

Curriculum Vitae

(Nasser A. M. Barakat)

I. Personal information

Name:	Nasser Aly Mohamed Barakat	
Date of birth:	31 th of Aug., 1972	
Marital status:	Married with 2 child	
Nationality:	Egyptian	
Position: (Permanent)	Associate Professor, Organic Materials and Fiber Engineering Dept., Chonbuk National University, Jeonju 561-756, South Korea. Professor in Chemical Engineering Dept., Faculty of Engineering, El-Minia University, Egypt	
Contacts	0082-10-6731-1431 (H.P), 0082-63-270-2363 (L.P)	
E-mail	nasser1995@hotmail.com nasser@jbnu.ac.kr	nasbarakat@yahoo.com
Languages	English (very good), Arabic (native) and Chinese (Good)	
Work abroad	I have no any problem to work in any country.	
Scopus ID	21741818400	

II. Educations:

Degree	Major	Institution	Title	Date
Bachelor	Chemical Engineering	Minia University, Mina, Egypt,	<i>Desulphurization of petroleum coke</i> (Graduation Project)	1995
Master	Chemical Engineering	Minia University, Mina, Egypt	<i>Desulphurization of petroleum coke and effect of some inorganic binders on its agglomeration</i>	1998
Doctor	Chemometrics	State key laboratory of	<i>New Chemometric</i>	2004

		Chemo/Biosensing and Chemometrics, College of Chemistry and Chemical Engineering, Hunan university, Changsha, China	<i>Algorithms for Knowledge Discovery from Complex Chemical Data</i>	
--	--	---	--	--

III. Employments

Position	Institution	Period	
		From	To
Full Professor	Chemical Engineering Dept., Faculty of Engineering, Minia University, Minia, Egypt	25/2/2015	Up to now
Associate Professor	Organic Materials and Fiber Engineering Dept., College of Engineering, Chonbuk National University, Jeonju 561-756, South Korea	25/10/2010	Up to now
Associate Professor	Chemical Engineering Dept., Faculty of Engineering, Minia University, Minia, Egypt	28/1/2010	30/9/2010
Lecturer	Chemical Engineering Dept., Faculty of Engineering, Minia University, Minia, Egypt	2-8-2009	27/1/2010
Postdoctoral fellow	Bionano system Engineering, College of Engineering, Chonbuk National University, Jeonju 561-756, South Korea.	1-2-2008	31-7-2009
Postdoctoral fellow	Bionano system Engineering, College of Engineering, Chonbuk National University, Jeonju 561-756, South Korea	1-2-2007	31-1-2008
Lecturer	Chemical Engineering Dept., Faculty of Engineering, El-Markab university,	1-9-2005	31-1-2007

	El-Khoms, Libya.		
Lecturer	Chemical Engineering Dept., Faculty of Engineering, Minia University, Minia, Egypt	1-8-2004	31-8-2005
Ph. D Student	A Member of China Scholarship Council to Study Ph. D. State key laboratory of Chemo/Biosensing and Chemometrics, College of Chemistry and Chemical Engineering, Hunan university, Changsha, China	1-9-2000	31-7-2004
Assistant Lecturer	Chemical Engineering Dept., Faculty of Engineering, Minia University, Minia, Egypt	31-8-1998	31-8-2000
Demonstrator	Chemical Engineering Dept., Faculty of Engineering, Minia University, Minia, Egypt.	1-9-1995	30-8-1998

IV. Awards

1. The best researcher in Chonbuk National University in 2015 (Oct. 2016)
2. Excellent researcher in Chonbuk National University in 2014 (Oct. 2015)
3. Visiting Professor in King Saud University, Saudi Arabia from June, 2013 up to now.
4. Egyptian Government Encouragement Prize in the field of Engineering Science
جائزه الدولة التشجيعية فى العلوم الهندسية. (2009)
5. Misr Elkhair Organization for the best research paper, Egypt 2010.
6. Korean Carbon Society prize for the best lecture about nanotechnology, 2008.
7. Grant of Postdoctoral program, Chonbuk National University Jeonju 561-756, South Korea (2007).
8. Best oral presentation at “China-Japan-Korea international Symposium on Advanced Functional Nanofibers, March 3-8, 2013, Suzhou, China (the 5th International Symposium on Advanced Functional Fibers for Young Researchers.
9. Korean Science and Engineering Foundation (KOSEF) Grant Funded by Korea Government (MOEHRD) (KOSEF-200/-022), 2008.

10. Regional Research Centers Programs of the Korean Ministry of Education & Human Resource Development through the Center for Healthcare Technology and Development, 2009.
11. Trans-Century Training Program for Talents by the Ministry of Education of China and the Ministry of Higher Education of Egypt to study Ph. D degree. I entered State key laboratory of Chemo/Biosensing and Chemometrics, College of Chemistry and Chemical Engineering, Hunan university, Changsha, China., 2000.

V. Patents

1. **Nasser A. M. Barakat**, Faheem A. Sheikh, Muzafar A. Kanjwal and Hak Yong Kim “*Nanofiber web with network structure and method of manufacturing*” **Korean patent**, 10-2008-0106954 (2008.10.30).
2. **Nasser A.M. Barakat**, Faheem A. Sheikh, Muzafar A. Kanjwal and Hak Yong Kim. “*Core-Sheath typed gallium arsenide/PVA composite nanofiber and method of manufacturing the same*” **Korean Patent**, 10-1028382 (Submission date 2009.03.03, Registration date 2011.04.04).
3. **Nasser A. M. Barakat**, Park Soo-Jin, Faheem S. Arjamen, Hwang Hee-Jin and Hak Yong Kim "Core-shell typed cobalt/carbon composite nanofibers and method manufacturing the same" **Korean Patent**, 10-1034253 (Submission date 2009.05.14, Registration date 2011.05.03).
4. **Nasser A. M. Barakat** and Abdelazeem Mohamed, “Magnetic capsules having the ability to attract iron compounds from the surrounded media”, **Egyptian Patent, 320966, 7-7-2011.**
5. Abdalla Abdal-hay, **Nasser. A.M. Barakat**, Jae Kyoo Lim, Air Jet Spinning of Hydroxyapatite/Poly(Lactic Acid) Hybrid Nanocomposite Membrane Mats for Bone Tissue Engineering (**Korean Patent , submitted**)

VI. Chapters and Books.

- 1.“**Metal Oxides Nanofibers and Their Applications**” *chapter* published by **AMERICAN SCIENTIFIC PUBLISHERS**, 25650 North Lewis Way, Stevenson Ranch, California 91381-1439, USA, within a book entitled: **Metal Oxide Nanostructures and Their Applications**. Edited by Ahmad Umar and Yoon-Bong Hahn. ISBN: 1-58883-170-1.
2. “**Influences of Morphology and Doping on the Photoactivity of TiO₂ Nanostructures**” *chapter* published by **AMERICAN SCIENTIFIC PUBLISHERS**, 25650 North Lewis Way, Stevenson Ranch, California 91381-1439, USA, within a book entitled: **Structural Nanocomposites: Perspectives for future applications**. Edited by James Njuguna. ISSN 1612-1317, ISSN 1868-1212 (electronic), ISBN 978-3-642-40321-7, ISBN 978-3-642-40322-4 (eBook), DOI 10.1007/978-3-642-40322-4, **Springer** Heidelberg New York Dordrecht London.
- 3.“**Novel Inorganic Nanofibers for Energy Storage Devices**” Hak Yong Kim, Nasser A. M. Barakat, and Ayman Youssef, **LAP LAMBERT Academic Publishing**, AV Akademikerlag GmbH& Co. KG, (ISBN 978-3-659-36070-1).
4. “**Titanium oxide-based nanofibers as effective catalyst for environmental and energy applications**” *chapter* published by , **LAP LAMBERT Academic Publishing**, AV Akademikerlag GmbH& Co. KG, Germany within a book entitled: **Smart Materials for Energy Storage and Environmental Application**. Edited by M. Shaheer Akhtar. ISSN 978-3-659-86539-8,

VII. Editorial Board

1. *Energy and Environment Focus*, ISSN: 2326-3040 (Print); EISSN: 2326-3059 (Online), American Scientific Publishers, 2013
2. *International Journal of Mechanical Engineering and Industrial Applications (IJMEIA)*, Research Publisher, 2015.
3. Journal of Advanced Research, ISSN: 2090-1232, Elsevier.

VIII. Publications in SCI Journals

***** 2018 *****

- 234 Zafar KhanGhouri, Khaled Elsaied, AhmedAbdala1, SaeedAl-Meer & **Nasser A. M. Barakat** “*Surfactant/organic solvent free single-step engineering of hybrid graphene-Pt/TiO₂ nanostructure: Efficient photocatalytic system for the treatment of wastewater coming from textile industries*” **Scientific Reports**, (2018) 8:14656 | DOI:10.1038/s41598-018-33108-4
- 233 Ahmed S. Yasin, Ibrahim M.A. Mohamed, Mohamed T. Amen, **Nasser A. M. Barakat**, Chan Hee Park and Cheol Sang Kim “*Incorporating Zirconia Nanoparticles into activated carbon as electrode material for capacitive deionization*” **Journal of Alloys and Compounds**, 2018, In Press.
- 232 Mohamed S. Mahmoud, Enas Ahmed, A.A. Farghali, A.H. Zaki and **Nasser A. M. Barakat**, “*Synthesis of Fe/Co-doped titanate nanotube as redox catalyst for photon-induced water splitting*” **Materials Chemistry and Physics**, 217, 2018, 125-132.
- 231 Mohamed S. Mahmoud, Enas Ahmed, A.A. Farghali, A.H. Zaki, Emad A.M. Abdelghani and **Nasser A. M. Barakat**, “*Influence of Mn, Cu, and Cd-doping for titanium oxide nanotubes on the photocatalytic activity toward water splitting under visible light irradiation*” **Colloids and Surfaces A: Physicochemical and Engineering Aspects**, 554, 2018, 100-109.
- 230 Mohamed T. Amen, **Nasser A. M. Barakat**, Mohammad Abu Hena Mostafa Jamal, Seong-Tshool Hong, Ibrahim M. A. Mohamed and Ali Salama, “*Anolyte In-situ Functionalized Carbon Nanotubes Electrons Transport Network as novel strategy for Enhanced Performance Microbial Fuel Cells*” **Applied Energy**, 228, 2018, 167-175.
- 229 **Nasser A. M. Barakat**, Mohannad Alajami, Zafar Khan Ghouri and Saeed Al-Meer, “*Effective NiMn Nanoparticles-Functionalized Carbon Felt as an*

Effective Anode for Direct Urea Fuel Cells” Nanomaterials, 2018, 8, 338, 1-13.

- 228 Mohamed S. Mahmoud, M. Shaheer Akhtar, Ibrahim M.A. Mohamed, Rawan Hamdan, Yara Abu Dakka, **Nasser A.M. Barakat** “*Demonstrated photons to electron activity of S-doped TiO₂ nanofibers as photoanode in the DSSC*, **Materials Letters** 225 (2018) 77–81 (Featured letter)
- 227 **Nasser A. M. Barakat** “*CoNi/CNTs Composite as Effective and Stable Electrode for Oxygen Evaluation Reaction in Alkaline Media*” **International Journal of Hydrogen Energy**, 2018, 43, 18, 8623-8631.
- 226 **Nasser A. M. Barakat**, Ayman Yousef, Salah Matter, M. Obaid, and Ahmed S. Yasin “*ZrO₂/TiO₂ Nanofiber Catalyst for Effective Liquefaction of Agricultural Wastes in Subcritical Methanol*” **Separation Science and Technology**, 2018, In Press.
- 225 **Nasser A. M. Barakat**, A.H. Zaki, Enas Ahmed, A.A. Farghali and Fahad S. Al-Mubaddel “*Fe_xCo_{1-x}-doped Titanium Oxide Nanotubes as Effective Photocatalysts for Hydrogen Extraction from Ammonium Phosphate*” **International Journal of Hydrogen Energy**, 43, 16, 2018, 7990-7997.
- 224 **Nasser A. M. Barakat**, Ahmed G. El-Deen, Zafar Khan Ghouri, Saeed Al-Meer, “*Stable N-doped & FeNi-decorated graphene non-precious electrocatalyst for Oxygen Reduction Reaction in Acid Medium*” **Scientific Reports**, 8, 2018, 1-11. doi:10.1038/s41598-018-22114-1
- 223 Mohammad Ali Abdelkareem, Yazan Al Haj, Mohannad Alajami, Hussain Alawadhi, **Nasser A.M. Barakat** “*Ni-Cd carbon nanofibers as an effective catalyst for urea fuel cell*” **Journal of Environmental Chemical Engineering**, 6, 1, 2018, 332-337.
- 222 **Nasser A. M. Barakat**, Mohamed A. Yassin, Fahad S. Al-Mubaddel and Mohamed T. Amen, “*New electrooxidation characteristic for Ni-based electrodes for wide application in methanol fuel cells*” **Applied Catalysis A: General**, 2018, 555, 148-154.
- 221 Mohannad Alajami, Mohamed A Yassin, Zafar Khan Ghouri, Saeed Al-

- Meer, Nasser A. M. Barakat "Influence of bimetallic nanoparticles composition and synthesis temperature on the electrocatalytic activity of NiMn-incorporated carbon nanofibers toward urea oxidation" **International Journal of Hydrogen Energy**, **43**, 2018, 5561-5575.
- 220 Nasser A. M. Barakat, Mohannad Alajami, Zafar Khan Ghouri and Saeed Al-Meer "CoNi Nanoparticles/CNT Composite as Effective Anode for Direct Urea Fuel Cells" **International Journal of Electrochemical Science**, **13**. 2018, 4693-4699.
- 219 Hend Omar Mohamed , Enas Taha Sayed, Hyunjin Cho, Mira Park, M. Obaid, Hak-Yong Kim, Nasser A.M. Barakat "Effective strategies for anode surface modification for power harvesting and industrial wastewater treatment using microbial fuel cells" **Journal of Environmental Management** **206** (2018) 228-235.
- 218 Nasser A. M. Barakat, Enas Ahmed, Mohamed T. Amen, Mohammad Ali Abdelkareem, A.A. Farghali "*N*-doped Ni/C/TiO₂ nanocomposite as effective photocatalyst for water splitting" **Materials Letters**, **2018**, **210**, 317-320.
- ***** 2017 *****
- 217 Hend Omar Mohamed, M. Obaid, Enas Taha Sayed, Yang Liu Jinpyo Lee, Mira Park, Nasser A. M. Barakat, Hak Yong Kim "Electricity generation from real industrial wastewater using a single-chamber air cathode microbial fuel cell with an activated carbon anode" **Bioprocess and Biosystems Engineering**, **2017**, **40** (8) 1151-1161.
- 216 Hend Omar Mohamed , M. Obaid, Enas Taha Sayed, Mohammad Ali Abdelkareem, Mira Park, Yanan Liu, Hak-Yong Kim, Nasser A.M. Barakat, "Graphite Sheets as high-performance low-cost anodes for mediator-less microbial fuel cells using real food wastewater" **Chemical Engineering & Technology**, **2017**, **40**, **12**, 2243-2250.
- 215 Zafar Khan Ghouri, Khaled Elsaied, Saeed Al-Meer, Nasser A. M. Barakat

“Applicable anode based on Co_3O_4 - $SrCO_3$ heterostructure nanorods-incorporated CNFs with low-onset potential for DUFCs” **Applied Nanoscience**, **2017**, **7**, **625-631**.

- 214** Nasser A.M. Barakat, Mohamed A. Yassin, Ahmed S. Yasin, Saeed Al-Meer “Influence of nitrogen doping on the electrocatalytic activity of Ni-incorporated carbon nanofibers toward urea oxidation” **International Journal of Hydrogen Energy**, **42**, **34**, **21741-21750**, **2017**.
- 213** Prem Singh Saud, Zafar Khan Ghouri, Mohamed K. Hassan, **Nasser A. M. Barakat** and Hak Yong Kim “Nano-designed λ - $CaCO_3$ @rGO photocatalyst for effective adsorption and simultaneous removal of organic pollutant” **Journal of Materials Science: Materials in Electronic**, **2016**, **27**, **9**, **9593-9598**.
- 212** Ayman Yousef, Robert M. Brooks, Mohammad A. Abdelkareem, Jabril A. Khamaj, M. M. El-Halwany, **Nasser A. M. Barakat**, Mohamed H. EL-Newehy, and Hak Yong Kim “Electrospun NiCu Nanoalloy Decorated on Carbon Nanofibers as Chemical Stable Electrocatalyst for Methanol Oxidation” **ECS Electrochemistry Letters**, **4** (9) **F51-F55** (**2015**).
- 211** Hend Omar Mohamed , Mohammad Ali Abdelkareem, M. Obaid, Su-Hyeong Chae, Mira Park, Hak Yong Kim, and **Nasser A. M. Barakat** “Cobalt Oxides-Sheathed Cobalt Nano flakes to Improve Surface Properties of Carbonaceous Electrodes Utilized in Microbial Fuel Cells” **Chemical Engineering Journal**, **2017**, **326**, **497-506**.
- 210** M. Obaid, Hend Omar Mohamed, Ahmed S. Yasin, Mohamed A. Yassin, Olfat A. Fadali, Hak-Yong Kim, and **Nasser A. M. Barakat** “Under-Oil Superhydrophilic Wetted PVDF Electrospun Modified Membrane for Continuous Gravitational Oil/Water Separation with Outstanding Flux” **Water Research**, **123**, **524-535**, **2017**.
- 209** Mohamed A. Yassin, Ibrahim M.A. Mohamed, Fahad S. Al-Mubaddel, **Nasser A.M. Barakat** “Effective and high performance graphene electrode for acidic electrolyte supercapacitors prepared from commercial sugar by one-pot procedure” **Materials Letters**, **201**, **2017**, Pages **22-26**

- 208** Nasser A. M. Barakat, “*Cuprite (Cu_2O) Architected Nanoparticles by Novel and Facile Treatment of PVA/Copper Acetate Electrospun Nanofibers*” **Energy and Environment Focus** Vol. 6, 2, 2017, 119-146.
- 207** Ayman Yousef, Robert M. Brooks, M.M. El-Halwany, **Nasser A.M. Barakat**, Mohamed H. EL-Newehy, Hak Yong Kim, “ *CuO -decorated, carbon-doped rutile TiO_2 nanofibers via one step electrospinning: Effective photocatalyst for azo dyes degradation under solar light*” **Chemical Engineering and Processing** 95 (2015) 202–207.
- 206** **Nasser A. M. Barakat**, Mohannad Alajami, Yazan Al Haj, M. Obaid, Saeed Al-Meer, “*Enhanced onset potential NiMn-decorated activated carbon as effective and applicable anode in urea fuel cells*”, **Catalysis Communications**, 2017, 97, 32-36.
- 205** Zafar Khan Ghouri, Saeed Al-Meer and **Nasser A. M. Barakat**, “ *$ZnO@C$ (core@shell) microspheres derived from spent coffee grounds as applicable non-precious electrode material for DMFCs*”, **Scientific Reports**, 2017, 7, 1738. doi:10.1038/s41598-017-01463-3.
- 204** Ibrahim M A Mohamed, Van-Duong Dao, Ahmed S Yasin, Hamouda M Mousa, Mohamed A Yassin, Muhammad Yasir Khan, Ho-Suk Choi and **Nasser A M Barakat** “*Physicochemical and photo-electrochemical characterization of novel N-doped nanocomposite ZrO_2/TiO_2 photoanode towards technology of dye-sensitized solar cells*” **Materials Characterization**, 2017, 127, 357-364.
- 203** Badr M. Thamer, Mohamed H. El-Newehy, **Nasser A. M. Barakat**, Salem S. Al-Deyab and Hak Yong Kim, “*Preparation of zero-valent Co/N-CNFs as an immobilized thin film onto graphite disk for methanol electrooxidation*” **Fibers and Polymers**, 2017, 18, 4, 696-705.
- 202** Van-Duong Dao, Liudmila L. Larina, Quoc Chinh Tran, Van-Tien Bui, Van-Toan Nguyen, Thanh-Dong Pham, Ibrahim M.A. Mohamed, **Nasser A.M. Barakat**, Bui The Huy, Ho-Suk Choi, “*Evaluation of Pt-based alloy/graphene nanohybrid electrocatalysts for triiodide reduction in photovoltaics*” **Carbon** 116 (2017) 294 – 302.

- 201** Nasser A. M. Barakat, M. Shaheer Akhtar, Ibrahim M A Mohamed, Yara Abu Dakka, Rawan Hamdan, Ahmed G. El-Deen, Khalid Elsaied, M. Obaid, and Saeed Al-Meer “*Effective and Stable FeNi@ N-doped graphene Counter Electrode for Enhanced Performance Dye Sensitized Solar Cells*” **Materials Letters**, **191** (2017) **80 - 84.**
- 200** Ibrahim M A Mohamed, Van-Duong Dao, Ahmed S Yasin, Mohamed A Yassin, **Nasser A M Barakat**, and Ho-Suk Choi “*Synthesis of novel ZrO₂&GO@TiO₂ nanocomposite as an efficient photoanode in dye-sensitized solar cells*” **Superlattices and Microstructures** **102** (2017) **235 -245.**
- 199** Ahmed Yousef, Mohamed H. El-Newehy, Salem S. Al-Deyab, **Nasser A. M. Barakat** “*Facile synthesis for of Ni-decorated multi-layers graphene sheets as effective anodes for direct urea fuel cells*” **Arabian Journal of Chemistry**, **10, 6** (2017) **811-822.**
- 198** Ahmed S. Yasin, M. Obaid, Ibrahim M.A. Mohamed, Cheol-Sang Kim and **Nasser A. M. Barakat** “*ZrO₂ nanofibers/activated carbon composite as novel and effective electrode material for enhanced performance capacitive deionization*” **RSC Advances**, **2017, 7**, **4616.**
- 197** Hend Omar Mohamed, M. Obaid, Ahmed S. Yasin,a Jun Hee Kim, and **Nasser A. M. Barakat** “*Electrodepositing technique for improving the performance of crystalline and amorphous carbonaceous anodes for MFCs*” **RSC Advances**, **2016, 6**, **111657.**
- 196** Ibrahim M A Mohamed; Van-Duong Dao; Ahmed S Yasin; Ho-Suk Choi; Khalil A Khalil, **Nasser A. M. Barakat** “*Facile synthesis of GO@SnO₂/TiO₂ nanofibers and their behavior in photovoltaics*” **Journal of Colloid and Interface Science**, **490** (2017) **303–313.**
- 195** Ibrahim M.A. Mohamed, Van-Duong Dao, Ahmed S. Yasin, **Nasser A.M. Barakat**, and Ho-Suk Choi “*Design of an efficient photoanode for dye-sensitized solar cells using electrospun one-dimensional GO/N-doped nanocomposite SnO₂/TiO₂*” **Applied Surface Science**, **400** (2017) **355–364.** <http://dx.doi.org/10.1016/j.apsusc.2016.12.176>.

***** 2016 *****

- 194 M. Obaid, Hend Omar Mohamed, Ahmed S. Yasin, Olfat A. Fadali, Khalil Abdelrazek Khalil, TaeWoo Kim, and **Nasser A. M. Barakat** “*Novel Strategy for Enhancing Electrospun PVDF Support layer of Thin-Film Composite Forward Osmosis Membrane*” **RSC Advances**, ,6 ,2016 102762.
- 193 Ibrahim M A Mohamed, Khalil Abdelrazek Khalil, Hamouda M Mousa and **Nasser A M Barakat** “*Ni/Pd-decorated Carbon NFs as an Efficient Electrocatalyst for Methanol Oxidation in Alkaline Medium*” **Journal of Electronic Materials**, 46, 1, 2016, 265-273. DOI: 10.1007/s11664-016-4900-z
- 192 Yousef Ayman, Brooks Robert, M M El-Halwany, M A Abdelkareem, Mohammad, Khamaj Jabril, Mohamed H EL-Newehy, **Nasser AM Barakat**, Hak Yong Kim “*Fabrication of Electrical Conductive NiCu–Carbon Nanocomposite for Direct Ethanol Fuel Cells*” **International Journal of Electrochemical Science**, 2015, 10, 7025-7032.
- 191 Muzafar A. Kanjwal, Ali Qublan Shawabkeh, Martin Alm, Peter Thomsen, **Nasser A.M. Barakat**, Ioannis S. Chronakis “*Hybrid matrices of ZnO nanofibers with silicone for high water flux photocatalytic degradation of dairy effluent*” **Materials Chemistry and Physics**, 181 (2016) 495-500
- 190 Ahmed S. Yasin, Hend Omar Mohamed, Ibrahim M.A. Mohamed, Hamouda M. Mousa, **Nasser A.M. Barakat** “*Enhanced desalination performance of capacitive deionization using zirconium oxide nanoparticles-doped graphene oxide as a novel and effective electrode*” **Separation and Purification Technology**, 171, 2016, 34-43.
- 189 Ibrahim M A Mohamed, Van-Duong Dao, Ahmed S. Yasin, Hamouda M Mousa, Hend Omar Mohamed, Ho-Suk Choi, Mohamed K. Hassan and **Nasser A M Barakat**, “*Nitrogen-doped&SnO₂-incoportaed TiO₂ Nanofibers as Novel and Effective Photoanode for Enhanced Efficiency*

Dye-sensitized Solar Cells” Chemical Engineering Journal, 304 (2016) 48–60.

- 188** Ayman Yousef, M.M. El-Halwany, Mohamed H. EL-Newehy, Salem S. Al-Deyab, and **Nasser A. M. Barakat**, “*Synthesis of Cu–S-Codoped TiO₂ Nanoparticles Supported on Carbon Nanofibers for Simultaneous Adsorption and Photocatalytic Decomposition of Reactive Black 5*” **J. Nanosci. Nanotechnol.** 2017, Vol. 17, 3998-4004.
- 187** **Nasser A. M. Barakat**, Moaaed Motlak, Zafar Khan Ghouri, Ahmed S. Yasin, Mohamed H. El-Newehy and Salem S. Al-Deyab “*Nickel nanoparticles-decorated graphene as highly effective and stable electrocatalyst for urea electrooxidation*” **Journal of Molecular Catalysis A: Chemical**, 421, 2016, 83-91.
- 186** Ibrahim M A Mohamed, Van-Duong Dao, Ahmed S. Yasin, Ho-Suk Choi, and **Nasser A M Barakat** “*Synthesis of novel SnO₂@TiO₂ nanofibers as an efficient photoanode of dye-sensitized solar cells*” **International Journal of Hydrogen Energy**, 41, 2016, 10578-10589.
- 185** Ibrahim M A Mohamed, Van-Duong Dao, **Nasser A M Barakat**, Ahmed S. Yasin, Ahmed Yousef, and Ho-Suk Choi “*Efficiency Enhancement of Dye-sensitized Solar Cells by Use of ZrO₂-doped TiO₂ Nanofibers Photoanode*” **Journal of Colloid and interface science**, 476, 2016, 9-19.
- 184** Ibrahim H. M. Aly, L. Abed Alrahim Mohammed, and **Nasser A. M. Barakat**, “*Influence of Densification Temperature on the Mechanical, Physical and Biological Properties of Bovine Bones Hydroxyapatite*” **Energy and Environment Focus**, Vol. 05, pp. 1–6, 2016.
- 183** Ibrahim H. M. Aly, L. Abed Alrahim Mohammed, Saeed Al-Meerd, Khalid Elsaid and **Nasser A. M. Barakat**, “*Preparation and characterization of wollastonite/titanium oxide nanofiber bioceramic composite as a future implant material*” **Ceramics International**, 42, 2016, 11525-11534.
- 182** Al-Mahmnur Alam, Zafar Khan Ghouri, **Nasser A. M. Barakat**, Prem Singh Saud, Mira Park, Hak Yong Kim “*Photoluminescent and*

Transparent Nylon-6 Nanofiber Mat Composed by CdSe@ZnS Quantum Dots and Poly (methyl methacrylate), **Polymer**, **2016**, **85**, **89-95**.

- 181** Hend Omar Mohamed, M. Obaid1, Khalil Abdelrazek Khalil and **Nasser A. M. Barakat** “*Power generation from unconditioned industrial wastewaters using commercial membranes-based microbial fuel cells*” **International Journal of Hydrogen Energy**, **41**, **2016** **4251-4263**.
- 180** Zafar Khan Ghouri,**Nasser A. M. Barakat**, Prem Singh Saud, Mira Park, Byoung-Suhk Kim, Hak Yong Kim “*Supercapacitors based on ternary nanocomposite of TiO₂&Pt@graphenes*” **Journal of Materials Science : Materials in Electronics**, **27**, **2016**, **3894-3900**.
- 179** M. Obaid, Zafar Khan Ghouri, Olfat A. Fadali, Khalil Abdelrazek Khalil, Abdulhakim A. Almajid and **Nasser A. M. Barakat**, “*Amorphous SiO₂ NPs- incorporated Poly(vinylidene fluoride) Electrospun Nanofiber Membrane for High Flux Forward Osmosis Desalination*” **ACS Applied Materials & Interfaces**, **8** (**2016**) **4561-4574**.
- 178** Ibrahim M A Mohamed, Moaaed Motlak, H. Fouad, and **Nasser A M Barakat**, “*Cobalt/Chromium Nanoparticles-incorporated Carbon Nanofibers as effective Non-Precious Catalyst for Methanol Electrooxidation in Alkaline Medium*” **Nano**, **11**, **2016**, **1650049-1 - 1650049-10**.
- 177** Zafar Khan Ghouri , Awan Zahoor, Nasser A.M. Barakat , Mohammad S. Alsoufi , Tahani M. Bawazeer , Ahmed F. Mohamed, Hak Yong Kim, “*The (2 × 2) tunnels structured manganese dioxide nanorods with α phase for lithium air batteries*” **Superlattices and Microstructures**, **90** (**2016**) **184-190**.
- 176** Muzafar A. Kanjwal, Martin Alm, Peter Thomsen, **Nasser A. M. Barakatb**, and Ioannis S. Chronakis “*Hybrid matrices of TiO₂ and TiO₂-Ag nanofibers with silicone for high water flux photocatalytic degradation of dairy effluent*” **Journal of Industrial and Engineering Chemistry**, **33**, **2016**, **142-149**.

- 175** Ayman Yousef, Robert M. Brooks, M. M. El-Halwany, M. Obaid, Mohamed H. El-Newehy, Salem S. Al-Deyab, and **Nasser A. M. Barakat** “*A Novel and Chemical Stable Co-B nanoflakes-like structure supported over titanium dioxide nanofibers used as catalyst for hydrogen generation from ammonia borane*” **International Journal of Hydrogen Energy**, **41** (2016) 285-293.
- 174** **Nasser A.M. Barakat**, Ayman Yousef, M. Obaid, and Gehan M. K. Tolba “*Ag-doped M_2O_3 Nanoflakes as Effective Catalyst for Lignin Liquefaction in Supercritical Methanol Medium*” **Ceramics International**, **42** (2016) 4386-4392.
- 173** Ibrahim M A Mohamed, Moaaed Motlak, M. Obaida, and **Nasser A M Barakat**, “*Co/Cr-decorated carbon nanofibers as novel and efficacious electrocatalyst for ethanol oxidation in alkaline medium*” **Journal of Nanoscience and Nanotechnology**, **2017**, **17**, 1280-1286.
- 172** **Nasser A.M. Barakat**, Mohamed H. El-Newehy, Ahmed S. Yasin, Zafar Khan Ghouri, Salem S. Al-Deyab, “*Ni&Mn nanoparticles-decorated carbon nanofibers as effective electrocatalyst for urea oxidation*” **Applied Catalysis A: General**, **2016**, **510**, 180-188.
- 171** Ayman Yousef, Robert M. Brooks, M.M. El-Halwany , Mohamed H. EL-Newehey, Salem S. Al-Deyab, **Nasser A.M. Barakat** “ *Cu^0/S -doped TiO_2 nanoparticles-decorated carbon nanofibers as novel and efficient photocatalyst for hydrogen generation from ammonia borane*” **Ceramics International**, **42** (2016) 1507-1512.

***** 2015 *****

- 170** Zafar Khan Ghouri, **Nasser A. M. Barakat**, Mira Park, Joon Hee Lee, Hak Yong Kim, “*Influence of copper content on the electrocatalytic activity toward methanol oxidation of Co_xCu_y alloy nanoparticles-decorated CNFs*” **Scientific Reports**, **2015**, **5**, 16695.
- 169** **Nasser A.M. Barakat**, Hajar M. Moustafa, M.M. Nassar, Mohammad Ali Abdelkareem, M.S. Mahmoud, Abdulhakim A. Almajid, Khalil Abdelrazek

- Khalil “*Distinct influence for carbon nano-morphology on the activity and optimum metal loading of Ni/C composite used for ethanol oxidation*” **Electrochimica Acta 182 (2015) 143–155.**
- 168** Zafar Khan Ghouri, **Nasser A. M. Barakat**, Al-Mahmnur Alam, Mohammad S. Alsoufi, Tahani M. Bawazeere, Ahmed F. Mohamed, and Hak Yong Kim, “*Synthesis and characterization of Nitrogen-doped & CaCO₃-decorated reduced graphene oxide nanocomposite for electrochemical supercapacitors*” **Electrochimica Acta 184 (2015) 193–202.**
- 167** Badr M. Thamer, Mohamed H. El-Newehy, Nasser A. M. Barakat, Mohammad Ali Abdelkareem , Salem S. Al-Deyab and Hak Yong Kim, “*In-situ synthesis of Ni/N-doped CNFs-supported graphite disk as effective immobilized catalyst for methanol electrooxidation*” **International Journal of Hydrogen Energy, 2015, 40, 43, 14845-14856.**
- 166** **Nasser A. M. Barakat**, Enas Ahmed, Mohammad Ali Abdelkareem, Mohamed H. El-Newehy, Salem S. Al-Deyab, A.A. Farghali, and M. M. Nassar “*Ag, Zn and Cd -doped Titanium Oxide Nanofibers as Effective photocatalysts for Hydrogen Extraction from Ammonium Phosphates*” **Journal of Molecular Catalysis A: Chemistry, 2015, 409, 117-126.**
- 165** Ibrahim M A Mohamed, Moaaed Motlak, M. Shaheer Akhtar, Ahmed S. Yasin, Mohamed H. El-Newehy, Salem S. Al-Deyab and **Nasser A M Barakat** “*Synthesis, Characterization and Performance as a Counter Electrode for Dye-Sensitized Solar Cells of CoCr-decorated Carbon Nanofibers*” **Ceramics International, 42 (2016) 146-153.**
- 164** M. Obaid, **Nasser A. M. Barakat**, Olfat A. Fadali, Saeed Al-Meer, Khalid Elsaid, and Khalil Abdelrazek Khalil, “*Stable and Effective Super-hydrophilic Polysulfone Nanofiber Mats for Oil/Water Separation*” **Polymer 72 (2015) 125-133.**
- 163** Abdalla Abdal-hay, Abdel Salam Hamdy, G. T. Abdel-Jaber, **Nasser A. M. Barakat**, A. A, Ebnalwaled, Khalil Abdelrazek Khalil “*A Facile Manufacturing of Ag/SiO₂ Nanofibers and Nanoparticles Composites via a*

Simple Hydrothermal Plasma Method” **Ceramics International**, **41**, **2015**, **12447-12452**.

- 162** Muzafar A. Kanjwal, Ioannis S. Chronakis, Nasser A.M. Barakat, “*Electrospun NiO, ZnO and composite NiO-ZnO nanofibers/photocatalytic degradation of dairy effluent*” **Ceramics International**, **41**, **2015**, **12229-12236**.
- 161** Zafar Khan Ghouri, **Nasser A.M. Barakat**, Hak Yong Kim, Mira Park, Khalil Abdelrazek Khalil, Mohamed H. El-Newehy, Salem S. Al-Deyab, “*Nano-engineered ZnO/CeO₂ dots@ CNFs for fuel cell application*” **Arabian Journal of Chemistry**, **9**, **2016**, **219-228**.
- 160** **Nasser A. M. Barakat**, Enas Ahmed, Mohammad Ali Abdelkareem, T. E. Farrag, and M. M. Nassar “*Ammonium Phosphate as Promised Hydrogen Storage Material*” **International Journal of Hydrogen Energy**, **2015**, **40**, **32, 10103-10110**.
- 159** Ahmed S. Yasin, M. Obaid, Mohamed H. El-Newehy, Salem S. Al-Deyab, and **Nasser A. M. Barakat**, “*Influence of Ti_xZr_(1-x)O₂ nanofibers composition on the photocatalytic activity toward organic pollutants degradation and water splitting*” **Ceramics International**, **41**, **2015**, **11876-11885**.
- 158** M. Obaid, Gehan M. K. Tolba, Moaaed Motlak, Olfat A. Fadali, Khalil Abdelrazek Khalil, Abdulhakim A. Almajid, and BongSoo Kim and **Nasser A. M. Barakat** “*Effective Polysulfone-Amorphous SiO₂ NPs Electrospun Nanofiber Membrane for High Flux Oil/Water Separation*” **Chemical Engineering Journal**, **2015**, **279**, **631-638**.
- 157** Gehan M. K. Tolba, A. M. Bastaweesy, E. A. Ashour, Wael Abdelmoez, Khalil Abdelrazek Khalil, and **Nasser A. M. Barakat** “*Effective and Highly Recyclable Ceramic Membrane based on Amorphous Nanosilica for Dye Removal from the Aqueous Solutions*” **Arabian Journal of Chemistry**, **9**, **2016**, **287-296**.
- 156** Moaaed Motlak, **Nasser A. M. Barakat**, Ahmed G. El-Deen, A. M.

- Hamza, M. Obaid, M. Shaheer Akhtar, Khalil Abdelrazek Khalil “*NiCu bimetallic nanoparticle-decorated graphene as novel and cost-effective counter electrode for dye-sensitized solar cells and electrocatalyst for methanol oxidation*” **Applied Catalysis A: General** **501** (2015) 41–47.
- 155 Muzafer A. Kanjwala, **Nasser A.M. Barakat**, Ioannis S. Chronakis “*Photocatalytic degradation of dairy effluent using AgTiO₂ nanostructures/polyurethane nanofiber membrane*” **Ceramics International**, **2015**, **41** (8), 9615-9621.
- 154 Zafar Khan Ghouri, M. Shaheer Akhtar, Awan Zahoor, **Nasser A. M. Barakat**, Weidong Han, Mira Park, Bishweshwar Pant, Prem Singh Saud, Cho Hye Lee, Hak Yong Kim “*High-efficiency super capacitors based on hetero-structured α-MnO₂ nanorods*” **Journal of Alloys and Compounds**, **2015**, **642**, 210-215.
- 153 M. M. Nassar, T. E. Farrag, M. S. Mahmoud, S. Abdelmonem, Khalil Abdelrazek Khalil and **Nasser A.M. Barakat**, “*Influence of the operating conditions on the morphology of CaCO₃ nanoparticles prepared by modified co-precipitation with pulse mode feeding*” **Advanced Powder Technology**, **26** (2015) 914-919.
- 152 Badr M. Thamer, Mohamed H. El-Newehy, Salem S. Al-Deyab, Mohammad Ali Abdelkareem, Hak Yong Kim, and **Nasser A. M. Barakat** “*Cobalt-incorporated, nitrogen-doped carbon nanofibers as effective non precious catalyst for methanol electrooxidation in alkaline medium*” **Applied Catalysis A: General**, **2015**, **498**, 230-240.
- 151 Gehan M. K. Tolba, **Nasser A. M. Barakat**, A. M. Bastaweesy, E. A. Ashour, Wael Abdelmoez, Mohamed H. El-Newehy, Salem S. Al-Deyab, and Hak Yong Kim, “*Effective and Highly Recyclable Nanosilica Produced from the Rice Husk for Effective Removal of Organic Dyes*” **Journal of Industrial and Engineering Chemistry** **29** (2105) 134-145.
- 150 Enas Taha Sayed, **Nasser A. M. Barakat**, Mohammad Ali Abdelkareem, H. Fouad, and Nobuyoshi Nakagawa, “*Yeast Extract as Effective and Safe Mediator for the Baker's Yeast-Based Microbial fuel Cell*” **Industrial &**

Engineering Chemistry Research, 2015, 54, 12, 3116-3122.

- 149** Moaaed Motlak, **Nasser A.M. Barakat**, M. Shaheer Akhtar, A.M. Hamza, Byoung-Suhk Kim, Cheol Sang Kim, Khalil Abdelrazek Khalil, Abdulhakim A. Almajid, “*High performance of NiCo nanoparticles-doped carbon nanofibers as counter electrode for dye-sensitized solar cells*” **Electrochimica Acta 160 (2015) 1–6**
- 148** Ayman Yousef, **Nasser A.M. Barakat**, Mohamed H. EL-Newehy, M.M. Ahmed, Hak Yong Kim “*Catalytic hydrolysis of ammonia borane for hydrogen generation using Cu(0) nanoparticles supported on TiO₂ nanofibers*” **Colloids and Surfaces A: Physicochemical and Engineering Aspects, 2015, 470, 194-201.**
- 147** Ayman Yousef, M. M. El-Halwany, **Nasser. A.M. Barakat**, Hak Yong Kim, “*One pot synthesis of Cu-doped TiO₂ carbon nanofibers for dehydrogenation of ammonia borane*” **Ceramics International 41 (2015) 6137–6140.**
- 146** Zafar Khan Ghouri, **Nasser A. M. Barakat**, Mira Park, Byoung-Suhk Kim, and Hak Yong Kim “*Synthesis and characterization of Co/SrCO₃ Nanorods-decorated Carbon nanofibers as novel electrocatalyst for methanol oxidation in alkaline medium*” **Ceramics International, 41 (2015) 6575-6582.**
- 145** Ahmed G. El-Deen, Jae-Hwan Choi, Cheol Sang Kim, Khalil Abdelrazek Khalil, Abdulhakim A. Almajid and **Nasser A. M. Barakat**, “*TiO₂ nanorods-intercalated reduced graphene oxide as high performance electrode material for membrane capacitive deionization*” **Desalination 361 (2015) 53–64.**
- 144** Moaaed Motlak, **Nasser A. M. Barakat**, M. Shaheer Akhtar, Ahmed G. El-Deen, M. Obaid, Cheol Sang Kim, Khalil Abdelrazek Khalil, Abdulhakim A. Almajid, “*High-Efficiency Dye-Sensitized Solar Cells Based on Nitrogen and Graphene oxide co-incorporated TiO₂ nanofibers photoelectrode*” **Chemical Engineering Journal, 2015, 268, 153-161.**

- 143** Ahmed G. El-Deen, Jae-Hwan Choi, Khalil Abdelrazek Khalil, Abdulhakim A. Almajid and **Nasser A. M. Barakat**, “A TiO_2 nanofibers/activated carbon composite as novel effective electrode material for capacitive deionization of brackish water” **RSC advances**, **2014,4**, **64634-64642**.
- 142** Ahmed G. El-Deen, Mohamed El-Newehy and **Nasser A. M. Barakat** “Nitrogen-doped, FeNi alloy nanoparticles-decorated graphene as efficient and stable electrode for electrochemical supercapacitors” **Nanoscale Research Letter**, **2015, 10:104**.
- 141** **Nasser A. M. Barakat**, Moaaed Motlak, Ahmed Taha, M. M. Nassar, M. S. Mahmoud², and H. Fouad, “Super Effective Zn-Fe-doped TiO_2 Nanofibers as Photocatalyst for Ammonia Borane Hydrolysis” **International Journal of Green Energy**, **2016, 13, 7**, **642-649**.
- 140** Ayman Yousef, M. M. El-Halwany, **Nasser A M Barakat**, Mohammednoor N. Al-Maghribi and Hak Yong Kim “ Cu_0 - doped TiO_2 nanofibers as potential photocatalyst and antimicrobial agent” **Journal of Industrial and Engineering Chemistry**, **26 (2015) 251-258**.
- 139** Zafar Khan Ghouri, **Nasser A.M. Barakat**, M. Obaid, Joong Hee Lee, Hak Yong Kim, “ Co/CeO_2 -decorated carbon nanofibers as effective non-precious electro-catalyst for fuel cells application in alkaline medium” **Ceramics International**, **41 (2) (2015) 2271-2278**.
- 138** Fadali O.A., M. Obaid, Mahmoud M.S., Farrag T.E., Kim TaeWoo, Khalil Abdelrazek Khalil and **Nasser A. M. Barakat**, “Novel Strategy for Copper Ion Cementation in Presence of Magnetic Field” **Chemical Engineering and Technology**, **2015, 38**, **380-386**.
- 137** Gehan M. K. Tolba, A. A. M. Bastaweesy, E. A. Ashour, Wael Abdelmoez, Mohamed El-Newehy, **and Nasser A. M. Barakat**, “Synthesis of novel Fe-doped amorphous TiO_2/C Nanofibers for supercapacitors applications” **International Journal of Electrochemical Science**, **2015, 10**, **3117-3123**.

- 136** Zafar Khan Ghouri, **Nasser A.M. Barakat**, Al-Mahmnur Alam, Mira Park, Tae Hwan Han and Hak Yong Kim, “*Facile synthesis of Fe/CeO₂-doped CNFs and Their Capacitance Behavior*” **International Journal of Electrochemical Science**, **2015**, **10**, **2064-2071**.
- 135** Zafar Khan Ghouri, **Nasser A.M. Barakat** and Hak Yong Kim, “*Synthesis and Electrochemical Properties of MnO₂ and Co-Decorated Graphene as Novel Nanocomposite for Electrochemical Super Capacitors Application*” **Energy and Environment Focus**, **4** (2015) **1-6**.
- 134** **Nasser A. M. Barakat**, Moaaed Motlak, M. M. Nassar, Mohammad Ali Abdelkareem, M. S. Mahmoud, Mohamed H. El-Newehy, and Hager M. Moustafa “*From Secondary to Primary Role in Alkaline Fuel Cells:Co-Decorated Graphene as Effective Catalystfor Ethanol Oxidation*” **ECS Electrochemistry Letters**, **4** (1) **F5-F8** (2015)
- 133** M. Obaid, Fadali O.A, Baek-Ho Lim, H. Fouad, and **Nasser A. M. Barakat**, “*Super-Hydrophilic and Highly Stable in Oils Polyamide-Polysulfone Composite Membrane by Electrospinning*” **Materials Letters**, **138**, **196-199**, (2015).
- 132** Moaaed Motlak, **Nasser A. M. Barakat**, M. Shaheer Akhtar, A. M. Hamza, Ayman Yousef, Hassan Fouad, and O-Bong Yang “*Influence of GO incorporation in TiO₂ nanofibers on the electrode efficiency in Dye-Sensitized Solar Cells*” **Ceramics International**, **41** (2015) **1205-1212**.
- 131** M. Obaid, **Nasser A. M. Barakat**, Fadali O.A, Moaaed Motlak, Abdulhakim A. Almajid, Khalil Abdelrazek Khalil, “*Effective and reusable oil/water separation membranes based on modified polysulfone electrospun nanofiber mats*” **Chemical Engineering Journal**, **2015**, **259**, **449-456**.
- 130** **Nasser A. M. Barakat**, Moaaed Motlak, Baek Ho Lim, Mohamed H. El-Newehy, and Salem S. Al-Deyab, “*Effective and Stable CoNi Alloy-Loaded Graphene for Ethanol Oxidation in Alkaline Medium*” **Journal of Electrochemical Society**, **2014**, **161**, **12**, **F1194-F1201**.

- 129** Bishweshwar Pant, **Nasser A.M. Barakat**, Hem Raj Pant, Mira Park, Prem Singh Saud, Jong-Wan Kim, Hak-Yong Kim “*Synthesis and photocatalytic activities of CdS/TiO₂ nanoparticles supported on carbon nanofibers for high efficient adsorption and simultaneous decomposition of organic dyes*” **Journal of Colloid and Interface Science**, **434**, 2014, 159-166.
- 128** Gehan M. K. Tolba, **Nasser A. M. Barakat**, A. M. Bastaweesy, E. A. Ashour, Wael Abdelmoez, Mohamed H. El-Newehy, Salem S. Al-Deyab, and Hak Yong Kim, “*Hierarchical TiO₂/ZnO Nanostructure as Novel Non-precious Electrocatalyst for Ethanol Electrooxidation*” **Journal of Materials Science & Technology**, **2015**, **31**, **1**, 97-105.

***** 2014 *****

- 127** **Nasser A. M. Barakat**, Moaaed Motlak, Byoung-Suhk Kim, Ahmed G. El-Deen, Salem S Al-Deyab, and A. M. Hamza “*Carbon Nanofibers doped by Ni_xCo_{1-x} Alloy Nanoparticles as Effective and stable Non Precious Electrocatalyst for Methanol Oxidation in Alkaline Media*” **Journal of Molecular Catalysis A: Chemical**, **2014**, **394**, 177-187.
- 126** Badr M. Thamer, Mohamed H. El-Newehy, **Nasser A. M. Barakat**, Mohammad Ali Abdelkareem, Salem S. Al-Deyab and Hak Yong Kim, “*Influence of Nitrogen doping on the Catalytic Activity of Ni-incorporated Carbon Nanofibers for Alkaline Direct Methanol Fuel Cells*” **Electrochimica Acta**, **2014**, **142**, 228-239.
- 125** Ahmed G.El-Deen, **NasserA.M.Barakat**, Khalil Abdelrazek Khalil, Moaaed Motlak, HakYongKim, “*Graphene/SnO₂ nanocomposite as an effective electrode material for saline water desalination using capacitive deionization*” **Ceramics International**, **2014**, **40**, **9**, 14627-14634.
- 124** **Nasser A. M. Barakat**, Ahmed Taha, Moaaed Motlak, M. M. Nassar, and M. S. Mahmoud, Salem S Al-Deyab, Mohamed El-Newehy, and Hak Yong Kim, “*ZnO&Fe₂O₃-incoportaed TiO₂ Nanofibers as Super Effective Photocatalyst for Water Splitting Under Visible Light Radiation*” **Applied**

Catalysis A: General, 2014, 481, 19-26.

- 123 Gopal Panthi, **Nasser A.M. Barakat**, Mira Park, Hak-Yong Kim, Soo-Jin Park, “*Fabrication of PdS/ZnS NPs doped PVAc hybrid electrospun nanofibers: Effective and reusable catalyst for dye photodegradation*” **Journal of Industrial and Engineering Chemistry, 2015, 21, 298-302.**
- 122 Ahmed G. El-Deen, **Nasser A. M. Barakat**, and Hak Yong Kim “*Graphene Wrapped MnO₂-Nanostructures as Effective and Stable Electrode Materials for Capacitive Deionization Desalination Technology*” **Desalination, 2014, 344, 289-298.**
- 121 Mohammad Ali Abdelkareem, Enas Taha Kasem, Nobuyoshi Nakagawa, Emad A. M. Abdelghani, **Nasser A. M. Barakat** “*Enhancement of the passive direct methanol fuel cells performance by modification of the cathode microporous layer using carbon nanofibers*” **Fuel Cells, 4, 607-613, 2014.**
- 120 Bishweshwar Pant, Hem Raj Pant, Mira Park, Yanan Liu, Ja-Wun Choi, **Nasser A.M. Barakat**, Hak-Yong Kim, “*Electrospun CdS-TiO₂ doped carbon nanofibers for visible-light-induced photocatalytic hydrolysis of ammonia borane*” **Catalysis Communications 50 (2014) 63–68.**
- 119 **Nasser A. M. Barakat, Moaaed Motlak** “*Co_xNiy-decorated graphene as novel, stable and super effective non-precious electro-catalyst for methanol oxidation*” **Applied Catalysis B: Environmental 154-155 (2014) 221-231.**
- 118 Emad A.M. Abdelghani, **Nasser A.M. Barakat**, Enas T. Sayed “*Effect of humidification conditions and adding 3 μm-size superfine powders on circulation rates of binary Geldart A-C mixtures in a semi-batch circulating fluidized bed*” **Powder Technology, Volume 256, April 2014, Pages 25-32**
- 117 **Nasser A. M. Barakat**, Ahmed G. El-Deen and Khalil A. Khalil, “*Effective Modified Carbon Nanofibers as Electrodes for Capacitive Deionization Process*” **Journal of Materials Science and Chemical Engineering, 2014, 2, 38-42.**

- 116** Gehan M. K. Tolba, **Nasser A. M. Barakat**, A. M. Bastaweesy, E. A. Ashour, Wael Abdelmoez and Hak Yong Kim, “*Synthesis and electrochemical capacitance behavior of ZnO-doped TiO₂ nanofibers*” **Energy and Environment Focus**, **2014**, **3**, **152-156**.
- 115** **Nasser A. M. Barakat**, Mohamed El-Newehy, Salem S. El-Deyab, and Hak Yong Kim “*Cobalt/Copper-decorated Carbon Nanofibers as Novel Non Precious Electrocatalyst for Methanol Electrooxidation*” **Nanoscale Research Letters**, **2014**, **9:2**.
- 114** Mohammad Ali Abdelkareem, M. Shahbudin Masdar, Takuya Tsujiguchi, Nobuyoshi Nakagawa, Enas Taha Sayed and **Nasser A. M. Barakat**, “*Elimination of Toxic Products Formation in Vapor-Feed Passive DMFC Operated by Absolute Methanol Using Air Cathode Filter*” **Chemical Engineering Journal**, **240**, **38-44**, **2014**.
- 113** Moaaed Motlak, M. Shaheer Akhtar, **Nasser A. M. Barakat**, A. M. Hamza, O-Bong Yang, and Hak Yong Kim “*High-Efficiency Electrode Based on Nitrogen-Doped TiO₂ Nanofibers for Dye-Sensitized Solar Cells*” **Electrochimica Acta**, **115**, **493-498**, **2014**.
- 112** **Nasser A. M. Barakat**, Khalil Abdelrazek Khalil, Ahmad G. El-Deen, Hak Yong kim, “*Development of Cd-doped Co Nanoparticles Encapsulated in Graphite Shell as Novel Electrode Material for the Capacitive Deionization Technology*” **Nano-Micro Letters**, **5 (4)**, **303 – 313**, **2013**.
- 111** **Nasser A. M. Barakat**, Moaaed Motlak, Ahmed A. Elzatahry, Khalil Abdelrazek Khalil, Emad A. M. Abdelghani, “*Ni_xCo_{1-x} Alloy Nanoparticle-doped Carbon nanofibers as Effective Non-Precious Catalyst for Ethanol Oxidation*” **International Journal of Hydrogen Energy**, **39 (1)**, **305 – 316**, **2014**.
- 110** **Nasser A. M. Barakat**, Mohammad Ali Abdelkareem, Mohamed El-Newehy, and Hak Yong Kim “*Influence of the nanofibrous morphology on the catalytic activity of NiO nanostructures: Effective impact toward methanol electrooxidation*” **Nanoscale Research Letters**, **2013**, **8:402**.

- 109** Nasser A. M. Barakat, Ahmed A. Elzatahry, Khalil Abdelrazek Khalil “*Synthesis and Characterization of Co-Mn-O Nanofibers Supported on a Graphite Disk: Novel strategy for nanofibers immobilization*” **Materials Research Bulletin**, **2014**, **49**, 503-508.
- 108** Ahmed G. El-Deen, Nasser A. M. Barakat, Khalil Abdelrazek Khalil and Hak Yong Kim “*Development of Multi-channels Carbon Nanofibers as Effective Electrosorptive Electrodes for Capacitive Deionization Process*” **Journal of Materials Chemistry A**, **2013**, **1** (36), 11001 – 11010.
- 107** Ahmed G. El-Deen, Nasser A. M. Barakat, Khalil Abdelrazek Khalil and Hak Yong Kim “*Hollow Carbon Nanofibers as Effective Electrode for Brackish Water Desalination Using Capacitive Deionization Process*” **New Journal of Chemistry**, **38**, 198-205, 2014.
- 106** Bishweshwar Pant, Hem Raj Pant, Nasser A.M. Barakat, Mira Park, Tae-Hwan Han, Baek Ho Lim, Hak-Yong Kim “*Incorporation of cadmium sulfide nanoparticles on the cadmium titanate nanofibers for enhanced organic dye degradation and hydrogen release*” **Ceramics International**, **40** (1), 1553 – 1559, 2014.
- 105** Ayman Yousef, Nasser A.M. Barakat, Hak Yong Kim “*Electrospun Cu-doped titania nanofibers for photocatalytic hydrolysis of ammonia borane*” **Applied Catalysis A: General**, **Volume 467**, 2 October 2013, Pages 98-106.
- 104** Emad A. M. Abdelghany, R. Aboubeah, T. Farrag and Nasser A. M. Barakat “*Study on fluidization of 0.5 µm ultrafine and 8.0 µm superfine powders in a binary mixture circulating fluidized bed*” **International Journal of Energy Research**, **38** (2014) 683-688. DOI: 10.1002/er.3117
- 103** Nasser A. M. Barakat, M. M. Nassar, Farrag T.E., Mahmoud M.S “*Effective Photodegradation of Methomyl Pesticide in Concentrated Solutions by Novel Enhancement of the Photocatalytic Activity of TiO₂ Using CdSO₄ Nanoparticles*” **Environmental Science and Pollution Research**, **21** (2014) 1425-1435. DOI: 10.1007/s11356-013-2027-9

- 102** Moaaed Motlak, **Nasser A. M. Barakat**, M. Shaheer Akhtar, A. M. Hamza, Ahmed Taha, O-Bong Yang, and Hak Yong Kim “*Enhancement the Conversion Efficiency of the Dye-Sensitized Solar Cells using Novel Ca-doped TiO₂ Nanofibers*” **Energy and Environment Focus**, **2 (5)**, 217 – 221, 2013.
- 101** **Nasser A. M. Barakat** “*Effective Co-Mn-O Nanofibers for Ammonia Borane Hydrolysis*” **Materials Letters**, **106**, 229-232, 2013.
- 100** Touseef Amna, **Nasser A. M. Barakat**, M. Shamshi Hassan, Myung-Seob Khil, Hak Yong Kim, “*Camptothecin loaded poly(ε-caprolactone) nanofibers via one-step electrospinning and their cytotoxicity impact*” **Colloids and Surfaces A: Physicochemical and Engineering Aspects**, **431**, 1–8, 2013.
- 99** Ayman Yousef, M. Shaheer Akhtar, **Nasser A. M. Barakat**, Moaaed Motlak, O-Bong Yang, and Hak Yong Kim, “*Effective NiCu NPs-doped Carbon Nanofibers as Counter Electrodes for Dye-Sensitized Solar Cells*” **Electrochimica Acta**, **102**, 142-148, 2013.
- 98** Mira Park, Hye Kyoung Shin, Byoung-Suhk Kim, Bishweshwar Pant, **Nasser A. M. Barakat**, Hak-Yong Kim, “*Facile Preparation of Graphene Induced from Electron-Beam Irradiated Graphite*” **Materials Letters**, **105**, 236-238, 2013.
- 97** **Nasser A. M. Barakat**, Mohammad A. Abdelkareem, and Hak Yong Kim “*Pd-doped Co Nanofibers Immobilized on a Chemically Stable Metallic Bipolar Plate as Novel Strategy for Direct Formic Acid Fuel Cells*”, **International Journal of Hydrogen Energy**, **38 (18)** 7438-7447, 2013.
- 96** Fadali O.A., Ebrahem E.E, Farrag T.E., Mahmoud M.S., Obaid M., **Nasser A. M. Barakat** “*Enhancement of Mass transfer Rate and Diminution of the Power Consumption of Copper Cementation using Electromagnetic Field*” **Energy and Environment Focus**, **2**, 133-138, (2013).
- 95** Wael Abdelmoez, **Nasser A. M. Barakat**, Asmaa Moaz, “*Treatment of*

Wastewater Contaminated with Detergents and Mineral Oils Using Effective and Scalable Technology” Water Science and Technology, 68 (5) 974-981, 2013.

- 94 Nasser A. M. Barakat, Ahmed G. El-Deen, Gwisu Shin, Mira Park and Hak Yong Kim “*Novel Cd-doped Co/C Nanoparticles for Electrochemical Supercapacitors*” **Materials Letters**, 99, 168-171, 2013.
- 93 Nasser A. M. Barakat, Mohammad A. Abdelkareem, and Hak Yong Kim, “*Ethanol Electro-Oxidation using Cadmium-doped Cobalt/Carbon Nanoparticles as Novel Non Precious Electrocatalyst*” **Applied Catalysis A: General Accepted manuscript**, 455, 193-198, 2013.
- 92 Abdalla Abdal-hay, Nasser A.M. Barakat, Jae Kyoo Lim “*Influence of Electrospinning and Dip-Coating Techniques on the Degradation and Cytocompatibility of Mg-Based Alloy*” **Colloids and Surfaces A: Physicochemical and Engineering Aspects**, 420, 37-45, 2013.
- 91 Nasser A. M. Barakat, Mohammad A. Abdelkareem, Ayman Yousef, Mohamed El-Newehy and Hak Yong Kim, “*Cadmium-doped Cobalt/Carbon Nanoparticles as Novel Non Precious Electrocatalyst for Methanol Oxidation*” **International Journal of Hydrogen Energy**, 38 (8) 3387-3394, 2013.
- 90 Nasser A. M. Barakat “*Catalytic and Photo Hydrolysis of Ammonia Borane Complex Using Pd-doped Co Nanofibers*” **Applied Catalysis A: General Accepted manuscript**, 451, 21-27, 2013.
- 89 Nasser A. M. Barakat, Muzafar A. Kanjawal, Ioannis S. Chronakis, and Hak Yong Kim, “*Influence of Temperature on The photodegradation Process Using Ag-doped TiO₂ Nanostructures: Negative Impact with the Nanofibers*” **Journal of Molecular Catalysis A: Chemical**, 366, 333-340, 2013.
- 88 Bishweshwar Pant, Hem Raj Pant, Nasser A.M. Barakat, Mira Park, kyungsoo Jeon, Yuri Choi, Hak-Yong Kim “*Carbon nanofibers decorated with binary semiconductor (TiO₂/ZnO) nanocomposites for the effective*

removal of organic pollutants and the enhancement of antibacterial activities” **Ceramics International**, **2013**, **39**, **7029-7035**.

- 87 Gopal Panthi, **Nasser A. M. Barakat**, Prabodh Risal, Ayman Yousef, Bishweshwar Pant, Afeesh R. Unnithan, Hak Yong Kim. “*Preparation and characterization of Nylon-6/gelatin composite nanofibers via electrospinning for biomedical applications*” **Fibers and polymers**, **14** (5) **718-723**, **2013**.
- 86 Afeesh R. Unnithan, P.B. Tirupathi Pichiah, Gopalsamy Gnanasekaran, Kalaiselvi Seenivasan, **Nasser A. M. Barakat**, Youn-Soo Cha, Che-Hun Jung, Achiraman Shanmugam, and Hak Yong Kim, “*Emu oil-Based Electrospun Nanofibrous Scaffolds for Wound Skin Tissue Engineering*” **Colloids and Surfaces A: Physicochemical and Engineering Aspects**, **415**, **454-466**, **2012**.
- 85 **Nasser A. M. Barakat**, M. Shaheer Akhtar, Ayman Yousef, Mohamed El-Newehy, and Hak Yong Kim “*Pd-Co-doped Carbon Nanofibers with Photoactivity as Effective Counter Electrodes for DSSCs*” **Chemical Engineering Journal**, **211-212** (2012) **9-15**.
- 84 Ayman Yousef, **Nasser A. M. Barakat**, Mohamed El-Newehy, and Hak Yong Kim “*Chemically Stable Electrospun NiCu Nanorods@Carbon Nanofibers for Highly Efficient Dehydrogenation of Ammonia Borane*” **International Journal of Hydrogen Energy**, **102**, **142-148**, **2013**.
- 83 **Nasser A. M. Barakat** and Hak Yong Kim “*Effect of silver-doping on the crystal structure, morphology and photocatalytic activity of TiO₂ nanofibers*” **IOP Conference Series: Materials Science and Engineering**, **2012**, **40**, **012003-1 – 012003-7**, [doi:10.1088/1757-899X/40/1/012003](https://doi.org/10.1088/1757-899X/40/1/012003).
- 82 Gopal Panthi, Ayman Yousef, **Nasser A. M. Barakat**, Khalil Abdelrazek Khalil, Shahina Akhter, Yu Ri Choi, Hak Yong Kim, “*Mn₂O₃/TiO₂ nanofibers with Broad-Spectrum Antibiotics Effect and Photocatalytic Activity for Preliminary Stage of Water Desalination*” **Ceramics International**, **39** (3) **2013**, **2239-2246**.

- 81** Faheem A. Sheikh, **Nasser A. M. Barakat**, Muzafar A. Kanjwal, R. Nirmala, John Hwa Lee, Hern Kim, and Hak Yong Kim “*Electrospun titanium dioxide nanofibers containing hydroxyapatite and silver nanoparticles as future implant materials*” **J Mater Sci: Mater Med** **(2010) 21:2551–2559**
- 80** Faheem A. Sheikh1, Muzafar A. Kanjwal, Javier Macossay, Muneeb A. Muhammad, Travis Cantu, Ioannis S. Chronakis, **Nasser A. M. Barakat**, and Hak Yong Kim “*Fabrication of Mineralized Collagen from Bovine Waste Materials by Hydrothermal Method as Promised Biomaterials*” **Journal of Biomaterials and Tissue Engineering Vol. 1, 194–197, 2011.**
- 79** Faheem A. Sheikh1, Muzafar A. Kanjwal, Jaewan Cha, Namsoo Kim, **Nasser A. M. Barakat**, and Hak Yong Kim “*Nanobiotechnology approach to fabricate polycaprolactone nanofibers containing solid titanium nanoparticles as future implant materials*” **International Journal of Materials Research, 102, 12 (2011) 1481-1487.**
- 78** Afeesh R. Unnithan, **Nasser A. M. Barakat**, P.B. Tirupathi, Gopalsamy Gnanasekaran, R. Nirmala, Youn-Soo Cha, Che-Hun Jung, Mohamed El-Newehy, and Hak Yong Kim, “*Wound-Dressing Materials with Antibacterial Activity from Electrospun Polyurethane-Dextran Nanofiber Mats Containing Ciprofloxacin HCl*” **Carbohydrate Polymers, 90 (4) 1786-1793, 2012.**
- 77** Gopal Panthi, **Nasser A. M. Barakat**, Khalil Abdelrazek Khalil, Ayman Yousef, Kyung-Soo Jeon, Hak yong kim, “*Encapsulation of CoS Nanoparticles in PAN Electrospun Nanofibers: Effective and Reusable Catalyst for Ammonia Borane Hydrolysis and Dyes Photodegradtion*” **Ceramics International, 39 (2) 2013, 1469-1476.**
- 76** Afeesh R. Unnithan, **Nasser A.M. Barakat**, M.F. Abadir, Ayman Yousef, Hak Yong Kim, “*Novel CdPdS/PVAc core-shell nanofibers as an effective Photocatalyst for organic pollutants degradation*” **Journal of Molecular Catalysis A: Chemical, 363-364 (2012) 186-194.**
- 75** **Nasser A. M. Barakat**, M. F. Abadir, M. Shaheer Akhtar, Mohamed El-

- Newehy, Yu-shik Shin, and Hak Yong Kim “*Synthesis and Characterization of Pd-doped Co Nanofibers as a Multifunctional Nanostructure*” **Materials Letters**, **85** (2012) 120-123.
- 74 Gopal Panthi, **Nasser A. M. Barakat**, A. M. Hamza, Afeesh R. Unnithan, Moaaed Motlak, Khalil A Khalil, Yu-shik Shin Hak Yong Kim, “*PANI-PVAc electrospun nanofiber mats as novel organic semiconductor material*” **Science of Advanced Materials**, **4** (11) 2012, 1118-1126.
- 73 **Nasser A. M. Barakat**, Khalil Abdelrazek Khalil, Hak Yong Kim” *Toward Facile Synthesizing of Diamond Nanostructures via Nanotechnological Approach: Lonsdaleite Carbon Nanofibers by Electrospinning*” **Materials Research Bulletin**, **47** (9) 2012, 2140-2147.
- 72 Ayman Yousef, **Nasser A. M. Barakat**, Khalil Abdelrazek Khalil Afeesh, R. Unnithan, Gopal Panthi, Bishweshwar pant, and Hak Yong Kim “*Photocatalytic Release of Hydrogen from Ammonia Borane -Complex Using Ni(0)-Doped TiO₂/C Electrospun Nanofibers*” **Colloids and Surfaces A: Physicochemical and Engineering Aspects**, **410** (2012) 59-65.
- 71 Abdalla Abdal-hay, **Nasser A.M. Barakat**, Jae Kyoo Lim, “*Novel Technique for Polymer Nanofibers Preparation: Air Jet Spinning*” **Science of Advanced Materials**, **4** (12) 2012, 1268-1275.
- 70 Abdalla Abdal-hay, Nasser A.M. Barakat, Jae Kyoo Lim,” *Hydroxyapatite-Doped Poly(Lactic Acid) Porous Film Coating for Enhanced Bioactivity and Corrosion Behavior of AZ31 Mg Alloy for Orthopedic Applications*” **Ceramics International**, **39** (2013) 183–195.
- 69 R. Afeesh, **Nasser A. M. Barakat**, Salem S Al-Deyab, Ayman Yousef and Hak Yong Kim, “*Nematic shaped Cadmium sulfide doped electrospun nanofiber mat: Highly efficient, Reusable, Solar light Photocatalyst*” **Colloids and Surfaces A: Physicochemical and Engineering Aspects**, **409** (2012) 21-29.
- 68 **Nasser A. M. Barakat**, “*Synthesis and Characterization of Maghemite*

Iron Oxide (γ - Fe_2O_3) Nanofibers: Novel Semiconductor with Magnetic Feature” Journal of Materials Science, 47 (2012) 6237-6245.

- 67 R. Nirmala, Hak Yong Kim, Chuan Yi, **Nasser A.M. Barakat**, R. Navamathavan, Mohamed El-Newehy, “Electrospun nickel doped titanium dioxide nanofibers as an effective photocatalyst for the hydrolytic dehydrogenation of ammonia borane”, **International Journal of Hydrogen Energy**, 37 (13) 2012, 10036-10045.
- 66 Ayman Yousef, **Nasser A. M. Barakat**, Touseef Amna, Afeesh R. Unnithan, Salem S. Al-Deyab , Hak Yong Kim”*Activated Carbon/Silver-Doped Polyurethane Electrospun Nanofibers: Single mat for different Pollutants Treatment* “**Macromolecular Research**, 20 (12) 2012, 1243-1248.
- 65 Gopal Panthi, **Nasser A. M. Barakat**, Afeesh R. Unnithan, Salem S. Al-Deyab, Bishweshwar Pant, Ki Taek Nam, Hak Yong Kim, “*Influence of Gelatin Incorporation on the Wettability and Mechanical Properties of Nylon-6 Electrospun Nanofibers: Novel Mats for Biomedical Applications*” **Journal of Nanoengineering and Nanomanufacturing**, 2 (2012) 286-290.
- 64 Afeesh R. Unnithan, **Nasser A.M. Barakat**, R. Nirmala, Salem S. Al-Deyab, Hak Yong Kim, “*Novel Electrospun Nanofiber Mats as Effective Catalysts for Water Photosplitting*” **Ceramics International**, 38 (6) 2012, 5175-5180.
- 63 Faheem A. Sheikh, Muzafar A. Kanjwal, J. Macossay, **Nasser A.M. Barakat**, Hak Yong Kim, “*A simple approach for synthesis, characterization and bioactivity of bovine bones to fabricate the polyurethane nanofiber containing hydroxyapatite nanoparticles*” **Express Polymer Letters**, 6 (1) 2012, 41 – 53.
- 62 Gopal Panthi, **Nasser A. M. Barakat**, Salem S. Al-Deyab, Mohamed El-Newehy, Dipendra Raj Pandeya, Hak Yong Kim, “*Interior synthesizing of ZnO nanoflakes inside Nylon6 electrospun nanofibers*” **Applied Polymer Science**, 127 (3) 2012, 2025-2032.

- 61** Ayman Yousef, **Nasser A. M. Barakat**, Touseef Amna, Afeesh R. Unnithan, Salem S. Al-Deyab , Hak Yong Kim “*Encapsulation of CdO/ZnO NPs in PU Electrospun Nanofibers as Novel Strategy for Effective Immobilization of the Photocatalysts*” **Colloids and Surfaces A: Physicochemical and Engineering Aspects**, **401** (2012) 8-16.
- 60** Ayman Yousef, **Nasser A. M. Barakat**, Touseef Amna, Afeesh R. Unnithan, Salem S. Al-Deyab , Hak Yong Kim “*Influence of CdO-doping on the Photoluminescence Properties of ZnO nanofibers: Effective Visible Light Photocatalyst for Waste Water Treatment*” **Journal of Luminescence**, **132** (7) 2012, 1668-1677.
- 59** Ayman Youssef, **Nasser A. M. Barakat** Touseef Amna, Salem S Al-Deyab, M. Shamshi Hassan, Abdallah Abdel-hay, Hak Yong Kim, *Inactivation of pathogenic K. pneumonia by CuO/TiO₂ nanofibers: A multifunctional nanomaterial via one-step electrospinning*” **Ceramics International**, **38** (6) 2012, 4525-4532.
- 58** Touseef Amna, M. Shamshi Hassan, Ki-Taek Nam, Yang You Bing, **Nasser A. M. Barakat**, Myung-Seob Khil, Hak Yong Kim “*Preparation, characterization and cytotoxicity of CPT/Fe₂O₃ embedded PLGA ultrafine composite fibers: A synergistic approach to develop promising anticancer material*” **International Journal of Nanomedicine**, **2012:7** (2012) 1659-1670.
- 57** **Nasser A. M. Barakat**, Faheem A. Sheikh, Salem S. Al-Deyab, Ioannis S. Chronakis, and Hak Yong Kim “*Biologically Active Polycaprolactone/Titanium Hybrid Electrospun Nanofibers for Hard Tissue Engineering*” **Science of Advanced Materials**, **3** (5) 2011, 730-734.
- 56** Muzafar A. Kanjwal, Faheem A. Sheikh, **Nasser A. M. Barakat**, Xiaoqiang Li, Hak Yong Kim, and Ioannis S. Chronakis, “*Co₃O₄, ZnO, Co₃O₄-ZnO Nanofibers and Their Properties*” **Journal of Nanoengineering and Nanomanufacturing**, **1** (2) 2011, 196-202.
- 55** Touseef Amna, M. Shamshi Hassan, Ayman Yousef, Amrita Mishra,

- Nasser A. M. Barakat, Myung-Seob Khil, Hak Yong Kim, “*Inactivation of Foodborne Pathogens by NiO/TiO₂ Composite Nanofibers: A Novel Biomaterial System*” **Food Bioprocess Technol**, **6 (4) 2013, 988-996.**
- 54** Muzafer A. Kanjwal, Faheem A. Sheikh, **Nasser A.M. Barakat**, Xiaoqiang Li, Hak Yong Kim, Ioannis S. Chronakis, “Zinc oxide’s hierarchical nanostructure and its photocatalytic properties” **Applied Surface Science**, **2012, 258, 8, Pages 3695-3702.**
- 53** Chuan Yi, R. Nirmala, **Nasser A. M. Barakat**, R. Navamathavan, and Hak-Yong Kim, “*Photocatalytic Properties of Silver Nanoparticles Decorated Nanobranched TiO₂ Nanofibers*”, **Journal of Nanoscience and Nanotechnology**, Vol. 11, 6886–6892, 2011
- 52** **Nasser A.M. Barakat**, A.M. Hamza, Salem S. Al-Deyab, Ahsanulhaq Qurashi, Hak Yong Kim, “*Titanium-based polymeric electrospun nanofiber mats as a novel organic semiconductor*” **Materials Science and Engineering B** **177 (2012) 34– 42.**
- 51** Hem Raj Pant, Woo-il Baek, Ki-Taek Nam, In-Soo Jeong, **Nasser A.M. Barakat**, Hak Yong Kim, “*Effect of lactic acid on polymer crystallization chain conformation and fiber morphology in an electrospun nylon-6 mat*” **Polymer**, **2011, Vol. 52, Issue 21, doi: 10.1016/j.polymer.2011.08.059**
- 50** **Nasser A. M. Barakat**, Salem S. Al-Deyab, and Hak Yong Kim “*Synthesis and Study of the Photoluminescence and Optical Characteristics of Cd/CdO Nanorods Prepared by the Electrospinning Process*” **Materials Letters**, **2012, Vol. 66, Issue 1, 225-228, doi:10.1016/j.matlet.2011.08.074.**
- 49** **Nasser A. M. Barakat**, Muzafer A. Kanjwal, Salem S. Al-Deyab, Ioannis S. Chronakis and Hak Yong Kim, “*Influence of Silver-doping on the crystal structure, Morphology and Photocatalytic activity of TiO₂ nanofibers*” **Materials Sciences and Applications**, **2011, 2, 9, 1188-1193.**
- 48** Woo-il Baek, R. Nirmala, **Nasser A.M. Barakat**, Mohamed H. El-Newehy, Salem S. Al-Deyab, Hak Yong Kim, “*Electrospun cross linked*

rosin fibers” Applied Surface Science, 2011, 258, 4, Pages 1385-1389

- 47 Nasser A. M. Barakat, M. F. Abadir, Ki Taek Nam, Ammar M. Hamza, Salem S. Al-Deyab, Woo-il Baeka, Hak Yong Kim “*Synthesis and film formation of iron–cobalt nanofibers encapsulated in graphite shell: magnetic, electric and optical properties study*” **Journal of Materials Chemistry**, 2011, 21 (29), 10957-10964, DOI: 10.1039/c1jm00052g
- 46 Touseef Amna, M. Shamshi Hassan, Nasser A. M. Barakat, Dipendra Raj Pandeya, Seong Tshool Hong, Myung-Seob Khil, Hak Yong Kim “*Antibacterial activity and interaction mechanism of electrospun zinc-doped titania nanofibers*” **Appl Microbiol Biotechnol**, 2011, DOI 10.1007/s00253-011-3459-0
- 45 Nasser A. M. Barakat, Khalil A Khalil, Ibrahim H Mahmoud, Muzafar A Kanjwal, Faheem A Sheikh, and Hak Yong Kim “*CoNi Bimetallic Nanofibers by Electrospinning: Nickel-Based Soft Magnetic Material with Improved Magnetic Properties*” **Journal of Physical Chemistry C**, 2010, 114, 37, 15589–15593.
- 44 Nasser A. M. Barakat, Bongsoo Kim, Chuan Yi, Younghun Jo, Myung-Hwa Jung, King Hee Chu and Hak Yong Kim “*Influence of cobalt nanoparticles incorporation on the magnetic properties of nickel nanofibers prepared by electrospinning*” **Journal of Physical Chemistry C**, 2009, 113, 19452-19457.
- 43 Nasser A. M. Barakat, M. F. Abadir Faheem A. Arjmand, Muzafar A. Kanjwal, Soo Jin Park, and Hak Yong Kim “*Polymeric nanofibers containing solid nanoparticles prepared by electrospinning and their applications*” **Chemical Engineering Journal**, 2010, 156, 487-495.
- 42 Nasser A. M. Barakat, Bongsoo Kim, S. J. Park, Younghun Jo, Myung-Hwa Jung, and Hak Yong Kim “*Cobalt Nanofibers Encapsulated in Graphite Shell with Thermally Independent Magnetic Properties*” **Journal of Materials Chemistry**, 2009, 19, 7371–7378
- 41 Nasser A. M. Barakat, Taha E Farrag, Muzafar A. Kanjwal, Soo-Jin Park,

Faheem A. Arjmand, and Hak Yong Kim “*Silver Nanofibres by a Novel Electrospinning Process: Nanofibres with Plasmon Resonance in the IR Region and Thermal Hysteresis Electrical Conductivity Features*” **European Journal of Inorganic Chemistry, 2010, 10, 1481-1488.**

- 40 Muzafar A. Kanjwal, **Nasser A. M. Barakat**, Faheem A. Sheikh, and Hak Yong Kim, “*Electrospun Titania Oxide Nanofibers Coupled Zinc Oxide Nanobranches as a Novel Nanostructure for Lithium Ion Batteries Applications*” **Bioceramics Development and applications, 2010, Vol.1, p 1-3, doi:10.4303/bda/D110129**
- 39 Muzafar A. Kanjwal, Faheem A. Sheikh, **Nasser A.M. Barakat**, Ioannis S. Chronakis, Hak Yong Kim, “*Co₃O₄-ZnO hierarchical nanostructures by electrospinning and hydrothermal methods*” **Applied Surface Science, 2011, 257, 7975-7981.**
- 38 Hee Jin Hwang, **Nasser A. M. Barakat**, M. F. Abadir, Faheem A. Sheikh, Muzafar A. Kanjwal and Hak Yong Kim, “*Boron Nitride Nanofibers by the Electrospinning Technique*” **Macromolecular research, 2010, 18, 551-557 .**
- 37 **Nasser A. M. Barakat**, Muzafar A. Kanjwal, Faheem A. Sheikh and Hak Yong Kim " *Spider-net within the N6, PVA and PU electrospun nanofiber mats using salt addition: Novel strategy in the electrospinning process*" **Polymer, 50 (2009) 4389–4396.**
- 36 Soo-Jin Park, Daman Chandra Parajuli, Madhab Prasad Bajagi, Kwang-Un Jeong, **Nasser A. M. Barakat**, and Hak Yong Kim, “*Multi-Walled Carbon Nanotubes Fabricated by Electrospinning of Acrylonitrile/Nylon Solution and Subsequent Carbonization*” **Journal of Nanoscience and Nanotechnology, 2010, 10, 8, 5252-5257.**
- 35 Soo-Jin Park, **Nasser A M Barakat**, Hak Yong Kim, “*Polymer nanofiber templated fabrication and characterization of gallium oxide nanofibers consisted of granular nanoparticles*” **Polymer International, 2011, 60, 322-326.**

- 34** Muzafar A. Kanjwal, **Nasser A. M. Barakat**, Faheem A. Sheikh, Gana kumar, Dae Kwang Park, and Hak Yong Kim, “*Titanium oxide nanofibers attached to zinc oxide nanobranches as a novel nanostructure for lithium ion batteries applications*” **Journal of Ceramic Processing Research.** **Vol. 11, No. 1, pp. 0~00 (2009)**
- 33** Muzafar A Kanjwal, **Nasser A M Barakat**, Faheem A Sheikh and Hak Yong Kim, “*Electronic characterization and photocatalytic properties of TiO₂/CdO electrospun nanofibers*” **Journal of Materials Sciences (2010) 45:1272–1279**
- 32** Muzafar A. Kanjwa, **Nasser A. M. Barakat**, Faheem A. Sheikh, Myung Seob Khil and Hak Yong Kim “*Effects of silver content and morphology on the catalytic activity of silver-grafted titanium oxide nanostructure*” **Fibers and polymers, 11,700-709, (2010).**
- 31** Muzafar A. Kanjwal' **Nasser A. M. Barakat**, Faheem A. Sheikh, Dae Kwang Park and Hak Yong Kim “*Physiochemical characterizations of electrospun (ZnO-GeO₂) nanofibers and their optical properties*” **Journal of Materials Science, (2010) 45, 14, 3833-3840.**
- 30** Faheem A. Sheikh, **Nasser A. M. Barakat**, Muzafar A. Kanjwal, Seol-Hee Jeon, Hyung-Sub Kang and Hak-Yong Kim " *Self synthesize silver nanoparticles in/on polyurethane nanofibers: Nano-biotechnological approach*" **Journal of Applied Polymer Science, 2010, 115, 6,3189-3198..**
- 29** Faheem A. Sheikh, **Nasser A. M. Barakat**, Muzafar A. Kanjwal, Park dae kwang, S. J. Park, M. S. Khil, Hak Yong Kim, " *Synthesize of polyvinyl alcohol (PVA) nanofibers incorporating hydroxyapatite nanoparticles as future implant materials*" **Macromolecular Research 2010, 18, 1, 59-66.**
- 28** **Nasser A. M. Barakat**, Kee-Do Woo, Muzafar A. Kanjwal, Kyung Eun Choi, Myung Seob Khil and Hak Yong Kim, " *Surface plasmon resonances, optical properties and electrical conductivity thermal hysteresis of silver nanofibers produced by electrospinning technique*" **Langmuir, 2008; 24(20); 11982-11987.**

- 27** **Nasser A. M. Barakat**, Myung Seob Khil and Hak Yong Kim “*A New Class of Hierarchical Silver Nanostructures Enabled by Electrospinning and Novel Hydrothermal Treatment*” **Science of Advanced Materials**, **2009, Vol. 1, 230-235.**
- 26** **Nasser A. M. Barakat**, Myung Seob Khil and Hak Yong Kim, “*Preparation of MnO nanofibers by novel hydrothermal treatment of manganese acetate/PVA electrospun nanofiber mats*”, **Materials Science and Engineering B**, **162** (2009) 205-208
- 25** **Nasser A. M. Barakat**, Bongsoo Kim and Hak Yong Kim, “*Production of smooth and pure nickel nanofibers by electrospinning technique: Nanofibers possess splendid magnetic properties*”, **Journal of Physical Chemistry C**, **2009, 113** (2), pp 531–536.
- 24** Muzafar A. Kanjwal, **Nasser A. M. Barakat**, Faheem A. Sheikh, and Hak Yong Kim, “*Photocatalytic activity of ZnO-TiO₂ Hierarchical nanostructure prepared by combined electrospinning and hydrothermal techniques*” **Macromolecular Research**, **2010, 18, 233-240**.
- 23** Faheem. A. Sheikh, **Nasser A. M. Barakat**, Muzafar A. Kanjwal, S. Aryal, M. S. Khil and H. Y. Kim, “*Novel Self-Assembled Amphiphilic Poly (ε-caprolactone)-grafted-Poly(vinyl alcohol) Nanoparticles: Hydrophobic and hydrophilic drugs carrier nanoparticles*” **Journal of Materials Science: Materials in Medicine**, **2009, 20:821–831.**
- 22** **Nasser A. M. Barakat**, Kee-Do Woo, S. G. Ansari, Jung-Ahn Ko, Muzafar A Kanjwal, and Hak Yong Kim, “*Preparation of nanofibers consisting of MnO/Mn₃O₄ by using the electrospinning technique: Nanofibers do have two band gap energies*” **Journal of Applied Physics A**, **95** (2009) 769-776 .
- 21** **Nasser A. M. Barakat** Abd El-Nasser M. Omran, Santosh Aryal, Faheem A. Sheikh, Hyo Kyoung Kang and Hak Yong Kim, “*Production of beads like hollow nickel acetate nanoparticles using colloidal-gel electrospinning methodology*” **Journal of Materials Science**, **(2008) 43:860–864.**

- 20** Nasser A. M. Barakat, Myung Seob Khil, Faheem A. Sheikh and Hak Yong Kim, "Synthesis and optical properties study of two cobalt oxides (CoO and Co_3O_4) nanofibers produced by electrospinning process", **Journal of Physical Chemistry C**, 2008, 112, 12225–12233
- 19** Faheem A. Sheik, Nasser A. M. Barakat, Muzafar A. Kanjwal, S. J. Park, Hern Kim, and Hak Yong Kim "Gallium Arsenide (GaAs) Nanofibers by Electrospinning Technique as Future Energy Server Materials" **Fibers and Polymers** 2010, Vol.11, No.3, 384-390
- 18** Faheem A. Sheikh, Nasser A. M. Barakat, Muzafar A. Kanjwal, Atul A. Chaudhari, Jung In-Hee, John Hwa Lee, Hak Yong Kim, "Electrospun Antimicrobial Polyurethane Nanofibers Containing Silver Nanoparticles for Biotechnological Applications" **Macromolecular Research**, 2009, 17, 688-696.
- 17** Muzafar A Kanjwal, Nasser A. M. Barakat, Faheem A. Sheikh, Myung Seob Khil and Hak Yong Kim, "Physiochemical characterizations of nano-belts consisting of three mixed oxides (Co_3O_4 , CuO and MnO_2) prepared by electrospinning technique" **Journal of Materials Science**, (2008), 43, 5489-5494.
- 16** A. M. Omran1, K. D. Woo1, D. K. Kim, S. W. Kim, M. S. Moon, Nasser A. M. Barakat and D. L. Zhang "Effect of Nb and Sn on the Transformation of α -Ti to β -Ti in Ti-35 Nb-2.5 Sn Nanostructure Alloys using Mechanical Alloying" **METALS AND MATERIALS International**, Vol. 14, No. 3 (2008), pp. 321-325
- 15** Babita Gaihre, Santosh Artal, Nasser A. M. Barakat and Hak y. Kim, "Gelatin stabilized iron oxide nanoparticles as a three dimensional template for hydroxyapatite crystal nucleation and growth", **Material Science and Engineering C**, Vol. 28, Issue 8, (2008) 1297-1303.
- 14** Nasser A. M. Barakat, Muzafar A. Kanjwal, Faheem A. Sheikh, Myung Seob Khil and Hak Yong Kim "Functionalization of Electrospun Titanium Oxide Nanofibers with silver nanoparticles: Strongly Effective Photocatalyst" **International Journal of Applied Ceramic Technology**,

2010, 7, S1, E54-E63.

- 13 Nasser A. Mohamed Barakat, *Two-dimensional display for multivariate data using all principle components embedding chemical information by regular polygon approach (RPA)"*, **J. Chemometrics**, **2007; 21:** 117–125.
- 12 Nasser A.M. Barakat, Myung Seob Khil, A.M. Omran, Faheem A. Sheikh, Hak Yong Kim, " *Extraction of pure natural hydroxyapatite from the bovine bones bio waste by three different methods"* **Journal of Materials Processing Technology**, **209** (2009) 3408-3415.
- 11 Nasser A.M. Barakat, K.A. Khalil, Faheem A. Sheikh, A.M. Omran, Babita Gaihre, Hak Yong Kim " *Physiochemical characterizations of hydroxyapatite extracted from bovine bones by three different methods: Extraction of biologically desirable HAp"* **Materials Science and Engineering: C**, **Vol. 28, Issue 8, (2008)** 1381-1387.
- 10 F. A. Sheikh, Nasser A. M. Barakat, B. S. Kim, S. Aryal, M. S. Khil and H. Y. Kim, " *Self-assembled amphiphilic polyhedral oligosilsesquioxane (POSS) grafted poly(vinyl alcohol) (PVA) nanoparticles,* **Materials Science and Engineering C**, **29 (2009)** 869-876.
- 9 Abdel-Nasser Omran, Kee Do Woo, Nasser A. M. Barakat, Hyun Bom. Lee, Sug Won Kim and Deliang Zhang, " *Fabrication of biocompatible β-Ti-Nb-Sn alloy by pulsed current activated sintering using HEBM powder"* **Science of Advanced Materials**, **2009, 1, 2,** 505-511.
- 8 Faheem A. Sheikh, Muzafar A. Kanjwal, Javier Macossay, Muneeb A. Muhammad, Travis Cantu, Nasser A. M. Barakat, Hak Yong Kim, " *Fabrication of mineralized collagen from bovine waste materials by hydrothermal method as promised biomaterials"* **Journal of Biomaterials and tissue Engineering Volume 1, Number 2, December 2011 , pp. 194-197(4).**
- 7 Nasser A. M. Barakat, Zeng-Ping Chen, Jiang-Hui Jiang, Ru-Qin Yu, *Geometrical Bounding of Data Space and Nonlinear Classification of Chemical Data Using MPGA algorithm,* **Computational Biology and**

Chemistry, 27 (2003) 423-430.

- 6 Nasser A. M. Barakat, Yi Zeng-Liang, Jiang-Hui Jiang, Ru-Qin Yu, *Piece-wise Quasi-linear Modeling in QSAR and Analytical Calibration Based on Linear Substructures Detected by Genetic Algorithm*, **Chemometric and Intelligent Laboratory Systems**, Vol. 72, 1, (2004), 73-82.
- 5 Nasser A. M. Barakat, Jiang-Hui Jiang, Ru-Qin Yu, *Bubble agglomeration algorithm for unsupervised classification: A new clustering methodology without a priori information*, **Chemometrics and Intelligent Laboratory Systems**, 27, 42-49, (2005)
- 4 I. H. M. Aly, Y. H. Magday and Nasser A. M. Barakat, *Desulfurization of Egyptian petroleum Coke*, **Dev. Chem. Eng. Mineral Process.** 11(3/4), pp. 395-406, 2003.
- 3 I. H. M. Aly, Y. H. Magday and Nasser A. M. Barakat, *Agglomeration of Fine-Grained Petroleum Coke*, **Dev. Chem. Eng. Mineral Process.** 11(3/4), pp. 407-418, 2003.
- 2 Nasser A. M Barakat, R. A. Abu-Beah, T. E. Farrage, E. A. Mahmoud, "Prediction of a new object location in a case of splitting the data set", **Alexandria Engineering Journal**, 2008, Vol. 47, No. 1, 113-125.
- 1 Fadali O.A, Ebrahem E. E., Farrage T. E., Nasser A. M. Barakat, Mahmoud M. S., and Obaid M., " Effect of Magnetic Field on the Rate of Copper Cementation onto Rotating Iron Cylinder" **Minia Journal of Engineering and Technology**, Vol. 30, Issue 2, 28-36 (2011).

IVV. International Conferences

1. Nasser A. M. Barakat, A. A. Madany, Y. H. Magdy and Ibrahim H. Aly, *Agglomeration of fine-grained petroleum coke*, the first Minia Inter. Conf. for Advanced trends in Engineering, MICATE'99, Vol. 3, Faculty of Engineering, Minia University, Minia, Egypt, 14-16 March, 1999.

2. **Nasser A. M. Barakat**, Y. Magedi and Ibrahim H. Aly, *Influence of Sodium Silicate addition on pelletizing of fine-grained petroleum coke*, the third Conf. of Egyptian/Syrian for Chemical Engineering, Suez Canal University, Faculty of Petroleum and Mining Engineering, Suez, Egypt, 25-27 Oct., 1999.
3. Ibrahim H. Aly, Iman A. Ashour, Taha E. Farrage, and **Nasser A. M. Barakat**, *Isothermal Oxidation Behavior of Aluminized Stainless-Steel in Air at Higher Temperature*, third Int. Conf. for Egyp. Metall. Soci., Cairo, 2004.
4. F. A. Sheikh, B. S. Kim, S. Aryal, **Nasser A. M. Barakat**, M. S. Khil and H. Y. Kim, "Self Assembled Amphiphilic Poly(vinyl alcohol) PVA grafted Polyhedral Oligosilsesquioxane (POSS) Nanoparticles, International Annual Koran polymer Society, Daejeon, S. Korea, Apr. 10-11, 2008.
5. **Nasser A. M. Barakat**, Duck Rae Lee, Faheem A. Sheikh, and Hak Yong Kim, "Physiochemical characterization of natural hydroxyapatite bioceramic extracted from bovine bones", 2007 Winter Conference of the Korean Fiber Society, Jeju, S. Korea, Dec. 13-14, 2007.
6. **Nasser A. M. Barakat**, Myung Seob Khil, Faheem A. Sheikh, Muzafar A Kanjwal, Jung-An Ko, Hyo-Kyoung Kang and Hak Yong Kim, "Synthesizing and Characterization of Smooth MnO Nanofibers Produced by Electrospinning Methodology" 2008 Spring Conference of the Korean Fiber Society, Seol, S. Korea, Apr. 17-18, 2008.
7. **Nasser A. M. Barakat**, Bongsoo Kim, S. J. Park, Younghun Jo, Myung-Hwa Jung, and Hak Yong Kim, "Cobalt Nanofibers Encapsulated in Graphite Shell with Thermally Independent Magnetic Properties" The international conference for nanotechnology industries, Riyadh, Saudi Arabia, 5-7 Apr. 2009
8. Muzafar A Kanjwal, **Nasser A. M. Barakat**, Faheem A. Sheikh, Myung Seob Khil and Hak Yong Kim, "Physiochemical characterizations of nano-belts consisting of three mixed oxides (Co_3O_4 , CuO and MnO_2) prepared by electrospinning technique" 2008 Spring Conference of the Korean Fiber Society, Seoul, S. Korea, Apr. 17-18, 2008.
9. **Nasser A. M. Barakat**, Seob Myung Khil and Hak Yong Kim, "Synthesis and optical properties study of two cobalt oxides (CoO and Co_3O_4) nanofibers produced by electrospinning process", International Conference on

Nanoscience + Technology, ICN+T 2008, Keystone Resort & Conference Centre, Keystone, Colorado, USA, July 20-25, 2008.

10. **Nasser A. M. Barakat**, Muzafar A. Kanjwal, Myung Seob Khil and Hak Yong Kim, "Surface plasmon resonances, optical properties and electrical conductivity thermal hysteresis of silver nanofibers produced by electrospinning technique", The Second Int. Korea-Japan Symposium, 06-09 Aug. 2008, Ueda, Nagano, 386-8567 Japan.
11. A.M.Omran, **Nasser A.M. Barakat**, Khalil Abdelrazek Khalil, and Sug Won Kim, "In-situ formation of TiC in Al-Ti-C master alloys using K_2TiF_6 and Graphite" First International Conference in Energy Engineering, ICEE-1, 29-31 Dec. 2008, Aswan, Egypt.
12. **Nasser A. M. Barakat**, Bongsoo Kim, S. J. Park, Younghun Jo, Myung-Hwa Jung, and Hak Yong Kim. "Cobalt Nanofibers Encapsulated in Graphite Shell with Thermally Independent Magnetic Propertius", The First International Conference For Nanotechnology Industries, King Abdullah Institute for Nanotechnology, King Sauud University, Saudi Arabia, Riyadh, 5-7 Apr. 2009.
13. **Nasser A. M. Barakat**, Taha E Farrag "A New Class of Hierarchical Silver Nanostructures Enabled by Electrospinning and Novel Hydrothermal Treatment" 5th Inter. Confer. For Chem. Eng., Engineering Military College, Cairo, Egypt 27-29 May, 2010.
14. Abdalla, A., N. Suardana, H. C. Yoon, J. Cu, J. D. Yeon, **Nasser A. M. Barakat**, M. M. Dewidar, and J. K. Lim. "Study on Improving Mechanical and Physical Properties of Novel Vegetal Waste Material Reinforced Unsaturated Polyester Polymer Composites" KSME international conference, South Korea, Muju, 2011
15. **Nasser A. M. Barakat** and Hak Yong Kim, "Titanium-based Polymeric Electrospun Nanofiber mats as a Novel Organic Semiconductor" Second Electrospinning International Conference, Jeju, South Korea, form 30-05-2012 to 01-06-2012.
16. **Nasser A. M. Barakat**, Khalil A. Khalil and Hak Yong Kim, "Effect of Silver-Doping on the Crystal Structure, Morphology and Photocatalytic Activity of TiO_2 Nanofibers" **Nanostruc 2012, United Kingdom, Cranfield University, 2-4 July 2012.**

- 17.** Abdalla. Abdal-hay, NPG. Suardana, Ho Cheol Yoon, Jianguo Cui, Jung Do Yeon, **Nasser A.M. Barakat**, Montasser Marasy Dewidar, Jae Kyoo Lim, **ICCM18 (International Conference on Composite Material), Jeju Island, South Korea, August 26, 2011**
- 18.** **Nasser A. M. Barakat**, Ahmed G. El-Deen, Khalil Abdelrazek Khalil, and Hak Yong Kim, *Porous Carbon Nanofiber as Effective Electrodes for Capacitive Deionization Desalination Technology*” China-Korea-Japan international symposium (ISAFN 2012), China, March 4-7, 2013.
- 19.** Tae Hwan Han, **Nasser A. M. Barakat**, and Hak Yong Kim, “*Pd-Doped Co nanofibers as counter electrodes for DSSCc*” China-Korea-Japan international symposium (ISAFN 2012), China, March 4-7, 2013.
- 20.** Baek Ho Lim, **Nasser A. M. Barakat**, and Hak Yong Kim, *Influence of Temperature on The photodegradation Process Using Ag-doped TiO₂ Nanostructures: Negative Impact with the Nanofibers* ” China-Korea-Japan international symposium (ISAFN 2012), China, March 4-7, 2013.
- 21.** Moaaed Motlak, A.Taha Abdelalim, M. M. Nassar, M. S. Mahmoud, **Nasser A. M. Barakat**, and Hak Yong Kim , *Novel Zn, Fe-doped TiO₂ nanofibers as effective photocatalysts for Ammonia borane hydrolysis* ” China-Korea-Japan international symposium (ISAFN 2012), China, March 4-7, 2013.
- 22.** **Nasser A. M. Barakat** and Khalil Abdelrazek Khalil, “*New Nanostructures as novel electrodes in Capacitive deionization desalination Technology*”, Techconnect2013 International Conference, Washington DC, Maryland, USA, May 12-16, 2013.
- 23.** **Nasser A. M. Barakat**, Ahmed G. El-Deen and Khalil A. Khalil, “*Effective Modified Carbon Nanofibers as Electrodes for Capacitive Deionization Process*” the 3rd Conference on Nanomaterials (CN 2014), Zhengzhen, China, Jan. 14-15, 2014.
- 24.** **Nasser A. M. Barakat**, “*NixCo_{1-x} Alloy nanoparticles-doped Carbon nanofibers as effective Non Precious Catalyst for Ethanol Oxidation*” **Third International Conference on Electrospinning, Westin San Francisco, San Francisco, USA, August 4-7, 2014.**
- 25.** B. Lim, H Kim, M. Park, **Nasser A. M. Barakat**, “Effective nickel oxide nanofibers toward methanol oxidation: Advantage of nanofibrous

- morphology”, **Third International Conference on Electrospinning, Westin San Francisco, San Francisco, USA, August 4-7, 2014.**
26. J. Kim, H. Kim, **Nasser A M Barakat**, M Park, “*Cd-doped Co nanoparticles as effective and stable electrode for capacitive deionization technology*” **Third International Conference on Electrospinning, Westin San Francisco, San Francisco, USA, August 4-7, 2014.**
27. Nasser A M Barakat, “*NixCo_{1-x} Alloy nanoparticles-doped graphene as effective non precious catalyst for ethanol oxidation*” **Third International Conference on Electrospinning, Westin San Francisco, San Francisco, USA, August 4-7, 2014.**
28. M. El Newehy, B. Thammer, **Nasser A. N. Barakat**, Mohammed Abdelkareem and Salem El Deyab” “*Influence of nitrogen doping on the catalytic activity of Ni-incorporated carbon nanofibers for alkaline direct methanol fuel cells*” **International Conference on Electrospinning, Westin San Francisco, San Francisco, USA, August 4-7, 2014.**
29. Ahmed G. El-Deen, Nasser A. M. Barakat, Khalil Abdelrazek Khalil, and Hak Yong Kim “**Novel One Pot Synthesis of Grapheme Wrapped MnO₂-nanostructured as High Performance Electrode for Water Desalination**” The Fifth International Chemistry Conference, Taef University, 26-29/4/2014, Abha- Saudi Arabia.
30. Mohamed S. Mahmoud, Mohammad A. Abdelkareem, Hager M. Moustafa, Mamdouh M. Nassar, and **Nasser A. M. Barakat**, “*Electrocatalytic Activity of Graphene Containing Different Percentages of Nickel to Ethanol Oxidation*” European Fuel Cell Technology & Applications Conference - Piero Lunghi Conference December 16-18, 2015, Naples, Italy
31. Nasser A. M. Barakat, Moaaed Motlak, Mohammad Abdelkareem, and Khalil Abdelrazek Khalil, “*CoNi-loaded graphene as effective non-precious electrocatalyst for methanol oxidation in alkaline medium*” **16th Topical Meeting of the International Society of Electrochemistry, Angra Dos Reis, Brazil, 22-26 March 2015.**
32. Hend Omar Mohamed, M. Obaid, **Nasser A. M. Barakat** “*Graphite Paper as Effective and Cheap Anode for Power Generation from Air Cathode Microbial Fuel Cell Using Unconditioned Industrial Wastewater*” **ICEEA 2016, Kuala Lumpur, Malaysia, July 25-27, 2016**

References

1. Prof. Hak Yong Kim

Vice President for Academic affairs
Chonbuk National University
Jeonju, 561-756
South Korea
E mail: khy@jbnu.ac.kr

2. Prof. Dr. Khalil A. Khalil

Professor of Material Engineering
Mechanical Engineering Department, King Saud University
P.O. Box 800, Riyadh 11421, Saudi Arabia
E mail kabdelmawgoud@ksu.edu.sa

3. Prof. Muzafar Kanjwal

Mechanical Engineering Department
The Hong Kong Polytechnic University.
E mail: maakanjw@polyu.edu.hk

