CURRICULUM VITAE



Dr. Ayman Nafady

Associate Professor of Electrochemistry at King Saud University, Riyadh, SA & Assistant Prof. of Physical/Inorganic Chemistry, Chemistry Department, Faculty of Science, Sohag University and & adjunct Senior Research Fellow at RMIT University, Melbourne, Australia and & Editor in Chief of International Journal of Nanomaterials and Chemistry

Email: <u>anafady@ksu.edu.sa</u> **Mobile:** +61450561970 (Australia) **Mobile:** +966569407110 (Saudi Arabia)

PERSONAL INFORMATION

البيانات الشخصيه

Date of birth5 November 1970Nationality:Australian

Webpage: http://www.chem.monash.edu.au/electrochem/members/nafady/index.html

http://fac.ksu.edu.sa/anafady/home

https://scholar.google.com/citations?user=BuApxoMAAAAJ&hl=en&safe=on

http://www.researchgate.net/profile/Ayman_Nafady

http://www.scopus.com/authid/detail.url?authorId=14622777700

Editor in Chief: International Journal of Nanomaterials and Chemistry

http://www.naturalspublishing.com/show.asp?JorID=4&pgid=41

Nile TV-International (Breakfast show): https://www.youtube.com/watch?v=N8rbQlyREO4 https://www.youtube.com/watch?v=N8rbQlyREO4 https://www.youtube.com/watch?v=f4ug5Mt6pR8

نبذه حياتية BIOGRAPHY

Dr. Nafady did his Ph.D. (2000-2004) under supervision of Prof. William Geiger, at the University of Vermont, USA and Prof. Refat Abdel-Hamid, Sohag University (joint supervision) and has been a Research Fellow at Monash University (2005-2011), Melbourne, Australia working with Prof. Alan Bond. He has made significant contributions to the fields of inorganic/organometallic electrochemistry and material science and has been a pioneer in the development of novel electrochemical and photochemical approaches for controlling the synthesis and fabrication of wide range of metal-organic frameworks and nanostructured materials for applications in water splitting, supercapacitors, biosensors, and other energy-related applications as well as *flow cell* technology for electrochemical applications using Synchrotron radiation. He has published one book chapter, one review article and more than **80** papers in peer-reviewed international journals. He has an *h-index* of **20** and the total number of citations for his publications is **1200**.

Dr. Nafady has been invited to give seminars about his work at many universities within Australia and overseas, including, Curtin University of Technology (2006), University of Melbourne (2007), Cairo University (2008), Sohag University (2009), University of Sydney (2010), RMIT University (2011), King Saud University (2013) Zewail city of Science and technology (2015), and University of Sindh (2016). He also presented his work in more

	es and TV-interviewed by Nile TV international through	
programs of "Breakfast show" (2013) and Story of Success (30 Sep. and 5 Oct. 2015). EDUCATION		
EDUCATION		
May, 2004	PhD in Inorganic/ Physical Chemistry University of Vermont, USA/South Valley University, Egypt (Joint program).	
January, 1998	Master in Analytical/Inorganic chemistry South Valley University, Sohag, Egypt.	
December, 1994	Diploma in Analytical/Inorganic Chemistry (Excellent with honors) South Valley University, Sohag, Egypt.	
May, 1992	B.S. in Chemistry (Very good with honors) Assiut University, Egypt.	
Ph. D. Thesis Title	"Novel electrochemistry of organometallic cobalt compounds in low polarity media containing tetrakis (pentafluorophenyl) borate anions"	
Advisors	Prof. William E. Geiger, Prof. Refat Abdel-Hamid, Prof. Abdel-Mawgoud Mostafa and Dr Hussein El Sagher	
M. SC. Thesis Title	"Electrochemical studies of transition metal complexes of triazamacrocyclic compounds"	
Advisors	Prof. Refat Abdel-Hamid, Prof. Abdel-Mawgoud Mostafa and Dr Hussein El Sagher	
EMPLOYMENT		
8/2012-Present	Associate Professor Department of Chemistry, Faculty of Science, King Saud University	
8/2010-4/2012	Senior Research Associate School of Chemistry, Monash University, Clayton, Victoria, Australia	
8/2005-8/2010	Postdoctoral Research Fellow School of Chemistry, Monash University, Clayton, Victoria, Australia	
6/2004-8/2005	Lecturer of Inorganic-Electrochemistry Chemistry Department, Faculty of Science, Sohag University, Sohag, Egypt	
9/2000-5/2004	Research Assistant	

Department of Chemistry, University of Vermont, Burlington,

	USA
12/1998-9/2000	Assistant Lecturer
	Chemistry Department, Faculty of Science, South Valley
	University, Sohag, Egypt
1/1993-11/1998	Demonstrator
	Chemistry Department, Faculty of Science, South Valley
	University, Sohag, Egypt

INVITED SEMINAR		
November, 2016	New avenues in Electrochemistry using TCNQ, TFAB and N/P doped carbon	Sultan Qaboos University, Muscat, Oman
April, 2016	New Horizons of Chemistry and Personal Development	Sohag University Sohag, Egypt
October, 2015	TCNQ: Simple Organic Molecule with Astonishing technological Applications	Zewail City of Science and Technology
July, 2013	Magic Anions derived from TCNQ/TFAB and their Electrochemical Applications	University of Melbourne, Australia
October, 2012	Novel Electrochemical Approaches for the Design, Fabrication, and Characterization of Nanostructure Materials and Coordination Polymers	King Saud University, Riyadh, Saudi Arabia
July, 2012	Recent Advances in Inorganic/Organometallic Electrochemistry via Utilization of TCNQ/TFAB Anions	RMIT, Melbourne, Australia
November, 2011	The "boring guy" (Zn) and its unusual chemistry with the two sisters: TCNQ and TCNQF ₄	Monash University, Australia
September, 2010	Recent advances in TCNQ-based molecular materials	University of Sydney, Australia
April, 2008	M(TCNQ) ₂ -based molecular materials: mechanistic aspects, their design and fabrications	Sohag University, Egypt

ACADEMIC SUPERVISON

2014-2015 Supervising one master student (Tawfeeq AlOtebi) on "synthesis, characterization and fabrication of lanthanides-TCNQ based coordination polymers (Ln = Gd, Sm, Pr and Eu)

2007-2011 Trained and co-supervised five Ph.D. students to conduct electrochemistry research in collaboration with their formal supervisors. These students are: Shaimaa Ahmed and Thanh Hai Le (Monash University, Prof. Alan Bond and Lisa Martin), Yanyan Mulyana and Kerwyn Alley (University of Melbourne, Asso/Prof. Colette Boskovic, and Laura J. McCormick (University of Melbourne, with Richard Robson and Brenden Ibrahams).

2005 Co-supervised one Masters Student (Emad Newar), Sohag University, thesis title: electro-clarification of sugar cane juice using aluminum alloy, Al1050, electrodes coated with polyaniline.

INTERNATIONAL REVIEWER AND EXAMINER

I have been selected to review papers for many top international journals such as Inorganic Chemistry, Chemistry of Materials, Angewandt Chemie international edition, Electroanalytical Chemistry, Advanced Functional Materials, Analyst, Chem Phys Chem, Electro Chemica Acta, J. International environmental Application and Science, J. organometallic Chemistry, Materials letter, Nano Research, Solid State Electrochemistry, Organometallics, Spectro Chemica Acta and Journal of Physical Chemistry C.

Examiner for Ph.D. thesis from National Center of Excellence in Analytical Chemistry, University of Sindh, Jamshoro-Pakistan titled "synthesis and Application of Calix[n]arene Derivatives" by Ashfaque Ali Bhatti

Examiner for Ph.D. thesis from National Center of Excellence in Analytical Chemistry, University of Sindh titled "Quantification of Asprin, Brufeen, Paracetamol and Diclofen in Human Body Fluids by Various Analytical Techniques".

Examiner for Ph.D. thesis from National Center of Excellence in Analytical Chemistry, University of Sindh titled "Electrochemical Evaluation and Recovery of Precious Metals Present in Some Pakistani Ores and Rocks"

مشروعات مموله من الخطه الوطنية السعوديه RESEARCH GRANTS:

Funded by National Plan for Science and Technology in Saudi Arabia

<u>Project Title</u> <u>Fund</u>

1- Design and Fabrication of High-Performance Flexible Energy Storage Devices via Layer by Layer assembly

- of Graphene and Ultra-thin Metal hydroxide Films Deposited onto Multiwall Carbon Nanotubes
- 2- Development of Novel Proton Conducting Organic Ionic Materials and their Acid Containing Compositions for H₂/O₂ Fuel Cell Application

SR 1,820760

RESEARCH GROUP FUND

- 1- SR <u>300,000</u> was awarded in <u>2013</u> fund for project "Nanomaterials for energy storage and other applications"
- 2- SR <u>300,000</u> was awarded in <u>2014</u> fund for project "Nanomaterials for energy storage and other applications"
- 3- SR_300,000 was awarded in 2015 fund for project "Nanomaterials for water splitting"
- 4- SR 500,000 was awarded in 2016 fund for project "N/P co-doped carbon for water splitting and hydrogen production"

SCIENTIFIC ACTIVITIES AND TRAINING

5 October, 2016	General Lecture on "Chemistry of Life" titled "Effective Learning Strategies and the Ideal Interaction Between Teachers and Students (World Day of Teachers)" at King Saud University, Riyadh, Saudi Arabia
16 June to 25 August 2016	Visiting Scientist at RMIT University, Melbourne, Australia working at with prof. Suresh Bhargava Centre for Advanced Materials and Industrial Chemistry
21 April, 2016	General Lecture on "Chemistry of Life" titled " Make your own Future" for Pharmacy and Science Students at Sohag University, Sohag, Egypt
20 April, 2016	Invited Lecture on the 1 st Science Day at Faculty of Science, Sohag University, Egypt titled " <i>New Horizons in Chemistry and Personal development</i> "
27 March, 2016	General Lecture on " Chemistry of Life " titled " <i>Role of Chemistry in our daily life and Chemistry of Happiness</i> " at king Saud University, Riyadh Saudi Arabia
5 October, 2015	Invited TV-Show for "Story of Success" program by Nile TV International, English https://www.youtube.com/watch?v=N8rbQlyREO4
30 September, 2015	Invited TV-Show for "Story of Success" program by Nile TV International, English

$\underline{https://www.youtube.com/watch?v=}f4ug5Mt6pR8$

10 June to 20 August 2015	Visiting Scientist at RMIT University, Melbourne, Australia working at with prof. Suresh Bhargava Centre for Advanced Materials and Industrial Chemistry
17-20 March, 2015	Scientific Referee at the Riyadh and National Olympiad for Giftness and Creativity (Mawhiba), Riyadh Saudi Arabia
17 June to 23 August 2014	Visiting Scientist at RMIT University, Melbourne, Australia working at with prof. Suresh Bhargava Centre for Advanced Materials and Industrial Chemistry
20-21 February, 2014	Scientific Referee at the Riyadh and National Olympiad for Giftness and Creativity (Mawhiba), Riyadh Saudi Arabia
25 June to 27 August 2013	Visiting Scientist at RMIT University, Melbourne, Australia working at with prof. Suresh Bhargava Centre for Advanced Materials and Industrial Chemistry
17-20 March, 2013	Referee at the Riyadh and National Olympiad for Giftness and Creativity (Mawhiba), Riyadh Saudi Arabia
11-13 November 2012	Participate in the 2 nd Saudi International Nanotechnology Conference, KACST, Riyadh, Saudi Arabia
8 June to 26 August 2012	Visiting Scientist at RMIT University, Melbourne, Australia working at with prof. Suresh Bhargava Centre for Advanced Materials and Industrial Chemistry
20-24 April, 2011	Electrocrystallization and in situ grazing XRD characterization of Zn-TCNQ semiconducting materials. Australian Synchrotron, Clayton, Australia
1-6 August, 2009	Design of flow cell for transient voltammetry and in situ grazing incidence X-ray diffraction characterization of electrocrystallized materials. Australian Synchrotron, Clayton, Australia
5-6 November, 2008	Special training on using scanning electron microscopy, CSIRO, Clayton, Australia
1-5 March, 2007	Develop in-situ electrochemical X-ray diffraction cells to monitor film formation of M(TCNQ)2-based material at Tsukuba synchrotron, Tokyo, Japan
15-21 February, 2006	Conduct X-ray diffraction on M(TCNQ) ₂ -based material at

Tsukuba synchrotron, Tokyo, Japan

12-15 January, 2006 Attending synchrotron radiation workshop Monash University, Clayton, Australia

الجمعيات العلمية AFFILIATION

• American Chemical Society

- Royal Australian Chemical Institute (RACI)
- Egyptian Chemical Society
- Saudi Chemical Society
- International Society of Electrochemistry

RESEARCH COLLABORATORS

التعاون العلمي مع الباحثين

1-Prof. Alan M. Bond	Monash University, Australia
2-Prof. Cameron Jones	Monash University, Australia
3-Prof. Keith Murray	Monash University, Australia
4- Prof. Richard Robson	University of Melbourne, Australia
5- Prof. Brendan Abrahams	University of Melbourne, Australia
6-Prof. Colette Boskovic	University of Melbourne, Australia
7 Drof Doland do Moras	Cymtin University of Technology Assets

7-Prof. Roland de Marco

8-Dr. Anthony P. O'Mullane

RMIT University, Melbourne, Australia

9-Prof. William E. Geiger University of Vermont, USA
10-Dr. C. Johan McAdam University of Otago, New Zealand
11-Dr. Nigel Lucas University of Otago, New Zealand

12-Dr. Alexander Bilyk CSIRO, Australia

13-Prof. Siraj Uddin University of Sindh, Jamshoro, Pakistan

14-Prof. Refat Abdel-Hamid Sohag University, Egypt

15- Prof. Suresh Bhargava RMIT University, Melbourne, Australia

16-Prof. Douglas MacFarlane Monash University, Australia

SCHOLARSHIPS AND AWARDS

الجوائز والمنح

2016	Medal from Center of Excellent in Analytical Chemistry, Sindh
	University, Pakistan
2005-2012	Australian Postdoctoral Fellowship
2007- 2008	travel grant awards from Monash University to attend conferences at
2009-2010	USA, Italy and Egypt
2002-2004	Research Assistant Scholarship, University of Vermont, USA
2000-2002	Ph.D. Research Scholarship to USA, Egyptian Ministry of Higher
	Education and Research
1999	Research Scholarship, South valley University, Sohag, Egypt.
1997	Teaching Assistant Award at South Valley University
1993	Outstanding Undergraduate Award, Egyptian scientific committee

(a) **Book Chapters**

Imran Shakir, Zahid Ali, Usman Ali Rana, <u>Ayman Nafady</u>, Mansoor Sarfraz, Inas Muen Al-Nashef and Dae Joon Kang "Nanostructured Materials for the Realization of Electrochemical Energy Storage and Conversion Devices: Status and Prospects" Handbook of Research on Nanoscience, Nanotechnology & Advanced Materials <u>2013</u>, IGI Global Publisher, chapter 15, pp376-413.

(b) Review Articles

<u>Ayman Nafady</u>, Anthony P O'Mullane, Alan M Bond "Electrochemical and photochemical routes to semiconducting transition metaltetracyanoquinodimethane coordination polymers"

Coordination Chemistry Reviews 2014, 268, 101-142 (I.F. = 11.01)

(c) Refereed Journal Articles

80- Razium A. Soomro, <u>Ayman Nafady</u>, Keith R. Hallam, Sana Jawaid, Abdullah Al Enizi, Syed T.H. Sherazi, Sirajuddin, Zafar H. Ibupoto, Magnus Willander "Highly sensitive determination of atropine using cobalt oxide nanostructures: Influence of functional groups on the signal sensitivity"

Analytica Chimica Acta, **2016** 948, 30-39

79- Ayman Nafady, Ylias Mohammad Sabri, Ahmad Esmaielzadeh Kandjani, Ali M. Alsalme, Alan M. Bond, Suresh Bhargava "Preferential synthesis of highly conducting Tl(TCNQ) phase II nanorod networks via electrochemically driven TCNO/Tl(TCNO) solid-solid phase transformation"

Journal of Solid State Electrochemistry, 2016, 20, 1-12

78- Masood Hussain, <u>Ayman Nafady</u>, Sirajuddin, Syed Tufail Hussain Sherazi, Muhammad Raza Shah, Ali Alsalme, Muhammad Siddique Kalhoro, Sarfaraz Ahmed Mahesara and Samia Siddiquia "Cefuroxime Derived Copper Nanoparticles and Their Application as a Colorimetric Sensor for Trace Level Detection of Picric Acid"

RSC Advances 2016, 6, 82882-82889

77- Omran A. Omran, Fadl A. Elgendy and <u>Ayman Nafady</u> "Fabrication and Applications of Potentiometric Sensors Based on p-tert-butylthiacalix[4]arene Comprising Two Triazole Rings Ionophore for Silver Ion Detection"

International Journal of Electrochemical Science 2016, 11, 4729 – 4742

76- Qurrat-ul-ain Baloach, <u>Ayman Nafady</u>, Aneela Tahira, Sirajuddin, Syed Tufail Hussain Sherazi, Tayyaba Shaikh, Munazza Arain,

Magnus Willander, Zafar Hussain Ibupoto "An amperometric sensitive dopamine biosensor based on novel copper oxide nanostructures"

Microsystem Technologies 2016, 1-7

75- Deshetti Jampaiah, Samuel J Ippolito, Ylias M Sabri, James Tardio, PR Selvakannan, <u>Ayman Nafady</u>, Benjaram M Reddy, Suresh K Bhargava "Ceria–zirconia modified MnO x catalysts for gaseous elemental mercury oxidation and adsorption"

Catalysis Science & Technology 2016, 6, 1792-1803

Putla Sudarsanam, Brendan Hillary, Baithy Mallesham, Bolla Govinda Rao, Mohamad Hassan Amin, <u>Ayman Nafady</u>, Ali Alsalme, Benjaram M Reddy, Suresh K Bhargava "Designing CuOx Nanoparticles-Decorated CeO₂ Nanocubes for Catalytic Soot Oxidation: Role of Nano-interface in the Catalytic Performance of Hetero-structured Nanomaterials"

LANGMUIR, 2016, 32(9), 2208-2215

73- Nazar Hussain Kalwar, <u>Ayman Nafady</u>, Razium Ali Soomro, Sirajuddin, Syed Tufail Hussain Sherazi Abdul Rauf Khaskheli, Keith Richard Hallam" *Microwave-assisted synthesis of L-cysteine-capped nickel nanoparticles for catalytic reduction of 4-nitrophenol*"

Rare Met. (2015) 34(10):683–691

72- <u>Ayman Nafady</u> "Electrochemistry with the extremely weak coordinating anions: Using of carboranes $[H-CB_{11}X_6Y_5]^-(X=H, Cl, Br; Y=H or Me)$ as supporting electrolyte anions"

Journal of Electroanalytical Chemistry, 2015, 755, 1-6

71- K. M. Mohibul Kabir, Ylias M. Sabri, Ahmad Esmaielzadeh Kandjani, Glenn I. Matthews, Matthew Field, Lathe A. Jones, <u>Ayman Nafady</u>, Samuel J. Ippolito, and Suresh K Bhargava "Mercury Sorption and Desorption on Gold: A Comparative Analysis of Surface Acoustic Wave and Quartz Crystal Microbalance-Based Sensors"

Langmuir, 2015, 31 (30), pp 8519-8529

70- Sudarsanam Putla, Mohamad Hassan Amin, Benjaram M. Reddy, <u>Ayman Nafady</u>, Khalid A. Al Farhan, and Suresh K. Bhargava "MnO_x Nanoparticle-Dispersed CeO₂ Nanocubes: A Remarkable Heteronanostructured System with Unusual Structural Characteristics and Superior Catalytic Performance"

ACS Appl. Mater. Interfaces, 2015, 7 (30), pp 16525–16535

69- Ahmad Esmaielzadeh Kandjani, Ylias Mohammad Sabri, Selvakannan R Periasamy, Nafisa Zohora, Mohamad Hassan Amin, <u>Ayman Nafady</u>, Suresh Kumar Bhargava " Controlling Core/Shell Formation of Nanocubic p-Cu2O/n-ZnO Toward Enhanced Photocatalytic performance"

Langmuir, 2015, 31, 10922-10930

68- Synøve Ø. Scottwell, Anastasia B. S. Elliott, Karl J. Shaffer, <u>Ayman Nafady</u>, C. John. McAdam, Keith C. Gordon and James D. Crowley "Chemically and Electrochemically Induced Expansion and Contraction of a Ferrocene Rotor"

Chemical Communications 2015, 51, 8161-8164

67- Razium Ali Soomro, <u>Ayman Nafady</u>, Sirajuddin, Syed Tufail Hussain Sherazi, Nazar Hussain Kalwar, Mohammad Raza Shah, and Keith Richard Hallam "

Catalytic Reductive Degradation of Methyl Orange Using Air Resilient Copper Nanostructures"

Journal of Nanomaterials Volume 2015, Article ID 136164, 12 pages

66- Sameerah I Al-Saeed, Khalid A AL-Farhan, <u>Ayman Nafady</u> "Redox-Induced Solid-Solid Phase Transformation of TCNQ Microcrystals into Semiconducting Ba [TCNQ] 2 Microstructures"

International Journal of Nanomaterials and Chemistry 2015, 1, 31

65- Nazar H Kalwar, <u>Ayman Nafady</u>, Syed Tufail H Sherazi, Razium A Soomro, Keith R Hallam, Abdul R Khaskheli, Asif A Jamali "*Catalytic degradation of imidacloprid using L-serine capped nickel nanoparticles*"

Materials Express 2015, 5, 121-128

64- Razium Ali Soomro, <u>Ayman Nafady</u>, Zafar Hussain Ibupoto, Syed Tufail Hussain Sherazi, Magnus Willander, Muhammad Ishaq Abro "Development of sensitive non-enzymatic glucose sensor using complex nanostructures of cobalt oxide"

Materials Science in Semiconductor Processing 2015, 34, 373-381

63- Tayyaba Shaikh, <u>Ayman Nafady</u>, Farah N Talpur, Muhammad H Agheem, Muhammad R Shah, Syed Tufail H Sherazi, Razium A Soomro, Samia Siddiqui "Tranexamic acid derived gold nanoparticles modified glassy carbon electrode as sensitive sensor for determination of nalbuphine"

Sensors and Actuators B: Chemical <u>2015</u>, 211, 359-369

62- Zafar Hussain Ibupoto, <u>Ayman Nafady</u>, Razium Ali Soomro, Syed Tufail Hussain Sherazi, Muhammad Ishaq Abro, Magnus Willander "Glycine-assisted synthesis of NiO hollow cage-like nanostructures for sensitive non-enzymatic glucose sensing"

RSC Advances 2015, 5, 18773-18781

61- Shaimaa Adeel, Mohamed S Abdelhamid, Ayman Nafady, Qi Li, Lisa L Martin, Alan M Bond "Voltammetric studies on the inter-relationship between the redox chemistry of TTF, TTF⁺⁺, TTF²⁺ and HTTF⁺ in acidic media"

RSC Advances 2015, 5, 18384-18390

60- Ruchika Ojha, <u>Ayman Nafady</u>, M. J. Shiddiky, Dayna Mason, John F. Boas, Angel A. J. Torriero, Alan M. Bond, Glen B. Deacon, Peter C. Junk "Conditions favouring formation of Pt^{III} derivatives in the electrochemical oxidation of the anticancer compound trans-[Pt^{II}{(p-BrC₆F₄)NCH₂CH₂NEt₂}Cl(py)]"

ChemElectroChem 2015, 2, 1048

59- Sameerah I. Al-Saeed, Ali M. Alsalme, <u>Ayman Nafady</u> "New Insights on the Mechanism of Oxidatively-Induced CO-Substitution Reaction for the Bimetallic FvCo₂(CO)₄ Gained by Digital Simulation"

International Journal of Electrochemical Science 2015, 10, 2170-2182

58- Sameerah I. Al-Saeed, Ali M. Alsalme, <u>Ayman Nafady</u> "Oxidatively-Promoted CO-Substitution Reaction by PPh₃ in the Dinuclear $FvCo_2(CO)_4$ in Low-Polarity Media Comprising $CH_2Cl_2/[NBu_4][B(C_6F_5)_4]$ "

International Journal of Electrochemical Science 2015, 10, 1669-1683

57- **Ayman Nafady**, Ali M. Alsalme, Khalid. A. AL-Farhan, Rafat M. El Khatib, Suresh Bhargava "Probing Solvation and Ion-Pairing Effects on the Redox Behavior of Cyclopentadienyl Cobalt Dicarbonyl, $CpCo(CO)_2$, in the presence of $[B(C_6F_5)_4]^T$ anion"

International Journal of Electrochemical Science 2014, 9, 8131 - 8144

56- Munawar Saeed Qureshi, Abdull Rahim bin Mohd Yusoff, Afzal Shah, <u>Ayman Nafady</u>, Sirajuddin " A new sensitive electrochemical method for the determination of vanadium(IV) and vanadium(V) in Benfield sample"

Talanta, <u>2015</u>, 132, 541–547

55- Syeda S. Hassan, <u>Ayman Nafady</u>, Sirajuddin, Amber R. Solangi, Muhammad S. Kalhoro, Muhammad I. Abro, Syed Tufail H. Sherazi "Ultra-trace level electrochemical sensor for methylene blue dye based on nafion stabilized ibuprofen derived gold nanoparticles"

Sensors and Actuators B: Chemical, 2015, 208, 320-326

54- Razium A. Soomro, <u>Ayman Nafady</u>, Sirajuddin, Najma Memon, Tufail H. Sherazi, Nazar H. Kalwar "L-cysteine protected copper nanoparticles as colorimetric sensor for mercuric ions"

Talanta 2014, 130, 415-422

53- Alexandr N. Simonov, Peter Kemppinen, Cristina Pozo-Gonzalo, John F. Boas, Ante Bilic, Andrew D. Scully, Adel Attia, **Ayman Nafady**, Elena A. Mashkina, Kevin N. Winzenberg, Scott E. Watkins, Alan M. Bond "Aggregation of a Dibenzo[b,def]chrysene Based Organic Photovoltaic Material in Solution"

J. Phys. Chem. B, 2014, 118, 6839–6849

52 - Shaimaa M Adeel, Oi Li, Ayman Nafady, Chuan Zhao, Amal I Siriwardana, Alan M Bond, Lisa L Martin "A systematic study of the variation of tetrathiafulvalene (TTF), TTF⁺ and TTF²⁺ reaction pathways with water in the presence and absence of light"

RSC Advances <u>2014</u>, 4 (91), 49789-49795

51- Hiroaki Iguchi, <u>Ayman Nafady</u>, Shinya Takaishi, Masahiro Yamashita, Alan M Bond "Solid-State Electrochemistry of a Semiconducting MMX-Type Diplatinum Iodide Chain Complex"

Inorganic Chemistry 2014, 53, 4022

- 50-Mousa Al-Noaimi, <u>Ayman Nafady</u>, Ismail Warad, Rwaida Alshwafy, Ahmad Husein, Wamidh H Talib, Taibi Ben Hadda "Heterotrimetallic Ru (II)/Pd (II)/Ru (II) complexes: Synthesis, crystalstructure, spectral characterization, DFT calculation and antimicrobial study"
- Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy <u>2014</u>, 122, 273-282
- 49- <u>Ayman Nafady</u>, Nasser J Al-Qahtani, Khalid A Al-Farhan, Suresh Bhargava, Alan M Bond "Synthesis and characterization of microstructured sheets of semiconducting Ca [TCNQ] 2 via redox-driven solid-solid phase transformation of TCNQ microcrystals"

Journal of Solid State Electrochemistry 2014, 18, 851-859

- 48- <u>Ayman Nafady</u>, Thanh Hai Le, Nguyen Vo, Naomi L Haworth, Alan M Bond, Lisandra L Martin "Role of Water in the Dynamic Disproportionation of Zn-Based TCNQ(F4) Coordination Polymers (TCNQ= Tetracyanoquinodimethane)" Inorganic Chemistry 2014, 53, 2268–2275
- 47-Thanh H Le, <u>Ayman Nafady</u>, Nguyen T Vo, Robert W Elliott, Timothy A Hudson, Richard Robson, Brendan F Abrahams, Lisandra L Martin, Alan M Bond "Electrochemically Directed Synthesis of Cu21 (TCNQF4⁻)(MeCN)₂ (TCNQF₄= 2, 3, 5, 6-Tetrafluoro-7, 7, 8, 8-tetracyanoquinodimethane): Voltammetry, Simulations, Bulk Electrolysis, Spectroscopy, Photoactivity, and X-ray Crystal Structure of the Cu₂I(TCNQF₄⁻)(EtCN)₂ Analogue"

Inorganic Chemistry <u>2014</u>, 53, 3230–3242

- 46- K. Wu, D. R. Laws, <u>Ayman Nafady</u>, W. E. Geiger "Substitution of CO Ligand by P (OPh) 3 in Radical Cations of the Cymantrene Family: Relationships of Substitution Rates to E1/2 Values and Carbonyl IR Frequencies"
- Journal of Inorganic and Organometallic Polymers and Materials $\underline{2014}$, 24, 137-144
- 45- M Al-Noaimi, <u>Ayman Nafady</u>, I Warad, R Alshwafy, A Husein, WH Talib, TB Hadda "Heterotrimetallic Ru (II)/Pd (II)/Ru (II) complexes: Synthesis, crystal structure, synthesis, spectral characterization, DFT calculation and antimicrobial study"

Spectrochimica acta. Part A, Molecular and biomolecular spectroscopy 2013, 122, 273-282

44- Muhammad Shahid, <u>Ayman Nafady</u>, Imran Shakir, Usman Ali Rana, Mansoor Sarfraz, Muhammad Farooq Warsi, Rafaqat Hussain, and Muhammad Naeem Ashiq "Copper vanadate Nanowires-Based MIS Capacitors: Synthesis, Characterization, and their Electrical Charge Storage Applications"

Journal of Nanoparticle Research 2013, 15, 1826.

43- Shaukat Ali Shahid, <u>Ayman Nafady</u>, Inam Ullah, Yun H. Taufiq-Yap, Imran Shakir, Farooq Anwar, and Umer Rashid "Characterization of Newly Synthesized ZrFe₂O₅ Nanomaterial and Investigations of Its Tremendous Photocatalytic Properties under Visible Light Irradiation"

Journal of Nanomaterials <u>2013</u>, 517643

42- Sam L. Choong, <u>Ayman Nafady</u> Andreas Stasch, Alan M. Bond and Cameron Jones "The facile assembly of bis-, tris- and poly- (triazaphosphole) systems using "click" chemistry"

Dalton Trans. 2013, 42, 7775

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