

# CURRICULUM VITAE

## PERSONAL INFORMATION

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## ACADEMIC QUALIFICATIONS

Academic Qualifications	University	Duration
<b>Ph.D. of Materials Science</b> (Thesis title: Synthesis, characterization and application of WO <sub>3</sub> , V <sub>2</sub> O <sub>5</sub> and their composites in nano scale)	National University of Malaysia (UKM), Malaysia	1 July 2004- 30 Jun 2008
<b>M.Sc. of Inorganic Chemistry</b> (Thesis title: An investigation on the effect of Talk inorganic filler on the physico-mechanical properties of polypropylene and its alloys)	Tehran University, Iran	22 Sep 1996- 6 Mar 1999
<b>B.Sc. of Applied Chemistry</b>	Tehran University, Iran	22 Sep 1990- 19 Feb 1995

## EMPLOYMENT HISTORY

Position	Start date	Employer
Researcher	April 2016- Oct 2016	Australian Government Department of Education and Training (RMIT University)
University Lecturer DS53 <b>Associate Professor</b>	Dec 2013- now	National University of Malaysia (UKM), Malaysia
University Lecturer DS51 <b>Senior Lecturer</b>	Sep 2012- Nov 2013	National University of Malaysia (UKM), Malaysia
University Lecturer DS51 <b>Lecturer</b>	Sep 2011- Aug 2012	National University of Malaysia (UKM), Malaysia
Post Doctorate Fellow	May 2008—Sep 2011	National University of Malaysia (UKM), Malaysia
Post Doctorate Fellow	Nov 2007 - Apr 2008	Technology and Catalysis Research Centre (COMBICAT) at University

		Malaya
Supervisor in Hard chromium electroplating manufactory	Dec 2002 - May 2004	Nooavaran hard chromium electroplating manufactory, Tehran, Iran
Supervisor in Hard chromium electroplating section , quality control laboratory and as a Quality control auditor	Nov 1999 – Dec 2002	Noritazeh glass Factory (under licensed of Soga Japan), Tehran, Iran

### RESEARCH INTEREST

- Synthesis of nanomaterials, composites, and investigation of their application
- Photocatalysts
- Using agricultural and industrial wastes as a resource
- Passive cooling materials and design
- Materials related to a renewable energy application

### AWARDS

Name of Award	From	Year
Silver Medal for Innovation of Green Geopolymer for Desiccant Cooling System	Malaysia Technology Expo (MTE 2018)	2018
Patent for Green geopolymer for desiccant cooling system (PI 2017705006)	National University of Malaysia (UKM), Malaysia	2017
Bronze Medal for Innovation of Green Desiccant Material	Malaysia Technology Expo (MTE 2017)	2017
The excellent oral presentation award	3rd International Conference on Smart Material Research (ICMSR 2017) Melbourne, Australia	2017
Endeavour Research Fellowship	Australian Government Department of Education and Training	2016
Copyright for Green Desiccant (UKM IKB/108/2/1187)	National University of Malaysia (UKM), Malaysia	2015
The best paper Award	International Conference on Medical, Environmental and Bio-technology (ICMEB 2014) Auckland, New Zealand	2014
Silver Medal for Innovation of High Efficiency Solar Cooling System	Malaysia Technology Expo (MTE 2013)	2013

Bronze Medal for Innovation of Multipurpose Compact Solar Heat Pump for Water Heating, Space Cooling and Drying Applications	Malaysia Technology Expo (MTE 2013)	2013
11th Edition of the Islamic Development Bank (IDB) Prize for Science & Technology (1434H/2013G)	Islamic Development Bank (IDB)	2013
Research Innovation Award (Solar cells and PV application research group)	7 <sup>th</sup> Innovation Festival by Vice Chancellor of UKM, 13 April 2012	2012
The best paper Award	First Conf. of Iranian Student in Malaysia	2011
Biographical record in Who's Who in the World"	Marquis Who's Who Publication Board (2010)	2010
Bronze Medal for Innovation of Green and Sustainable Technology in the Production of Thermally Stable Bio-polyol	Malaysia Technology Expo (MTE 2008)	2008
An award of Zamalah Scheme	Universiti Kebangsaan Malaysia(UKM)	2006
An award of commendation for having ranked first among the student of chemistry admitted in the year 1990 (Bachelor of Science)	Tehran University, Iran	1995
First rank for SGS-ICS internal auditor training course (ISO 9000)	SGS	2000

### SCIENTIFIC RECORD

<b>Journals:</b>	50
<b>Confer. Proceedings:</b>	32
<b>Book chapter:</b>	2
<b>Citations:</b>	> 1085 (based on google scholar)
<b>h-index:</b>	18

#### Peer review (Journal)

Applied Catalysis B: Environmental; Current Opinion in Solid State & Materials Science; Energy; Solar Energy Materials and Solar Cells; International Journal of Energy Research; Applied Surface Science; Journal of Cleaner Production; Current Nanoscience; Recent Patents on Nanotechnology; Journal of Experimental Nanoscience; The Beilstein Journal of Nanotechnology

#### Editorial Boards (Journals)

- Associate Editorial Board Members of Current Nanoscience Journal

#### Scientific Committees (Conferences)

- Technical Committee of the 4th International Conference on Frontiers of Composite Materials (ICFCM2019) and the 5th International Conference on Smart Material Research (ICSMR2019), The University of Queensland, Brisbane, Australia, November 13-16, 2019
- Technical committee of the 2nd International Conference on Energy, Electrical and Power Engineering (CEEPE 2019), June 25-28, 2019, University of California, Berkeley, USA
- Technical Committee of the International Conference on Environmental Engineering and Energy Science (ICEEES 2019), July 21-23, 2019, Geosciences International Conference Centre, Beijing, China
- Technical Committee member in the 3rd International Conference on Frontiers of Composite Materials (ICFCM 2018), Sydney, Australia November 16-18, 2018.
- Invited speaker at Recycling Expo 2018, August 29-30, 2018, Berlin, Germany
- Organizing Committee Member (secretary) of the Southeast Asia Global Innovation Challenge (SEA-GIC 2018) Competition, organized by the ACS Malaysia International Chemical Science Chapter
- Technical committee Member in the 1st International Symposium on Nano technology and Smart materials for Environmental Applications (ISNSEA 2018)
- Technical committee Member in 8th International Conference on Environment Science and Engineering (ICESE 2018)
- Technical committee Member in 9th International Conference on Environmental Science and Development (ICESD 2018)
- Technical Committee of 3rd International conference on carbon materials and materials sciences (CCMM 2018)
- Technical committee of 3rd International Conference on Advances on Clean Energy Research 2018
- Technical committee Member in IEEE International Conference on Green Energy (ICOGES 2017)
- Advisor for Iranian student association
- Committee member of the first, second and third SERI colloquium

### Membership of professional bodies

Institute of Electrical and Electronics Engineers (IEEE); American Nano Society; World Society of Sustainable Energy Technologies (WSSET); Asia-Pacific Chemical, Biological & Environmental Engineering Society (APCBEEES); International association of computer science and information technology (IACSIT); Nanotechnology Scientific Core of Iranian student in Malaysia

### Teaching course code:

1. BRCC1 - RSRS 6012 Building Resilience to Climate Change (Science, Impacts and Vulnerability)
2. BRCC2 - RSRS 6022 Building Resilience to Climate Change Approaches to Adaptation

## RESEARCH & DEVELOPMENT PROJECTS

1. Project Leader/Group Leader

	CATEGORY	RESEARCH CODE	TITLE OF RESEARCH	STATUS
1	Research University Grant (GUP)	GUP-2018-129	Development of modified photocatalytic self-cleaning concrete (geopolymer) for reducing pollution from air	Ongoing 15/11/2018 - 14/11/2020

2	Ganjaran Penerbitan	GP-K019259	Publication incentives	Ongoing
3	Dana Lonjakan Penerbitan	DLP-2013-015	Study and Evaluating of Different Porous Geopolymers For Green Passive Cooling Application	Achieved
4	Fundamental	FRGS/1/2012/T K07/UKM/03/4	Studies on Solar Detoxification Performance of TiO <sub>2</sub> , WO <sub>3</sub> and Their Composites as Photocatalysts	Achieved
5	Research University Grant (GUP)	GUP-2012-092	Study of Using Agriculture Wastes (Rice) as Desiccant	Achieved
6	Incentive Grant Young Researchers	GGPM-2012-027	Study and Evaluation of Different porous Geopolymers For Green Passive Cooling Application	Achieved

## 2. Research Joint/ Group Joint

	CATEGORY	RESEARCH CODE	TITLE OF RESEARCH	STATUS
1	Research University Grant (GUP)	GUP-2018-128	Jet Impingement Photovoltaic-Thermal (PVT) Solar Air Collector for Higher Electricity Production	Ongoing 15/11/2018 - 14/11/2020
2	Fundamental (FRGS)	FRGS/1/2018/T K06/UKM/02/1	Thermal Properties Characterisation of Autoclaved Aerated Concrete (AAC) Blocks Containing Recycled Concrete Powder for Sand Substitution in Reducing Cooling Load for Hot and Humid Climates.	Ongoing 01/01/2019 -31/12/2020
3	Dana Pembangunan Penyelidikan PTJ	DPP-2018-002	Grid Connected Solar Photovoltaic Thermal (PVT) System with Nano Fluids and Nano PCM	Ongoing 10/01/2018- 09/01/2019
4	Dana Impak Perdan	DIP-2015-028	Metal Ions/ Nanocellulose and Polyaniline Nanocomposites as Counter Electrode in Dye Sensitized Solar Cell	Achieved 01/01/2016 -31/10/2018
5	Dana Pembangunan Penyelidikan	DPP-2015-132	Spectrum Adjustment In Transparent Solar Cell	Finished
6	Exploratory	ERGS/1/2012/T K07/UKM/01/4	Higher Efficiency CdTe Solar Cells with Highly Transparent Cadmium Sulfide (CdS <sub>co</sub> ) Thin Films as Window Layer	Finished
7	Exploratory	ERGS/1/2012/T K07/UKM/02/3	Exploring Power Conversion Efficiency of thermoelectric generators Common Using Waste Heat	ongoing

8	Exploratory	ERGS/1/2012/T K07/UKM/02/4	Fundamental Investigation on Photovoltaic Material Properties of Copper-Zinc-Tin-Sulphide (Cu <sub>2</sub> ZnSnS <sub>4</sub> ) Thin Films Grown by Molecular Beam epitaxy (MBE)	Finished
9	Exploratory	ERGS/1/2012/T K07/UKM/03/5	Exploring the Reduction in Dye-Sensitized Cost of Solar Cell (DSSC) by Using Highly Electroactive Cobalt Sulfide nanosheets as Counter Electrode	Finished
10	Fundamental	FRGS/1/2011/T K/UKM/01/19	Fundamental Studies of Front and Back Contact Formation on Crystalline and Multicrystalline Silicon Solar Cells by Laser annealing	Finished
11	Fundamental	FRGS/1/2011/T K/UKM/01/20	Investigation on Interfacial Stability of Flexible Thin Film Cadmium Telluride Solar Cells on Polymer and Metal Foils	Finished
12	Fundamental	FRGS/1/2011/T K/UKM/01/22	Enhanced IR Absorption in Si/SixGe1-x/Si and Si / Ge / Si Solar Cells	Finished
13	Fundamental	FRGS/1/2011/T K/UKM/02/35	Heat transfer study by the Air Flow Collector Terms photovoltaic (PV) with absorber configuration Z	Finished
14	Fundamental	FRGS/1/2011/T K/UKM/03/13	Thermal Analysis of Jet Impingement Water Solar Collector	Finished
15	Incentive Grant University-Industry Research	INDUSTRY-2012-012	Modelling and Fabrication of Low Cost Silicon Quantum Dot (SiQD) Solar Cell for Industrial Application	Finished
16	Research Group Development Fund	DPP-2013-110	Next Generation Solar Cell Development	Finished
17	Fundamental	FRGS / 1/2011 / TK / SMEs / 03/13	Jet impingement Thermal Analysis of Solar Air Collector	Finished

## PUBLICATION

### International Refereed Journals

- 1) **Nilofar Asim**, Mohamad Hassan Amin, M.A. Alghoul, Marzieh Badiei, Masita Mohammad, Shawkat S. Gasaymeh, Nowshad Amin, Kamaruzzaman Sopian; Key Factors of Desiccant-Based Cooling Systems: Materials; Applied Thermal Engineering 159 (2019), 113946
- 2) **Nilofar Asim**, Mohammad Alghoul, Masita Mohammad, Mohamad Hassan Amin, M.Akhtaruzzaman, Nowshad Amin, Kamaruzzaman Sopian; Emerging sustainable solutions for depollution: Geopolymers; Construction and Building Materials Volume 199, 2019, Pages 540-548
- 3) **Nilofar Asim**, Mohamad Hassan Amin, Kamaruzzaman Sopian; Study of Acid Treatment Conditions on the Water and Moisture Absorbency of Coconut Coir; International Journal of Chemical Engineering and Applications, Vol. 10, No. 1, February 2019

- 4) Foo Wah Low, Chin Wei Lai, **Nilofar Asim**, Md. Akhtaruzzaman, Mohammad Alghoul, Sieh Kiong Tiong, Nowshad Amin; An investigation on titanium doping in reduced graphene oxide by RF magnetron sputtering for dye-sensitized solar cells; *Solar Energy* Volume 188, August 2019, Pages 10-18
- 5) M.S Jamal, S.A. Shahahmadi, P. Chelvanathan, Hamad F. Alharbi, MohammadR. Karim, Monis Luqman, Nabeel H. Alharth, Yahya S. Al-Harhi, M.Aminuzzaman, **Nilofar Asim**, K. Sopian, S.K. Tiong, Nowshad Amin, Md.Akhtaruzzaman ; Effects of Growth Temperature on the Photovoltaic Properties of RF Sputtered Undoped NiO Thin Films; *Results in Physics*, Available online 24 May 2019, 102360, In Press, Accepted Manuscript
- 6) M.S.Jamal, S.A.Shahahmadi, P.Chelvanathan, **Nilofar Asim**, H.Misran, M.I.Hossain, N.Amin, K.Sopian, Md.Akhtaruzzaman; Effect of Defect Density and Energy Level Mismatch on the Performance of Perovskite Solar Cells by Numerical Simulation; *Optik* 2019 Volume 182, Pages 1204-1210
- 7) Muhammad Yahya Zulakmal, Ahmad Fudholi, Nurul Shahirah Rukman, Nurul Syakirah Nazri, Chan Hoy Yen, **Nilofar Asim**, Sohif Mat, Kamaruzzaman Sopian; Computational Fluid Dynamics Analysis of Thermoelectric Generators Performance under Solar Photovoltaic-Thermal (PVT) System; *Journal of Advanced Research in Fluid Mechanics and Thermal Sciences* 56, Issue 2 (2019) 223-232
- 8) Zeynab Emdadi, Ali Maleki, Mojtaba Azizi, **Nilofar Asim**; Evaporative Passive Cooling Designs For Buildings; *Strategic Planning for Energy and the Environment* 2019; 38(4) 63-80
- 9) M. A. Alghoul, S. A. Shahahmadi, Bitu Yeganeh, **Nilofar Asim**, A. M. Elbreki, K. Sopian, S. K. Tiong, N. Amin, A review of thermoelectric power generation systems: Roles of existing test rigs/ prototypes and their associated cooling units on output performance, 2018, *Energy Conversion and Management* 174:138-156
- 10) Ali Maleki, Masita Mohammad, Zeynab Emdadi, **Nilofar Asim**, Mojtaba Azizi, Javad Safaei, Adsorbent materials based on a geopolymer paste for dye removal from aqueous solutions, *Arabian Journal of Chemistry*, 2018 In press
- 11) M.A.Alghoul, F.Y.Hammadi, Nowshad Amin, **NilofarAsim**; The role of existing infrastructure of fuel stations in deploying solar charging systems, electric vehicles and solar energy: A preliminary analysis; *Technological Forecasting and Social Change*, 2018, Volume 137, Pages 317-326
- 12) Zeynab Emdadi, **Nilofar Asim**, Mohd Ambar Yarmo, Mehdi Ebadi, Masita Mohammad and Kamaruzzaman Sopian; Chemically Treated Rice Husk Blends as Green Desiccant Materials for Industrial Application; *Chemical Engineering & Technology* 2017 Volume 40, Issue 9, pages 1619–1629; doi:10.1002/ceat.201600105
- 13) Zeynab Emdadi, **Nilofar Asim**, Mohamad Hassan Amin, Mohd Ambar Yarmo, Ali Maleki , Mojtaba Azizi and Kamaruzzaman Sopian; Development of Green Geopolymer Using Agricultural and Industrial Waste Materials with High Water Absorbency; *Applied sciences* 2017, 7(5), 514; doi:10.3390/app7050514
- 14) Zeynab Emdadi , **Nilofar Asim** , Mohd Ambar Yarmo , Roslinda Shamsudin ,Masita Mohammad and Kamaruzaman Sopian; Green Material Prospects for Passive Evaporative Cooling Systems: Geopolymers, *Energies* 2016, 9, 586; doi:10.3390/en9080586
- 15) M. F. Abdullah; M. A. Alghoul ; Hameed Naser ; **Nilofar Asim** ; Shideh Ahmadi ; B. Yatim ;

K. Sopian; Research and development efforts on texturization to reduce the optical losses at front surface of silicon solar cell; *Renewable and Sustainable Energy Reviews* ;Volume 66 (2016), Pages 380–398

- 16) Zeynab Emdadi, **Nilofar Asim**, M. Ambar Yarmo, Roslinda Shamsudin, Masita Mohammad and K. Sopian; The study of NaOH and aging time effects on green geopolymer's compressive strength; *Advances in Environmental Biology*, 10(8) 2016, Pages: 119-125
- 17) Khadijeh Beigom Ghoreishi, **Nilofar Asim**, Zatil Amali Che Ramli, Zeynab Emdadi, M. Ambar Yarmo; Highly efficient photocatalytic degradation of methylene blue using carbonaceous WO<sub>3</sub>/TiO<sub>2</sub> composites; *Journal of Porous Materials*, ( 2016) DOI 10.1007/s10934-015-0117-4
- 18) **Nilofar Asim**, Zeynab Emdadi, Masita Mohammad, M. A. Yarmo, K. Sopian; Agricultural solid wastes for green desiccant applications: An overview of research achievements, opportunities and perspectives; *Journal of Cleaner Production* (2015) 91: 26-35.
- 19) Ebadi, M., Mat-Teridi, M.A., Sulaiman, M.Y., Basirun, W.J., **Asim**, N., Ludin, N.A., Ibrahim, M.A., Sopian, K., 2015. Electrodeposited p-type Co<sub>3</sub>O<sub>4</sub> with high photoelectrochemical performance in aqueous medium. *RSC Advances* 5, (2015) 36820-36827
- 20) K.B. Ghoreishi, M.A. Yarmo, and **Nilofar Asim**; Investigation of Curing Kinetics of Diglycidyl Ether of Bisphenol A and Zinc (II) Complexes Using Dynamic DSC Technique; *Journal of Polymer Research* (2015) 22, 1-12
- 21) S. A. Shahahmadi, B. Yeganeh, N. Huda, **N. Asim**, M. Hafidz, M.M. Alam, Z. A. AlOthman, K. Sopian, N. Amin ; Properties of a-SiGe Thin Films on Glass by Co-Sputtering for Photovoltaic Absorber Application; *Journal of Nanoscience and Nanotechnology* 11/2015; 15(11). DOI:10.1166/jnn.2015.11412
- 22) M. Gabbasa, K. Sopian, A. Fudholi, **N. Asim**, A review of unitized regenerative fuel cell stack: Material, design and research achievements, *International Journal of Hydrogen Energy*, 39 (2014) 17765-17778 DOI: 10.1016/j.ijhydene.2014.08.121
- 23) Z. Emdadi, **Nilofar Asim**, M.A. Yarmo, R. Shamsudin, Investigation of More Environmental Friendly Materials for Passive Cooling Application Based on Geopolymer, *APCBEE Procedia*, 10 (2014) 69-73
- 24) Zeynab Emdadi, **Nilofar Asim**, Zatil Amali Che Ramli, M. A. Yarmo, Roslinda Shamsudin, K. Sopian; Feasibility Study of Using Rice Husk and its Treated Forms with Alkali Solution as a Desiccant Material; *WSEAS Transactions on Environment and Development*, Volume 10, 2014,306-311 (E-ISSN:2224-3496)
- 25) Aiman Roslizar, M. A. Alghoul, B. Bakhtyar, **Nilofar Asim**, and K. Sopian; Annual Energy Usage Reduction and Cost Savings of a School: End-Use Energy Analysis; *The Scientific World Journal* Volume 2014 (2014), Article ID 310539, 8 pages <http://dx.doi.org/10.1155/2014/310539>
- 26) **Asim**, N., Syuhami, M.F., Badiei, M., Yarmo, M.A., 2014. WO<sub>3</sub> Modification by Synthesis of Nanocomposites. *APCBEE Procedia* (2014) 9, 175-180
- 27) Badiei, M., **Asim**, N., Jahim, J.M., Sopian, K., 2014. Comparison of Chemical Pretreatment Methods for Cellulosic Biomass. *APCBEE Procedia* (2014) 9, 170-174



- 28) Zatil Amali Che Ramli, **Nilofar Asim**, Wan N. R. W. Isahak, Zeynab Emdadi, Norasikin Ahmad Ludin, M. Ambar Yarmo and Kamaruzzaman Sopian; Photocatalytic Degradation of Methylene Blue under UV light irradiation on prepared Carbonaceous TiO<sub>2</sub>, *The Scientific World Journal* Volume 2014 (2014), Article ID 415136, 8 pages <http://dx.doi.org/10.1155/2014/415136>
- 29) **Nilofar Asim**, Shideh Ahmadi, M.A. Alghoul, F.Y. Hammadi, Kasra Saeedfar, K. Sopian; Research and Development Aspects on Chemical Preparation Techniques of Photoanodes for Dye Sensitized Solar Cells; *International Journal of Photoenergy* Volume 2014 (2014), Article ID 518156, 21 pages, <http://dx.doi.org/10.1155/2014/518156>
- 30) Shideh Ahmadi, **Nilofar Asim**, M.A. Alghoul, F. Y. Hammadi, Kasra Saeedfar, N. A. Ludin, Saleem H. Zaidi, K. Sopian; The Role of Physical Techniques on the Preparation of Photoanodes for Dye Sensitized Solar Cells; *International Journal of Photoenergy*, Volume 2014 (2014), Article ID 198734, 19 pages
- 31) Khadijeh Beigom Ghoreishi, **Nilofar Asim**, Mohd Ambar Yarmo, Mohd Wahid Samsudin; Mesoporous phosphated and sulphated silica as solid acid catalysts for glycerol acetylation; *Chemical Papers*, 2014, Volume 68, Issue 9, pp 1194-1204
- 32) K. B Ghoreishi, Mostafa Ghasemi, Mostafa Rahimnejad, Mohd Ambar Yarmo, Wan Ramli Wan Daud, **Nilofar Asim**, Manal Ismail; Development and Application of Vanadium Oxide/Polyaniline Composite as a Novel Cathode Catalyst in Microbial Fuel Cell, *International Journal of Energy Research*, Volume 38, Issue 1, pages 70–77, January 2014 DOI: 10.1002/er.3082
- 33) Norasikin A Ludin, M Azwan M Bakri, Norman Kamaruddin, Kamaruzzaman Sopian, M Solah Deraman, Norul Hisham Hamid, **Nilofar Asim**, M Yusuf Othman; Malaysian oil palm plantation sector: exploiting renewable energy toward sustainability production; *Journal of Cleaner Production* Volume 65, 15 February 2014, Pages 9–15
- 34) P Poovanaesvaran, MA Alghoul, A Fadhil, MM Abdul-Majeed, **N Asim**, K Sopian (2013), Techno-economic evaluation of a small-scale pv-bwro system at different latitudes, *Desalination and Water Treatment* 52: 7082-7091
- 35) Mahdi Shahmiri, Nor Azowa Ibrahim, Fatemeh shayesteh, **Nilofar Asim**, Nabi Motallebi; Preparation of PVP-coated copper oxide nanosheets as antibacterial and antifungal agents; *Journal of Materials Research*, Vol. 28, No. 22, Nov 28, 2013
- 36) Mohamed Gabbasaa, Kamaruzzaman Sopian, Zahira Yaakob, M. Reza Faraji Zonooz, Ahmad Fudholi, **Nilofar Asim**; Review of the energy supply status for sustainable development in the Organization of Islamic Conference; *Renewable & Sustainable Energy Reviews* Volume 28, December 2013, Pages 18–28
- 37) Mahdi Shahmiri, Nor Azowa Ibrahim, Nastaran Faraji, Wan Mahmood Mat Yunus, **Nilofar Asim**, Norhazlin Zainuddin; Third-order Nonlinear Optical Properties of Chemically Synthesized Copper Oxide Nanosheets, *Physica E: Low-dimensional Systems and Nanostructures*, Volume 54, Pages 109–114 (2013)
- 38) Mahdi Shahmiri, Nor Azowa Ibrahim, Norhazlin Zainuddin, **Nilofar Asim**, B. Bakhtyar, A. Zaharim, K.Sopian, Effect of pH on the Synthesis of CuO Nanosheets by Quick Precipitation Method, *WSEAS Transactions on Environment and Development*, Issue 2, Volume 9, 2013, Pages 243-252
- 39) **Nilofar Asim**, Kamaruzzaman Sopian, Shideh Ahmadi, Kasra Saeedfar, M.A. Alghoul, Omidreza Saadatian, Saleem H. Zaidi; A Review on the Role of Materials Science in Solar Cells, *Renewable & Sustainable Energy Reviews*, Volume 16, Issue 8, 2012, Pages 5834–5847

- 40) Omidreza Saadatian, K. Sopian, C.H. Lim, **Nilofar Asim**, M.Y. Sulaiman; Trombe walls: A review of opportunities and challenges in research and development, *Renewable & Sustainable Energy Reviews*, 16 (2012) 6340–6351
- 41) A.A Lahimer, M. A. Alghoul, K.Sopian, Nowshad Amin, **Nilofar Asim** and M.I. Fadhel; Research and Development Aspects of Pico Hydro Power, *Renewable & Sustainable Energy Reviews*, Volume 16, Issue 8, 2012, Pages 5861-5878
- 42) **Nilofar Asim**, Omidreza Sadaatian, Norasikin A Ludin, M Reza Faraji Zonooz, K Sopian, Perspective of Agriculture Wastes Usage as a Resource, *Advanced Materials Research* (2012)Volume 550, Pages 2246-2254
- 43) Shideh Ahmadi, Chin-Hua Chia, Sarani Zakaria, Kasra Saeedfar, **Nilofar Asim**, Synthesis of Fe<sub>3</sub>O<sub>4</sub> nanocrystals using hydrothermal approach, *Journal of Magnetism and Magnetic Materials*, 324 (2012) 4147–4150
- 44) Khadijeh Beigom Ghoreishi, **Nilofar Asim** , Mohd Ambar Yarmo; V<sub>2</sub>O<sub>5</sub>-Polyaniline Nanocomposite as a Catalyst for Heterogeneous Ozonolysis of Oleic Acid; *Advanced Materials Research* Volume 364 (2012),page 217-221
- 45) Kamaruzzaman Sopian, Baharuddin Ali, **Nilofar Asim**; Strategies for renewable energy applications in the organization of Islamic conference (OIC) countries; *Renewable and Sustainable Energy Reviews*; Volume 15, Issue 9, December 2011, Pages 4706-4725
- 46) **Nilofar Asim**, Kamaruzzaman Sopian; Perspective of Nanomaterials in Solar cell, *International Journal of Nanoscience*, Volume 10, Issue 6(2011) pp. 1197-1208
- 47) **Nilofar Asim**, Sahidan Radiman and Mohd Ambar Yarmo, M.S.Banaye Golriz ; Vanadium pentoxide: Synthesis and Characterization of Nanorod and Nanoparticle V<sub>2</sub>O<sub>5</sub> Using CTAB Micelle Solution, *Microporous and Mesoporous Materials* 120 (2009) pp. 397-401
- 48) **Nilofar Asim**, S. Radiman and M.A.bin Yarmo; Preparation of WO<sub>3</sub> Nanoparticles Using Cetyl Trimethyl Ammonium Bromide Supermolecular Template, *American Journal of Applied Sciences* 6 (7): 1424-1428, 2009
- 49) **Nilofar Asim**, S. Radiman and M.A.bin Yarmo; Preparation and characterization of core - shell Polyaniline/V<sub>2</sub>O<sub>5</sub> nanocomposite via microemulsion method; *Materials Letters*, Volume 62, Issues 6-7, 15 March 2008, Pages 1044-1047
- 50) **N. Asim**, S. Radiman and M.A.bin Yarmo; Synthesis of WO<sub>3</sub> in nanoscale with the usage of sucrose ester microemulsion and CTAB micelle solution ; *Materials Letters*, Volume 61, Issue 13, May 2007, Pages 2652-2657
- 51) F. Jahanshah, K. Sopian, S.H. Zaidi, M.Y. Othman, N. Amin and **N. Asim** ; Modeling the effect of PN Junction Depth on the output of planer and rectangular textured solar cells, *American Journal of Applied science* 6(4): 576-580,
- 52) Kamaruzzaman Sopian, Abdul Latif Ibrahim, **Nilofar Asim** , Nowshad Amin, and Saleem H. Zaidi; Can a High-Tech Silicon Photovoltaic (PV) be a Cottage Industry?, *European Journal of Scientific Research* Vol.24 No.2 (2008), pp.263-269
- 53) Kamaruzzaman Sopian, **Nilofar Asim** , Nowshad Amin, and Saleem H. Zaidi; Enhancement of Optical Absorption in Thin Film Silicon Solar Cells in Silicon-On-Insulator (SOI) Configuration, *European Journal of Scientific Research* Vol.24 No.3 (2008), pp.358-364

- 54) Mohd Azri Ab Rani, **Nilofar Asim**, Nor Aziah Lazim, Marzieh Badiei and Mohd Ambar Yarmo; Ozonolysis of oleic acid over a nano Vanadium pentoxide ( $V_2O_5$ ) catalyst, European Journal of Scientific Research Vol.24 No.3 (2008), pp.428-432
- 55) Nor Aziah Lazim, **Nilofar Asim**, Mohd Azri Ab Rani, Ali Ahmadzadeh, Mohd Ambar Yarmo & Shahidan Radiman; Investigation of Nanoscale Tungsten (VI) Oxide as a Catalyst for the Ozonolysis of Oleic Acid, European Journal of Scientific Research Vol.24 No.4 (2008), pp.463-467
- 56) Kamaruzzaman Sopian, Nowshad Amin, **Nilofar Asim** and Saleem H. Zaidi; Plasma Implantation for Emitter and Localized Back Surface Field (BSF) Formation in Silicon Solar Cells, European Journal of Scientific Research Vol.24 No.3 (2008), pp.365-372

#### **Book:**

- 1) Chapter 8 in “**Nanomaterials for Green Energy**”, Elsevier, ISBN: 9780128137314, 2018
- 2) Chapter 10 in “**Nanocomposites: Preparation, Properties and Performance**”, Nova Publishers, ISBN: 978-1-60456-798-4, 2008

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### Academic Experience – List of students

#### List of PhD:

1. Zeynab Emdadi Barkadehi; Doctor of Philosophy (Renewable Energy); 2017
2. Mohammad Istiaque Hossain; Doctor of Philosophy (Electrical, Electronic and Systems Engineering); 2016
3. Mohammad Shakeri; Doctor of Philosophy (Electrical, Electronic and Systems Engineering); 2018
4. Mohammad Shah Jamal; Doctor of Philosophy (Renewable Energy); in progress
5. Rafiza Abdul Rahman; Doctor of Philosophy (Renewable Energy); in progress
6. Nur Athirah Binti Abdullah; Doctor of Philosophy (Renewable Energy); in progress
7. Ghaith Yahya Ahmed; Doctor of Philosophy (Renewable Energy); in progress
8. Ewe Win Eng; Doctor of Philosophy (Renewable Energy); in progress

#### Postgraduate (MSc):

1. Zatil Amali Binti Che Ramli; Master of Science (Renewable Energy); 2015
2. Muhamad Irsyamuddin Bin Mohd Zin, Master of Science (Renewable Energy);2018
3. Fahia Tarannum Munna; Master of Science (Renewable Energy); in progress
4. Nurul Shahirah Binti Rukman; Master of Science (Renewable Energy); in progress

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