi**. Enhanced Optoelectronic Properties of PFO/Fluorol 7GA Hybrid Light Emitting Diodes via Additions of TiO₂ Nanoparticles. *Polymers*, 8(9), (2016): 334-340.
- 128.** **M. S. Alsalhi**, S. Devanesan, Akram A Alfuraydi, R. Vishnubalaji, A.M. Murugan, K. Murugan, M. Nicoletti, G. Benelli. Green synthesis of silver nanoparticles using *Pimpinella anisum* seeds: antimicrobial activity and cytotoxicity on human neonatal skin stromal cells and colon cancer cells. *International journal of Nanomedicine*, 11, (2016): 4439–4449.
- 127.** N Mohamed Basith, R Azhagu Raj, **M.S AlSalhi**, S Devanesan, SJ Askar Ali, S Rajasekar, R Sundaram, C Ragupathi. Structural, Magnetic, Optical, and Catalytic Properties of Fe₃O₄ Nanoparticles by the Sol-Gel Method. *Journal of Superconductivity and Novel Magnetism*. 29 (8), (2016): 2053–2058.
- 126.** J.Subramaniam, K. Murugan, C. Panneerselvam, K. Kovendan, R. Rajaganesh, **M.S. AlSalhi**, S. Devanesan, M. Nicoletti, A. Canale, G. Benelli.

Multipurpose effectiveness of *Couroupita guianensis*-synthesized gold nanoparticles: high antiplasmodial potential, field efficacy against malaria vectors and synergy with *Aplocheilus lineatus* predators. *Environmental Science and Pollution Research*,23(8),(2016):7543-7558.

125. K. Murugan, C. Panneerselvam, S.Christina Mary, M. Roni, B. Chandramohan, J. Subramaniam, M. S. AlSalhi, S. Devanesan, M. Nicoletti, R. Pavela, A. Canale, G. Benelli. In vivo and in vitro effectiveness of *Azadirachta indica*-synthesized silver nanocrystals against *Plasmodium berghei* and *Plasmodium falciparum*, and their potential against malaria mosquitoes. *Research in veterinary science*, 106 (6),(2016):14-22.

124. K Alfaramawi, MG Al-Rasheedi, MR Baig, **M. S Alsalhi**,Solar radiation-induced changes in optical characteristics of PM-355 polymeric films. *Radiation Measurements*,86(3),(2016):49-55.

123. M. H. Aziz, M Fakhar-e-Alam, M. Fatima, F. Shaheen, S. Iqbal, M Atif, M. Talha, S. Mansoor Ali, M.Afzal, Abdul Majid, T. S. Al-Harbi, M. Ismail, Z. M Wang, **M.S. AlSalhi**. Photodynamic Effect of Ni Nanotubes on an HeLa Cell Line. *PloS one*,11(3),(2016): e0150295.

122. C. Vadivalagan, P. Karthika, K. Murugan, C. Panneerselvam, M. Paulpandi, P. Madhiyazhagan, **M. S. AlSalhi**, S. Devanesan, Marcello Nicoletti, Giovanni Benelli. Genetic deviation in geographically close populations of the dengue vector *Aedes aegypti* (Diptera: Culicidae): influence of environmental barriers in South India. *Parasitology Research*,115(3),(2016): 149-1160.

121. K. Murugan, D. Dinesh, K. Kavithaa, M. Paulpandi, T. Ponraj, **M.S. Alsalhi**, S. Devanesan, J. Subramaniam, R. Rajaganesh, Hui Wei, Suresh Kumar, Marcello Nicoletti, G. Benelli Hydrothermal synthesis of titanium dioxide nanoparticles: mosquitocidal potential and anticancer activity on human breast cancer cells (MCF-7). *Parasitology Research*,115(3),(2016): 1085-1096.

120. K. Murugan, D. Nataraj, P. Madhiyazhagan, V.Sujitha, B. Chandramohan, J. Subramaniam, Hui Wei, Ban Syuhei, **M.S. AlSalhi**, S. Devanesan, G. Benelli. Carbon and silver nanoparticles in the fight against the filariasis vector *Culex quinquefasciatus*: genotoxicity and impact on behavioral traits of non-target aquatic organisms. *Parasitology Research*,115(3), (2016): 1071-1083.

119. B. Chandramohan, K. Murugan, C.Panneerselvam, P.Madhiyazhagan, D. Dinesh, **M. S. AlSalhi**, S.Devanesan, Hui Wei, Giovanni Benelli. Characterization and mosquitocidal potential of neem cake-synthesized silver nanoparticles: genotoxicity and impact on predation efficiency of mosquito natural enemies. *Parasitology Research*,115(3), (2016): 1015-1025.

118. A. Alyamani, K.H. Ibnaouf, O.A. Yassin, **M.S. AlSalhi**, Z .Fekkai, N. Mustapha. Spectral, electrical and morphological properties of spin coated MEH-PPV and cresyl violet blended thin films for a light emitting diode. Optik-International Journal for Light and Electron Optics, 127(4),(2016): 2331-2335.

117. V. Masilamani, Khalid AlZahrani, S. Devanesan, Qadi AlQahtani, **M.S. AlSalhi**. Smoking Induced Hemolysis: Spectral and microscopic investigations. Scientific Reports, (6), 2016: 21095.

116. P. Mahesh Kumar, K. Murugan, P.Madhiyazhagan, K. Kovendan, D. Amerasan, B. Chandramohan, D. Dinesh, **M. S. AlSalhi**, S.Devanesan, Hui Wei, Giovanni Benelli. Biosynthesis, characterization, and acute toxicity of Berberis tinctoria-fabricated silver nanoparticles against the Asian tiger mosquito, Aedes albopictus, and the mosquito predators Toxorhynchites splendens and Mesocyclops thermocyclopoides. Parasitology Research,115 (2), (2016):751-759

115.K.Murugan, P.Aruna, C. Panneerselvam, P.Madhiyazhagan, M.Paulpandi, J. Subramaniam, **M.S. AlSalhi**, S. Devanesan, M. Nicoletti, Giovanni Benelli. Fighting arboviral diseases: low toxicity on mammalian cells, dengue growth inhibition (in vitro) and mosquitocidal activity of Centrocercus clavulatum-synthesized silver nanoparticles. Parasitology Research,115 (2),(2016),: 651-662.

114. K. Murugan, C. Vadivalagan, P. Karthika, C.Panneerselvam, M.Paulpandi, J. Subramaniam, **M. S. AlSalhi**, S Devanesan, N Parajulee, G Benelli. DNA barcoding and molecular evolution of mosquito vectors of medical and veterinary importance.Parasitology Research,115(1),(2016): 107-121

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