

الأبحاث العلمية
المنشورة بمجلات
عالمية محكمة خلال
سنة 2015

Published Papers in
Reviewed Journals
Through 2015

قسم الرياضيات والإحصاء

Department of Mathematics and Statistics

- 1) A. Abdel-Aziz Alaa, **A. Amin Essam**: *The Sampling Distribution of the Maximum Likelihood Estimators from Weibull-uniform Distribution Based on Upper Record Values*. **Journal of Statistics: Advances In Theory And Applications**. Vol. 14, No.2, pages 167-180, 2015.
- 2) **A. Aljouiee**: *Geometric Lattices of Subgroups and Exchange Property*. **Lobachevskii Journal of Mathematics**. Vol. 36, No. 1, pages 76–78, 2015.
- 3) **A. Amin Essam**, A. Abdel-Aziz Alaa: *Bayesian And Non-Bayesian Estimation From Weibull-Uniform Distribution Based On Upper Record Values*. **Journal Of Statistics: Advances In Theory And Applications**. Vol. 14, No. 1, pages 107-123, 2015.
- 4) **Abdelkarem Berkaoui**: *On Characterizing the Set of Martingale Measures in Discrete Time*. **Stochastics and Dynamics**. Vol. 15, No. 3, 1550017, pages 1-17, 2015.
- 5) Abderrahim El Attar, **Said El Manouni**, Omar Sidki: *Nonlinear Elliptic Problems Involving The n -Laplacian With Maximal Growth*. **Electronic Journal Of Differential Equations**. Vol. 2015, No. 197, pages 1-15, 2015.
- 6) **Abdullah Aljouiee**, **Samir Kumar Bhowmik**: *Windowed Fourier Frames To Approximate Two-Point Boundary Value Problems*. **Abstract And Applied Analysis**. Vol. 2015, Article Id 153010, pages1-7, 2015.
- 7) **Ahmad Abubaker**, Adam Baharum, Mahmoud Alrefaei: *Automatic Clustering Using Multi-Objective Particle Swarm And Simulated Annealing*. **Plos One**. Vol. 10, No. 7: e0130995, pages 1-23, 2015.
- 8) **Ayman A. Mostafa**: *Bayesian Analysis Technique For Generalized Cox's Proportional Hazards Model Using Bugs: Applications In Medical Data*. **Advances And Applications In Statistics**. Vol. 46, No. 1, pages 1–36, 2015.
- 9) **E. M. Solouma**, **M. M. Khader**: *Implementation Of Legendre Collocation Spectral Method For Solving Fractional Variational Problems*. **Jokull Journal**. Vol. 65, No. 4, pages 188-200, 2015.

- 10) **E. M. Solouma:** *Three-Dimensional Surfaces Foliated By An Equiform Motion Of Pseudohyperbolic Surfaces In E^7 .* **JP Journal Of Geometry And Topology.** Vol. 17, No. 2, pages 109–126, 2015.
- 11) **Emad M. Solouma, Mohamed M. Khader:** *Approximate Technique For Solving Class Of Fractional Variational Problems.* **Applied Mathematics.** Vol. 6, No. 5, pages 837-846, 2015.
- 12) **Faryad Ali And Mohammed A. Al-Kadhi:** *On The Janko Group J 4 Generated By (2, 3, T) Generators.* **Aip Conf. Proc.** 1648, 850104, pages 1-4, 2015.
- 13) **Hafedh Faires And Abdelkarim Berkaoui:** *Bayesian Estimation For Modulated Claim Hedging.* **Int. Journal Of Engineering Research And Applications.** Vol. 5, Issue 1(Part 4), pages 76-81, 2015.
- 14) **Hafedh Faires:** *The Stochastic Error Rate Estimation Of Prediction Distributions.* **Journal Of Mathematical Finance.** Vol. 5, pages 172-177, 2015.
- 15) Humaira Farzana, Md. Shafiqul Islam And **Samir Kumar Bhowmik:** *Computation Of Eigenvalues Of The Fourth Order Sturm-Liouville Bvp By Galerkin Weighted Residual Method.* **British Journal Of Mathematics & Computer Science.** Vol. 9, Issue. 1, pages: 73-85, 2015.
- 16) **Lazhar Bougoffa,** Randolph C. Rach: *Approximate Analytical Solutions Of The Thomas-Fermi Equation By A Direct Method.* **Rom. Journ. Phys.** Vol. 60, No. 7-8, pages 1032-1039, Bucharest, 2015.
- 17) **Lazhar Bougoffa** Abdul-Majid Wazwaz: *New Approximate Solutions of the Blasius Equation.* **International Journal of Numerical Methods For Heat & Fluid Flow.** Vol. 25 No. 7, pages 1590-1599, 2015.
- 18) **Lazhar Bougoffa** Randolph Rach Abdul-Majid Wazwaz Jun-Sheng Duan: *On The Adomian Decomposition Method For Solving The Stefan Problem.* **International Journal Of Numerical Methods For Heat & Fluid Flow.** Vol. 25 No. 4, pages. 912-928, 2015.
- 19) **M. M. Khader,** A. M. Megahed: *Boundary Layer Flow Due to a Stretching Sheet with a Variable Thickness and Slip Velocity.* **Journal of Applied Mechanics and Technical Physics.** Vol. 56, No. 2, pages 241–247, 2015.
- 20) **M. M. Khader:** *Fractional Chebyshev Finite Difference Method for Solving the Fractional-Order Delay Bvps.* **International Journal of Computational Methods.** Vol. 12, No. 6, 1550033, pages 1-11, 2015.
- 21) **M. M. Khader, E. M. Solouma:** *Introducing Fdm Combined with Hermite Formula for Solving Numerically the Linear Fractional Klein-Gordon*

- Equation. Journal of Computational and Theoretical Nanoscience.* Vol. 12, No. 11, pages 4579-4583 (5), 2015.
- 22) **M. M. Khader, Abdullah Aljouiee:** *Numerical Simulation for Mathematical Model of the Hepatitis C with Different Types of Virus Genome Using Legendre Spectral Collocation Method.* *Journal of Computational and Theoretical Nanoscience.* Vol. 12, No. 11, pages 4601-4606 (6), 2015.
- 23) **M. M. Khader, Mohammed M. Babatin:** *Numerical Study of Fractional Logistic Differential Equation Using Implementation of Legendre Wavelet Approximation.* *Journal of Computational and Theoretical Nanoscience.* Vol. 12, No.11, pages 1–5, 2015.
- 24) **M. M. Khader:** *An Efficient Approximate Method For Solving Fractional Variational Problems.* *Applied Mathematical Modelling.* Vol. 39, Issues 5–6, Pages 1643–1649, 2015.
- 25) Marie José Bertin, **Toufik Zaïmi:** *Complex Pisot Numbers in Algebraic Number Fields.* *C. R. Acad. Sci. Paris, Ser. I.* Vol. 353, Issue 11, pages 965–967, 2015.
- 26) **Mohamed Hmissi, Farida Mokchaha, And Aya Hmissi:** *On Potential Kernels Associated With Random Dynamical Systems.* *Opuscula Math.* Vol. 35, No. 4, pages 499–515, 2015.
- 27) **Mohammed A. Aba Oud:** *Valuation of Options on Oil Futures Under the 3/4 Oil Price Model.* *International Journal of Theoretical and Applied Finance.* Vol. 18, No. 8:1550050, pages 1-12, 2015.
- 28) Moussa Chrif, **Said El Manouni, Fares Mokhtari:** *Strongly Anisotropic Elliptic Problems with Regular and L^1 Data.* *Portugal. Math. (N.S.).* Vol. 72, Fasc. 4, pages 357–391, 2015.
- 29) Nasser H. Sweilam, **Mohamed M. Khader, Mohamed Adel:** *Numerical Solution for the Fractional Wave Equation Using Pseudo-Spectral Method Based on the Generalized Laguerre Polynomials.* *Applied Mathematics.* Vol. 6, pages 647-654, 2015.
- 30) Randolph C. Rach, **Lazhar Bougoffa, Ammar Khanfer:** *Approximate Analytic Solutions for the Influence of Mass Flux on Mixed Convection in a Saturated Porous Medium.* *Appl. Math. Inf. Sci.* Vol. 9, No. 6, pages 1-10, 2015.
- 31) S. Dhawana, **Samir kumar bhowmik, Sheo kumar:** *Galerkin-Leastsquare b-Spline approach toward advection–Diffusion equation.* *Applied Mathematics and Computation.* Vol. 261, pages 128–140, 2015.

- 32) **Samer Al-Ashhab**: *A Curvature-Unified Equation for a Non-Newtonian Power-Law Fluid Flow*. *Int. J. Adv. Appl. Math. And mech.* Vol. 2, No. 3, pages 72 – 77, 2015.
- 33) **Samer Al-Ashhab**: *Parameter Variation in a Third Order Singular Boundary Value Problem*. *Int. J. Open Problems Compt. Math.* Vol. 8, No. 1, pages 57-65, 2015.
- 34) **Samir Kumar Bhowmik**: *A Multigrid Preconditioned Numerical Scheme for AReaction–Diffusion System*. *Applied Mathematics and Computation*. Vol. 254, pages 266–276, 2015.
- 35) **Samir Kumar Bhowmik**: *Tchebychev Polynomial Approximations for m^{th} Order Boundary Value Problems*. *International Journal of Pure and Applied Mathematics*. Vol. 98, No. 1, pages 45-63, 2015.
- 36) T. Z. Boulmezaoud, **S. Mziou**, B. Boudjedaa, **M. M. Babatin**: *Inverted Finite Elements For Degenerate And Radial Elliptic Problems In Unbounded Domains*. *Japan J. Indust. Appl. Math.* Vol. 32, pages 237–261, 2015.
- 37) **Toufik Zaïmi**, Mounia Selatnia, Hanifa Zekraoui: *Comments On The Fractional Parts Of Pisot Numbers*. *Archivum Mathematicum (Brno)*. Tomus 51, pages 153–161, 2015.
- 38) **Said El Manouni**, Nikolaos S. Papageorgiou, Patrick Winkert: *Parametric nonlinear nonhomogeneous Neumann equations involving a nonhomogeneous differential operator*. *Monatshefte für Mathematik*, 17, no. 2, pages 203–233, 2015.
- 39) Fethi Bin Muhammad Belgacem, Vartika Gulati, Pranay Goswami, **Abdullah Aljoujje**: *A treatment of generalized fractional differential equations: Sumudu transform series expansion solutions, and applications*. *Fractional dynamics*, pages 369–379, De Gruyter Open, Berlin, 2015.
- 40) **M. M. Khader**, Ahmed M. Megahed: *Approximate solutions for the flow and heat transfer due to a stretching sheet embedded in a porous medium with variable thickness, variable thermal conductivity and thermal radiation using Laguerre collocation method*. *Appl. Appl. Math.* 10 , no. 2, pages 817–834, 2015.
- 41) **M. M. Khader**, N. H. Sweilam: *Numerical and analytical study for integro-differential equations using spectral collocation method*. *New Trends Math. Sci.* 3, no. 4, pages 144–153, 2015.

- 42) **M. M. Khader**, M. Adel: *Numerical treatment of the fractional SIRC model and influenza A using generalized Euler method*. J. Mod. Methods Numer. Math. 6 , no. 1, pages 44–56, 2015.
- 43) **M. M. Khader**: *A new fractional Chebyshev FDM: an application for solving the fractional differential equations generated by optimisation problem*. Internat. J. Systems Sci. 46, no. 14, pages 2598–2606, 2015.
- 44) **M. M. Khader**, N. H. Sweilam: *Numerical and theoretical study for solving multi-term linear fractional differential equations using a collocation method based on the generalized Laguerre polynomials*. J. Fract. Calc. Appl. 6, no. 2, pages 53–64, 2015.

قسم الفيزياء

Department of Physics

- 45) Alawiah, S. Bauk, **M. W. Marashdeh**, K. S. Ng, H. A. Abdul-Rashid, Z. Yusoff, W. Gieszczyk, M.N. Noramaliza, G.A. Mahdiraji, N. Tamchek, S.Z. Muhd-Yassin, K. A. Mat-Sharif, M. I. Zulkifli , M. J. Maah, S. S. Cheomar, D. A. Bradley: *Thermoluminescence glow curves and deconvoluted glow peaks of ge doped flat fibers at ultra-high doses of electron radiation*. **Radiation Physics and Chemistry**. Vol. 113, pages 53–58, 2015.
- 46) Alawiah, M. S. Alina, S. Bauk, H. A. Abdul-Rashid, W. Gieszczyk, M. N. Noramaliza, G. A. Mahdiraji, N. Tamchek, M. I. Zulkifli, D. A. Bradley, **M. W. Marashdeh**: *The thermoluminescence characteristics and the glow curves of Thulium doped silica fiber exposed to 10MV photon and 21MeV electron radiation*. **Applied Radiation and Isotopes**. Vol. 98, pages 80–86, 2015.
- 47) A. Alawiah, S. Bauk, **M.W. Marashdeh**, M. Z. N.Nazura, H. A. Abdul-Rashid, Z.Yusoff, W. Gieszczyk, M. N. Noramaliza, F. R. Mahamadikan, G. A. Mahdiraji, N. Tamchek, S. Z. Muhd-Yassin, K. A. Mat-Sharif, M. I. Zulkifli, N. Omar, W. S. Wanabdullah, D. A. Bradley: *The thermoluminescence glow curve and the deconvoluted glow peak characteristics of erbium doped silica fiber exposed to 70–130kVp x-rays*. **Applied Radiation and Isotopes**. Vol. 104, pages 197–202, 2015.
- 48) **A. Eid**: *Charged Thin Shell Wormholes with Variable Equations of State*. **Advanced Studies in Theoretical Physics**. Vol. 9, No. 11, pages 503 – 515, 2015.
- 49) **A. Eid**: *Dynamics of a Charged Scalar Field Thin Shell*. **Gravitation and Cosmology**. Vol. 21, No. 4, pages 329–333, 2015.
- 50) **A. Eid**: *Linearized Stability of Reissner Nordstrom De-Sitter thin shell wormholes*. **New Astronomy**. Vol. 39, pages 72–75, 2015.
- 51) Elhadi H. M. Isaaq, **Hatim M. Elkhair**, Abdelrahman A. Elbadawi, Mohamed A. Siddig, Murwan K. Sabah Elkhair: *Determination of Dielectric Constant of Gum Arabic / Carbon Black Composite Material*. **Nova Journal of Engineering and Applied Sciences**. Vol. 3, No. 1, pages 1-7, 2015.

- 52) Elhadi H. M. Ishage, **Hatim M. Elkhair**, Mohamed A. Siddig, Abdelrahman A. Elbadawi: *Diffusivity and Electrical Properties of Gum Arabic, Carbon BLACK/KBR03 Composite Material*. **International Journal of Engineering Sciences & Research Technology**. Vol. 4, Issue. 4, pages 263-269, 2015.
- 53) A. Sayari, **L. El Mir**, S. Al-Heniti, T. Al-Harbi, S. J. Yaghmour, A.A. Al-Ghamdi: *Influence of aluminium Concentration In $Zn_{0.9}V_{0.1}O$ nanoparticles on structural and optical properties*. **Materials Science-Poland**. Vol. 33, Issue. 1, pages 198-204, 2015.
- 54) **A.M. El-Khayatt, M.A. Al-Rajhi**: *Analysis of some lunar soil and rocks samples in terms of photon interaction and photon energy absorption*. **Advances in Space Research**. Vol. 55, pages 1816–1822, 2015.
- 55) **A.M. El-Khayatt**, Hector rene vega-Carrillo: *Photon and neutron kerma coefficients for polymer gel dosimeters*. **Nuclear Instruments and Methods In Physics Research A**. Vol. 792, pages 6–10, 2015.
- 56) A. S. Al-Hobaib, **Jaber El Ghouli, Lassaad El Mir**: *Synthesis and characterization of polyamide thin-film nanocomposite membrane containing ZnO nanoparticles*. **Membrane Water Treatment**. Vol. 6, No. 4, pages 309-321, 2015.
- 57) Abdelfatteh Bouzidi, Karim Omri, **Lassaad Elmir**, Hajer Guermazi: *preparation, structural and optical investigations of ITO nanopowder and ITO/epoxy nanocomposites*. **Materials Science In Semiconductor Processing**. Vol. 39, pages 536–543, 2015.
- 58) **Ahmed Mohammed Alkaoud**: *Effects of Thermal Annealing on the Spectral Properties of GaAsBi Alloys Grown by Molecular Beam Epitaxy (Mbe)*. **Journal of Materials Science and Engineering A**. Vol. 5, Issues 7-8, pages 249-256, 2015.
- 59) Amor Sayari, **Lassaad El Mir**: *Structural and Optical Characterization of Ni and Al Co-Doped ZnO Nanopowders Synthesized via the Sol-Gel Process*. **Kona Powder And Particle Journal**. No. 32, pages 154–162, 2015.
- 60) Bilquis Ibrahim Adham, **Hatim Mohamed El-Khair**, Mohamed Ahmed Siddig: *Frequency Dependence of Atomic Diffusivity and Electrical Properties of Gum Arabic/Graphite Composite*. **Journal of Materials Science and Chemical Engineering**. Vol. 3, pages 30-36, 2015.
- 61) D.A.E. Darwish, K.T.M. Abul-Nasr, **A.M. El-Khayatt**: *The assessment of natural radioactivity and its associated radiological hazards and dose parameters in granite samples from South Sinai, Egypt*. **Journal of Radiation Research and Applied Sciences**. Vol. 8, pages 17-25, 2015.

- 62) E. Fazio, M. Hjiri, R. Dhahri, **L. Elmir**, G. Sabatino, F. Barreca, F. Neri, S.G. Leonardi, A. Pistone, G. Neri: *Ammonia sensing properties of V-doped ZnO:Ca nanopowders prepared by sol-gel synthesis*. **Journal of Solid State Chemistry**. Vol. 226, pages 192–200, 2015.
- 63) H. Belaid, M. Nouiri, A. Sayari, Z. Ben Ayadi, K. Djessas, **L. El Mir**: *Modifications in electrical properties of ZnO:In/PS/Si (100) heterojunction by ZnO intermediate layer*. **Can. J. Phys.** Vol. 93, pages 1–6, 2015.
- 64) H. Belaid, M. Nouiri, Z. Ben Ayadi, K. Djessas, **L. El Mir**: *Fabrication and electrical properties of Si/PS/ZnO: in solar cell deposited by rf-magnetron sputtering based on nanopowder target material*. **J. Mater. Sci: Mater Electron**. Vol. 26, pages 8272–8276, 2015.
- 65) H. Dahman, **L. El Mir**: *Cu₂SnS₃ thin films deposited by spin coating route: a promise candidate for low cost, safe and flexible solar cells*. **J. Mater. Sci: Mater Electron**. Vol. 26, pages 6032–6039, 2015.
- 66) **I. Ghiloufi, L. Khezami, L. El Mir**: *Nanoporous activated carbon for fast uptake of heavy metals from aqueous solution*. **Desalination and Water Treatment**. Vol. 55, pages 935–944, 2015.
- 67) **I. Ghiloufi, A. S. Al-Hobaib, L. El Mir**: *Partial carbonized nanoporous resin for uptake of lead from aqueous solution*. **Water Science & Technology**. Vol. 72, Issue. 6, pages 974-982, 2015.
- 68) **Imed Ghiloufi, Lassaad El Mir**: *preparation and characterization of doped and undoped nanoporous carbon for heavy metal removal from aqueous solution*. **Phys. Status Solidi C**. Vol. 12, No. 1–2, pages 25–29, 2015.
- 69) **Imed Ghiloufi, Lotfi Khezami, Lassaad El Mir**: *preparation and characterization of nanoporous resin for heavy metal removal from aqueous solution*. **Journal of Water Supply: Research and Technology-Aqua**. Vol. 64, Issue 3, pages 316-325, 2015.
- 70) **Imed Ghiloufi**: *Fast Removal of Co²⁺ And Ni²⁺ from Aqueous Solution Using Partial Carbonized Nanoporous Resin*. **Current World Environment**. Vol. 10, Issue. 3, pages 729-737, 2015.
- 71) Imen Ben-Slama, Imen Mrad, Naima Rihane, **Lassaad El Mir**, Mohsen Sakly, Salem Amara: *Sub-Acute Oral Toxicity of Zinc Oxide Nanoparticles in Male Rats*. **J. Nanomed Nanotechnol**. Vol. 6, Issue. 3, 1000284, pages 1-6, 2015.
- 72) Intissar Grissa, **Jaber Elghoul**, Lobna Ezzi, Sana Chakroun, Emna Kerkeni, Mohsen Hassine, **Lassaad El Mir**, Meriem Mehdi, Hassen Ben Cheikh, Zohra Haouas: *Anemia and genotoxicity induced by sub-chronic*

- intra-gastric treatment of rats with titanium dioxide nanoparticles. Mutation Research/Genetic Toxicology and Environmental Mutagenesis.* Vol. 794, pages 25–31, 2015.
- 73) **J. El Ghouli, M. Kraini, O. M. Lemine, L. El Mir:** *Sol–Gel Synthesis, structural, optical and magnetic properties of Co-doped ZnO nanoparticles.* **J. Mater. Sci: Mater Electron.** Vol. 26, pages 2614–2621, 2015.
- 74) **J. El Ghouli, L. El Mir:** *Synthesis by sol–gel process, structural and luminescence of V and Mn doped $\alpha - \text{Zn}_2\text{SiO}_4$.* **J. Mater. Sci: Mater Electron.** Vol. 26, pages 3550–3557, 2015.
- 75) **J. El Ghouli, L. El Mir:** *Photoconversion from yellow-to-green in vanadium doped zinc silicate nanophosphor material.* **Superlattices and Microstructures.** Vol. 82, pages 551–558, 2015.
- 76) **J. El Ghouli, M. Kraini, L. El Mir:** *Synthesis of CO-doped ZnO nanoparticles by sol–gel method and its characterization.* **J. Mater. Sci: Mater Electron.** Vol. 26, Pages 2555–2562, 2015.
- 77) **K. Berrada, H. Eleuch:** *Consideration of geometric phase and population transfer without using rotating-wave approximation.* **Laser Physics.** Vol. 25, No. 2, 025201, pages 1-4, 2015.
- 78) **K. Berrada And H. Eleuch:** *Quantum control of the geometric phase in exact analytical solution using ultra-short strong pulses.* **Laser Physics.** Vol. 25, No. 10, 105201, pages 1-7, 2015.
- 79) **K. Berrada:** *Bipartite entanglement within the framework of power-law potential systems.* **Journal of Russian Laser Research.** Vol. 36, No. 1, pages 35-42, 2015.
- 80) **K. Berrada:** *Construction of photon-added spin coherent states and their statistical properties.* **Journal of Mathematical Physics.** Vol. 56, 072104, pages 1-7, 2015.
- 81) **K. Berrada:** *Control of quantum correlations in solid state systems.* **Solid State Communications.** Vol. 221, pages 18–23, 2015.
- 82) **K. Berrada, C. H. Raymond Ooi, S. Abdel-Khalek:** *Geometric phase and entanglement of Raman photon pairs in the presence of photonic band gap.* **Journal of Applied Physics.** Vol. 117, 124904, pages 1-10, 2015.
- 83) **K. Berrada:** *Protecting the precision of estimation in a photonic crystal.* **J. Opt. Soc. Am. B.** Vol. 32, No. 4, pages 571-576, 2015.

- 84) K. Omri, **O. M. Lemine, J. El Ghouli, L. El Mir**: *Sol-gel synthesis and room temperature ferromagnetism in Mn doped ZnO nanocrystals*. **J Mater Sci: Mater Electron**. Vol. 26, pages 5930–5936, 2015.
- 85) **K. H. Ibnaouf**: *Amplified spontaneous emission spectra of poly(9,9-dioctylfluorenyl-2,7-diyl) under pulsed laser excitation*. **Synthetic Metals**. Vol. 209, pages 534–543, 2015.
- 86) **L. El Mir, K. Omri, J. El Ghouli**: *Effect of crystallographic phase on green and yellow emissions in Mn-doped zinc silicate nanoparticles incorporated in silica host matrix*. **Superlattices and Microstructures**. Vol. 85, pages 180–184, 2015.
- 87) M. Hjiri, R. Dhahri, **L. El Mir**, S. G. Leonardi, G. Neri: *Excellent CO gas sensor based on Ga-doped ZnO nanoparticles*. **J Mater Sci: Mater Electron**. Vol. 26, pages 6020–6024, 2015.
- 88) M. Hjiri, R. Dhahri, **L. El Mir**, A. Bonavita, N. Donato, S.G. Leonardi, G. Neri: *Co sensing properties of Ga-doped ZnO prepared by sol-gel route*. **Journal of Alloys and Compounds**. Vol. 634, pages 187–192, 2015.
- 89) M. Hjiri, R. Dhahri, N. Benmansour, **L. El Mir**, M. Bonyani, A. Mirzaei, S.G. Leonardi, G. Neri: *Electrochemical Properties Of A Novel Ni-Doped Nanoporous Carbon*. **Materials Letters**. Vol. 160, pages 452–455, 2015.
- 90) M. Kraini, N. Bouguila, **J. El Ghouli**, I. Halidou, S. A. Gomez-Lopera, C. Va'Zquez-Va'Zquez, M. A. Lo'Pez-Quintela, S. Alaya: *Influence of annealing temperature on the properties of In₂S₃:Sn films deposited by spray pyrolysis*. **J Mater Sci: Mater Electron**. Vol. 26, pages 5774–5782, 2015.
- 91) **Mohammad W. Marashdeh, Ibrahim F. Al-Hamarneh**, Eid M. Abdel Munem, A. A. Tajuddin, Alawiah Ariffin, Saleh Al-Omari: *Determining the mass attenuation coefficient, effective atomic number, and electron density of raw wood and binderless particleboards of Rhizophora spp. by using Monte Carlo simulation*. **Results in Physics**. Vol. 5, pages 228–234, 2015.
- 92) N. Ben Mansour, I. Najeh, S. Mansouri, **L. El Mir**: *Effect of pyrolysis temperature on the properties of Carbon/Nickel nanocomposites prepared by sol-gel method*. **Applied Surface Science**. Vol. 337, pages 158–165, 2015.
- 93) Naima Rihane Ben Younes, Salem Amara, Imen Mrad, Imen Ben-Slama, Mustapha Jeljeli, Karim Omri, **Jaber El Ghouli, Lassaad El Mir**, Khemais Ben Rhouma, Hafedh Abdelmelek, Mohsen Sakly: *Subacute toxicity of titanium Dioxide (TiO₂) nanoparticles in male rats: emotional behavior and*

- pathophysiological examination. Environ Sci Pollut Res.* Vol. 22, pages 8728–8737, 2015.
- 94) O. M. Lemine, Karim Omri, L. El Mir, V Velasco, Patricia Crespo, Patricia De La Presa, Hoicine Bouzid, Ali Youssif, Ali Hajry: *Fe₂O₃ Nanoparticles for magnetic hyperthermia applications. Mater. Res. Soc. Symp. Proc.* Vol. 1779, pages 7-13, 2015.
- 95) R Dhahri, M Hjiri, L. El Mir, E Fazio, F Neri, F Barreca, N Donato, A Bonavita, S G Leonardi, G Neri: *ZnO:Ca nanopowders with enhanced CO₂ sensing properties. J. Phys. D: Appl. Phys.* Vol. 48, 255503, pages 1-7, 2015.
- 96) R. Dhahri, M. Hjiri, L. El. Mir, A. Bonavita, D. Iannazzo, S.G. Leonardi, G. Neri: *CO sensing properties under Uv radiation of Ga-doped Zno nanopowders. Applied Surface Science.* Vol. 355, pages 1321–1326, 2015.
- 97) S. Abdel-Khalek, K. Berrada, H. Eleuch: *Effect of the time-dependent coupling on a superconducting qubit-field system under decoherence: Entanglement and Wehrl entropy. Annals of Physics.* Vol. 361, pages 247–258, 2015.
- 98) S. Abdel-Khalek, K. Berrada, A.-S. F. Obada, M. R. B. Wahiddin: *Entropy squeezing for qubit–field system in the presence multi-photon process under decoherence effect. Opt Quant Electron.* Vol. 47, pages 267–278, 2015.
- 99) S. Gouadria, H. Dahman, I. Najeh, A. Alyamani, L. El Mir: *Silicon carbide/carbon nanocomposite for negatronic applications. J Mater Sci: Mater Electron.* Vol. 26, pages 7397–7406, 2015.
- 100) S. Mansouri, A. Jouili, L. El Mir, Ahmed A. Al-Ghamdi, F. Yakuphanoglu: *Studies of photosensitivity and photo-induced negative differential resistance (NDR) of TIPS-pentacene-poly(3-hexyl)thiophene blend organic thin film transistor. Synthetic Metals.* Vol. 207, pages 1–12, 2015.
- 101) S. Mansouri, L. El Mir, Ahmed A. Al-Ghamdi, Farid El-Tantawy, F. Yakuphanoglu: *Modeling of current–voltage and capacitance–voltage characteristics of pentacene and sol–gel derived SiO₂ gate dielectric layer based on thin-film transistor. Synthetic Metals.* Vol. 199, pages 159–168, 2015.
- 102) S. Rabaoui, H. Dahman, S. Dekhil, K. Omri, A. Alyamani, L. El Mir: *Effect of drying temperature on the structural and optical characteristics of Cu₂ SnS₃ thin films synthesized by simple spin coating technique. J Mater Sci: Mater Electron.* Vol. 26, Pages 8588–8594, 2015.
- 103) S. Rabaoui, H. Dahman, N. Ben Mansour, L. El Mir: *Structural, optical and electrical properties of Cu₂ SnS₃ nanoparticles synthesized by simple*

solvothermal technique. J Mater Sci: Mater Electron. Vol. 26, pages 1119–1124, 2015.

- 104) Saradh Prasad, **K. H. Ibnaouf**, M. S. Alsalhi, Kamal Alameh, D. Devaraj, A. Hamdan, M. R. Karim, M. B. Zaman, And V. Masilamani: *Laser from optically pumped quantum dot CdSe/ZnS in a Colloidal Liquid.* **Journal of Nanoscience and Nanotechnology.** Vol. 15, pages 1-4, 2015.
- 105) Saradh Prasad, **K. H. Ibnaouf**, M. S. Alsalhi, D. Devaraj, V. Masilamani: *High power amplified spontaneous emission from an oligomer in solution.* **Journal of Luminescence.** Vol. 168, pages 109–113, 2015.
- 106) W. Djeridi, N. Ben Mansour, A. Ouederni, P.L. Lewellyn, **L. El Mir**: *Influence of the raw material and nickel oxide on the CH₄ capture capacity behaviors of microporous carbon.* **International Journal of Hydrogen Energy.** Vol. 40, pages 13690-13701, 2015.
- 107) W. Rouis, A. Sayari, M. Nouiri, M. Ezzdini And S. Rekaya, **L. El Mir**, L. Sfaxi, H. Maaref: *Characterisation of the GaAs-Based intermediate band solar cell with multi-stacked InAs/InGaAs quantum dots.* **Int. J. Nanotechnol.** Vol. 12, Nos. 8/9, pages 584-596, 2015.

قسم الكيمياء

The Department of Chemistry

- 108) Abdessalem Hamrouni, Noomen Moussa, Agatino Di Paola, Leonardo Palmisano, **Ammar Houas**, Francesco Parrino: *Photocatalytic activity of binary and ternary $\text{SnO}_2 - \text{ZnO} - \text{ZnWO}_4$ Nanocomposites*. *Journal of Photochemistry and Photobiology A: Chemistry*. Vol. 309, pages 47–54, 2015.
- 109) **Ahmed M. A. El-Seidy**: *In Situ Room Temperature Synthesis and Characterization of Salicylaldehyde Phenylhydrazone Metal Complexes, Their Cytotoxic Activity on MCF-7 Cell Line, and Their Investigation as Antibacterial and Antifungal Agents*. *Synthesis and Reactivity in Inorganic, Metal-Organic, and Nano-Metal Chemistry*. Vol. 45, pages 437–446, 2015.
- 110) Asma Mayoufi, Moahamed Faouzi Nsib, Olfa Ahmed, **Ammar Houas**: *Synthesis, characterization and photocatalytic performance of W, N, S-Tri-doped TiO_2 under visible light irradiation*. *Comptes Rendus Chimie*. Vol. 18, pages 875–882, 2015.
- 111) F. H. Assaf, **A. M. A. El-Seidy**, **M. M. Abou-Krishna**, And A. A. Eissa: *Electrodeposition and Characterization Of Zn-Ni-Mn Alloy from Sulfate Bath: Influence of Current Density*. *Int. J. Electrochem. Sci*. Vol. 10, pages 5465–5478, 2015.
- 112) Fawzi H. Assaf, **Mortaga M. Abou-Krishna**, **Omar K. Alduaij**, **Ahmed M. A. El-Seidy**, Ahmed A. Eissa: *The Effect Manganese Concentration on the Corrosion Resistance and Physical Properties of Zn-Ni-Mn Alloy Films Produced by Electrodeposition*. *Int. J. Electrochem. Sci*. Vol. 10, pages 6273–6287, 2015.
- 113) Fikria Jabli, Mohamed Ali Zaidi, **Nawfel Ben Hamadi**, S. Althoyaib, Malek Gassoumi: *Characterisation of the effect of surface passivation with SiO_2/SiN on deep levels in AlGaIn/GaN/Si HEMTs*. *Journal of Alloys and Compounds*. Vol. 653, pages 624-628, 2015.
- 114) H. M. Rageh, **M. M. Abou-Krishna**, A. M. Abo-Bakr, And M. Abd-Elsabour: *Electrochemical Behavior and the Detection Limit of Ascorbic Acid on a Pt*

Modified Electrode. Int. J. Electrochem. Sci. Vol. 10, pages 4105–4115, 2015.

- 115) Hend. N. Hafez, **Abdulrahman. G. Alshammari, Abdel-Rhman. B. A. El-Gazzar**: *Facile heterocyclic synthesis and antimicrobial activity of polysubstituted and condensed pyrazolopyranopyrimidine and pyrazolopyranotriazine derivatives.* *Acta Pharm.* Vol. 65, pages 399–412, 2015.
- 116) Hend. N. Hafez, **Abdel-Rhman. B. A. El-Gazzar**: *Synthesis of pyranopyrazolo N-glycoside and pyrazolopyranopyrimidine C-glycoside derivatives as promising antitumor and antimicrobial agents.* *Acta Pharm.* Vol. 65, pages 215–233, 2015.
- 117) Houda Slimen, Hinda Lachheb, Samir Qourzal, Ali Assabbane, **Ammar Houas**: *The effect of calcination atmosphere on the structure and photoactivity of TiO₂ synthesized through an unconventional doping using activated carbon.* *Journal of Environmental Chemical Engineering.* Vol. 3, pages 922–929, 2015.
- 118) **K. K. Taha, M. O. M'hamed, H. Idriss**: *Mechanical fabrication and characterization of Zinc Oxide (Zno) Nanoparticles.* *Journal of Ovonic Research.* Vol. 11, No. 6, pages 271–276, 2015.
- 119) **K.T. Kamal, K. Lotfi, K.D. Omar, R.E. Mohamed, K.M. Abueliz** And H. Nassir: *Heavy Metals Concentrations in Fish From Red Sea and Arabian Gulf: Health Benefits and Risk Assessments due to their Consumption.* *Asian J. Chem.* Vol. 27, No. 12, pages 4411-4416, 2015.
- 120) **Kamal K. Taha, Fahad M. Al Ghtani**: *Determination of the elemental contents of date palm (Phoenix Dactylifera L.) from Kharj Saudi Arabia.* *World Scientific News.* Vol. 6, pages 125-135, 2015.
- 121) Khaoula Hajlaoui, **Naoufel Ben Hamadi, Moncef Msaddek**: *Copper Nanoparticles Cycloaddition of Terminal Acetylenes with Carbohydrate Azide.* *Catal. Lett.* Vol. 145, pages 1246–1250, 2015.
- 122) Lazhar Labiadh, Mehmet A. Oturan, Marco Panizza, **Nawfel Ben Hamadi, Salah Ammar**: *Complete removal of AHPS synthetic dye from water using new electro-fenton oxidation catalyzed by natural pyrite as heterogeneous catalyst.* *Journal of Hazardous Materials.* Vol. 297, pages 34–41, 2015.
- 123) Leila Elsellami, Hinda Lachheb, **Ammar Houas**: *Synthesis, characterization and photocatalytic activity of Li-,Cd-, and La-doped TiO₂.* *Materials Science in Semiconductor Processing.* Vol. 36, pages 103–114, 2015.

- 124) **Lotfi Khezami**, Abdulrahman Omar Al Megbel, Abdelbasset Bessadok Jemai, Mohamed Ben Rabha: *Theoretical and experimental analysis on effect of porous silicon surface treatment in multicrystalline silicon solar cells*. **Applied Surface Science**. Vol. 353, pages 106–111, 2015.
- 125) Mohamed Faouzi Nsib, Naima Naffati, Ali Rayes, Noomen Moussa, **Ammar Houas**: *Effect of some operational parameters on the hydrogen generation efficiency of Ni-ZnO/PANI composite under visible-light irradiation*. **Materials Research Bulletin**. Vol. 70, pages 530–538, 2015.
- 126) **Mohamed Heikal**, Sahar M. Ibrahim: *Characteristics and Durability of Alkali Activated Slag-Microsilica Pastes Subjected to Sulphate and Chloride Ions Attack*. **Ceramics – Silikáty**. Vol. 59, Issue 2, pages 81-89, 2015.
- 127) **Mohamed Heikal**, H. El-Didamony, E. A. Kishar, M. A. Negeada: *Hydration Characteristics of Prompt Cement in the Presence Citric Acid as Retarder*. **Ceramics – Silikáty**. Vol. 59, Issue 1, pages 17-23, 2015.
- 128) **Mohamed Heikal**, **O.K. Al-Duaij**, N.S. Ibrahim: *Microstructure of composite cements containing blast-furnace slag and silica nano-particles subjected to elevated thermally treatment temperature*. **Construction and Building Materials**. Vol. 93, pages 1067–1077, 2015.
- 129) **Mohamed Heikal**, M.M. Radwan, **O.K. Al-Duaij**: *Physico-mechanical characteristics and durability of calcium aluminate blended cement subject to different aggressive media*. **Construction and Building Materials**. Vol. 78, pages, 379–385, 2015.
- 130) **Mohamed Heikal**, M. N. Ismail, N. S. Ibrahim: *Physico-mechanical, microstructure characteristics and fire resistance of cement pastes containing Al₂O₃ nano-particles*. **Construction and Building Materials**. Vol. 91, pages 232–242, 2015.
- 131) **Mohamed I. Attia**, Farouk K. M. Wali: *Removal of Nickel (II) and Zinc (II) from their aqueous solution mixture using Carbon Soot as an economic adsorbing material*. **Wulfenia Journal**. Vol. 22, No. 4, pages 442-464, 2015.
- 132) **Mohamed Ould M'hamed**: *Ball Milling for Heterocyclic Compounds Synthesis in Green Chemistry: A Review*. **Synthetic Communications**. Vol. 45, pages 2511–2528, 2015.
- 133) **Mohamed Ould M'hamed**: *Clean and Efficient One-Pot Synthesis of New 2-Oxo-2,3-Dihydro- 1h-Pyrrole-3-Carboxylic Acid and 2-Oxo-1,2-Dihydro-Pyridine-3- Carboxylic Acid Derivatives through Ball Milling under Catalyst-Free and Solvent-Free Conditions*. **Research & Reviews: Journal of Chemistry**. Vol. 4, Issue. 4, pages 28- 34, 2015.

- 134) Mohamed Ould M'hamed, L. Khezami, Abdulrahman G. Alshammari, S. M. Ould-Mame, I. Ghiloufi, O. M. Lemine: *Removal of cadmium(II) ions from aqueous solution using Ni (15 Wt.%) -doped $\alpha\text{Fe}_2\text{O}_3$ nanocrystals: equilibrium, thermodynamic, and kinetic studies.* **Water Science & Technology**. Vol. 72, Issue. 4, pages 608-615, 2015.
- 135) Mortaga M. Abou-Krishna, Mohamed I. Attia, Fawzi H. Assaf, Ahmed A. Eissa: *Influence of pH on the Composition, Morphology and Corrosion Resistance of Zn-Ni-Mn Alloy Films Synthesized by Electrodeposition.* **Int. J. Electrochem. Sci.** Vol. 10, pages 2972 –2987, 2015.
- 136) Musa E. Mohamed, Kamal Khalifa Taha: *Computational reaction mechanism study of the schiff base formation between para-substituted aniline and pyrrole-2-carbaldehyde.* **European Journal of Pharmaceutical and Medical Research**. Vol. 2, Issue. 4, pages 769-778, 2015.
- 137) Naoufel Ben Hamadi: *Asymmetric synthesis of enantiopure fluorinated cyclopropyl carbohydrate analogues.* **Journal of Fluorine Chemistry**. Vol. 170, pages 47–51, 2015.
- 138) Sedahmed Osman, Omar K. Duaij, Kamal K. Taha: *Enhancement the octane number of sudanese gasoline (Nile Blend).* **International Letters Of Chemistry, Physics And Astronomy**. Vol. 9, Issue 2, pages 184-193, 2015.
- 139) T. A. Yousef, G. M. Abu El-Reash, M. I. Attia, M. N. El-Tabai: *Comparative ligational, optical band gap and biological studies on Cr(III) and Fe(III) complexes of hydrazones derived from 2-hydrazinyl-2-oxo-N-phenylacetamide with both vanillin and O-vanillin.* **Chemical Physics Letters**. Vol. 36, pages 180–192, 2015.
- 140) T. A. Yousef, Sara F. Ahmed, O. A. El-Gammal, G. M. Abu El-Reash: *Structural, spectral, thermal and biological studies on (Z)-N-benzoyl-N'-(2-oxo-2-(Phenylamino)Acetyl)carbamohydrazonothioic acid (H_2PABT) and its Cd(II), Hg(II), Zn(II) and U(VI) O_2^{2+} complexes.* **Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy**. Vol. 146, pages 228–239, 2015.