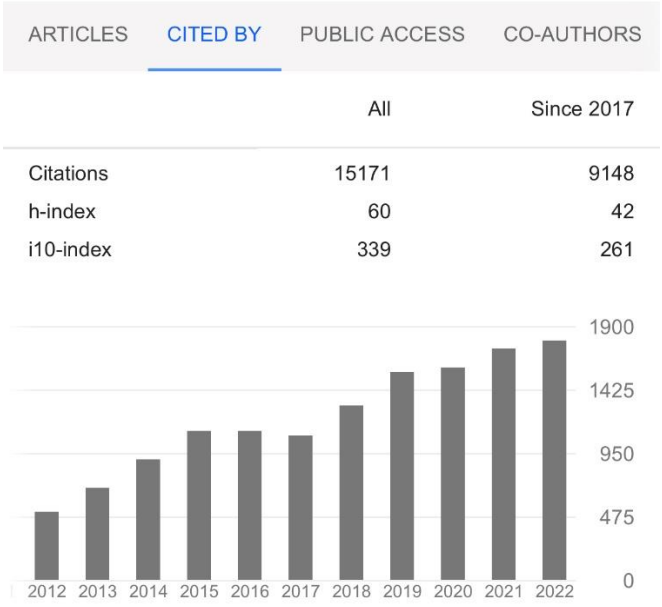
## *Publications Summary*

**No. of Publications from our Group at IIT Indore : 112**
**Total No. of Publications : ~ 507**
**Total Book Chapter : 12**
**For complete list :**
**http://people.iiti.ac.in/~xray/pubs.html or https://iiti.irins.org/profile/60464**




***Courtesy Goggle Scholar: https://scholar.google.com/citations?user=_AL4b0QAAAAJ&hl=en&authuser=1***

**Titled Golden Author by Dalton Transaction from Royal Society of Chemistry for publishing more than 50 articles in Dalton Trans overall *(https://blogs.rsc.org/dt/2021/07/28/celebrating-our-golden-authors-prof-shaikh-m-mobin/?doing_wp_cron=1628097585.3982529640197753906250)***

| ***ACS has recognized as Highly Cited Authors among top 3% in India and among top 10 Indian Scientists to publish more than 100 ACS publications.*** | ***2019-2020*** |
|---|---|
| ***The following articles lead to top 5% of highly cited authors with RSC journals in 2019 and 2020 consecutively.*** | ***Number of citations in 2019*** |
| Sustainable carbon-dots: recent advances in green carbon dots for sensing and bioimaging; *J. Mater. Chem. B,* **2017**,*5,* 8904-8924 | **57** |
| Design and construction of a ferrocene based inclined polycatenated Co-MOF for supercapacitor and dye adsorption applications; *J. Mater. Chem. A,* **2017**,*5*,17998-18011. | **41** |
| Small biomolecule sensors based on an innovative MoS2-rGO heterostructure modified electrode platform: a binder-free approach; *Dalton Trans.,* **2017,***46,*15848-15858. | **13** |
| | ***Number of citations in 2020*** |
| Robust heterostructures of a bimetallic sodiumzinc metal- organic framework and reduced graphene oxide for high- performance supercapacitors; *J. Mater. Chem. A,* **2019**,*7*,1725-1736. | **14** |
| Small biomolecule sensors based on an innovative MoS2-rGO heterostructure modified electrode platform: a binder-free approach; *Dalton Trans.,* **2017,***46,*15848-15858. | **13** |

## *List of Publications from Research Group @IIT Indore*

1. Mate, N., Pranav, Nabeela, K., Kaur, N., **Shaikh, M. M.*** (2022): Insight into the Modulation of Carbon-Dot Optical Sensing Attributes through a Reduction Pathway. *ACS Omega*. **Just Accepted (Acceptance Letter Attached)**
2. Choudhary, N., **Shaikh M. M.*** (2022): Conversion of Biomass-Derived Aldehydes using Environmentally Benign CuNi nanocatalyst. *Asian Journal of Organic Chemistry*. **Just Accepted (Acceptance Letter Attached)**
3. Kaur, N., Tiwari, P., Abbas, Z., and **Shaikh M. M.*** (2022): Doxycycline detection and degradation in aqueous media via simultaneous synthesis of Fe-N@Carbon dots and Fe3O4-Carbon dot hybrid nanoparticles: One arrow two hawk approach. *J. Mater. Chem. B.***,** *10*, 5251.
4. Chaudhary, N., Abdelgaid, M., Mpourmpakis, G., and **Shaikh M. M.*** (2022): CuNi Bimetallic Nanocatalyst Enables Sustainable Direct Carboxylation Reactions. *Mol. Catal.*, *530*, 112630.
5. Abbas, Z., Tiwari, P., Kumar, V., and **Shaikh M. M.*** (2022): Gelatin-Assisted Co-exfoliation of Graphene nanoplatelets/MoS2 for High-Performance Supercapacitors. *Sustainable Energy Fuels*, *6*, 3872.
6. Kumar, V., Kumar, P., Deka, R., Abbas, Z., and **Shaikh M. M.*** (2022): Recent development of morphology-controlled hybrid nanomaterials for triboelectric nanogenerator: A Review. *The Chemical Record,*, e202200067.
7. Deka, R., Kumar, V., Rajak, R., and **Shaikh M. M.*** (2022): Two-dimensional layered nickel-based coordination polymer for supercapacitive performance. *Sustainable Energy Fuels,*, *6*, 3014.
8. Kaur, N., Tiwari, P., Mate, N., Sharma, V. and **Shaikh M. M.*** (2022): Photoactivatable carbon dots as label free fluorescent probe for picric acid detection and for light induced bacterial inactivation. *J. Photochem. Photobiol. B, 229*, 112412.
9. Ahmad, K., Kumar, P., Kim, H. and **Shaikh M. M.*** (2022): Optoelectronic and photovoltaic properties of (NH4)3Bi2I9 : A perovskite-like energy material for Pb free perovskite solar cells. *ChemNanoMat*, e202200061.
10. Ghosh, T., Gotluru, K., and **Shaikh M. M.*** (2022): A highly active nitrogen doped mixed phase mixed valence cobalt nanocatalyst for olefins and nitroarenes hydrogenation. *ChemistrySelect, 7(19),e202200204.*
11. Choudhary, N., Kumar, V., **Shaikh, M. M.*** (2022): Bimetallic CoNi Nanoflowers for Catalytic Transfer Hydrogenation of Terminal Alkynes. *ChemistrySelect*, 7(37), e202202501.
12. Rajak, R., Saraf, M., Kumar, P., Natarajan, K., and **Shaikh M. M.*** (2021): Construction of Cu-based Metal-Organic Framework by Employing Mixed Ligand Strategy and Its Facile Conversion into Nano Fibrous CuO for Electrochemical Energy Storage Applications. *Inorg. Chem.*, *60,22*,16986.
13. Ghosh, T., Natarajan, K., Kumar, P. and **Shaikh M. M.*** (2021): Nitrogen Doped Mixed Phase Cobalt Nanocatalyst Derived from Trinuclear Mixed Valence Co(III)/Co(II) Complex for High Performance Oxygen Evolution Reactions. *Inorg. Chem.*, *60,4*, 2333.
14. Kumar, R., Ansari, S. N., Kumar, P., Deka, R., Saraf, M. and **Shaikh M. M.*** (2021): Progress and Perspectives on Covalent Organic Frameworks (COFs) and Composites for Various Energy Applications.
    *Chem. Eur. J., 27(55), 13669-13698.* (Invited Review for Special Virtual Issue on MOF2020WEB under Chemistry Europe)
15. Kumar, P., Ahmed, K., Dagar, J., Unger E., and **Shaikh M. M.*** (2021): Two-Step Deposition Approach for Lead Free (NH4)3Sb2I9 Perovskite Solar Cells with enhanced Open Circuit Voltage and Performance. *ChemElectroChem*., *8(16)*, 3150-3154.
16. Singh, A., Chaudhary, N., Mathur, P. and **Shaikh M. M.*** (2021): Cubane Ru4(CO)8 cluster containing 4 pyridine-methanol ligands as a highly efficient photoelectrocatalyst for oxygen evolution reaction from water. *J. Organomet. Chem.*, *940*, 121769.
17. Chandra, P., Choudhary, N., Maiti, D., Lahiri, G. K. and **Shaikh M. M.*** (2021): Copper mediated chemo-and stereoselective cyanation reactions. *Asian J. Org., 10(8)*, 1897-1937.

18. Sharma, V., Tiwari, P., Kaur, N. and **Shaikh M M.*** (2021): Optical nanosensors based on fluorescent carbon dots for the detection of water contaminants: a review. *Environ. Chem. Lett.*, 19(4), 3229-3241.
19. Ahmad, K., Kumar, P., Shrivastava, P. and **Shaikh M. M.*** (2022): Sn(IV) inserted lead free perovskite materials (MA3(Bi1-xSnx)2I9) as light absorbers: Band gap engineering and enhanced photovoltaic performance. *Energy Technol.*, *10*(3), 2100717.
20. Rajak, R., Kumar, R., Ansari, S. N., Saraf, M. and **Shaikh M. M.*** (2020): Recent highlights and future prospects on mixed-metal MOFs as emerging contestants for supercapacitors. *Dalton Trans., 49(34), 11792*-11818. (Invited Perspective by Dalton Editorial Office:Accepted).
21. Ahmed, K. Kumar, P. and **Shaikh M. M.*** (2020): All inorganic Pb free perovskite light absorbers for efficient perovskite solar cells with enhanced performance. *Chem. Asian J.,* 15(18), 2859-2863.
22. Natarajan, K., Saraf, M., Gupta, A. K. and **Shaikh M. M.*** (2020): Nanostructured $MnO_2$/$Cd(OH)_2$ Heterojunction Constructed under Ambient Conditions as a Sustainable Cathode for Photocatalytic Hydrogen Production. *Ind. Eng. Chem. Res*., *59(16)*, 7584-7593.
23. Chandra, P., Ghosh, T., Choudhary, N., Mohammad, A. and **Shaikh M. M.*** (2020): Recent Advancement in Oxidation or Acceptorless Dehydrogenation of Alcohols to Valorised Products using Manganese Based Catalysts. *Coord. Chem. Rev*., *411*, 213241.
24. Choudhary, N., Ghosh, T., and **Shaikh M. M.***(2020): Ketone hydrogenation by using ZnO-Cu(OH)Cl/MCM-41 with a splash of water: an environmentally benign approach. *Chem. Asian. J*., 15(8), 1339-1348.
25. Ahmad, K. and **Shaikh M. M.*** (2020): Recent Progress and Challenges in A3Sb2X9 Based Perovskite Solar Cells. *ACS Omega*, *5(44)*, 28404-28412. (Mini Review: Invited Article from ACS Omega Editor).
26. Kaur, N., Tiwari, P., Kapoor, K. S., Saini, A. K., Sharma, V. and **Shaikh M. M.*** (2020): Metal-Organic Framework based Antibiotic Release and Antimicrobial Response: An Overview. *CrystEnggCommun.*, 22(44), 7513-7527. (Invited Perspective from CrystEnggCommun Editor)
27. Ahmed, K., Kumar, P. and **Shaikh M. M.*** (2020): Hydrothermally grown novel pyramids of CaTiO3 perovskite as efficient electrode modifier for sensing applications. *Mater. Adv.*, *1*,2003-2009.
28. Tiwari, P., Kaur, N., Sharma, V and **Shaikh M. M.*** (2020): A spectroscopic investigation of Carbon dots and its reduced state towards fluorescence performance. *J. Photochem. Photobiol. A, 403,* 112847.
29. Ghosh, T., Choudhary, N. and **Shaikh M. M.*** (2020): Design and synthesis of silver decorated Fe3O4 @ Fe doped CeO2 core @ shell ternary composite as highly efficient nanocatalyst for selective oxidation of alkenes. *ChemistrySelect*, *5(31)*, 9601-9606.
30. Ahmed, K., and **Shaikh M. M.*** (2020): Design and fabrication of cost effective and sensitive non-enzymatic hydrogen peroxide sensor using Co-doped δ-MnO2 flowers as electrode modifier. *Anal. Bioanal. Chem.*, *413(3)*, 789-798.
31. Ahmed, K., Kumar, P. and **Shaikh M. M.***(2020): A Two-Step Modified Sequential Deposition Method based Pb Free (CH3NH3)3Sb2I9 Perovskite with Improved Open Circuit Voltage and Performance. *ChemElectroChem.*, *7(4)*, 946-950.
32. Rajak, R., Saraf, M. and **Shaikh M. M.*** (2020): Mixed-Ligand Architected Unique Topological Heterometallic Sodium/Cobalt-Based MetalOrganic Framework for High-Performance Supercapacitors. *Inorg. Chem.*, *59*, 1642-1652.
33. Ahmed, K. Kumar, P. and **Shaikh M. M.*** (2020): A highly sensitive and selective hydroquinone sensor based on a newly designed N-rGO/SrZrO3 composite. *Nanoscale Advances*, *2*, 502-511.
34. Singh, A., Torubaev, Y., Ansari, S. N., Singh, S.K., and Mathur, P., **Shaikh M. M.*** (2020): The Borderline: Exploring the Structural Landscape of Triptycene in Cocrystallization with Ferrocene. *CrystEnggCommun.*, *22*,1314-1320.

35. Natarajan, K., Gupta, A., Ansari, S. N., Saraf, M. and **Shaikh M. M.*** (2019): Mixed-ligand Architected 2D Co(II) MOF Expressing Novel Topology as an Efficient Photoanode for Water Oxidation Using Visible Light. *ACS Appl. Mater. Interfaces*, *11*, 13295-13303
36. Rajak. R., Saraf, M. and **Shaikh M. M.*** (2019): Robust heterostructure of bimetallic sodium–zinc metal– organic framework and reduced graphene oxide for high– performance supercapacitors. *J. Mater. Chem. A*, 7,1725-1736.
37. Kumari. P., Verma, S. K. and **Shaikh M. M.*** (2019): A facile two-photon fluorescent probe: Endoplasmic Reticulum tracker, monitoring ER stress and vesicular transport to lysosomes. *Chem. Commun*., 55,294-297.
38. Verma, S. K., Ansari, S. N., Kumari. P. and **Shaikh M. M.*** (2019): Click Reaction Driven Highly Fluorescent Dinuclear Organo-gold(I) Complex Exhibit Dual Role: A Rare Au···H Interactions and as Anti-proliferative Agent. *Organometallics*, *38(13),* 2591-2596.
39. Ansari, S. N., Kumar, P., Gupta. A. K., Mathur, P., and **Shaikh M. M.*** (2019): Catalytic CO2 Fixation over a Robust Lactam-Functionalized Cu(II) Metal Organic Framework. *Inorg. Chem.*, 58,*15*, 9723-9732.
40. Rajak, R., Saraf, M., Verma. S. K., Kumar, R., and **Shaikh M. M.*** (2019): Dy(III)-Based Metal Organic Framework as a Fluorescent Probe for Highly Selective Detection of Picric Acid in Aqueous Medium. *Inorg. Chem.*, 58, 23,16065-16074.
41. Gupta. A. K., Saraf, M., Bharadwaj, P. K., and **Shaikh M. M.*** (2019): Dual Functionalized CuMOF based Composite for High-Performance Supercapacitor. *Inorg. Chem.*, 58,*15*,9844-9854.
42. Tiwari, P., Sharma, V., Kaur, N, Ahmed, K. and **Shaikh M. M.*** (2019): Sustainable Graphene Production: New insights into Cannabis Sativa Engineered Carbon Dots based Exfoliating agent for Facile Production of Graphene. *ACS Sustainable Chem. Eng.*, 7,13, 11500-11510.
43. Ansari, S. N., Saraf, M., Gupta, A. K. and **Shaikh M. M.*** (2019): Functionalized Cu-MOF@CNT Hybrid: Synthesis, Crystal Structure and Applicability in Supercapacitors. *Chem. Asian J.*, 14(20), 3566-3571.
44. Ansari, S. N., Saini, A. K., Kumari, P. and **Shaikh M. M.*** (2019): An Imidazole Derivative Based Chemodosimeter for $Zn^{2+}$ and $Cu^{2+}$ ions through "On-Off-On" Switching with Intracellular $Zn^{2+}$Detection. *Inorg Chem Front.*, *6*,736-745.
45. Kaur, N., Sharma, V., Tiwari, P. and **Shaikh M. M.***(2019): "Vigna radiata" based green C-dots: photo-triggered theranostics, highly selective and sensitive fluorescent sensor for extracellular and intracellular iron (III) and multicolor live cell imaging probe. *Sens Actuators B Chem*., 291, 275-286.
46. Ahmad. K., Ansari, S. N., Natarajan, K. and **Shaikh M. M.*** (2019): A Two-Step Modified Deposition Method Based $(CH_3NH_3)_3Bi_2I_9$ Perovskite: Lead Free, Highly Stable and Enhanced Photovoltaic Performance. *ChemElectroChem.*, 6,1-8.
47. Ghosh, T., Mohammed, A., and **Shaikh M. M.*** (2019): Hybrid Cobalt Doped Cerium Oxide as a Multifunctional Nanocatalyst for Various Organic Transformations. *ACS Sustainable Chem. Eng.*, 7,*16*,13746-13763.
48. Kumari, P.,Verma, S. K., Natarajan, K., Ansari, S. N., Saini, A. K., and **Shaikh M. M.*** (2019): Design and Synthesis of a New Facile Ligand in a Dual Role: Mechanically Elastic Crystal and Selective Mitochondria Target. *Cryst. Growth & Des., 19(10), 5483-5490.* (Invited Article for a Virtual Special Issue: Structure Property Relationship in Crystalline Solids).
49. Tiwari, P., Kaur, N, Sharma, V., Kang, H., Uddin, J. and **Shaikh M. M.*** (2019): Cannabis Sativa derived carbon dots with N-S co-doped: highly efficient nanosensors for temperature and vitamin B12. *New J. Chem.*, 43(43), 17058-17068.
50. Ahmad. K. and **Shaikh M. M.*** (2019): Organic-Inorganic Copper (II) Based Perovskites: A Benign Approach towards LowToxic and Water Stable Light Absorbers for Photovoltaic Applications. *Energy Technol., 8(3),* 1901185.
51. Ahmed, K., Kumar, P. and **Shaikh M. M.*** (2019): Hydrothermally grown SnO2 flowers as efficient electrode modifier for simultaneous detection of catechol and hydroquinone. *J. Electrochem. Soc, 166,* B1577-1584.

52. Rajak, R., Mohammad, A., Chandra, P. and **Shaikh M. M.*** (2019): Catalytic Application of Tactically Aligned Cd(II) Based Luminescent 3D- Supramolecular Networks. *ChemistrySelect, 4(24),* 7162-7172.
53. Ahmed, K. and **Shaikh M. M.*** (2019): High surface area 3D-MgO flowers as the modifier for working electrode for efficient detection of 4-chlorophenol. *Nanoscale Advances* , *1*,719-727.
54. Ahmad, K. and **Shaikh M. M.*** (2019): Construction of Polyanilne/ITO Electrode for Electrochemical Sensor Applications. *Mater. Res. Express, 6(8),* 085508.
55. Saraf, M., Rajak, R. and **Shaikh M. M.*** (2019): MOF Derived High Surface Area Enabled Porous Co3O4 Nanoparticles for Supercapacitors. *ChemistrySelect, 4,* 8142-8149.
56. Kumari, P., Ansari, S. N., Kumar, R., Saini, A. K. and **Shaikh M. M.*** (2019): Design and Construction of Aroyl-Hydrazone Derivatives: Synthesis, Crystal Structure, Molecular Docking and Their Biological Activities. *Chem. Biodiversity, 16(11),* e1900315.
57. Saraf, M., Natarajan, K., Gupta, A. K.; Kumar, P.; Rajak, R.; and **Shaikh M. M.*** (2019): Electrochemical energy storage properties of solvothermally driven ZnFe2O4 microspheres. *Mater. Res. Express, 6(9),* 095534.
58. Ahmed, K. and **Shaikh M. M.*** (2019): Shape controlled synthesis of high surface area MgO microstructures for highly efficient congo red dye removal and peroxide sensor. *J. Environ. Chem. Eng.* , *16*,e1900315.
59. Sharma, V., Singh, S. K. and **Shaikh M. M.*** (2019): Bioinspired carbon dots: From Rose petals to tunable emissive nanodots. *Nanoscale Advances, 1*, 1290-1296.
60. Ghosh. T., Chandra, P., Mohammed, A. and **Shaikh M. M.*** (2018): Benign approach for methyl-esterification of oxygenated organic compounds using TBHP as methylating and oxidizing agent. *Appl. Catal. B: Environmental, 226*, 278-288.
61. Saraf, M.; Natarajan, K.; **Shaikh M. M.*** (2018): An Emerging Robust Heterostructure of $MoS_2$-rGO For High Performance Supercapacitors.. *ACS Appl. Mater. Interfaces, 10*, 16588-16595.
62. Natarajan, K., Saraf. M. and **Shaikh M. M.*** (2018): Visible light driven water splitting through an innovative Cu-treated-d-MnO2 nanostructure: probing enhanced activity and mechanistic insights. *Nanoscale, 10*, 13250-13260.
63. Sharma, V.,Kaur, N., Tiwari, P. and **Shaikh M. M.*** (2018): Multifunctional fluorescent "Off-On-Off" nanosensor for Au3+ and S2− employing N-S co-doped carbon–dots. *Carbon, 139*, 393-403.
64. Kumari. P., Sanjay, K. V. and **Shaikh M. M.*** (2018): Water soluble two-photon fluorescent organic probe for long-term imaging of lysosomes in live cells and tumor spheroids. *Chem. Commun., 54*,539-542.
65. Verma. S. K., Kumari, P., Ansari, S. N. and **Shaikh M. M.*** (2018): A novel mesoionic carbene based highly fluorescent Pd(II) complex as an endoplasmic reticulum tracker in live cells. *Dalton Trans.*(Communication), *47*, 15646-15650.
66. Saraf. M., Natarajan, K. and **Shaikh M. M.*** (2018): A Robust Nanocomposite of Nitrogen Doped Reduced graphene Oxide and MnO2 Nanorods for High Performance Supercapacitors and Non-enzymatic Peroxide Sensors. *ACS Sustainable Chem. Eng., 6*,10489-10504.
67. Mohammad, A., Ahmad, K., Qureshi, A., Tauqeere, M. and **Shaikh M. M.*** (2018): Zinc oxide-graphitic carbon nitride nanohybrid as an efficient electrochemical sensor and photocatalyst. *Sens Actuators B Chem, 277*, 467-476.
68. Tiwari, P., Kaur, N., Sharma, V., and **Shaikh M. M.*** (2018): High yield graphene production arising from synergistic effect of inflated temperature and gelatin offers higher stability and cellular compatibility. *Phys. Chem. Chem. Phys, 20(30),* 20096-20107.
69. Ahmad, K.; Ansari, S. N.; Natarajan, K.; **Shaikh M. M.*** (2018): Design and Synthesis of 1D-Polymeric Chain Based $[(CH_3NH_3)3Bi_2Cl_9]_n$ Perovskite: A New Light Absorber Material for Lead Free Perovskite Solar Cells. *ACS App. Energy Mater, 1(6), 2405-2409.*
70. Ansari. S., Verma, S. K., Garin, A. and **Shaikh M. M.*** (2018): Vacuum Mediated Single-Crystal-to-Single-Crystal (SCSC) Trans-formation in Na-MOFs: Rare to Novel Topology and Activation of Nitrogen in Triazole Moieties. *Cryst. Growth & Des., 18*, 1287-1292.

71. Singh. A., **Shaikh M. M.*** and Mathur, P. (2018): Preparation of Ru3(CO)8-pyridine-alcohol cluster and its use for selective catalytic transformation of primary to secondary amines. *Dalton Trans.*, 47(39), 14033-14040.
72. Sharma, V., Kaur, N., Tiwari, P. and **Shaikh M. M.*** (2018): Full color emitting fluorescent carbon material as reversible pH sensor with multicolor live cell imaging. *J Photochem Photobiol B., 182*,137-145.
73. Saini, A., Saraf, M., Kumari, P. and **Shaikh M. M.*** (2018): A highly selective and sensitive chemosensor for L−tryptophan by employing Schiff based Cu(II) complex. *New J. Chem., 42*,3509-3518.
74. Mohammed, A., Ansari, S. N., Choudhary, A., Ahmed, K., Rajak, R. and **Shaikh M. M.*** (2018): Enthralling Adsorption of Different Dye and Metal Contaminants from Aqueous Systems by Cobalt/cobalt Oxide Nanocomposites Derived from Single-source Molecular Precursors. *ChemistrySelect, 3(21), 5733-5741*.
75. Singh, A., Singh, S., Saini, A. K., **Shaikh M. M.*** and Mathur, P. (2018): Facile oxidation of alcohols to carboxylic acids in basic water medium by employing ruthenium picolinate cluster as an efficient catalyst. *Appl. Organomet. Chem., 000*, Accepted.
76. Choudhary, A., Mohammed, A. and **Shaikh M. M.*** (2018): Facile synthesis of phase pure ZnAl2O4 nanoparticles for effective photocatalytic degradation of organic dyes. *Mater. Sci. Eng., B., 227*, 136-144.
77. Ahmad, K., Mohammed, A., Ansari, S. N. and **Shaikh M. M.*** (2018): Construction of graphene oxide sheets based modified glassy carbon electrode (GO/GCE) for the highly sensitive detection of nitrobenzene. *Mater. Res. Express* , 5(7), 075601.
78. Saini, A. K., Natarajan, K. and **Shaikh M. M.*** (2017): A new multitalented azine ligand: elastic bending, single-crystal-to-single-crystal transformation and a fluorescence turn–on Al(III) sensor. *Chem. Commun*., *53*, 9870-9873.
79. Mohammed, A., Chandra, P., Ghosh, T., Carraro, M. and **Shaikh M. M.*** (2017): Facile Access to Amides from Oxygenated or Unsaturated Organic Compounds by Metal Oxides Nanocatalysts Derived from Single-source Molecular Precursors. *Inorg. Chem*., *56*, 10596-10608.
80. Rajak, R., Saraf, M., Mohammed, A. and **Shaikh M. M.*** (2017): Design and construction of ferrocene based inclined polycatenated Co-MOF for supercapacitor and dye adsorption applications. *J. Mater. Chem. A, 5*, 17998-18011.
81. Saraf, M., Natarajan, K., Saini, A. and **Shaikh M. M.*** (2017): Small biomolecules sensor based on an innovative MoS2-rGO heterostructure modified electrode platform: A binder-free approach. *Dalton Trans*., *46*, 15848-15858.
82. Natarajan, K., Saraf, M. and **Shaikh M. M.*** (2017): Visible Light Induced Water Splitting Based On A Novel - $Fe_2O_3$/CdS Heterostructure. *ACS Omega*, *2*, 3447-3456.
83. Sharma, V., Tiwari, P. and **Shaikh M. M.*** (2017): Sustainable carbon-dots: Recent advances in green carbon dots for sensing and bioimaging. *J. Mater. Chem. B., 5*, 8904-8924. (Invited Review by the Journal)
84. Choudhary, A., Mohammed, A. and **Shaikh M. M.*** (2017): Recent Advances in Single-Crystal-to-Single-Crystal Transformation at the Discrete Molecular Level. *Cryst. Growth & Des*., *17*, 2893-2910.
85. Ahmed, K., Mohammed, A. and **Shaikh M. M.*** (2017): Hydrothermally grown α-$MnO_2$ nanorods as highly efficient low cost counter-electrode material for dye-sensitized solar cells and electrochemical sensing applications. *Electrochim. Acta*, *252*, 549-557.
86. Ahmed, K. and **Shaikh M. M.*** (2017): Graphene oxide based planar heterojunction perovskite solar cell under ambient condition. *New J. Chem*., *41*, 14253-14258.
87. Saraf, M., Natarajan, K. and **Shaikh M. M.*** (2017): Multifunctional porous $NiCo_2O_4$ nanorods: sensitive enzymeless glucose detection and supercapacitor properties with impedance spectroscopic investigations. *New J. Chem***.,** *41*, 9299-9313.
88. Singh, A., Kumari, P., Raghuvanshi, A., **Shaikh M. M.*** and Mathur, P. (2017): Ferrocene-substituted bis(ethynyl)-anthracene compounds as anticancer agents. *Appl. Organomet. Chem*., e4071.

89. Saraf, M., Natarajan, K.; **Shaikh M. M.*** (2017): Microwave assisted fabrication of nanostructured reduced graphene oxide (rGO)/$Fe_2O_3$ composite as a promising next generation energy storage material. *RSC Adv*., *7*, 309-317.
90. Mohammed, A., Ahmad, K., Rajak, R. and **Shaikh M. M.*** (2017): Binder Free Modification of Glassy Carbon Electrode by Employing Reduced Graphene Oxide/ZnO Composite for Voltammetric Determination of Certain Nitroaromatics. *Electroanalysis*, **2017,** *29, 1-10.*
91. Sharma, V., and **Shaikh M. M.*** (2017): Cytocompatible peroxidase mimic CuO:graphene nanosphere composite as colorimetric dual sensor for hydrogen peroxide and cholesterol with its logic gate implementation. *Sens Actuators B Chem*, *240*, 338-348.
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93. Saini, A. K., Sharma, V., Mathur, P. and **Shaikh M. M.*** (2016): The development of fluorescence turn-on probe for Al(III) sensing and live cell nucleus-nucleoli staining. *Scientific Reports*, *6*, 34807.
94. Saraf, M., Rajak, R., and **Shaikh M. M.*** (2016): A fascinating multitasking Cu-MOF/rGO hybrid for high performance supercapacitor and highly sensitive and selective electrochemical nitrite sensor. *J. Mater. Chem. A*, *4*, 16432-16445.
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