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نام و نام خانوادگی: محمد رضا محمودیان

موسس، فناور و رییس هیئت مدیره شرکت دانش بنیان نوآوران نانو صنعت معین

عضو هیئت علمی دانشگاه فرهنگیان (بهشتی تهران)

عضو پاره وقت دفتر تالیف کتب درسی (گروه شیمی)

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انجام پروژه های بین المللی در کشورهای کره جنوبی و مالزی از سال ۹۱ تا کنون

اجرای کارگاه آموزشی EIS برای اساتید دانشگاه آزاد 1395

اجرای کارگاه آموزشی برای اساتید دانشگاه UM مالزی 1395

انجمن نانو آمریکا، ایالات متحده آمریکا، عضو، ۲۰۱۱، (بین المللی)

<http://members.nanosociety.us/reza>

The International Advisory Editorial Board of *International Journal of Electroactive Materials*

http://electroactmater.com/index.php?option=com_content&view=article&id=85&Itemid=13

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تدریس و فعالیت:

عضو هیئت علمی دانشگاه فرهنگیان (مرکز بهشتی تهران)

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دانشگاه آزاد دماوند، 1382-1387، شیمی پایه و شیمی تجزیه

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عضو هیئت مدیر 2009 AMPT international conferences

دروس مورد تدریس:

شیمی عمومی ۱ و آزمایشگاه شیمی عمومی ۱

شیمی عمومی ۲ و آزمایشگاه شیمی عمومی ۲

شیمی تجزیه ۱ و آزمایشگاه شیمی تجزیه ۱

شیمی تجزیه ۲ (الکتروشیمی) و آزمایشگاه شیمی تجزیه ۲

آنالیز دستگاهی

شیمی تجزیه پیشرفته

تحلیل محتوای آموزشی در شیمی

راهنمایی تدریس در آموزش شیمی

جوایز:

انتخاب طرح نانو افزودنی Sn-doped TiO₂ برای کنترل خوردگی اینجانب بعنوان طرح نوآورانه

سال ۹۵ از طرف معاونت فناوری ریاست جمهوری و ستاد نانو فناوری

سه کمک هزینه پروژه از دانشگاه مالایا، (۲۰۰۹، ۲۰۱۰ و ۲۰۱۱)

انتخاب کتاب تحت عنوان "ساختار اتمی" (محراب قلم، تهران، ایران، 1384) در جشنواره رشد (ایران، 1384)

داری سطح بلوغ فناوری ۸ (TRL) برپایه تولید و فناوری نانو افزودنی ضد خوردگی از وزارت علوم و فناوری

کتاب:

1) کتاب معلم شیمی ۳ و آزمایشگاه (وزارت آموزش و پرورش 1393)

2) ساختار اتم برای معلم شیمی " (قائم مقام فراهانی، تهران ایران، 1387)

3) "چرخه بورن هابر" (معراج، تهران ایران، 1386)

4) تصویر سازی در آموزش شیمی " (فرهیختگان علوی، تهران. ایران، 1385)

5) "ساختار اتم" (محراب قلم، تهران، ایران، 1383)

زمینه های تخصص:

-الکتروشیمی (الکتروسینتز، Electrodeposition)

-خوردگی (طیف سنجی امپدانس الکتروشیمیایی)

-سنسور

کتاب بین المللی :

Abdolhossein Saaedi, Mahmood Moradi, Mohamed H. Alkordi, **Mohammad Reza Mahmoudian**, Gholam Hossein Bordbar, Ramin Yousef, Functional Nanomaterials, Graphene-Metal-Organic Framework Modified Gas Sensor, **Springer**, 2020.

همکاریهای بین المللی:



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Date: 10/08/2016

To whom it may concern

This letter is to certify that Dr. Mohammad Reza Mahmoudian has been invited by Thin Film Coating Laboratory at Department of Mechanical Engineering, Eng. Center, Hanyang University, Seoul, South Korea to held seminar and workshop on nanotechnology and electrochemistry from 29th July to 14th August. His advice and experience were very useful and applicable for graduate students. We wish to continue collaborating and inviting him in near future.

Sincerely Yours;

Erfan Zal Nezhad

Professor Erfan Zal Nezhad
Dep, of Mechanical Eng,
Hanyang University, Seoul, Korea
TEL : 2220-0442
한 양 대 학 교

16 July 2021

To whom it may concern,

It is hereby to confirm that the following projects have been carried out in collaboration with Dr. Mohammad Reza Mahmoudian from Farhangian University in the Department of Chemistry, Universiti Malaysia and their cost have been paid using the grants mentioned in each article. The cost per article for purchasing materials and characterization was an average of RM 5,000 which a part of this amount was spent for living cost for Dr. Mohammad Reza Mahmoudian during his stay in Malaysia.

- Synthesis of polyaniline microtubes/Pt reduced N-graphene oxide in the presence of L-glutamine for the detection of Hg^{2+} 2020
MR Mahmoudian, WJ Basirun, PM Woi, Y Alias
Journal of Applied Electrochemistry 50 (12), 1269-1280
Impact Oriented Interdisciplinary Research Grant (IIRG013B-2019) and Prototype Research Grant Scheme (PR003-2018A)
- Investigating the effectiveness of $g-C_3N_4$ on Pt/ $g-C_3N_4$ /polythiophene nanocomposites performance as an electrochemical sensor for Hg^{2+} detection 2020
MR Mahmoudian, WJ Basirun, Y Alias, P MengWoi
Journal of Environmental Chemical Engineering 6 (5), 104204
Impact Oriented Interdisciplinary Research Grant (IIRG013B-2019) and Prototype Research Grant Scheme (PR003-2018A)
- An electrochemical sensor based on Pt/ $g-C_3N_4$ /polyaniline nanocomposite for detection of Hg^{2+} 2020
MR Mahmoudian, Y Alias, PM Woi, R Yousefi, WJ Basirun
Advanced Powder Technology 31 (8), 3372-3380
Impact Oriented Interdisciplinary Research Grant (IIRG013B-2019) and Prototype Research Grant Scheme (PR003-2018A)
- Voltammetric sensing of formaldehyde by using a nanocomposite prepared by reductive deposition of palladium and platinum on polypyrrole-coated nitrogen-doped reduced graphene oxide 2019
MR Mahmoudian, WJ Basirun, PM Woi, H Hazarkhani, YB Alias
Microchimica Acta 186 (6), 1-12
Prototype Research Grant Scheme (PR003-2018A)
- Synthesis and characterization of $\alpha-Fe_2O_3$ /polyaniline nanotube composite as electrochemical sensor for uric acid detection 2019
MR Mahmoudian, WJ Basirun, M Sookhakian, PM Woi, E Zalnezhad, YB Alias
Advanced Powder Technology 30 (2), 384-392
Prototype Research Grant Scheme (PR003-2018A)

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I-Glutamine-assisted synthesis of ZnO oatmeal-like/silver composites as an electrochemical sensor for Pb^{2+} detection 2019

MR Mahmoudian, WJ Basirun, PM Woi, R Yousefi, Y Alias
Analytical and bioanalytical chemistry 411 (2), 517-526
Prototype Research Grant Scheme (PR003-2018A)

If you require further clarifications, please reach me by pmwoi@um.edu.my

Yours truthfully,



Dr. PM Woi
Associate Professor
Faculty of Science
Universiti Malaysia

PI for IIRG013B-2019
Co-PI for PR003-2018A

To whom it may concern,

This is to confirm that Dr. Mohammad Reza Mahmoudian (Passport No: Z26722660) has successfully initiated and embarked on two electrochemical sensor projects, with the collaboration of Department of Chemistry, University of Malaya, during his visit here. They are:

- a) Synthesis and characterization of Pt/PPy and Pd/PPy nano-spherical for mercury(II) ions detection.
- b) A sensitive dopamine biosensor based on Ag₂ Pd₃ nano-spherical and AgCuO nano-rose morphology.

Thank you, best regards.



Dr. Wan Jeffrey Basiran
(Professor)
Dept. Chemistry,
University Malaya
50603 Kuala Lumpur

25 July 2015

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Chemistry Department

CS CamScanner

پروژه های در حال انجام تحت شرکت دانش بنیان نوآوران نانو صنعت معین

۱- تثبیت گرد و غبار تحت نظارت ستاد ملی مبارزه با گرد و غبار ریاست جمهوری

۲- پوشش پیچ وپابند صنایع ریلی وزارت راه و شهر سازی (راه آهن جمهوری اسلامی

مقالات ISI:

Publications: ISI Journals (Accepted or Published):

Publications: ISI Journals (Accepted or Published):

- 1-E Rasouli, WJ Basirun, MR Johan, M Rezayi, **M.R. Mahmoudian**, [Electrochemical DNA-nano biosensor for the detection of cervical cancer-causing HPV-16 using ultrasmall Fe₃O₄-Au core-shell nanoparticles](#), 2023, Sensing and Bio-Sensing Research 40, 100562
- 2-**M.R. Mahmoudian**, [l-Cysteine-assisted synthesis of polypyrrole-coated copper nanobelts and their application in the detection of hydrazine](#), Microchemical Journal 2022(183)107995
- 3-**M.R. Mahmoudian**, [Synthesis and characterization of Fe₃O₄/Polyaniline microtube composite as electrochemical sensor for Lead \(II\) detection](#), Journal of Research on Many-body Systems 12 , 2022(1), 101-114
- 4-**M.R. Mahmoudian**, W.J. Basirun, P.M. Woi, Y. Alias, [Synthesis of polyaniline microtubes/Pt reduced N-graphene oxide in the presence of L-glutamine for the detection of Hg²⁺](#), Journal of Applied Electrochemistry 50, 2020 (12), 1269-1280
- 5-**M.R. Mahmoudian**, W.J. Basirun, Y. Alias, P. MengWoi, [Investigating the effectiveness of g-C₃N₄ on Pt/g-C₃N₄/polythiophene nanocomposites performance as an electrochemical sensor for Hg²⁺ detection](#), Journal of Environmental Chemical Engineering 8 , 2020(5), 104204
- 6-**M.R. Mahmoudian**, Y. Alias, P.M. Woi, R. Yousefi, W.J. Basirun, [An electrochemical sensor based on Pt/g-C₃N₄/polyaniline nanocomposite for detection of Hg²⁺](#), Advanced Powder Technology 31, 2020 (8), 3372-3380
- 7--L. Shokrzadeh, P. Mohammadi, **M.R. Mahmoudian**, W.J. Basirun, M. Bahreini, [L-glycine-assisted synthesis of SnO₂/Pd nanoparticles and their application in detection of biodeteriorating fungi](#) Materials Chemistry and Physics 240,2020, 122172
- 8-A. S  aedi, M. Moradi, M.H. Alkordi, **M.R. Mahmoudian**, G.H. Bordbar, [Graphene-metal-organic framework modified gas sensor](#), Functional Nanomaterials, 2020, 117-142
- 9-**M.R. Mahmoudian**, W.J. Basirun, P.M. Woi, H. Hazarkhani, Y.B. Alias, [Voltammetric sensing of formaldehyde by using a nanocomposite prepared by reductive deposition of palladium and platinum on polypyrrole-coated nitrogen-doped reduced graphene oxide](#), Microchimica Acta 186 , 2019 (6), 1-12
- 10-R. Yousefi, **M.R. Mahmoudian**, [The use of nanotechnology in preventing corrosion of metal pipe and equipment of Shahid Abbaspour Dam](#), Journal of Dam and Hydroelectric Powerplant 6, 2019 (20), 31-37
- 11-- **MR Mahmoudian**, WJ Basirun, PM Woi, R Yousefi, Y Alias, [l-Glutamine-assisted synthesis of ZnO oatmeal-like/silver composites as an electrochemical sensor for Pb²⁺ detection](#), *Analytical and bioanalytical chemistry*, 411, 2019 (2), 517-526

- 12- **MR Mahmoudian**, WJ Basirun, M Sookhakian, PM Woi, E Zalnezhad, [Synthesis and characterization of \$\alpha\$ -Fe₂O₃/polyaniline nanotube composite as electrochemical sensor for uric acid detection](#), *Advanced Powder Technology*, 30, 2019 (2), 384-392
- 13- R Yousefi, HR Azimi, **MR Mahmoudian**, WJ Basirun, [The effect of defect emissions on enhancement photocatalytic performance of ZnSe QDs and ZnSe/rGO nanocomposites](#), *Applied Surface Science* 435, 2018, 886-893
- 14- R Yousefi, HR Azimi, **MR Mahmoudian**, M Cheraghizade, [Highly enhanced photocatalytic performance of Zn \(1– x\) Mg_xO/rGO nanostars under sunlight irradiation synthesized by one-pot refluxing method](#), *Advanced Powder Technology* 29 (1), 2018, 78-85
- 15- M Cheraghizade, F Jamali-Sheini, R Yousefi, F Niknia, **MR Mahmoudian**, [The effect of tin sulfide quantum dots size on photocatalytic and photovoltaic performance](#), *Materials Chemistry and Physics* 195, 2017, 187-194
- 16- F Jamali-Sheini, F Niknia, M Cheraghizade, R Yousefi, **MR Mahmoudian**, [Broad Spectral Response of Se-Doped SnS Nanorods Synthesized through Electrodeposition](#), *ChemElectroChem* 4 (6) 2017, 1478-1486
- 17- **MR Mahmoudian**, WJ Basirun, Y Alias, [Synthesis of 3D hierarchical Ag/CuO nanostructures in the presence of L-histidine and their application](#), *Journal of Alloys and Compounds* 699, 2017, 803-811
- 18- M Sookhakian, WJ Basirun, MAM Teridi, **MR Mahmoudian**, M Azarang, [Prussian blue-nitrogen-doped graphene nanocomposite as hybrid electrode for energy storage applications](#), *Electrochimica Acta* 230, 2017, 316-323
- 19- **MR Mahmoudian**, WJ Basirun, E Zalnezhad, M Ladan, Y Alias, [L-Glutamine-assisted synthesis of flower-like NiO and ball-flower-like NiO/Ag as an electrochemical sensor for lead \(II\) detection](#), *RSC Advances* 7 (49) 2017, 30870-30878
- 20- HR Azimi, M Ghoranneviss, SM Elahi, **MR Mahmoudian**, F Jamali-Sheini, [Excellent photocatalytic performance under visible-light irradiation of ZnS/rGO nanocomposites synthesized by a green method](#), *Frontiers of Materials Science* 10 (4) 2016, 385-393
- 21- R Yousefi, **MR Mahmoudian**, A Sa, M Cheraghizade, F Jamali-Sheini, [Effect of annealing temperature and graphene concentrations on photovoltaic and NIR-detector applications of PbS/rGO nanocomposites](#), *Ceramics International* 42 (14) 2016, 15209-15216
- 22- WJ Basirun, IM Saeed, H Ghadimi, M Ladan, **MR Mahmoudian**, M Ebadi, [Lead corrosion and formation of lead oxides from a lead-air cell in methanesulfonic acid](#), *Journal of New Materials for Electrochemical Systems* 19 (4) 2016, 217-222

23-**M.R. Mahmoudian**, WJ Basirun, Y binti Alias, A sensitive dopamine biosensor based on polypyrrole coated palladium silver nanospherical composites, *Industrial & Engineering Chemistry Research*, 2016, 55 (25), pp 6943–6951.

24-Abdolhossein Sa, Ramin Yousefi, Farid Jamali-Sheini, Ali Khorsand Zak, Mohsen Cheraghizade, **M.R. Mahmoudian**, Mohammad Amin Baghchesara, Abbas Shirmardi Dezaki, XPS studies and photocurrent applications of alkali-metals-doped ZnO nanoparticles under visible illumination conditions, *Physica E: Low-dimensional Systems and Nanostructures* 79, 113-118

25-**M.R. Mahmoudian**, WJ Basirun, PM Woi, M Sookhakian, R Yousefi and Yatimah Alias, Synthesis and characterization of Co₃O₄ ultra-nanosheets and Co₃O₄ ultra-nanosheet-Ni (OH)₂ as non-enzymatic electrochemical sensors for glucose detection, *Materials Science and Engineering: C* 59, 500-508

26-**M.R. Mahmoudian**, WJ Basirun, Y Alias, A sensitive electrochemical Hg²⁺ ions sensor based on polypyrrole coated nanospherical platinum, *RSC Advances* 6 (43), 36459-36466.

27-M Sookhakian, NA Ridwan, E Zalnezhad, GH Yoon, Majid Azarang, **M.R. Mahmoudian**, Y Alias, Layer-by-Layer Electrodeposited Reduced Graphene Oxide-Copper Nanopolyhedra Films as Efficient Platinum-Free Counter Electrodes in High Efficiency Dye-Sensitized Solar Cells, *Journal of The Electrochemical Society* 163 (5), D154-D159

28-Ramin Yousefi, **M.R. Mahmoudian**, Abdolhosain Sa, Mohsen Cheraghizade, Farid Jamali-Sheini, M Azarang, Effect of annealing temperature and graphene concentrations on photovoltaic and NIR-detector applications of PbS/rGO nanocomposites, *Ceramics International*, Volume 79, May 2016, Pages 113–118

29-**M.R. Mahmoudian**, Y Alias, WJ Basirun, Pei MengWoi, Farid Jamali-Sheini, M Sookhakian, M Silakhor, A sensitive electrochemical nitrate sensor based on polypyrrole coated palladium nanoclusters, *Journal of Electroanalytical Chemistry*, 751,2015, 30-36

30-Mahyar Silakhori, Hadi Fauzi, **Mohammad R Mahmoudian**, Hendrik Simon Cornelis Metselaar, Teuku Meurah Indra Mahlia, Hossein Mohammad Khanlou , Preparation and thermal properties of form-stable phase change materials composed of palmitic acid/polypyrrole/graphene nanoplatelets, *Energy and Buildings* , 99, 2015, 189–195

31-**M. R. Mahmoudian**, Y. Alias, W.J. Basirun, Pei Meng Woi, M. Sookhakian, Farid Jamali-Sheini, Synthesis and characterization of Fe₃O₄ rose like and spherical/reduced graphene oxide nanosheet composites for lead (II) sensor, *Electrochimica Acta*, 169,2015, 126-133

32-H Ghadimi, **M.R. Mahmoudian**, WJ Basirun, A sensitive dopamine biosensor based on ultra-thin polypyrrole nanosheets decorated with Pt nanoparticles, *RSC Advances* 5 (49), 2015, 39366-39374

- 33-F Jamali-Sheini, R Yousefi, NA Bakr, **M.R. Mahmoudian**, J Singh, Electrodeposition of Cu–ZnO nanocomposites: Effect of growth conditions on morphologies and surface properties, *Materials Science in Semiconductor Processing* 27, 2015, 507-514
- 34- Pooria Moozarm Nia, Woi Pei Meng^a, Farnaz Lorestani, **M.R. Mahmoudian**, Y. Alias, Electrodeposition of copper oxide/polypyrrole/reduced graphene oxide as a nonenzymatic glucose biosensor, *Sensors and Actuators B: Chemical*, 209, 31 2015, 100–108
- 35- Wan Jeffrey Basirun, Mehran Sookhakian, Saeid Baradaran, Zulkarnain Endut, **Mohammad Reza Mahmoudian**, Mehdi Ebadi, Ramin Yousefi, Hanieh Ghadimi, Sohail Ahmed, Graphene oxide electrocatalyst on MnO₂ air cathode as an efficient electron pump for enhanced oxygen reduction in alkaline solution, *Scientific Reports* 5, 2015, 9108
- 36-M.T. Tajabadi, W.J. Basirun^d, F. Lorestani, R. Zakaria, S. Baradaran, Y.M. Amin, **M.R. Mahmoudian**, M. Rezayi, M. Sookhakian, Nitrogen-doped graphene-silver nanodendrites for the non-enzymatic detection of hydrogen peroxide, *Electrochimica Acta*, Volume 151, 2015, 126–133
- 37-**M.R. Mahmoudian**, Y. Alias, W.J. Basirun, P.M. Woi, R. Yousefi, Synthesis of Polypyrrole Coated Silver Nanostrip Bundles and Their Application for Detection of Hydrogen Peroxide, *Journal of The Electrochemical Society* 161(2014) (9), H487-H492.
38. M. Sookhakian, Y.M. Amin, R. Zakaria, W.J. Basirun, **M.R. Mahmoudian**, B. Nasiri-Tabrizi, S. Baradaran, M. Azarang, Significantly improved photocurrent response of ZnS-reduced graphene oxide composites, *Journal of Alloys and Compounds*, 632, 2015, 201-207.
- 39-Mohsen Cheragizade, Ramin Yousefi, Farid Jamali-Sheini, **M. R Mahmoudian**, Abdolhossein Sa'aei, Nay Ming Huang, Synthesis and characterization of PbS mesostructures as an IR detector grown by hydrogen-assisted thermal evaporation, *Materials Science in Semiconductor Processing*, 2014, 26, 704–709
- 40-.Ramin Yousefi, Mohsen Cheragizade, Farid Jamali-Sheini, **M. R. Mahmoudian**, Abdolhossein Saa'edi and Nay Ming Huang, Influences of anionic and cationic dopants on the morphology and optical properties of PbS nanostructures, *Chinese Phys. B*, 2014, 23.
- 41.-T. Marimuthu, **M.R. Mahmoudian**, S. Mohamad, Y. Alias, Synthesis and characterization of non-enzymatic hydrogen peroxide sensor of polypyrrole coated cobalt nanocomposites, *Sensors and Actuators B: Chemical*, 202, 2014, 1037-1043
- 42.-**M. R. Mahmoudian**, Y. Alias, W.J. Basirun, Pei Meng Woi, M. Sookhakian, Facile preparation of MnO₂ nanotubes / reduced graphene oxide nanocomposite for

electrochemical sensing of hydrogen peroxide, *Sensors and Actuators B: Chemical*, 201, 2014, 526-534

43-Farid Jamali-Sheini, Ramin Yousefi, **M. R. Mahmoudian**, Nabeel Ali Bakr, Facile synthesis of different morphologies of Te-doped ZnO nanostructures, *Ceramics International*, 40, Issue 6, 2014, 7737-7743

44-**M. R. Mahmoudian**, Y. Alias, W.J. Basirun, Pei Meng Woi, S. Baradaran, M. Sookhakian, Synthesis, Characterization, and Sensing Applications of polypyrrole coated Fe₃O₄ nanostrip bundles, *Ceramics International*, 40, 7, 2014, 9265-9272

45-W.J. Basirun, M. Sookhakian, **M. R. Mahmoudian**, M. Ebadi, Solid-phase electrochemical reduction of graphene oxide films in alkaline solution, *Nanoscale Research Letters*, 2013, 8:397.

46.Farid Jamali-Sheini, Ramin Yousefi, **M. R. Mahmoudian**, Effect of annealing process on the growth and surface properties of Au–ZnO nanowire films grown by chemical routes, *Ceramics International*, 39, 2013, 7577-7581

47 **M. R. Mahmoudian***, Y. Alias and W. J. Basirun. Synthesis of polypyrrole coated manganese nanowires and their application in hydrogen peroxide detection , *Materials chemistry and physics*.(2013)141, pp. 298-303

48. **M. R. Mahmoudian***, W. J. Basirun and Y. Alias. Effects of different polypyrrole/TiO₂ nanocomposite morphologies in polyvinyl butyral coatings for preventing the corrosion of mild steel. *Applied surface science*. (2013) 268 , pp. 302-311

49-A. Khorsand Zak, W.H. Abd. Majid, **M.R. Mahmoudian**, Majid Darroudi, Ramin Yousefi, Starch-stabilized synthesis of ZnO nanopowders at low temperature and optical properties study, *Advanced Powder Technology*, (2013) 24 (3) , pp. 618-624

50-**M. R. Mahmoudian***, Y. Alias, W. J. Basirun, ,Ramin Yosefi, Synthesis and characterization of Zinc/ Polypyrrole nanotube as a protective pigment in organic coatings, (2013) *Metallurgical and Materials Transactions A*.

51-**M. R. Mahmoudian***, W. J. Basirun and Y. Alias. Effect of narrow diameter polyaniline nanotubes and nanofibers in polyvinyl butyral coating on corrosion protective performance of mild steel. *Progress in organic coatings* (2013) 75 (4), pp. 301-308 (<http://dx.doi.org/10.1016/j.porgcoat.2012.08.004>)

52- S. Baradaran, W. J. Basirun, **M. R. Mahmoudian**, M. Hamdi, Y. Alias, Synthesis and characterisation of monetite in water/ethylene glycol/N,N-dimethylformamide mixed solvents by a sonochemical method, *Metallurgical and Materials Transactions A* (2012) 44 (5) , pp. 2331-2338

53- electrodeposited polypyrrole nanofibers between two layers of reduced graphene oxide nanosheets, (2012), *Electrochimica Acta*, 72, 53–60.(<http://dx.doi.org/10.1016/j.electacta>).

54-**M.R. Mahmoudian***, Y. Alias, W.J. Basirun, M.Ebadi, Preparation of ultra-thin polypyrrole nanosheets decorated with Ag nanoparticles and their application in hydrogen peroxide detection,(2012), *Electrochimica Acta*, 72 , 46-52 . (<http://dx.doi.org/10.1016/j.electacta>).

55-Ramin Yousefi, Farid Jamali-Sheini, A. Khorsand Zak, **M.R.Mahmoudian**, Effect of indium concentration on morphology and optical properties of In-doped ZnO nanostructures, *Ceramics International* 38 (2012) 6295–6301

56-**M. R. Mahmoudian***, W. J. Basirun and Y. Alias. (2012). Comparison of protection between double strands of polyaniline and poly o-anisidine with poly (acrylic acid- co- acryl amide) on steel. *Journal of Coatings Technology and Research*. 9 (1) 79–86

57-M. Ebadi,W. J. Basirun, S. Y. Leng and **M. R. Mahmoudian**, Investigation of Corrosion Inhibition Properties of Caffeine on Nickel by Electrochemical Techniques, *Int. J. Electrochem. Sci.*, 7 (2012) 8052 – 8063

58- M.Ebadi, W.J. Basirun, Y. Alias, **M.R. Mahmoudian**, S.Y. Leng, (2012) Investigation of electrodeposition of Ni-Co-Fe-Zn alloys in DMSO with MHD effect. *Materials Characterization* (66) 46-55

59-**M. R. Mahmoudian***, Y. Alias, W. J. Basirun and M. Ebadi. (2011). Poly (N-methyl pyrrole) and its copolymer with o-toluidine electrodeposited on steel in mixture of DBSA and oxalic acid electrolytes. *Current Applied Physics*. 11, 368-375

60-**M. R. Mahmoudian***, W. J. Basirun and Y. Alias. (2011). Synthesis and characterization of poly(N-methylpyrrole)/TiO₂ composites on steel. *Applied Surface Science*. 257, 3702–3708

61-**M. R. Mahmoudian***, W. J. Basirun and Y. Alias. (2011). Synthesis of polypyrrole/Ni-doped TiO₂ nanocomposites (NCs) as a protective pigment in organic coatings. *Progress in Organic Coatings*. 71 (1), 56-64

62- Mehdi Ebadi*, Wan Jeffrey Basirun, Yatimah Alias, **Mohammadreza Mahmoudian** ‘Electrodeposition of Quaternary Alloys with High Saturation Magnetic Flux Density’ *Chemistry Central Journal*, No; 2010, 4:14

63- Mehdi Ebadi*, Wan Jeffrey Basirun, Yatimah Alias, **Mohammad Reza Mahmoudian**. ‘Normal and Anomalous co-deposition of Ni-Co-Fe-Zn Alloys from EMIC/EG in the presence of an external magnetic field’ *Metallurgical and Materials Transactions A* Volume 42, Number 8, 2402-2410

64-**M. R. Mahmoudian***, Y. Alias and W. J. Basirun. (2011). Studies on the effects of the potential sweep rates and pH on the corrosion rate of polyaniline coated steel. *Advance materials research* (264 – 265), 463-468

65. **M. R. Mahmoudian***, W. J. Basirun, Y. Alias, M. Ebadi. (2011). Synthesis and characterization of Polypyrrole/ Sn-doped TiO₂ nanocomposites (NCs) as a protective pigment. *Applied Surface Science*. 257, 8317– 8325

66. M. Ebadi, W. J. Basirun, Y. Alias, **M. R. Mahmoudian**, Electrodeposition of Ni-Co Alloys in DMSO under Magnetic Field. *South African Journal of Chemistry*, 2011, vol 64, 17 - 22

67- **M. R. Mahmoudian***, W. J. Basirun and Y. Alias. (2011).Electrochemical Characteristics of coated Steel with Poly (N-methyl pyrrole) Synthesized in presence of ZnO NPs. *Thin solid films* 520(1) 258-265.

68- **M. R. Mahmoudian***, Y. Alias and W. J. Basirun. (2011). Facile fabrication of Zn/Zn₅ (OH)₈ Cl₂. H₂O flower-like nanostructure on the surface of coated Zn with Poly (N-methyl pyrrole). *Applied Surface Science*. 257(24) 10539-10544

69-Yang Kok Kee, **M. R. Mahmoudian**, Mehdi Ebadi, Koay Hun Lee, Wan Jeffrey Basirun (2011), Diffusion coefficient of Tin (II) Methanesulfonate in Ionic Liquid and Methane Sulfonic Acid (MSA) solvent, *Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science* 42 (6) 1274-1279

70- Ramin Yousefi, A.K. Zak, **M. R. Mahmoudian** (2011) Growth and characterization of Cl-doped ZnO hexagonal nanodisks. *Journal of solid state chemistry*, 184, (10) 2678-2682

71-**M. R. Mahmoudian***, Y. Alias and W. J. Basirun. (2010). Electrodeposition of (pyrrole-co-phenol) on steel surfaces in mixed electrolytes of oxalic acid and DBSA. *Materials Chemistry and Physics*, 124 (2-3), 1022-1028

72- M Ebadi, WJ Basirun, Y Alias, **M.R. Mahmoudian**, Evaluation of nickel-cobalt deposition through the electrochemical impedance spectroscopy under magnetic field, *Galvanotechnik* 102 (6), 1265

(international conferences) :

1-**M. R. Mahmoudian***, Y. Alias and W. J. Basirun. (2009). International Conference of advances in materials and processing technologies (AMPT'09), Kuala Lumpur, Malaysia. Oral presentation and co-chair.

2-**M. R. Mahmoudian***, Y. Alias and W. J. Basirun. (2009). Regional Conference on Ionic Liquids 2009, University of Malaya Kuala Lumpur, Malaysia. Oral presentation

3-**M. R. Mahmoudian***, Y. Alias and W. J. Basirun. (2010). 3rd International Conference on Functional Materials and Devices (ICFMD) 2010, Kuala Terengganu, Malaysia. Poster