

CURRICULUM VITAE



Name: Mohamed Mokhtar Mohamed Mostafa

Date of Birth: 11.11.1966

Nationality: Egypt

Current address:

Professor of Physical Chemistry, Chemistry Department, Faculty of Science, King Abdul-Aziz University, Jeddah 21589, P.O.Box 80203, Saudi Arabia.

Tel.: + 966 500558045; Fax: +966-2-6952292

E-mail(s): mmokhtar2000@yahoo.com / mmoustafa@kau.edu.sa

Website: <http://mmoustafa.kau.edu.sa>

Permanent address:

Professor of Physical Chemistry, Surface Chemistry and Catalysis Lab, Physical Chemistry Department, National Research Centre (NRC), El Buhouth Str., Dokki, Cairo, P.O.Box 12311, Egypt, Tel.: +202 33371362; Fax: +202 33370931

Experience and Academic Appointments:

6/2012 -present	Professor (Full)	Chemistry Dept., Faculty of Science, KAU, Saudi Arabia
08/2004-06/2012	Associate Professor	Chemistry Dept., Faculty of Science, KAU, Saudi Arabia
06/2003-08/2004	Assistant Research Professor	Catalysis lab.,Physical Chemistry Department, NRC, Egypt
11/1997-06/2003	Researcher	Catalysis lab.,Physical Chemistry Department, NRC, Egypt
05/1993-11/1997	Research Assistant	Catalysis lab.,Physical Chemistry Department, NRC, Egypt
06/1990-05/1993	Demonstrator	Catalysis lab.,Physical Chemistry Department, NRC, Egypt
08/1988-05/1990	Chemist	Helwan Engineering industrial company, Helwan, Egypt

Education:

PhD (Nov.,1997)	Physical Chemistry, Faculty of Science, Cairo University, Cairo, Egypt. "Studies on Some Physicochemical, Surface and Catalytic Properties of CuO-ZnO supported on Gamma Alumina"
MSc (May,1993)	Physical Chemistry, Faculty of Science, Zagazig University, Zagazig, Egypt. "Studies on Some Physicochemical Characterization and Catalytic Properties of V ₂ O ₅ catalyst under varying conditions"
BSc (May,1988)	Chemistry, Faculty of Science, Ain Shams University, Cairo, Egypt.

Distinctions:

- Cited in Marquis Who's Who in Science in 2013
- The Award of Excellence of Scientific Publication for the staff members 2012, deanship of Scientific Research, King Abdulaziz University, Jeddah, Saudi Arabia
- The Award of Excellence of Citation on the Scientific Publication for the staff members 2011, deanship of Scientific Research, King Abdulaziz University, Jeddah, Saudi Arabia
- The Award of Excellence of Scientific Publication for the staff members 2011, deanship of Scientific Research, King Abdulaziz University, Jeddah, Saudi Arabia

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- *The Award of Excellence of Scientific Publication for the staff members 2010 , deanship of Scientific Research, King Abdulaziz University, Jeddah, Saudi Arabia*
- *The Award of Excellence of Scientific Publication for the staff members 2009 , deanship of Scientific Research, King Abdulaziz University, Jeddah, Saudi Arabia*
- *Senior Research Fellowship in 2007 (July-Sept.) from DAAD, at Chemical Reaction Technology, Erlangen- Nuremberg University, Germany.*
- *Senior Research Fellowship in 2003 (June-August) from DAAD, at Surface Chemistry and Catalysis Lab, Ulm University, Ulm, Germany*
- *Senior Research Fellowship in 1998 (May)-1999 (Sept.) from DAAD, at Institute of Chemical Engineering and Processing, Karlsruhe University, Germany*

Professional Associations:

- ACS American Chemical Society (membership number: 30044788).
- ACS Catalysis Science & Technology
- AAAS Advancing Science Serving Society (membership number: 40969789)
- RSC Royal Society of Chemistry.
- RSC Applied Catalysis Group.
- IS 34th International Seminar for Physical Chemistry and Chemical Engineering
- ESCSC Egyptian Society for Surface Chemistry and Catalysis

Journal Reviewer: (up to date more than 60 articles reviewed in last 5 years)

Journal of Applied Catalysis: A Chemical, Journal of Molecular Catalysis: A Chemical, Journal of Applied Clay Science, Journal of Solid State Chemistry, Journal of Colloids and Interface Science, Applied Surface Science, Industrial & Engineering Chemistry Research, Journal of Alloys and compounds, Materials Research Bulletin, ACS Applied Materials & Interface, JACERS, Arabian Journal of Chemistry, Current Nanoscience, Microporus and Mesoporous Materials, Ceramics International.

Editorial Board: -Journal of Membrane and Separation Tecnology (JMST)
-Advanced Science, Engineering and Medicine (ASEM)

Research Topics:

- Synthesis and characterization of nano-structured materials
- Synthesis and characterization of zeolites and zeolite membranes
- Synthesis and characterization of clays
- Synthesis of fine chemicals
- Selective catalytic reduction of nitrogen oxides
- Oxidation catalysis
- Green chemistry
- Photocatalysis

Current Academic and Industrial Collaborators:

Saudi Arabia

- King Abdulaziz City for Science and Technology (KACST)
- Saudi Basic Industries Corporation (SABIC)

International

- BioNano consulting office, London, UK
- Imperial College, London, UK
- University College London, UK
- Utrecht University, Utrecht, The Netherlands
- Friedrich-Alexander Erlangen-Nuremberg University, Germany
- National Centre for Nano-Structured Materials, South Africa
- State Key Laboratory of Structural Chemistry, Fujian Institute of Research on the Structure of Matter, Chinese Academy of Sciences, Fuzhou 350002, China

Research Projects:

Previous projects

- Preparation and Characterization of Low Temperature CO-conversion catalysts; Academy of Scientific Research and Technology, Egypt (1993-1995).
- Preparation and Characterization of Cu-ZnO/Al₂O₃ catalysts used in hydrogenolysis of dimethylmaleate; BASF, Germany (1998-1999).
- Modification of Surface and Catalytic Properties of Cu-nano-particle Catalysts used in Methanol Synthesis and Steam Reforming; SABIC, Saudi Arabia (2006).
- Kinetics of thermal degradation and surface catalytic studies of a novel hopcalite system; SABIC, Saudi Arabia (2007).
- Preparation and physicochemical studies of nano structural cobalt/manganese based hydrotalcite catalysts; SABIC (2008).
- Remediation of persistent organic pollution using chemically modified carbon nanotubes; dsr, KAU (2008)
- Preparation, characterization and surface acidity studies on heteropoly acid catalysts; MS 10-14; SABIC (2009)
- Preparation and characterization of Zirconium Modified Nano Zinc-Cobaltite Spinel for N₂O Abatement; 3-37-429; DSR, KAU (2009)
- Microwave Assisted Eco-Friendly Rapid Synthesis of Pyrazolo [1,5-a] Pyrimidine Derivatives using Mg/Al-Hydrotalcite Solid Base Catalysts; MS 11/3; SABIC, KAU (2010)
- The use of KSA Kaolin in preparation of catalyst used in hydrogenation of p-nitrophenol, dsr, KAU (2010)
- Preparation and characterization of nanocomposite metal oxide supported zirconia catalysts for abatement of environmental pollutant NO_x gases; 8-NAN184-3, dsr, KAU (2010-2011)
- Nanocatalysts for wastewater treatment; T-81/429; KAU/ BNC-London (2009-2011).
- Nanocatalysts for the synthesis of fine chemicals; T-80/429; KAU/ BNC-London (2009-2011).

Current projects

- New Catalytic Routes and Porous Catalyst Materials for the Synthesis of Light Olefins from Alcohols derived from Natural Gas, Coal and Biomass; T-002/431; KAU UU-The Netherlands (2011-2014).
- Acidic and/or Basic Zeolite-Membranes for Separation and Catalytic Processes; D-002/432; KAU/FAU-Erlangen-Nuremberg Germany (2012-2014).
- Development of novel photocatalysts using a combinatorial chemistry approach; D-005/432; KAU/ BNC-London (2011-2014).

- Investigations into the development and application of supported LDH materials; D-005/432; KAU/BNC-London (2011-2014).
- The design of new composite materials containing metal oxide supported 2D graphene sheets; Strategic project KAU/KACST (11-NAN2057-03).
- Photocatalysis for Water Purification Applications (KAU-BioNano)
- Development of a photocatalytic water treatment demonstrator (KAU-BioNano)

Human Capital Development:

Accreditation committee

- A member of the accreditation committee at Chemistry Department, Faculty of Science, King Abdulaziz University for the undergraduate studies in collaboration with Canadian Society of Chemistry (CSC).
- A member of the accreditation committee at Chemistry Department, Faculty of Science, King Abdulaziz University for the postgraduate studies in collaboration with Royal Society of Chemistry (RSC).

PhD/MSc Students Graduated Under My Direct Supervision

- Dr Reham Mohamed Abou El-Aineen (PhD Student, 2003- 2005, Graduated 2005, Cairo University): Studies on Physicochemical, surface and Catalytic Properties of Some Transition Metal Oxide Catalysts Under Varying Conditions: Currently Assistant Professor (Surface Chemistry and Catalysis Lab) at National Research Centre, Cairo, EG.
- Mr Abdulrahman Babin (MSc Student, 2004-2005, Graduated 2005, King Abdulaziz University): Studies of The Physicochemical, Surface and Catalytic Properties of Double Oxide System Cu- Mn- O. Currently PhD student.
- Mrs Reem Ibraheem (MSc Student, 2006-2007, Graduated 2006, King Abdulaziz University) :Effect of preparation conditions on the formation of ZnCoO- double oxide spinel
- Mrs Reem A. Al-Shereef (MSc Student, 2008-2009, Graduated 2009, King Abdulaziz University): Study the Texture Properties of Nanostructural Synthetic Anionic Clays
- Mrs Huda K. Sherbini (MSc Student, 2009-2011, Graduated 2011, King Abdulaziz University): Preparation and characterization of nanoporous zeolites: currently PhD student under my direct supervision.
- Dr Ebtisam Al-Sabaan (PhD student, 2009-2011, Graduated 2012, KAU): A study of nanosized layered hydroxalicates for fine chemical applications: Currently Assistant Professor (Chemistry Department, KAU)
- Mrs Asmaa Medkhaly (MSc student, 2011 to date): Preparation of perovskite-type oxide as catalyst in selective catalytic reduction of NO_x
- Mrs Huda K. Sherbini (PhD Student 2013 to date): Partially crystalline zeolite catalysts for the conversion of alcohols into light olefins
- Mrs Ebtisam A-Motairi (MSc student, 2014 to date): Benzylolation of benzene over insitu generated heteropolyacid catalysts on surface of nano metal phosphates

Lecturing

- General Chemistry (Chem. 110)
- General Chemistry (Chem. 281)
- Physical Chemistry I (Chem. 202)

- Solid State and Surface Chemistry (Chem. 345)
- Advanced Solid State and Surface Chemistry I (Chem. 690)
- Scientific Presentations and Introduction to Scientific research (Chem. 695)
- Special Topics in Physical Chemistry (Chem. 696)
- Advanced Solid State and Surface Chemistry II (Chem. 742)

Research Impact:

Patents

1. **SYNTHESIZING AND UTILIZING NOVEL NANO-CRYSTALLINE ZINC CHROMITE-SUPPORTED NANO-PALLADIUM CATALYST** ; Abdulaziz A. Bagabas, Vagif Malik Akhmedov, **Mohamed Mokhtar Mohamed Mostafa** ,Abdulrahman A. Al-Rabiah; **United states patent, US007951976 B1.**
2. **SYNTHESIZING AND UTILIZING NOVEL RUTHENIUM NANOPARTICLES - ACTIVATED CHARCOAL-NANO-ZINC OXIDE COMPOSITE CATALYST;** Abdulaziz A. Bagabas, **Mohamed Mokhtar Mohamed Mostafa**, Vagif Malik Akhmedov, **United states patent, US8,110,708 B2.**
3. **SYNTHESIS OF ZINC-OXIDE NANOPARTICLES AND THEIR USE FOR PHOTOCATALYTIC DEGRADATION OF CYANIDE,** Abdulaziz A. Bagabas, Reda M. Mohamed, Mohamed F.A.Aboud, **Mohamed Mokhtar Mohamed Mostafa**, Ahmed S. Alshammari, Zeid A.Al-Othman, **United states patent, US 8,252,256 B2.**
4. **ZINC-OXIDE NANOPARTICLES AND THEIR USE FOR PHOTOCATALYTIC DEGRADATION OF CYANIDE,** Abdulaziz A. Bagabas, Reda M. Mohamed, Mohamed F.A.Aboud, **Mohamed Mokhtar Mohamed Mostafa**, Ahmed S. Alshammari, Zeid A.Al-Othman, **United states patent, US 8, 362, 094 B1**
5. **ZINC-OXIDE NANOPARTICLES AND THEIR USE FOR PHOTOCATALYTIC DEGRADATION OF CYANIDE- A PROCESS,** Abdulaziz A. Bagabas, Reda M. Mohamed, Mohamed F.A.Aboud, **Mohamed Mokhtar Mohamed Mostafa**, Ahmed S. Alshammari, Zeid A.Al-Othman, **United states patent, US 8, 361, 324 B1**
6. **COMPOSITE CATALYST AND USING THE SAME FOR MAKING ISOPROPYL ALCOHOL;** Abdulaziz A. Bagabas, **Mohamed Mokhtar Mohamed Mostafa** ,Abdulrahman A. Al-Rabiah; Vagif Malik Akhmedov, **United states patent, US20120203034.**
7. **HETABLE CARBON NANOTUBE XEROGELS/XEROGELS/GELS;** Ainara Garcia Gallastegui, Milo Shaffer, **Mohamed Mokhtar**, Sulaiman Basahel, **UK patent No. 1122198.3**
8. **GRAPHENE AND GRAPHENE OXIDE AEROGELS/XEROGELS/GELS FOR CO₂ CAPTURE** ; Ainara Garcia Gallastegui, Milo Shaffer, **Mohamed Mokhtar**, Sulaiman Basahel, **UK patent No. 1204169.5**

PUBLISHED PAPERS

1995-2000

Updated December, 2014

1. Th.El-Nabarawy, **M. Mokhtar** and G.A.El-Shobaky, "Texture Properties of un-doped and Na₂O-doped V₂O₅/Al₂O₃Catalysts", *Adsorption Science & Technol.*, 12 (1995) 27.
2. G.A. El-Shobaky, G.A. Fagal and **M. Mokhtar**; "Analysis of thermally induced Solid-Solid Interactions In Vanadia-Alumina System", *J. Thermal Analysis and Clorimetry*, 46 (1996) 1473.
3. G.A. El-Shobaky, A.S.Ahmed , **M. Mokhtar**; "Effect of Gamma irradiation on Surface and Catalytic Properties of CuO-ZnO/Al₂O₃ System", *J. Radioanal. Nuclear Chemistry, Articles*. 219 No.1 (1997) 89-94.
4. G.A. El-Shobaky, G.A. Fagal and **M. Mokhtar**; "Effect of ZnO on Surface and Catalytic Properties of CuO/Al₂O₃ System", *Applied Catalysis: A Gen.* 155(1997)167-178.
5. G.A. El-Shobaky, G.A.Fagal, A.S.Ahmed, **M. Mokhtar**, "Physicochemical, surface and catalytic properties of the Na₂O-doped CuO- ZnO/Al₂O₃ System", *Adsorption Science & Technol.*, 15 No.9 (1997) 77.
6. G.A. El-Shobaky, G.A.Fagal, A.M.Ghozza, **M. Mokhtar**; "Effect of Li₂O doping on Surface and Catalytic Properties of CuO-ZnO/Al₂O₃ System", *Colloids and Surfaces A*: 142 (1998) 17-25.
7. G.A. El-Shobaky, A.S. Ahmed, G.A. Fagal , **M.Mokhtar**; "Solid-solid Interaction in CuO-ZnO/Al₂O₃ system under varying conditions", *Thermochim. Acta*, 319 (1998) 67-74.
8. H.G. El-Shobaky, **M. Mokhtar** and G.A. El-Shobaky; "Physicochemical, Surface and catalytic properties of CuO-ZnO/ Al₂O₃ system", *Appl. Catalysis A*: 180 (1999) 275-283.
9. H.G. El-Shobaky, **M. Mokhtar**, A.S. Ahmed; "Effect of MgO-doping on solid-solid interactions in Mo O₃ / Al₂O₃ system", *Thermochem. Acta* 327(1999) 39-46.

2000-2007

10. H.G. El-Shobaky, W.M.Shaheen, **M. Mokhtar**; "Surface and catalytic properties of the Co₃O₄/MgO System Doped with Fe₂O₃". *Adsorption Science and Technol.* 19 no.8 (2001) 621.
11. M.M. Doheim, H.A. El-Boohy, **M. Mokhtar** and G.A. El-Shobaky; "Surface and catalytic properties of γ -Irradiated ZnO-treated Co₃O₄/Al₂O₃ system", *Adsorption Science and Technol.* 19 no.9 (2001) 751.
12. **M. Mokhtar**, C. Ohlinger, J.H. Schlander and T. Turek; "Hydrogenolysis of dimethyl maleate on Cu/ZnO/ Al₂O₃ catalysts", *Chem. Eng. Technol.* 24 (2001) 4, 423-427.
13. **M. Mokhtar**, H.G. El-Shobaky, A.S.Ahmed, "Surface and Catalytic properties of Co₃O₄/Al₂O₃ as influenced by ZnO", *Colloids and Surfaces A*: 203, 1-3 (2002) 87-95.

14. M. Mokhtar, H.G. El-Shobaky , A.S.Ahmed “Surface and catalytic properties of CuO doped with Li_2O and Al_2O_3 ”, *Colloids and Surfaces A: 203* ,1-3 (2002) 205-215.
15. N.R.E. Rdwan, M. Mokhtar, G.A. El-Shobaky; “Thermal behaviour of Ammonium molybdate/basic magnesium carbonate system doped with lithium nitrate”, *J. Thermal Analysis and Calorimetry*, vol. 71 (2003) 977-986.
16. M. Mokhtar; “Surface and catalytic properties of CuO/ Al_2O_3 system as influenced by treating with trace amounts of MoO_3 ”, *Adsorption Sci. Technol.* 21(5) (2003) 425.
17. N.R.E. Radwan, M. Mokhtar, G.A. El-Shobaky; “Surface and catalytic properties of CuO and Co_3O_4 Solids as Influenced by Treatment with Co^{2+} and Cu^{2+} Species”, *Applied Catalysis A: Gen.* 241 (2003) 77-90.
18. A.M. Salem, M. Mokhtar, G.A. El-Shobaky, “Electrical properties of pure and Li_2O -doped NiO/MgO System”, *Solid State Ionics*, 170 (1-2) (2004) 33-42.
19. G.A. El-Shobaky, M. Mokhtar, A.M. Salem; “Structure and electrical transport properties of pure and Li_2O -doped CuO/MgO solid solution”, *Materials Research Bulletin*, 40 (6) (2005) 891-902.
20. H. G. El-Shobaky, M. Mokhtar; “Effect of Li_2O and CoO – doping of CuO/ Fe_2O_3 system on its surface and catalytic Properties”, *Applied Surf. Sci.:* 253 (24) (2007) 9407-9413

2009

21. S. N. Basahel , E.H. El-Mossalamy , M. Mokhtar; “Preparation and physicochemical characterization of thermally stable nano-sized hopcalite catalysts”, *Int. J. Nanomanufacturing*, Vol. 4, Nos. 1/2/3/4, 2009
22. M. Mokhtar, S.N. Basahel, S.A. Al-Thabaiti ; “Modification of Surface and Catalytic Properties of Cu nanostructure Catalysts used in Methanol Synthesis and Steam Reforming”, *Int. J. Nanoparticles* Vol. 2, Nos. 1/2/3/4/5/6, 2009
23. M. Mokhtar, M.W. Kadi; “Physicochemical and texture properties of nanocrystalline ZnCo_2O_4 spinel and the effect of γ - irradiation on its sintering process”, *J. Materials Technology* Vol. 24, No. 2, 2009.
24. S. N. Basahel, S.A. Al-Thabaiti, A.Y.Obaid, M. Mokhtar and M. Abdelsalam; “ Chemical modification of multi-walled carbon nanotubes using different oxidizing Agents: optimization and characterization”, *Int. J. Nanoparticles*, Vol. 2, Nos. 1/2/3/4/5/6, 2009

2010

25. M. Mokhtar, S. N. Basahel, Y.O. Al-Angary; “Nanosized spinel oxide catalysts for CO-oxidation prepared via CoMnMgAl quaternary hydrotalcite route”, *Journal of Alloys and Compounds* 493 (2010) 376–384

26. S. N. Basahel, I. H. Abd El-Maksod, B. M. Abu-Zeid, **M. Mokhtar**; "Effect of Zr^{4+} doping on the stabilization of ZnCo-mixed oxide spinel system and its catalytic activity towards N_2O decomposition", *Journal of Alloys and Compounds* 493 (2010) 630–635
27. M.A. Gabal, S.A. Al-Thabaiti, E.H. El-Mossalamy, M. Mokhtar, "Structural, magnetic and electrical properties of Ga-substituted NiCuZn nanocrystalline ferrite", *Ceramics International*, 36, 4, (2010) 1339-1346
28. T. T. Ali, S. A. Al-Thabaiti, A. O. Alyoubi, **M. Mokhtar**, "Copper substituted heteropolyacid catalysts for the selective dehydration of ethanol", *J. Alloys and Compounds* 496 (2010) 553–559
29. M. Abdel Salam, **M. Mokhtar**, S.N. Basahel, S.A. Al-Thabaiti, A.Y. Obaid, "Removal of chlorophenol from aqueous solutions by multi-walled carbon nanotubes: Kinetic and thermodynamic studies", *J. Alloys and Compounds*, 500 (2010) 87-92
30. **M. Mokhtar**, A. Inayat, J. Ofili, W. Schwieger, "Thermal decomposition, gas phase hydration and liquid phase reconstruction in the system Mg/Al hydrotalcite/mixed oxide: A comparative study", *Applied Clay Science*, 50 (2010) 176-181.

2011

31. **M. Mokhtar**, T.S. Saleh, N.S. Ahmed, S.A. Al-Thabaiti, R.A. Al-Shareef, "An eco-friendly N-sulfonylation of amines using stable and reusable Zn-Al hydrotalcite solid base catalyst under ultrasound irradiation", *Ultrasonics Sonochemistry*, 18 (2011) 172-176.
32. Maurice C. D. Mourad, **Mohamed Mokhtar**, Matthew G. Tucker, Emma R. Barney, Ronald I. Smith, Abdulrahman O. Alyoubi, Sulaiman N. Basahel, Milo S. P. Shaffer and Neal T. Skipper, "Activation and local structural stability during the thermal decomposition of Mg/Al-hydrotalcite by total neutron scattering", *J. Materials Chemistry*, 21 (2011) 15479–15485.

2012

33. **Mohamed Mokhtar**, Tamer S. Saleh, Sulaiman N. Basahel, "Mg-Al Hydrotalcites as efficient catalysts for aza-Michael addition reaction: A green protocol", *Journal of Molecular Catalysis A: Chemical* 353– 354 (2012) 122– 131
34. Ainara Garcia-Gallastegui, Dianan Iruretagoyena, Mohamed Mokhtar, Abdullah M. Asiri, Sulaiman N. Basahel, Shaeel A. Al-Thabaiti, Abdulrahman O. Alyoubi, David Chadwick, Milo S. P. Shaffer, "Layered double hydroxides supported on multi-walled carbon nanotubes: preparation and CO_2 adsorption characteristics ", *J. Materials Chemistry*, 22, (2012) 13932–1394 [Featured in journal front cover page]
35. Sulaiman N. Basahel, Tark T. Ali, K. Narasimha Rao, A. A. Bagabas, **Mohamed Mokhtar**, "Effect of iron oxide loading on the phase transformation and physicochemical properties of nanosized mesoporous ZrO_2 ", *Materials Research Bulletin*, 47 (2012) 3463-3472
36. Garcia Gallastegui, Ainara; Iruretagoyena, Diana; Gouvea, Veronica; **Mokhtar, Mohamed**; Asiri, Abdullah; Basahel, Sulaiman; Al-Thabaiti, Shaeel; Alyoubi, Abdulrahman; Chadwick,

David; Shaffer, Milo, "Graphene Oxide as support for Layered Double Hydroxides: enhancing the CO₂ sorption capacity", *Chemistry of Materials*, 24(2012) 4531-4539

2013

37. **Mohamed Mokhtar M. Mostafa**, K. Narasimha Rao, Huda S. Harun, Sulaiman N. Basahel, Islam H. Abd El-Maksod, "Synthesis and characterization of partially crystalline nano sized ZSM-5 zeolites", *Ceramics International*, 39 (2013) 683-689.
38. **Mokhtar, M.**, Basahel, S. N., & Ali, T. T, "Effect of Synthesis Methods for Mesoporous Zirconia on Its Structural and Textural Properties", *Journal of Materials Science*, 48 (2013) 2705-2713
39. Tamer S. Saleh, Katabathini Narasimharao, Nesreen S. Ahmed, Sulaiman N. Basahel, Shaeel A. Al-Thabaiti, **Mohamed Mokhtar**, "Mg-Al hydrotalcite as an efficient catalyst for microwave assisted regioselective 1,3-dipolar cycloaddition of nitrilimines with the enamionone derivatives: A green protocol", *Journal of Molecular Catalysis A: Chemical* 367 (2013) 12-22
40. Katabathini Narasimharao, **Mohamed Mokhtar** , Sulaiman N. Basahel, Shaeel A. Al-Thabaiti, "Synthesis, characterization, and catalytic activity of nitridated magnesium silicate catalysts", *Journal of Materials Science*, 48 (12) (2013) 4274-4283.
41. Yun-Peng Xie, Shaeel A. Al-Thabaiti, Mohamed Mokhtar, Thomas C.W. Mak, (2013) "An unusual silver-ethynide polymeric chain containing centrosymmetric Ag₁₄ cluster segments stabilized by mixed carboxylate ligands", *Inorganic Chemistry Communications* 31 (2013) 54-57.
42. R.M.Mohamed, I.A. Mkhallid , S.A. Al-Thabaiti, **Mohamed Mokhtar**, "Nano Cu metal doped on TiO₂-SiO₂ nanoparticle catalysts in photocatalytic degradation of direct blue dye", *Journal of Nanoscience and Nanotechnology*, 13 (2013) 4975-4980
43. Qingyun Qian, Javier Ruiz-Martínez, **Mohamed Mokhtar**, Abdullah M. Asiri, Shaeel A. Al-Thabaiti, Suliman N. Basahel, Hendrik van der Bij, Bert M. Weckhuysen, "Single-Particle Spectroscopy on Large SAPO-34 Crystals at Work: Methanol-to-Olefins vs. Ethanol-to-Olefins", *Chemistry A European Journal*, 19 (2013) 11204-11215.
44. Katabathini Narasimharao, Ebtisam Al-Sabban, Tamer Saleh, Ainara Garcia Gallastegui , Almudena Celaya Sanfiz, Sulaiman Basahel, Shaeel Al-Thabaiti, Abdulrahman Alyoubi, Abdullah Obaid, **Mohamed Mokhtar**, "Microwave assisted efficient protocol for the classic Ullmann homocoupling reaction using Cu-Mg-Al hydrotalcite catalysts", *Journal of Molecular Catalysis A: Chemical* , 379 (2013) 152-162.

2014

45. **Mohamed Mokhtar**, Sulaiman Basahel, Tarek T. Ahmed, "Ethanol to hydrocarbons using silver substituted polyoxometalates: Physicochemical and catalytic study", *Journal of Industrial and Engineering Chemistry*, 20 (2014) 46-53.

46. K. Narasimharao, M. Ahmed Malik, **M. M. Mokhtar**, S. Basahel, S. Al-Thabaiti, "Iron oxide supported sulfated TiO₂ nanotube catalysts for NO reduction with propane", *Ceramics International*, 40 (2014) 4039-4053.
47. Sulaiman N. Basahel, Shaeel A. Al-Thabaiti, Katabathini Narasimharao, Nesreen S. Ahmed, Mohamed Mokhtar "Nanostructured Mg-Al Hydrotalcite: A benign Efficient Alternative to the Homogeneous Catalysts in the Synthesis of Fine Chemicals", *Journal of Nanoscience and Nanotechnology*, 14(2)(2014)1931-1945. [REVIEW ARTICLE]
48. Qingyun Qian, Javier Ruiz-Martínez, **Mohamed Mokhtar**, Abdullah M. Asiri, Shaeel A. Al-Thabaiti, Suliman N. Basahel, Bert M. Weckhuysen, "Single-Particle Spectroscopy of Alcohol-to-Olefins over SAPO-34 at Different Reaction Stages: Crystal Accessibility and Hydrocarbons Reactivity", *ChemCatChem*, 2014, 6, 772 – 783 [Featured in journal as VIP]
49. Qingyun Qian, Javier Ruiz-Martínez, **Mohamed Mokhtar**, Abdullah M. Asiri, Shaeel A. Al-Thabaiti, Suliman N. Basahel, Bert M. Weckhuysen, "Single-catalyst particle spectroscopy of alcohol-to-olefins conversions: Comparison between SAPO-34 and SSZ-13", *Catalysis Today*, 226 (2014) 14–24
50. Kongzhao Su, Feilong Jiang, Jinjie Qian, Kang Zhou, Jiandong Pang, Sulaiman Basahel, **Mohamed Mokhtar**, Shaeel A. AL-Thabaiti, Maochun Hong, "Calix[4]arene-Based Clusters with μ_9 -Carbonato-Bridged CoII₉ Cores", *Inorganic Letters*, 1(1) (2014) 1-8.
51. Jayita Bandyopadhyay, Shaeel A. Al-Thabaiti, Suprakas Sinha Ray, Sulaiman Nassir Basahel, **Mohamed Mokhtar**, "Unique Cold-Crystallization Behavior and Kinetics of Biodegradable Poly[(butylene succinate)-co adipate] Nanocomposites: A High Speed Differential Scanning Calorimetry Study", *Macromolecular Materials and Engineering*, 299 (8) (2014) 939-952.
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