

CURRICULUM VITAE



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<https://scholar.google.com/citations?user=ZAoGLTwAAAAJ&hl=en>

Research

I am Interested in advanced materials, nanomaterials with special interest in their application in heterogeneous catalysis. Solid acids and solid bases for liquid phase and gas phase reactions. In addition, I am specialist in catalyst and adsorbent characterization with particular expertise in adsorption measurements. I have published over 85 refereed publications and many international patents in these and related topics. I have numerous collaborative projects with public and private sector organizations.

Teaching

I am experienced in university teaching in physical chemistry and in teaching chemistry to non-science students. I am interested in science education at all levels and outreach.

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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. <i>"Studies on Some Physicochemical, Surface and Catalytic Properties of CuO-ZnO supported on Gamma Alumina"</i>
MSc (May,1993)	Physical Chemistry, Faculty of Science, Zagazig University, Zagazig, Egypt. <i>"Studies on Some Physicochemical Characterization and Catalytic Properties of V₂O₅ catalyst under varying conditions"</i>
BSc (May,1988)	Chemistry, Faculty of Science, Ain Shams University, Cairo, Egypt.

Distinctions:

- Cambridge Certificate for outstanding scientific achievement, 22nd December 2016.
- Cited in Marquis Who's Who in Science in 2013
- The Award of Excellence of Scientific Publication for the staff members 2016,2015,2014,2013,2012, 2011 2010 and 2009 deanship of Scientific Research, King Abdulaziz University, Jeddah, Saudi Arabia
- The Award of Excellence of Citation on the Scientific Publication for the staff members 2016,2015,2014,2013,2012 and 2011 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 under International Seminar for Chemical Engineering and Physical Chemistry Program

Professional Associations:

- ACS American Chemical Society (membership number: 30044788).
- ACS Catalysis Science & Technology

- AAAS American Association for the Advancement of Science
- RSC Royal Society of Chemistry (563468).
- RSC Applied Catalysis Group.
- IAS International Adsorption Society
- 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 150 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, Microporous and Mesoporous Materials, Ceramics International, Journal of Nanoscience and Nanotechnology.

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

Research Topics:

- Synthesis and characterization of nano-structured materials, zeolites, clays, hybrid and composite materials.
- Liquid phase catalytic organic synthesis of fine chemicals.
- Environmental catalysis (CO oxidation, Selective catalytic reduction of nitrogen oxides DeNO_x).
- Oxidation catalysis.
- Green chemistry.
- Photocatalysis.
- CO₂ adsorption, desulfurization and wastewater treatment.

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

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- 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).
- 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).

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- Application of the synthetic magadiite clay for environmental remediation of methylene blue dye in water (Distinguished Project)

Current projects

- Photocatalysis for Water Purification Applications (KAU-BioNano)
- Development of a photocatalytic water treatment demonstrator (KAU-BioNano)
- New solid acid catalysts for the synthesis of some pyridopyrimidine derivatives (11/130/1436-S)
- A facile access for synthesis of novel pyrimido[1,2-a]benzimidazoles and pyrazolo[3,4-b]pyridines incorporating benzofuran moiety utilizing solid acid catalyst (147-130-383)
- Metal oxide-zirconia based catalysts for propene production through oxidative dehydrogenation of propane in absence of oxygen. (SABIC-KAU)

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 hydrotalcites for fine chemical applications: Currently Assistant Professor (Chemistry Department, KAU)
- Mrs Asmaa Medkhaly (MSc student, 2011): Preparation of perovskite-type oxide as catalyst in selective catalytic reduction of NO_x
- Mrs Ebtisam A-Motairi (MSc student, 2014 to date): Benzoylation of benzene over in situ generated heteropolyacid catalysts on surface of nano metal phosphates
- Mrs Nada Shaeel Al-Thabaiti (MSc student 2015 to date): Layered double hydroxide catalysts for coupling reactions
- Mrs Huda K. Sherbini (PhD Student 2013 to date): Partially crystalline zeolite catalysts for the conversion of alcohols into light olefins
- Mrs Ghalia Al-Zahrani (PhD student 2016 to Date): Synthesis and characterization of layered double hydroxide supported nickel catalyst for Suzuki C-C coupling reactions
- Mrs Bodour Al-Hashdi (MSc. Student 2017):

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)

Books

Abullah Y.Obaid, Shaeel A.Al-Thabaiti, **Mohamed Mokhtar M. Mostafa**, Mohamed S. Abdel Salam, Abou-Elhagag A. Hermas: *Chemistry For Preparatory Year Students*. Edited by Khawarizm Academic, 11/2012;

Abdullah Y.Obaid, Shaeel A.Al-Thabaiti, **Mohamed Mokhtar M. Mostafa**, Mohamed S. Abdel Salam, Abou-Elhagag A. Hermas: *Manual Solution & Exams Models For University Chemistry*. 11/2012; Khawarizm Academic.

Mohamed Mokhtar Mohamed Mostafa: *Nanocatalysts and Solid State Chemistry: Heterogeneous Catalysis*. 11/2012; Elsevier.

Prof.Abdullah Y.Obaid, Prof.Shaeel A.Al-Thabaiti, Dr.Mohamed Mokhtar M.Mostaa, Dr.Mohamed S. Abdel Salam, Dr.Abou-Elhagag A. Hermas: *University Chemistry*. 11/2011; Khawarizm Academic.

Prof.Abdullah Yousof Obaid, Prof.Shaeel A. Al-Thabaiti, Dr.Abou-Elhagag A. Hermas, Dr, **Mohamed Mokhtar M. Moustafa**: *Notes In Fundamental Chemistry*. 11/2010; Khawarizm Academic.

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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**, Vagif Malik Akhmedov, **United states patent,US 8, 362,302 B2**
7. **SYNTHESIS OF COPPER OXIDE-DOPED ZINC OXIDE NANOPARTICLES AND THEIR USE,** Abdulaziz A. Bagabas, Ahmed S. Alshammari, Mohamed F. Aboud, **Mohamed Mokhtar Mohamed Mostafa** , Emad Addurihem, Zeid A. Al-Othman, Musaed A. Alangari, **US, 8623, 220 B2**
8. **CATALYST, METHOD FOR MANUFACTURING CATALYST AND PROCESS;** Bagabas, Abdulaziz A., Akhmedov, Vagif Malik, Mostafa, Mohamed Mokhtar Mohamed, Al-rabiah, Abdulrahman A., **Japanese patent, JP2003160302A**

9. COMPOSITE CATALYST, PROCESS FOR PRODUCING THE SAME, AND METHOD FOR USING THE SAME Abdulaziz A. Bagabas, Mohamed Mokhtar Mohamed Mostafa ,Abdulrahman A. Al-Rabiah; Vagif Malik Akhmedov, Japanese patent, JP2012232288A
10. ELECTRICALLY-HEATABLE CARBON NANOTUBE AEROGELS AND XEROGELS, Sulaiman N Basahel Mohamed M M Mostafa, Ainara Garcia Gallastegui, Milo S Shaffer , UK patent, GB2516564

PUBLISHED PAPERS

1995-2000

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. Schlender 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 Li₂O and Al₂O₃", *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/Al₂O₃ system as influenced by treating with trace amounts of MoO₃", *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 Co₃O₄ Solids as Influenced by Treatment with Co²⁺ and Cu²⁺ Species", *Applied Catalysis A: Gen.* 241 (2003) 77-90.
18. A.M. Salem, **M. Mokhtar**, G.A. El-Shobaky, "Electrical properties of pure and Li₂O-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 Li₂O-doped CuO/MgO solid solution", *Materials Research Bulletin*, 40 (6) (2005) 891-902.
20. H. G. El-Shobaky, M. Mokhtar; "Effect of Li₂O and CoO – doping of CuO/Fe₂O₃ 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 ZnCo₂O₄ 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 Zr⁴⁺ doping on the stabilization of ZnCo-mixed oxide spinel system and its catalytic activity towards N₂O 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 CO₂ 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 CO_2 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 nitrated 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 Ag_{14} 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 TiO_2-SiO_2 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
- Updated November, 2017

Differential Scanning Calorimetry Study", *Macromolecular Materials and Engineering*, 299 (8) (2014) 939-952.

52. Tarek T. Ali, Katabathini Narasimharao, Nesreen S. Ahmed, Sulaiman Basahel, Shaeel Al-Thabaiti, **Mohamed Mokhtar**, "Nanosized iron and nickel oxide zirconia supported catalysts for benzylation of benzene: Role of metal oxide - support interaction", *Applied catalysis A: Gen.*, 486 (2014) 19-31.
53. Abdulaziz A. Bagabas, **Mohamed Mokhtar**, Vagif M. Akhmedov, Katabathini Narasimharao, Sulaiman N. Basahel, Abdulrahman Al-Rabiah, "Ru-C-ZnO composite catalysts for the synthesis of methyl isobutyl ketone via single step gas phase acetone self-condensation", *Catalysis Letters*, 144 (7) (2014) 1278-1288.
54. Kong-Zhao Su, Feilong Jiang, Jinjie Qian, Yanli Gai, Ming-yan Wu, Salem Mohammed Bawaked, **Mohamed Mokhtar**, Shaeel A. AL-Thabaiti, and Mao-Chun Hong, "Generalized Synthesis of Calixarene-Based High-Nuclearity M_4n Nanocages ($M = Ni$ or Co ; $n = 2-6$)", *Crystal Growth & Design*, 14 (2014) 3116–3123.
55. Jie Pan, Fei-Long Jiang, Ming-Yan Wu, Lian Chen, Yan-Li Gai, Salem M. Bawaked, **Mohamed Mokhtar**, Shaeel A. AL-Thabaiti, and Mao-Chun Hong, "A Series of d_{10} Metal Clusters Constructed by 2,6-Bis[3-(pyrazin-2-yl)-1,2,4-triazolyl]pyridine: Crystal Structures and Unusual Luminescences", *Cryst. Growth & Design*, 14 (2014) 5011–5018.
56. Kongzhao Su, Feilong Jiang, Jinjie Qian, Jiandong Pang, Shaeel A. AL-Thabaiti, Salem M. Bawaked, **Mohamed Mokhtar**, Qihui Chen, Maochun Hong, "Alkali-Metal-Templated Assembly of Two High-Nuclearity Cobalt Clusters Based on Thiacalix[4]arene", *Crystal Growth & Design*, 14 (2014) 5865–5870
57. Asma H.A. Medkhali, Katabathini Narasimharao, Sulaiman N. Basahel, **Mohamed Mokhtar**, "Divalent Transition Metals Substituted $LaFeO_3$ Perovskite Catalyst for Nitrous Oxide Decomposition", *Journal of Membrane and Separation Technology*, 3 (2014) 206-212
58. Qingyun Qian, Charlotte Vogt, Mohamed Mokhtar, Abdullah M. Asiri, Shaeel A. Al-Thabaiti, Suliman N. Basahel, Javier Ruiz-Martínez, Bert M. Weckhuysen, "Combined Operando UV/Vis/IR Spectroscopy Reveals the Role of Methoxy and Aromatic Species during the Methanol-to-Olefins Reaction over H-SAPO-34", *ChemCatChem*, 6 (2014) 3396 – 3408

2015

59. S. A. Al-Thabaiti, Sinha Ray, Sulaiman N. Basahel, **Mohamed Mokhtar**, "Multi-functional Nanobiocomposites of Poly[(butylenes succinate)-co-adipate] and Clay", *Journal of Nanoscience and Nanotechnology*, 15(3) (2015) 2446-2450
60. Shaeel A. Al-Thabaiti, Suprakas Sinha Ray, Sulaiman Nassir Basahel, **Mohamed Mokhtar**, "Viscoelastic Properties of Poly[(butylene succinate)-co-adipate] Nanocomposites", *Journal of Nanoscience and Nanotechnology*, 15 (3), 2312-2316
61. Almudena Celaya Sanfiz, Nicol'as Morales Vega, Martina De Marco, Diana Iruretagoyena **Mohamed Mokhtar**, Salem M. Bawaked, Sulaiman N. Basahel, Shaeel A. Al-Thabaiti, Abdulrahman O. Alyoubi, Milo S.P. Shaffer, "Self-condensation of acetone over Mg-Al layered double hydroxide supported on multi-walled carbon nanotube catalysts", *Journal of Molecular Catalysis A: Chemical* , 398, (2015) 50–5
62. E. Borodina, F. Meirer, I. Lezcano-González, **M. Mokhtar**, A.M Asiri, S.A. Al-Thabaiti, S.N. Basahel, J. Ruiz-Martinez, B.M. Weckhuysen, "Influence of the Reaction Temperature on the Nature of the Active and Deactivating Species during Methanol-to-Olefins Conversion over H SSZ 13", *ACS Catalysis*, 5 (2015) 992–1003
63. Robert Menzel, Suelen Barg, Salem M. Bawaked, **Mohamed Mokhtar**, Shaeel A. Al-Thabaiti, Sulaiman N. Basahel, Eduardo Saiz Guterrez, Milo S. P. Shaffer, "Joule Heating Characteristics of Emulsion-Templated Graphene Aerogels" ,*Advanced Functional Materials*, 25 (2015)28–35
64. Nicholas Chadwick, Sanjayan Sathasivam, Salem Bawaked, **Mohamed Mokhtar Mostafa**, Shaeel A Al-Thabaiti, Sulaiman N Basahel, Ivan P Parkin and Claire J Carmalt , " The Use of Time Resolved Aerosol Assisted Chemical Vapour Deposition in Mapping Metal Oxide Thin Film Growth and Fine Tuning Functional Properties", *J. Mater. Chem. A*, 3 (2015) 4811–4819
65. Kongzhao Su , Feilong Jiang , Jinjie Qian , Jiandong Pang , Falu Hu , Salem M. Bawaked ,**Mohamed Mokhtar** , Shaeel A. AL-Thabaiti , Maochun Hong, "Synthesis and characterization of decanuclear Ln(III) cluster of mixed calix[8]arene-phosphonate ligands (Ln = Pr, Nd)",*Inorganic Chemistry Communications*, 54 (2015)34-37
66. Kongzhao Su, Feilong Jiang, Jinjie Qian, Jiandong Pang, Falu Hu, Salem M. Bawaked, **Mohamed Mokhtar**, Shaeel A. Al-Thabaiti , Maochun Hong, "Bridging different Co₄-calix[4]arene building blocks into grids, cages and 2D polymers with chiral camphoric acid",*CrystEngComm*, 17 (2015) 1750-1753

67. Sulaiman N Basahel, Tarek T Ali, **Mohamed Mokhtar**, Katabathini Narasimharao, "Influence of crystal structure of nanosized ZrO_2 on photocatalytic degradation of methyl orange", *Nanoscale Research Letters*, **10** (2015) 73
68. Raul Salazar, Marco Altomare, Kiyoungh Lee, Jyotsna Tripathy, Robin Kirchgeorg, Nhat Truong Nguyen, **Mohamed Mokhtar**, Abdelmohsen Alshehri, Shaeel A. Al-Thabaiti, Patrik Schmuki, "Use of Anodic TiO_2 Nanotube Layers as Mesoporous Scaffolds for Fabricating $CH_3NH_3PbI_3$ Perovskite-Based Solid-State Solar Cells", *ChemElectroChem*, **6** (2015) 824–828
69. Kongzhao Su , Feilong Jiang , Jinjie Qian , Lian Chen , Jiandong Pang , Salem M. Bawaked , **Mohamed Mokhtar**, Shaeel A. Al-Thabaiti, Maochun Hong, " Stepwise Construction of Extra-Large Heterometallic Calixarene-Based Cages" , *Inorganic Chemistry*, **54**(7) (2015), 3183–3188.
70. Imgon Hwang, Seulgi So, **Mohamed Mokhtar**, Abdelmohsen Alshehri, Shaeel A. Al-Thabaiti, Anca Mazare, Patrik Schmuki, "Single-Walled TiO_2 Nanotubes: Enhanced Carrier-Transport Properties by $TiCl_4$ Treatment", *Chemistry A European Journal*, **21** (25) (2015) 9204–9208
71. Ralitsa Purova, Katabathini Narasimharao, Nesreen S.I. Ahmed, Shaeel Al-Thabaiti, Abdelmohsen Al-Shehri, **Mohammed Mokhtar**, Wilhelm Schwieger, "Pillared HMC-36 zeolite catalyst for biodiesel production by esterification of palmitic acid", *Journal of Molecular Catalysis A: Chemical* **406** (2015) 159–167
72. Ebtesam Al-Mutairi, Katabathini Narasimharao, **Mohamed Mokhtar Mostafa** "Heteropolyacid generated on surface of iron phosphate nanotubes: structure and catalytic activity studies", *RSC Adv.*, **5** (2015) 63917–63929

2016

73. Mohammadpour, Fatemeh; Altomare, Marco; So, Seulgi; L, Kiyoungh; **Mokhtar, Mohamed**; Alshehri, Abdelmohsen; Al-Thabaiti, Shaeel A.; Schmuki, Patrik, "High-Temperature Annealing of TiO_2 Nanotube Membranes for Efficient Dye-Sensitized Solar Cells", *Semiconductor Science and Technology*, **31** (2016) 014010
74. Sulaiman N. Basahel, Nesreen S. Ahmed, Katabathini Narasimharao, **Mohamed Mokhtar**, "Simple and efficient protocol for synthesis of pyrido[1,2-a]pyrimidin-4-one derivatives over solid heteropolyacid catalysts", *RSC Adv.*, **6** (2016) 11921–11932

75. Martina De Marco, Foivos Markoulidis, Robert Menzel, Salem M. Bawaked, **Mohamed Mokhtar**, Shaeel A. Al-Thabaiti, Sulaiman N. Basahel, Milo S. P. Shaffer, "Cross-Linked Single-Walled Carbon Nanotube Aerogel Electrodes via Reductive Coupling Chemistry", *J. Mater. Chem. A*, 4(2016) 5385–5389
76. Davinder S. Bhachu , Savio J.A. Moniz , Sanjayan Sathasivam, David O. Scanlon , eAron Walsh, Salem M. Bawaked, **Mohamed Mokhtar**, Abdullah Y. Obaid, Ivan P. Parkin, Junwang Tang, Claire J. Carmalt, " Bismuth Oxyhalides: Synthesis, Structure and Photoelectrochemical Activity", *Chemical Science*; 7 (2016) 4832-4841
77. JeongEun Yoo, Marco Altomare, **Mohamed Mokhtar**, Abdulmohsen A. Alshehri , Shaeel A. Al-Thabaiti, Anca Mazare, Patrik Schmuki "Photocatalytic H₂ Generation Using Dewetted Pt-Decorated TiO₂ Nanotubes – Optimized Dewetting and Oxide Crystallization by a Multiple Annealing Process", *Journal of Physical Chemistry C*; 120 (29)(2016) 15884–15892.
78. Sulaiman N. Basahel, **Mohamed Mokhtar**, Edreese H. Alsharaeh, Tarek T. Ali, Hatem A. Mahmoud, Katabathini Narasimharao, "Physico-Chemical and Catalytic Properties of Mesoporous CuO-ZrO₂ Catalysts", *Catalysts* 6 (2016) 57
79. Robert Menzel, Diana Iruretagoyena Ferrer, Yifan Wang, Salem Bawaked, **Mohamed Mokhtar**, Shaeel A Al-Thabaiti, Sulaiman N. Basahel, Milo S. P. Shaffer, "Graphene Oxide/ Mixed Metal Oxide Hybrid Materials for Enhanced Adsorption Desulfurization of Liquid Hydrocarbon Fuels", *Fuel* 181 (2016) 531–536
80. Sulaiman N. Basahel, **Mohamed Mokhtar**, Edreese H. Alsharaeh, Tarek T. Ali, Hatem A. Mahmoud, Katabathini Narasimharao, "Photocatalytic degradation of p-nitrophenol in aqueous suspension by using graphene/ ZrO₂ catalysts" , *Nanoscience and Nanotechnology Letters*, 8 (5) (2016) 448–457
81. Jeong Eun Yoo, Marco Altomare, **Mohamed Mokhtar**, Abdelmohsen Alshehri, Shaeel A. Al-Thabaiti, Anca Mazare, Patrik Schmuki, "Anodic TiO₂ nanotube arrays directly grown on quartz glass used in front- and back-side irradiation configuration for photocatalytic H₂ generation: Anodic TiO₂ nanotube arrays directly grown on quartz glass", *Physica Status Solidi (A) Applications and Materials Science*, 213(10) (2016) 2733
82. Dutta Chowdhury, Klaartje Houben, Gareth T. Whiting, **Mohamed Mokhtar**, Abdullah M. Asiri, Shaeel A. Al-Thabaiti, Suliman N. Basahel, Marc Baldus, and Bert M. Weckhuysen, " Initial Carbon–Carbon Bond Formation during the Early Stages of the Methanol-to-Olefin Process Proven by Zeolite-Trapped Acetate and Methyl Acetate Abhishek", *Angewandte Chemie, International Edition*: 55 (2016) 15840–15845

2017

83. Nesreen.S. Ahmed, Robert Menzel, Yifan Wang, Ainara Garcia-Gallastegui, Salem M. Bawaked, Abdullah Y. Obaid, Sulaiman N. Basahel, **Mohamed Mokhtar**, "Graphene-oxide-supported CuAl and CoAl layered double hydroxides as enhanced catalysts for carbon-carbon coupling via Ullmann reaction", *Journal of Solid State Chemistry* 246 (2017) 130–137
84. Nicholas P. Chadwick, Andreas Kafizas, Raul Quesada-Cabrera, Carlos Sotelo-Vazquez, Salem Mohammed Bawaked, **Mohamed Mokhtar**, Shael A. Al Thabaiti, Abdullah Y. Obaid, Sulaiman N. Basahel, James R. Durrant, Claire J. Carmalt, Ivan P. Parkin "Ultraviolet Radiation Induced Dopant Loss in a TiO₂Photo-catalyst", *ACS Catalysis* 7 (2017) 1485–1490
85. Tariq R. A. Sobahi, Magdy Y. Abdelaal, R. M. Mohamed, **M. Mokhtar**"Photocatalytic degradation of methylene blue dye in water using Pt/ZnO-MWCNT under visible light", *Journal of Nanoscience and Nanotechnology Letters* 9(2017) 144–150
86. Ameen Shahid, Nesreen S. Ahmed, Tamer S. Saleh, Shael A. Al-thabaiti, Sulaiman N. Basahel, Wilhelm Schwieger, **Mohamed Mokhtar**, "Solvent-free Biginelli reactions catalyzed by hierarchical zeolite utilizing Ball mill technique: Green sustainable process", *Catalysts* 2017, 7, 84; doi:10.3390/catal703008
87. Nicholas P. Chadwick, Sanjayan Sathasivam, Carlos Sotelo-Vazquez, Salem M. Bawaked, **Mohamed Mokhtar**, Sulaiman N. Basahel, Abdullah Y. Obaid, Claire J. Carmalt, Ivan P. Parkin, "Dopant stability in multifunctional doped TiO₂'s under environmental UVA exposure", *Environmental science Nano*, 2017, DOI: 10.1039/c7en00061h
88. Sanjayan Sathasivam, Benjamin A. D. Williamson, Shael A. Althabaiti, Abdullah Y. Obaid, Sulaiman N. Basahel, **Mohamed Mokhtar**, David O. Scanlon, Claire J. Carmalt , Ivan P. Parki, "Chemical Vapor Deposition Synthesis and Optical Properties of Nb₂O₅ thin films with Hybrid Functional Theoretical Insight into Band Structure and Band Gaps", *ACS Applied Materials & interface*, xx(2017)xx.DOI: 10.1021/acsami.7b00907
89. E. Borodina, H. Sharbini Harun Kamaluddin, F. Meirer, **M. Mokhtar**, A. M. Asiri, S. A. Al-Thabaiti, S. N. Basahel, J. Ruiz-Martinez, B. M. Weckhuysen, "Influence of the Reaction Temperature on the Nature of the Active and Deactivating Species During Methanol-to-Olefins Conversion over H-SAPO-34", *ACS Catalysis*, 7 (2017) 5268–5281

90. Martina De Marco, Robert Menzel, Salem M. Bawaked, **Mohamed Mokhtar**, Abdullah Y. Obaid, Sulaiman N. Basahel, Milo S. P. Shaffer, "Hybrid effects in graphene oxide/carbon nanotube-supported layered double hydroxides: enhancing the CO₂ sorption properties", *Carbon*, **123** (2017) 616-627
91. **Mohamed Mokhtar**, "Application of Synthetic Layered Sodium Silicate Magadiite Nanosheets for Environmental Remediation of Methylene Blue Dye in Water", *Materials*, **10** (2017) 760.
92. Islam Hamdy Abd ElMaksod, Abdelmohsen Al-Shehri, Salem Bawaked, **Mohamed Mokhtar**, Katabathini Narasimharao, "Structural and photocatalytic properties of precious metals modified TiO₂-BEA zeolite composites", *Molecular Catalysis*, **441** (2017) 140-149

CONFERENCES AND WORKSHOPS

1. S. N. Basahel , E. H. El-Mossalamy , **M. Mokhtar**; "Preparation and physicochemical characterization of thermally stable nano-sized hopcalite catalysts" *The International Conference on Nanotechnology (ICON008)* 17 – 19 June 2008, King Abdul Aziz University, Jeddah, Kingdom of Saudi Arabia.
2. **M. Mokhtar**, S.N.Basahel, S.A.A Thabaiti ; "Modification of Surface and Catalytic Properties of Cu nanostructure Catalysts used in Methanol Synthesis and Steam Reforming" *The International Conference on Nanotechnology (ICON008)* 17 – 19 June 2008, King Abdul Aziz University, Jeddah, Kingdom of Saudi Arabia.
3. S. N. Basahel, S.A. Al-thabaiti, A.Y.Obaid, **M. Mokhtar** , M.Abdelsalam; "Chemical Modification of Multi-Walled Carbon Nanotubes Using Different Oxidizing Agents: Optimization and Characterization" *The International Conference on Nanotechnology (ICON008)* 17 – 19 June 2008, King Abdul Aziz University, Jeddah, Kingdom of Saudi Arabia.
4. M. Mokhtar, J. Ofili, W. Schwieger; "Synthetic Mg/Al-hydrotalcites: in-situ XRD studies of thermal decomposition and gas-phase hydration"; *Die 21. Deutsche Zeolith-Tagung (DZT), Christian-Albrechts-Universität , Kiel*, March 4- 6, 2009, Germany.
5. S. N. Basahel, M. Abdel Salam, **M. Mokhtar**, S. A. Al Thabaiti, A. Y. Obaid, "Kinetic and thermodynamic studies of 2,3-dichlorophenol removal by pristine multi-walled carbon nanotubes from aqueous solution", *The Taibah International Chemistry Conference (TICC-2009)* Al-Madinah Al-Munawarah March 23 -25, 2009, KSA.

6. S. N. Basahel, **M. Mokhtar**, T. T. Ali, A. Bagabas, I. H. Abd El Maksod, "Nanosized Mesoporous Fe / Zr Composite Oxide Catalysts I. Preparation and Characterization", *International Workshop on Advanced Materials (IWAM 2010)* Ras Al Khaimah 21-23 February, 2010, UAE.
7. Ebtissam Al-Sabban , S. N. Basahel, **M. Mokhtar**, "Nano sized Nickel and Copper Layered Hydrotalcite Catalysts For the Sonochemical Synthesis of Pyrazolo [1,5-a] Pyrimidine Derivative: I. Structural Characterization", *III International Workshop Layered Materials: Design and Function*, 14th – 15th May 2010 **Bochum, Germany**.
8. **M. Mokhtar** , S. N. Basahel, I. H. Abd-Elmaksod, T.S. Saleh, " Nanosized Mg/Al-Hydrotalcites as Catalysts using Microwave Assisted Ecofriendly for rapid Synthesis of Pyrazolo [1,5 a] Pyrimidine Derivatives" , *6th Nanoscience and Nanotechnology Conference* , 15-18 June 2010, **Izmir (IYTE), Turkey**.
9. Abdulaziz Bagabas, **Mohamed Mostafa**, Vagif Akhmedov, Mohamed Ashanqiti, Faez AL-Otaibi " One-Step Gas-Phase Acetone Condensation Over Nano-Ruthenium/ Activated Charcoal/ Nano-Zinc Oxide: Part I-Effect of Acetone Flow Rate on Catalytic Properties", *8th International Conference & Exhibition on Chemistry in Industry* (Chemindix) ,Gulf International Convention Center Gulf Hotel, October 18-20, 2010, **Kingdom of Bahrain**.
10. Abdulaziz Bagabas, **Mohamed Mokhtar**, Vagif Akhmedov, "One-Step Gas-Phase Acetone Condensation Over Nano-Ruthenium/ Activated Charcoal/ Nano-Zinc Oxide: Part III-Effect of Temperature on Catalytic Properties", *EuropaCat X*; Glasgow University, 28 August-2 Sept 2011, **Glasgow, Scotland**.
11. Ainara Garcia-Gallastegui, Diana Iruretagoyena, **Mohamed Mokhtar**, Abdullah Asiri, Sulaiman N. Basahel, Shaeel A. Al-Thabaiti, Abdulrahman O. Alyoubi, David Chadwick, Milo S. P. Shaffer, " Graphene Oxide supported Layered Double Hydroxides for CO₂ capture applications" , *Graphene 2012*, April 10-13, **Brussels, Belgium**.
12. Ainara Garcia-Gallastegui, Mourad M. M., Celaya Sanfiz A., **Mokhtar M.**, Asiri A., Basahel S. N., Al-Thabaiti S. A., Alyoubi A. O., Skipper N., Shaffer M. S. P., "Aerogels based on cross-linked carbon nanotube scaffolds, Euromat 2011 – European Congress and Exhibition on Advanced Materials and Processes", **September 2011, France**.
13. Ainara Garcia-Gallastegui, Diana Iruretagoyena, **Mohamed Mokhtar**, Abdullah M. Asiri, Sulaiman N. Basahel, Shaeel A. Al-Thabaiti, Abdulrahman O. Alyoubi, David Chadwick, and Milo S. P. Shaffer, " Graphene Oxide/Carbon nanotube supported

Layered Double Hydroxides for CO₂ capture applications" *ChemOnTubes*, April 2012, France.

14. Q. Qian, J. Ruiz-Martínez, **M. Mokhtar**, Abdullah M. Asiri, S. A. Al-Thabaiti, S. N. Basahel, B. M. Weckhuysen, "Kinetics of alcohols conversion on individual large SAPO-34 crystals studied by in-situ micro-spectroscopic techniques", **SynFuel2012 Symposium**, June 29-30, **Munich, Germany**
15. A. Bagabas, A. Alshammari, A. AlSayigh, A. AL-Fahad, V. Akhmedov, Baku, **M. Mostafa**, A. AL-Rabiah, "Highly selective one-step gas-phase synthesis of methyl isobutyl ketone over supported Pd nanoparticles on nanocrystalline zinc chromite", **15th International Congress on Catalysis 2012** , July 1-6, **Munich, Germany**.
16. S. Reuß, P.S. Singh, K. Franz, **M.M. Mostafa**, W. Schwieger, "The stepwise template decomposition in zeolite BEA membranes: Synthesis, properties and their effect on their separation performance", **12th International Conference on Inorganic Materials 2012**, July 9-13, **Enschede, The Netherlands**
17. Tarek T. Ali, E. Alsharaeh, H. Mahmoud, S. Basahel, Mohamed Mokhtar, "Nanocomposite copper oxide supported mesoporous zirconia: Physicochemical properties", **Third International Conference on Multifunctional, Hybrid and Nanomaterials**, 3-7 March, 2013, **Sorrento (near Naples), Italy**.
18. Qingyun Qian, Javier Ruiz-Martínez, **Mohamed Mokhtar**, Abdullah M. Asiri, Shaeel A. Al-Thabaiti, Suliman N. Basahel and Bert M. Weckhuysen, "Single-Particle Spectroscopy of Large SAPO-34 Crystals at Work: Methanol-to-Olefins vs. Ethanol-to-Olefins", **Netherlands' Catalysis and Chemistry Conference**, 11-13 March, 2013 , Noordwijkerhout, The Netherlands
19. Javier Ruiz-Martínez, Qingyun Qian, **Mohamed Mokhtar**, Abdullah M. Asiri, Shaeel A. Al-Thabaiti, Suliman N. Basahel and Bert M. Weckhuysen, " Combined in-situ UV-Vis and IR spectroscopy revealing the chemistry of the intermediates during methanol-to-olefins reaction", **Netherlands' Catalysis and Chemistry Conference** ,11-13 March, 2013, **Noordwijkerhout, The Netherlands**
20. Abdulaziz Bagabas, Ahmad Alshammari, **Mohamed Mokhtar**, Emad Addurihem, Muhamad AL-Abdussalam, "Effect of Synthesis Medium on the Characters of Chromium(III) hydroxide and Chromia Nanoparticles", **Chemistry of Energy and Food: 245th American Chemical Society National Meeting & Exposition-New Orleans, LA**. April 7-11, 2013
21. Javier Ruiz-Martínez, Qingyun Qian, **Mohamed Mokhtar**, Abdullah M. Asiri, Shaeel A. Al-Thabaiti, Suliman N. Basahel , Bert M. Weckhuysen, "Evolution of the Methanol-

Updated November, 2017

to-Olefins Intermediates Revealed by a Combined in-situ-UV-vis and IR Approach”, *XIth European Congress in Catalysis*; Sept. 1-6, 2013, Lyon, France.

22. **Mohamed Mokhtar**, Tarek T. Ali, K. Narasimharao, Tamer S. Saleh, Shaeel A. Al-Thabaiti, Sulaiman N. Basahel *International Porous and Powder Materials Symposium and Exhibition (PPM 2013)*, 3-6, September, Izmir, Turkey
23. Katabathinin Narasimharao, Tarek Ali, Sulaiman Basahel, Shaeel Al-Thabaiti, **Mohamed Mokhtar**, “Nanosized gold supported catalysts for catalytic oxidative cracking of propane”, *NANOTECH DUDAI 2013*, 28-30, October, Dubai, UAE.
24. S. Reuß, M. Bartsch, **M. Mokhtar**, S.A. Al-Thabaiti, S.N. Basahel, W. Schwieger, “BEA containing zeolite membranes prepared by an organo-template free synthesis route”
26. *Deutsche Zeolith-Tagung*, 26 – 28 February 2014, Universität Paderborn, Germany.
25. Martina de Marco, Robert Menzel, Salem M. Bawaked, **Mohamed Mokhtar**, Abdullah Y. Obaid, Shaeel A. Al-Thabaiti, Abdulrahman O. Alyoubi, Sulaiman N. Basahel, David Chadwick, Milo S.P Shaffer, “Hierarchical Carbon Nanotube-Graphene Oxide Networks As Supports For CO₂ Adsorbers”, *Chem’On Tubes 2014*, March 30th - April 3rd, Riva del Garda, Italy.
26. Robert Menzel, S. Barg, Martina de Marco, Salem M. Bawaked, **Mohamed Mokhtar**, Abdullah Y. Obaid, Shaeel A. Al-Thabaiti, Abdulrahman O. Alyoubi, Sulaiman N. Basahel, David Chadwick, Milo S.P Shaffer, “Nanostructured Carbon Networks as Electrically Heatable Support for Layered Double Hydroxides”, *Chem’On Tubes 2014*, March 30th - April 3rd, Riva del Garda, Italy.
27. Sulaiman N. Bashel, **Mohamed Mokhtar**, Edreese Alsharaeh, Tarek T. Ali, Hatem A. Mahmoud, Katabathini Narasimharao, “Nanostructured zirconia/graphene oxide hybrids: physicochemical studies”, *Nanotech Dubai 2015*, March 26-18, Dubai, AUE.
28. **Mohamed Mokhtar**: Invited Speaker: “Layered Double Hydroxides and their Application in Petrochemicals”; *the 3rd Saudi International Petrochemical Technologies Conference 2015 (3rd SIPTC)*”, 5-6 May 2015, King Abdulaziz City for Science and Technology (KACST), Riyadh, Saudi Arabia.
29. Ebtesam Al-Mutairi, K. Narasimharao, **Mohamed Mokhtar**: Oral Presentation, “Highly active porous iron phosphate nanotubes deposited molybdenum oxide catalysts for benzylation of benzene”, *Third International Conference on Advanced Complex Inorganic Nanomaterials (ACIN 2015 from 13 to 17 July 2015, Namur, Belgium)*

30. **Mohamed Mokhtar**: Oral presentation: "Layered Double Hydroxides as Efficient Alternatives to Homogeneous Catalysts in the Synthesis of Fine Chemicals"; *BIT's 6th Annual Global Congress of Catalysis-2015, Sept. 24-26, Xi'an, China*
31. **Mohamed Mokhtar**, S.N. Basahel, Nesreen S. Ahmed: Oral presentation: "Layered Double Hydroxides as Efficient Alternatives to Homogeneous Catalysts in the Synthesis of Fine Chemicals"; *1st International Conference of Applied Chemistry (ICAC-2015), Nov. 18-19, Jeddah, Saudi Arabia*
32. R. Menzel, Y. Wang, S. Bawaked, **M. Mokhtar**, S. Al-Thabiti, S. Basahel, M. S. P. Shaffer, D. Iruretagoyena "Graphene Oxide / Mixed Metal Oxide Hybrid Materials for Enhanced Dibenzothiophene Adsorption from Liquid Hydrocarbons Fuels"; *12th Conference on the Fundamentals of Adsorption 29 May - 3 June 2016, Friedrichshafen/Germany*
33. **Mohamed Mokhtar**: Invited Speaker: "Graphene oxide supported layered double hydroxide hybrids: Synthesis and applications"; *7th annual congress on Materials Research and Technology, Feb. 20-21, 2017 Berlin, Germany.*
34. Ghalia Alzahrani, Elham S. Azam, Nesreen Said Ismail Ahmed, and **Mohamed Mokhtar**, Novel Efficient Pd-free Catalyst for Suzuki C-C Coupling Reaction: Sustainable and green protocol, *International Porous and Powder Materials Symposium and Exhibition (PPM 2017) Sept. 12-15, Izmir, Turkey.*

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