

CRI - Publications

1. P. Shubha, K. Namratha, M.L. Gowda, M. Nayan, H. Manjunatha, **K. Byrappa**, In vitro and in vivo toxicological evaluation of green synthesised anatase TiO₂ nanoforms, **Materials Research Innovations** 27(3) (2023) 138-144.
2. P. Radhakrishnan Arya, P. Abishad, V. Unni, P. Vemula Ram, N. Pollumahanti, J.Yasur, L. John, A. Karthikeyan, P. Nambiar, S. Juliet, V. Kunjukunju Vinod, J.Vergis, N. Vasantrao Kurkure, S. Baliram Barbuddhe, **K. Byrappa**, D. BhiwaRawool, Facile synthesis of silver-zinc oxide nanocomposites using Curcuma longa extract and its in vitro antimicrobial efficacy against multi-drugresistant pathogens of public health importance, **Inorganic Chemistry Communications** 148 (2023) 110356.
3. Y.R. Girish, Udayabhanu, N.M. Byrappa, G. Alnaggar, A. Hezam, G. Nagaraju, K. Pramoda, **K. Byrappa**, Rapid and facile synthesis of Z-scheme ZnO/g-C₃N₄ heterostructure as efficient visible light-driven photocatalysts for dye degradation and hydrogen evolution reaction, **Journal of Hazardous Materials Advances** 9 (2023) 100230.
4. E. Aparna, K.M.L. Rai, M. Sureshbabu, R.L. Jagadish, S.L. Gaonkar, **K. Byrappa**, Retraction Note to: Synthesis of thioesters and thioamides under solvothermal condition using thiourea as thionating agent, **Journal of Materials Science** 58(11) (2023) 5128-5129.
5. P.M. Abishad, M. Jayashankar, K. Namratha, B.S. Srinath, N.V. Kurkure, S.B. Barbuddhe, D.B. Rawool, J. Vergis, **K. Byrappa**, Synthesis of ZIF-8(Fe) Functionalized with Citral as Potent Antimicrobial Candidate against Multi-Drug Resistant Enterococcal Escherichia coli and Non-Typhoidal Salmonella spp, **Russian Journal of Bioorganic Chemistry** 49(2) (2023) 360-366.
6. P. Abishad, M. Jayashankar, K. Namratha, M.B. Nayan, N.V. Kurkure, S.B. Barbuddhe, D.B. Rawool, J. Vergis, **K. Byrappa**, Zeolite imidazole framework (Fe) nanostructure: a simple and efficient dye degradation catalyst under visible light, **Inorganic Chemistry Communications** 147 (2023) 110058.
7. Saleh, E. A. M.; Rai, M. L.; Kotian, S. Y.; Hassan, I.; Husain, K.; Abishad, P. C.; **Byrappa, K.**; Sharabi, R. S. S. Al. Synthesis, Antifungal, and Antioxidant Evaluation of New Class of Thiazoloquinazoline Linked by Carbonyl with Nitrile, Phenylacrylonitrile, Pyrazole, Triazolo [1, 5- a] Pyrimidine as Five and Six-Membered Heterocycles Derivatives. **Russ. J. Bioorganic Chem.** 2022,1–2.
8. Saleh, E. A. M.; Kotian, S. Y.; Al Dawsari, A. M.; Hassan, I.; Husain, K.; Abishad, P. C.; **Byrappa, K.**; Sharabi, R. S. S. A.; Rai, K. M. L. Synthesis, Antioxidant, and Antibacterial Activities of Two Novel Series of 3,5-Disubstituted Isoxazole Ether-

Linked Isoxazolines and 3,5-Disubstituted Pyrazole Ether-Linked Isoxazolines Mediated by Chloramine-T. **Russ. J. Bioorganic Chem.** 2022, 48 (5), 1043–1052.

9. Prasastha, V. R.; Yasur, J.; Abishad, P.; Unni, V.; Gourkhede, D. P.; Nishanth, M. A. D.; Niveditha, P.; Vergis, J.; Malik, S. V. S.; **Byrappa, K.**; Kurkure, N. V.; Rawool, D. B.; Barbuddhe, S. B. Antimicrobial Efficacy of Green Synthesized Nanosilver-Conjugated Cinnamaldehyde against Multi-Drug-Resistant Enteroaggregative Escherichia Coli in Galleria Mellonella. *Pharmaceutics* 2022, 14 (9), 1924.
10. Abishad, P.; Vergis, J.; Unni, V.; Ram, V. P.; Niveditha, P.; Yasur, J.; Juliet, S.; John, L.; **Byrappa, K.**; Nambiar, P.; Kurkure, N. V.; Barbuddhe, S. B.; Rawool, D. B. Green Synthesized Silver Nanoparticles Using Lactobacillus Acidophilus as an Antioxidant, Antimicrobial, and Antibiofilm Agent Against Multi-Drug Resistant Enteroaggregative Escherichia Coli. *Probiotics Antimicrob. Proteins* 2022.
11. Zare, Mina, Namratha, Keerthiraj, Ilyas, Shaista, Sultana, Afreen, Hezam, Abdo, Sunil, L., Surmeneva, Maria A., Surmenev, Roman A., Nayan, M. B., Ramakrishna, Seeram, Mathur, Sanjay and **Byrappa Kullaiah**, Emerging Trends for ZnO Nanoparticles and Their Applications in Food Packaging. **ACS Food Science & Technology** 2022, 2 (5), 763.
12. M, P. H.; Al-Ostoot, F. H.; Vivek, H. K.; Khanum, S. A. Design, docking, synthesis, and characterization of novel N'(2-phenoxyacetyl) nicotinohydrazide and N'(2-phenoxyacetyl) isonicotinohydrazide derivatives as anti-inflammatory and analgesic agents. **Journal of Molecular Structure** 2022, 1247, 131404.
13. Keerthiraj, D. N.; Nayan, M.; H T, B.; **Byrappa, K.** Impact of industrialization on physico-chemical characteristics of soil around Nanjangud, Karnataka, India and perspective strategies for enhancing the soil fertility. 2022.
14. Keerthiraj, D. N.; Nayan, M.; Byrappa, K.; Madesh, P.; H T, B. Impact of industrialeffluents on the ground water contamination around industrial areas of Nanjunagud, Mysore district, India, and an effective strategy to treat using advanced oxidation process. 2022, 9, 18885.
15. K. Namratha, M.B. Nayan, Abrar Ahmed, **K. Byrappa**, H.T. Basavarajappa. Cation Exchange and Water Holding Capacities of Soil from the Industrial Zone of Nanjungud Taluk, Mysore District, Karnataka, India. *International Journal of Research and Analytical Reviews*, 2022, pp.
16. Mina Zare, Keerthiraj Namratha, Shaista Ilyas, Afreen Sultana, Abdo Hezam, Maria A Surmeneva, Roman A Surmenev, MB Nayan, Seeram Ramakrishna, Sanjay Mathur, **Kullaiah Byrappa**. Emerging Trends for ZnO Nanoparticles and Their Applications in Food Packaging, American Chemical Society, ACS Food Science & Technology, April 26, 2022

17. K. Namratha, M. B. Nayan, M. S. Darshan, H. T. Basavarajappa, P. Madesh & **K. Byrappa**. Hydrothermal—From Geology to Technology (Part 1), Journal of the Geological Society of India, 98, pages353–362 (2022)
18. Hezam, Q. A. Drmosh, D. Ponnammam, M. A. Bajiri, M. Qamar, K. Namratha, M. Zare, M. B. Nayan, S. A. Onaizi, **K. Byrappa**, The Chemical Record. 2022, e202100299.
19. Yarabahally R Girish, Gubran Alnaggar, Abdo Hezam, Mysore B Nayan, Ganganagappa Nagaraju, **Kullaiah Byrappa**. Facile and rapid synthesis of solar-driven $\text{TiO}_2/\text{g-C}_3\text{N}_4$ heterostructure photocatalysts for enhanced photocatalytic activity. Journal of Science: Advanced Materials and Devices, Vol 7, Issue 2, June 2022, 100419
20. Mohammed Abdullah Bajiri, Abdo Hezam, K. Namratha, Basheer M. Al-Maswari, H. S. BhojyaNaik, **K. Byrappa**, Nabil Al-Zaqri, Ali Alsalmeh and Raghad Alasmari. Non-noble metallic Cu with three different roles in a Cu doped $\text{ZnO}/\text{Cu}/\text{g-C}_3\text{N}_4$ heterostructure for enhanced Z-scheme photocatalytic activity. *New Journal of Chemistry*, 2021,45, 13499-13511 (**Impact Factor 3.591**).
21. Salma Kouser, Abdo Hezam, **K Byrappa**, Shaukath Ara Khanum. Sunlight-assisted synthesis of cerium (IV) oxide nanostructure with enhanced photocatalytic activity. Optik, 167236, July 2021. (**Impact Factor 2.443**).
22. K. Namratha, M.B. Nayan, M.D. Pandareesh and **K. Byrappa**. Hydrothermal Form – Geology to Nanotechnology and Nanogeoscience (Part II), *Journal of Geological Society of India, Springer*. 2021. (In Press) (**Impact Factor 1.73**).
23. Nael Abutaha, Abdo Hezam, Fahd A Almekhlafi, Adel Morshed Nagi Saeed, K Namratha, **K Byrappa**, Rational design of $\text{Ag-ZnO-Fe}_3\text{O}_4$ nanocomposite with promising antimicrobial activity under LED light illumination, *Applied Surface Science*, April 2020, Volume 527, 146893. (**Impact Factor 6.182**).
24. M. Zare, K. Namratha, S. Ilyas, A. Hezam, S. Mathur, **K. Byrappa**, Novel Fortified PHBV-CS Biopolymer with Bio-hydrothermal synthesized ZnO-Ag Nanocomposites in enhanced shelf life of food packaging, *ACS Appl. Mater. Interfaces*., 2019, 11, 51, 48309-48320, (**Impact Factor 8.758**).
25. Q.A. Drmosh, A. Hezam, A.H.Y. Hendi, M. Qamar, Z.H. Yamani, **K. Byrappa**, Ternary $\text{Bi}_2\text{S}_3/\text{MoS}_2/\text{TiO}_2$ with double Z-scheme configuration as high performance photocatalyst, *Applied Surface Science*, 499 (2020), 143938, (**Impact Factor 6.182**).
26. A. Hezam, K. Namratha, Q. A. Drmosh, D. Ponnammam, Jingwei Wang, Suchitra Prasad, Momin Ahamed, Chun Cheng, **K. Byrappa**, CeO_2 Nanostructures Enriched

with Oxygen Vacancies for Photocatalytic CO₂ Reduction, **ACS Applied Nano Materials**, 2019, 138-148, (Impact Factor 7.5)

27. Q.A. Drmosh, A Hezam, M.K. Hossain, M Qamar, ZH Yamani, **K Byrappa**, A novel Cs₂O–Bi₂O₃–TiO₂–ZnO heterostructure with direct Z-Scheme for efficient photocatalytic water splitting, **Ceramics International**, (2019), doi.org/10.1016/j.ceramint.2019.08.092, (Impact Factor 3.83).
28. Mohammed Abdullah Bajiri, Abdo Hezam, K Namratha, R Viswanath, QA Drmosh, HS Bhojya Naik, **K Byrappa**, CuO/ZnO/g-C₃N₄ heterostructures as efficient visible light-driven photocatalysts, **Journal of Environmental Chemical Engineering**, (2019), doi.org/10.1016/j.jece.2019.103412. (Impact Factor 4.3).
29. Abdo Hezam, K. Namratha, Q.A. Drmosh, T.R. Lakshmeesha, S. Srikantaswamy, and **K. Byrappa**. The correlation among morphology, oxygen vacancies and properties of ZnO nanoflowers, **Journal of Materials Science: Materials in Electronics**, 2018, 29 (16), 13551–13560. (Impact Factor 2.220).
30. Abdo Hezam, K Namratha, QA Drmosh, ZH Yamani, K Byrappa Synthesis of heterostructured Bi₂O₃–CeO₂–ZnO photocatalyst with enhanced sunlight photocatalytic activity, **Ceramics International** 2018, 43 (6), 5292-5301 (Impact Factor 3.83)
31. Alkathy, Mahmoud S., Abdo Hezam, K.S.D. Manoja, Jingwei Wang, Chun Cheng, **K. Byrappa**, and KC James Raju Effect of sintering temperature on structural, electrical, and ferroelectric properties of lanthanum and sodium co-substituted barium titanate ceramics, **J. Alloys and Compounds**, 2018, 762, 49-61. (Impact Factor 4.65)
32. Mina Zare, K. Namratha, **K. Byrappa** Green Synthesis and characterization of ZnO-Ag Nanocomposite by *Thymus vulgaris*, **International Journal of Scientific Research in Science and Technology**, 2018, 4 (5), 1636-1640, (Impact Factor 5.327)
33. K. Jagadish, L. Shruthi, M.R. Abhilash, **K. Byrappa** and S. Srikantaswamy, Hydrothermal Synthesis of Multiwall Carbon Nanotubes using Polystyrene: Purification and Characterization, **International Journal for Research in Applied Science & Engineering Technology**, 2018, 6 (2), 2085-2089.
34. Abdo Hezam., Namratha K., Drmosh Q.A., Chandrashekar B. N., Jayaprakash, G.K., Chun Cheng, Srikanta Swamy S., **K. Byrappa**. Electronically Semitransparent ZnO Nanorods with Superior Electron Transport ability for DSSCs

and Solar photocatalysis **Ceramics International**, 2018, 44 (6): 7202-7208. **(Impact Factor 3.83)**

35. K. Namratha, **K. Byrappa**, B. Deepthi. Photo decolorization of Cibacron brilliant yellow dye using ZnO photocatalyst under sunlight **Progress in Petrochemical Science**, 2018, 1, (1), 1-4.
36. Kabiru B., Sarojini B.K., Narayana B., Anjali R., **K. Byrappa**. **(Impact Factor 4. 811)** A study on adsorption behaviour of newly synthesized banana pseudo-stem derived superabsorbent hydrogels for cationic and anionic dye removal from effluents. **Carbohydrate Polymers**, 2018, 181, 605-615. **(Impact Factor 7.182)**
37. Nischith Raphael, K Namratha, B.N. Chandrashekar, K.K. Sadasivuni, D. Ponnammma, A.S. Smitha, S. Krishnaveni, Chun Cheng, **K Byrappa**, Surface modification and grafting of carbon fibers: A route to better interface, **Progress in Crystal Growth and Characterization of Materials**, 64, 2018, 75-101. **(Impact Factor 6)**.
38. S Madan Kumar, B.C. Manjunath, Fares Hezam Al-Ostoot, Mahima Jyothi, Mohammed Al-Ghorbani, Shaukath Ara Khanum, Avinash K Kudva, NK Lokanath, **K. Byrappa**, Synthesis, crystal structure and Hirshfeld surfaces of 1-(3, 4-dimethoxyphenyl)-3-(3-hydroxyphenyl) prop-2-en-1-one, **Chemical Data Collections**, 15, 2018, 153-160.
39. Mina Zare K, Namratha K, **Byrappa K**, Surendra D.M., Yallappa S., Basavaraj Hungund Surfactant Assisted Solvothermal Synthesis of ZnO Nanoparticles and Study of their Antimicrobial and Antioxidant Properties. **Journal of Materials Science & Technology**, 2018, 34 (6): 1035-1043 **(Impact Factor 6.155)**
40. V. Vidya, R.R. Achar, M.U. Himathi, N. Akshita, Y.T. Somayaji, R. Dinesha, H.K. Vivek and K. Byrappa, Venom peptides – a comprehensive translational perspective in pain management. **Current Research in Toxicology** (in press)
41. K.S. Suryakoppa, R. Appadurai, K. Byrappa and M.H.M. Khan, Phytochemical analysis of UV active and inactive bioactive compounds present in *Polianthes tuberosa* (Linn.) flower, **J. Separation Science** 2021:1-10.
42. Y. R. Girish, K. Prashantha and **K. Byrappa**, Recent advances in aggregation-induced emission of mechanochromic luminescent organic materials, **Emergent Materials**, 1-52, 2021.
43. Naveen YP, Asna Urooj and **K. Byrappa**, A Review on Medicinal Plants Evaluated For Anti-Diabetic Potential In Clinical Trials: Present Status and Future Perspective, **Journal of Herbal Medicine**. 28 (2021) 100436

44. Sumana Y Kotian, PM Abishad, **K Byrappa**, KM Lokanatha Rai, Potassium iodate (KIO_3) as a novel reagent for the synthesis of isoxazolines: evaluation of antimicrobial activity of the products, *Journal of Chemical Sciences*, 131 2019, 46. **(Impact Factor 1.406)**.
45. Mina Zare, K. Namratha, S. Alghamdi, Y.H.E. Mohammad, A. Hezam, Mohamad. Zare, Q.A. Drmash, **K. Byrappa**, B. N. Chandrashekar, S. Ramakrishna and Xiang Zhang, Novel green biomimetic approach for synthesis of ZnO-Ag nanocomposite; antimicrobial activity against food-borne pathogen, biocompatibility and sol var photocatalysis, *Scientific Reports*, 9, (2019), 1-15. **(Impact Factor 3.998)**.
46. P. Shubha, **K. Byrappa**, K. Namratha, Jit Chatterjee, MS Mustak Phytofabrication of ZnO Nanoparticles using Piper betel Aqueous Extract and Evaluation of its Applicability in Dentistry, *Pharmaceutical Nanotechnology*, 2018, 6 (2), 1-8. **(Impact Factor 0.135)**.
47. Mina Zare, K. Namratha, **K. Byrappa** Biocompatibility Assessment and Photocatalytic Activity of Bio-hydrothermal Synthesis of ZnO Nanoparticles by *Thymus vulgaris* Leaf Extract. *Materials Research Bulletin*, 2018, 109: 49-59. **(Impact factor 4.019)**
48. B.S. Srinath. K. Namratha, **K. Byrappa**. Green synthesis of biocompatible gold nanoparticles from gold mine bacteria *Bacillus oceanisediminis* and their antileukemic activity. *International Journal of Pharmacy and Biological Sciences*, 8 (2), 2018, **(Impact factor 2. 6)**
49. Mazzura W.C., Zahid H, Mohd S, Minaketan T, Sunil K, Abu B A M, **Byrappa K**. Polymer-wrapped single-walled carbon nanotubes: a transformation toward better applications in healthcare. *Drug Delivery and Translational Research*, March 2018, 28. **(Impact Factor 2.664)**
50. [Vinutha V. Saliya](#), Badiadka Narayana, [Balladka K. Sarojini](#), **K. Byrappa**, A Comprehensive Review on Recent Developments in the Field of Biological Applications of Potent Pyrazolines Derived from Chalcone Precursors. *Letters in drug design and discovery*, 2018, 15(5), 516-574. **(Impact Factor 1.169)**.
51. Shubha P. Likith Gowda M. Namratha K., Shyam Sunder S., Manjunatha HB. **K. Byrappa**, ex-situ fabrication of ZnO NPs coated silk fibers for surgical applications, *Materials chemistry and physics*, 2019. **(Impact Factor 3.408)**.
52. Samah A. Mahyoub, Abdo Hezam, Fahim A. Qaraah, K Namratha, M B Nayan, Q A. Drmash, D Ponnammam, **K Byrappa**. Surface Plasmonic Resonance and Z-Scheme Charge Transport Synergy in Three-Dimensional Flower-like Ag–CeO₂–ZnO Heterostructures for Highly Improved Photocatalytic CO₂ Reduction. *ACS Applied Energy Materials*. 4, 4, 3544-3554, 2021. **(Impact Factor 6.024)**.

53. A D Kumar, H K Vivek, B Srinivasan, S Naveen, K Kumara, N K Lokanath, **K Byrappa**, K Ajay Kumar. Design, synthesis, characterization, crystal structure, Hirshfeld surface analysis, DFT calculations, anticancer, angiogenic properties of new pyrazole carboxamide derivatives. *Journal of Molecular Structure*. 1235, 130271, 2021. **(Impact Factor 3.196)**.
54. Mohammed Abdullah Bajiri, Abdo Hezam, K. Namratha, Basheer M. Al-Maswari, H .S.BhojyaNaik, **K. Byrappa**, Nabil Al-Zaqri, Ali Alsalmeh, Fahad A. Alharthi, Non-Noble Metallic Cu with Three Different Roles in Cu doped ZnO/Cu/g-C₃N₄ Heterostructure for Enhanced Z-Scheme Photocatalytic Activity. *New Journal of Chemistry*, (in print) RSC Journal, UK.
55. Udayabhanu, Veerabhadrachar Pavitra, Marappa Shivanna. Fahad A. Alharthi, Beekannahalli Mokshanatha Praveen, Yaled Thippeswamy Ravikiran, **K. Byrappa**, Ganganagappa Nagaraju, High capacitive h-MoO₃ hexagonal rods and its applications towards lithium ion battery, humidity and nitrite sensing, *International Journal of Energy Research*. 1-12, 2021, **(Impact Factor 3.81)**.
56. Mahyoub Samah, Hezam Abdo Qaraah Fahim, Namratha, Keerthiraj, Nayan Mysore, Drmash, Qasem, Ponnammamma Deepalekshmi, Byrappa Kullaiyah. Surface plasmonic resonance and Z-scheme charge transport synergy in 3D flowers-like Ag-CeO₂-ZnO heterostructure for highly improved photocatalytic CO₂ reduction. *ACS Applied Energy Materials*. 2021. (In Print) **(Impact Factor 4.473)**
57. Achutha Dileep Kumar, Hamse Kameshwar Vivek, Bharath Srinivasan, Shivalingegowda Naveen, Karthik Kumara, Neratur Krishnappagowda Lokanath, **K Byrappa**, Kariyappa Ajay Kumar. Design, synthesis, characterization, crystal structure, Hirshfeld surface analysis, DFT calculations, anticancer, angiogenic properties of new pyrazole carboxamide derivatives, *Journal of Molecular Structure*, Volume 1235, 2021, 130271. **(Impact Factor 2.463)**.
58. Abdo Hezam, Jingwei Wang, QA Drmash, P Karthik, Mohammed Abdullah Bajiri, K Namratha, Mina Zare, TR Lakshmeesha, Srikantaswamy Shivanna, Chun Cheng, Bernaudshaw Neppolian, **K Byrappa**, Rational construction of plasmonic Z-scheme Ag-ZnO-CeO₂ heterostructures for highly enhanced solar photocatalytic H₂ evolution. *Applied Surface Science*, Volume 541, 148457, 2021. **(Impact Factor 6.182)**.
59. Narayana U K N, Sumana Y K, Vrushabendra Basavanna, Vicas C S, Satish K Byrappa, Shridevi D, Srikantamurthy Ningaiah, T K Chaitra, Srinivasa Murthy V, **K Byrappa**, K M Lokanatha Rai. Synthesis, Characterization, and Evaluation of Biological Activities of Imidazolyl – Isoxazoline Analogue, *Biointerface Research in Applied Chemistry*, 10(6), 7187-7197, 2020. **(Impact Factor 0.89)**.
60. K.P. Rakesh, Man Xu, Piye Wu, Y.R. Girish, H.M. Manukumar, S. Byrappa, and **K. Byrappa**, Advances in silicon carbide (SiC) based ceramic nanoarchitectures: An

imperative multifunctional aspirant in biomedical applications, ***Materials Today Communiation***, **28** (2021) 102533.

61. Abdo Hezam, Jingwei Wang, Q.A. Drmosh, P. Karthik, Mohammed Abdullah Bajiri, K Namratha, Mina Zare, TR Lakshmeesha, Srikantaswamy Shivanna, Chun Cheng Bernaurdshaw Neppolian, **K Byrappa**, Rational Construction of Plasmonic Z-Scheme Ag-ZnO-CeO₂ Heterostructures for Highly Enhanced Solar Photocatalytic H₂ Evolution, ***Applied Surface Science***, 2021 (In print). **(Impact Factor 6.182)**
62. Pandareesh MD, Vivek H.K., **K Byrappa**, Prostate Carcinogenesis: Insights in relation to Epigenetics and Inflammation, ***Endocrine, Metabolic & Immune Disorders - Drug Targets***, 2020, 20, Doi.10.2174/1871530320666200719020709.
63. VV Manju, S Divakara, **K Byrappa**, R Somashekar, Determination of crystal structure and elastic constants of MCU-5 cotton fiber using WAXS data, ***AIP Conference Proceedings***, 2115, 2019, 030032.
64. S. Madan Kumar, B.N. Lakshminarayana, S. Nagaraju, S. Ananda, B.C. Manjunath, N.K. Lokanath, **K Byrappa**, 3D energy frameworks of a potential nutraceutical, ***Journal of Molecular Structure***, 1173, 2018, 300-306. **(Impact Factor – 2.463)**.
65. P. Shubha, M. Likhith Gowda, K. Namratha, S. Shyamsunder, H. B. Manjunatha, **K. Byrappa.**, *Ex-situ* fabrication of ZnO nanoparticles coated silk fiber for surgical applications, ***Materials chemistry and physics***, 231(2019), 21-26, **(Impact Factor –2.781)**.
66. Mina Zare, K Namratha, Shaista Ilyas, Abdo Hezam, Sunil L, Maria A, Surmeneva, Roman A. Surmenenev, Sanjay Mathur, **K Byrappa.**, Emerging Trends on ZnO Nanocomposite Biopolymers for Food Packaging Applications, (Under reviewing)
67. Mina Zare, K Namratha, Shaista Ilyas, Abdo Hezam, Sanjay Mathur, **K Byrappa**, Smart Fortified PHB-CS Biopolymer with ZnO-Ag Nanocomposites for Enhanced Shelf Life of Food Packaging, ***ACS Applied Materials & Interfaces***, (2019), Doi: 10.1021/acsami.9b15724. **(Impact Factor 8.758)**
68. Abdo Hezam, K Namratha, Ponnamm D, QA Drmosh, Nagi Saeed A M, Kishor Kumar Sadasivuni, **K Byrappa**, Sunlight-Driven Combustion Synthesis of Defective Metal Oxide Nanostructures with Enhanced Photocatalytic Activity, ***ACS Omega*** (2019), Doi.10.1021/acsomega.9b02564. **(Impact Factor 2.87)**
69. Drmosh QA, Abdo Hezam, Hendi AHY, Mohammad Qamar, Yamani ZH and **K Byrappa**, Ternary Bi₂S₃/MoS₂/TiO₂ with double Z-scheme configuration as high performance photocatalyst, ***Applied Surface Science***,(2019),143938. **(Impact Factor 6.182)**
70. QA Drmosh, Abdo Hezam, AHY Hendi, Mohammad Qamar, ZH Yamani, **K Byrappa**, Ternary Bi₂S₃/MoS₂/TiO₂ with double Z-scheme configuration as high performance photocatalyst, ***Applied Surface Science***,(2020-Accepted), doi.org/10.1016/j.apsusc.2019.143938(Impact Factor 6.182)

71. L. Kashinath, K. Namratha, Kripal S Lakhi, Stalin Joseph, Ajayan Vinu, **K. Byrappa**. Microwave Mediated Synthesis, Characterization of CeO₂-GO Hybrid Composite for Excellent Photocatalytic Activity, Removal of Chromium Ions and its Antibacterial Efficiency. ***Journal of Environmental Sciences***, 2019, 76, 65-79 (**Impact Factor 4.302**).
72. Subbulakshmi N Karanth, Badiadka Narayana, Balladka Kunhanna Sarojini Madan Kumar Shankar, **K. Byrappa**. Crystal structure, Hirshfeld surfaces and Biological studies of 4, 5-dihydro-1, 3, 4-oxadiazole-2-thiones, ***Chemical data collections***, 2019, 19, 100179. (**Impact Factor 1.7**).
73. C.S. Vicas, K. Namratha, M.B. Nayan, **K. Byrappa**. Controlled Hydrothermal Synthesis of Bismuth Vanadate Nano-articulate Structures: Photo oxidation of Methicillin Resistant Staphylococcus aureus and Organic Dyes. ***Materials Today proceedings***, 2019, 9, 468–480.
74. C Shruthi, V Ravindrachary, **K Byrappa**, B Guruswamy, D Jagadeesh Prasad, Karthik Kumara, NK Lokanath, Growth and characterization of (E)-1-(5-Chlorothiophene-2-Yl)-3-(4-Dimethylamino) Phenyl) Prop-2-En-1-One, novel NLO single crystal, ***Materials Science Forum***, 2019, 962, 3-9.
75. C Shruthi, V Ravindrachary, K Byrappa, B Guruswamy, Janet Goveas, Karthik Kumara, NK Lokanath, Synthesis, Optical and Thermal Properties of 1-(4-Methoxyphenyl)-2-((5-(1-(Naphthalene-1-Yloxy) Ethyl)-[1, 3, 4]-Oxadiazol-2-Yl) Sulfanyl) Ethano-e-A Novel Heterocyclic Compound, ***Materials Science Forum***, 2019, 962, 10-16.
76. Y. Sangappa, S. Latha, S. Asha, P. Sindhu, N. Parushuram, M. Shilpa, **K. Byrappa** and B. Narayana. Synthesis of anisotropic silver nanoparticles using silk fibroin: characterization and antimicrobial properties. ***Materials Research Innovations***, 2019, 23, 79-85.
77. P. Shubha, **K. Byrappa**, K. Namratha, Jit Chaterjee, MS Mustak Phytofabrication of ZnO Nanoparticles using Piper betel Aqueous Extract and Evaluation of its Applicability in Dentistry, ***Pharmaceutical Nanotechnology***, 2018, 6 (2), 1-8.
78. Hezam, Abdo, K. Namratha, Deepalekshmi Ponnamm, Q.A. Drmosh, Adel Morshed Nagi Saeed, Chun Cheng, **K. Byrappa**. Direct Z-Scheme Cs₂O–Bi₂O₃–ZnO Heterostructures as Efficient Sunlight-Driven Photocatalysts, ***ACS Omega***, 2018, 3, 9 12260-12269. (**Impact Factor 2.87**).
79. Hezam, Abdo, K. Namratha, Q.A. Drmosh, Deepalekshmi Ponnamm, Adel Morshed Nagi Saeed, V. Ganesh, B. Neppolian, **K. Byrappa**. Direct Z-scheme Cs₂O–Bi₂O₃–ZnO heterostructures for photocatalytic overall water splitting, ***Journal of Materials Chemistry A***, 2018, 6, 43, 21379-21388 (**Impact Factor 11.301**).

80. Mina Zare, K. Namratha, S. Yallappa, **K. Byrappa**. Comprehensive biological assessment and photocatalytic activity of surfactant assisted solvothermal synthesis of ZnO nanogranules ***Materials Chemistry and Physics***, 2018, 215, 148-156, **(Impact Factor 3.408)**.
81. L. Kashinath, K. Namratha, **K. Byrappa**. Microwave assisted synthesis and Characterization of Cerium Oxide-Graphene Oxide Nanocomposite for Significant Efficiency of Photodegradation Performance of Dyes, reduction of Cr (VI) and its antibacterial. effect. ***Journal of Environmental Science***, 2018, 76, 65-79, **(Impact Factor 4.302)**.
82. P. Shubha, K. Namratha, K.C. Mithali, V. Divya, M.S. Thakur **K. Byrappa**. Green Technology enabled Graphene oxide Reduction Using Justichia wynaadensis Extract and Assessment of in vitro Antioxidant and Antibacterial activity. ***Advanced Science Letters***, 2018, 24 (1), 5746-5730.
83. Harshitha KR, Sarojini BK, Narayana B, Anupam. G. Lobo, Madan Kumar S, **K. Byrappa**. Single crystal X-ray studies and Hirshfeld surface analysis of ethoxy phenyl substituted chalcone derivatives. ***Chemical Data Collections***, 2018, 17–18, 121–131. **(Impact Factor 0.87)**
84. Vinutha V.S., Narayana B., Sarojini B.K, Mahesh N, **K. Byrappa**, Madan Kumar S. Synthesis Crystal Structures and Hirshfeld surface studies of chalcone derivatives: (2E) -1- (4-2, 4-Dichlorophenyl) -3- [4- (propan-2-yl) phenyl] prop-2-en-1-one and (2E) -1- (4-Fluorophenyl) -3- [4- (propan-2-yl) phenyl] prop-2-en-1-one ***Chemical Data Collections***, 2018, 15 **(Impact Factor 0.87)**
85. Murugan R., L. Kashinath, Subash R., Sakthivel P., **K. Byrappa**, Rajendran S., Ravi G. (Impact Factor 2. 446) Pure and alkaline metal ion (Mg, Ca, Sr, Ba) doped cerium oxide nanostructures for photo degradation of methylene blue ***Materials Research Bulletin***, 2018, 97, 319-325. **[Google citations 1] (Impact Factor 4.019)**
86. Mahima B., Boja Poojary, Madan Kumar S, Mumtaz M.H., Nikhila P, Revannasiddappa, B.C., **K. Byrappa**. Structural, crystallographic, Hirshfeld surface, thermal and antimicrobial evaluation of new sulfonyl hydrazones. ***Journal of Molecular Structure***, 2018, 1159, 55-66. **(Impact Factor 2.463)**.
87. Shilpa M.S., Saba K.S., Madan Kumar S., **K. Byrappa**., Prasad J.D. (E) -N'- (4-Nitrobenzylidene) -2- (1- (4-methoxyphenyl) -5-oxo-1H-1, 2, 4-triazol-4 (5H) -yl) acetohydrazide: Synthesis, Crystal structure, DFT, and Hirshfeld surface analysis. ***Chemical Data Collections***, 2018, 13–14, 126-138. **(Impact Factor 0.87)**
88. Shameer A.B., Namratha K., Nandaprakash M.B., **K. Byrappa**., Somashekar R. Structure and Electrical conductivity of irradiated BaTiO₃ Nanoparticles. ***Physica Status Solidi***, 2018, 255, 6, **(Impact Factor 1.795)**

89. Madan Kumar S, Fares Hezam Al-Ostoot, Manjunath B.C., Shamprasad Varija Raghu, Yasser Hussein E M, Mahesh N, Shaukath A K, Lokanath N K, **Byrappa K.**, Crystal Packing analysis of 1- (3, 4-dimethoxyphenyl) -3- (4-bromophenyl) prop-2-en-1-one exhibiting a putative halogen bond C—Br...O. **Journal of Molecular Structure**, 2018, 1156, 216-223. (Impact Factor 2.463).
90. Kothandapani J, Krishna Reddy, Singarajanahalli Mundarinti, Thamotharan S, Madan Kumar S, **Byrappa K.**, Selva Ganesan Subramaniapillai. TBHP mediated substrate controlled oxidative dearomatization of indoles to C2/ C3-quaternary indolinones. European **Journal of Organic Chemistry**, 2018, 22, 2762-2767. (Impact Factor 2.889)
91. Subbaiah T., Jagatheeswaran K., Subramaniapillai S.G., Natarajan S.V., Madan Kumar S., **Byrappa K.**, Judith Percino, Fernando Robles. Quantitative analysis of intermolecular interactions in 2, 2'- ((4-bromophenyl) methylene) bis (3-hydroxy-5, 5-dimethylcyclohex-2-en-1-one): Insights from crystal structure, PIXEL, Hirshfeld surfaces and QTAIM analysis. **Journal of Chemical Sciences**, 2018, 130: 20. (Impact Factor 1.254).
92. Hijas K.M., Madan Kumar S., **K. Byrappa.**, Geethakrishnan Thankappan, Jeyram S., Nagalakshmi R. Spectroscopic investigations on 2-methoxy-4 (phenyliminomethyl) phenol: A non-linear optical material. **Journal of Molecular Structure**, 1155 2018, 249-259, (Impact Factor 1.406).
93. Madan Kumar S., Lakshminarayana B.N., Nagaraju S., Sushma, Ananda S, Manjunath B.C., Lokanath N. K., & **K. Byrappa**. 3D energy frameworks of a potential neutraceutical. **Journal of Molecular Structure**, 2018, 1173, 300-306, (Impact Factor 2.463).
94. C. Glidewell, M.A.E. Shaibah, H.S. Yathirajan, S.M. Kumar, **K. Byrappa**. N, N-dimethyl- (2- (2, 2-diphenyl) -2-prop-2-ynoxy) vacetoxy) vethylammonium (2R, 3R) - (hydrogentartrate). **CSD code LAYSOW- Private Communication. CCDC1569461.**
95. Madan Kumar S., Manjunath B.C., Al-Ostoot F.H., Jyothi M., Mohammed AL-Ghorbani, Khaanum S. A., Kudva A. K., Lokanath N. K. & **Byrappa K.**, Synthesis, crystal structure and Hirshfeld surfaces of 1- (3, 4-dimethoxyphenyl) -3- (3-hydroxyphenyl) prop 2-en-1-one. **Chemical Data Collections**, 2018, 15-16, 153-160.
96. Shilpa M.S., Ravindra R.K., Saba Kauser J. S., Madan Kumar S., Jagadeesha P.D., **Byrappa K.**, Praveen K.B., Lakkanna S.C., Jagadish S.K. (2018) (Cite Score 0. 87). (E) -N- (4-nitrobenzylidene) -2- (1- (4- methoxyphenyl) -5-oxo-1 H -1, 2, 4-triazol-4 (5 H) - yl) acetohydrazide: Synthesis, crystal structure, DFT and Hirshfeld surface analysis. **Chemical Data Collections**, 2018, 13–14, 126-138.

97. V.V. Salian, B.K. Sarojini, N. Mahesh, **K. Byrappa** and S. Madan Kumar. Synthesis, crystal structures and Hirshfeld surface studies of chalcone derivatives: (2E)-1-(4-2, 4-Dichlorophenyl)-3-[4-(propan-2-yl)phenyl]prop-2-en-1-one and (2E)-1-(4-Fluorophenyl)-3-[4-(propan-2-yl) phenyl] prop-2-en-1-one. **Chemical Data Collections**, Vol. 15–16, (2018) pp. 54-61.
98. R. Ranjana, S. Asha, N. Parushuram, K.S. Harisha, M. Shilpa, B. Narayana, **K. Byrappa** and Y. Sangappa, Synthesis and characterization of gold nanoparticles. **AIP Conference Proceedings**, 2019, 2009, 020042; <https://doi.org/10.1063/1.5052111>.
99. Mahadeva Gowda, K.S. Harisha, T. Ranjana, K.V. Harish, B. Narayana, **Byrappa K.** and Y. Sangappa, Synthesis of gold nanoparticles using silk fibroin and their characterization **AIP Conference Proceedings**, 2018, 1953, 030184; <https://doi.org/10.1063/1.5032519>.
100. M. Parvathy Venu, S.M. Dharmaprakash and **K. Byrappa**. Fabrication of n-ZnO:Al/p-Si(100) heterojunction diode and its characterization. **AIP Conference Proceedings**, 2018, 1942, 120012.
101. Nikhil, P., Boja Poojary, Madan Kumar S. and **K. Byrappa** (Impact Factor 0.563) Synthesis, Characterization, Crystal Structure and Hirshfeld Surface Analysis of ethyl 2— (4 bromophenyl) -1-cyclohexyl-1H—benzo [d] imidazole-5-carboxylate. **Crystallography Reports**, 2018, 63 (4): 574-580. (Impact Factor 0.661).
102. Nischith Raphel, Namratha K., Chandrshekar B.N., **K. Byrappa.**, Surface modification and grafting of carbon fibers; A route to better interface. (Review). **Progress in Crystal Growth and Characterization of Materials**, 2018, 64 (3), (Impact factor 6).
103. Vinutha V. Salian, B. Narayana, B.K. Sarojini, Sujanya M Jesus, N. Mahesh, **Byrappa K.**, Madan Kumar S., Synthesis, Crystal Structures and Hirshfeld surfaces of chalcone derivatives: (2E) -1- (4-2, 4-Dichlorophenyl) -3- [4- (propan-2-yl) phenyl] prop-2-en-1-one and (2E) -1- (4-Fluorophenyl) -3- [4- (propan-2-yl) phenyl] prop-2-en-1-one, **Chemical Data Collections**, 2018, 15–16, 54-61. (Impact Factor 0.561)
104. P. Nikil, Boja Poojary, S. Madan Kumar, **K. Byrappa**. (Impact Factor 0. 561) Synthesis, Characterization, Crystal Structure and Hirshfeld Surface Analysis of ethyl2- (4-bromophenyl) -1-cyclohexyl-1H-benzo [d] imidazole-5-carboxylate **Crystallography Reports**. 2018, 63, 4, 574–580. (Impact Factor 0.661).
105. Hijas K.M., Madan Kumar S. and **K. Byrappa.**, Geethakrishnan Thankappan, Jeyram S., Nagalakshmi R. Spectroscopic investigations using density functional theory on 2-methoxy- 4 (phenyliminomethyl) phenol: A non linear optical material. **Journal of Molecular Structure**, 2018, 1155, 249-259 (Impact Factor 2. 463)

106. CK Chandrashekar, P. Madhusudan, H.P. Shivaraju, P. Sajan, B. Basavalingu, S. Ananda, **K. Byrappa**, Synthesis of rare earth-doped yttrium vanadate polyscale crystals and their enhanced photocatalytic degradation of aqueous dye solution. *International Journal of Environmental Science and Technology*, 2018, 15(2), 427-440. (Impact Factor 2.540).
107. Chowdary B. N, Preetham HD, Verma SK, et al. A short hydrophobic peptide conjugated 3,5- disubstituted pyrazoles as antibacterial agents with DNA gyrase inhibition. *Journal of Molecular Structure*. 2023;1276:134661.10.1016/j.molstruc.2022.134661
108. Verma R, Verma S, K Hamse V, et al. Regioselective Synthesis, Antiproliferative Effect and Molecular Docking Studies of 2,3,5-Tri(Het)Aryl-Pyrrole Derivatives as a New Inhibitor of JAK3, VEGFR and PARP. Elsevier BV; 2023.
109. Prashantha K. Krishnappa A. Muthappa M 3D bioprinting of gastrointestinal cancer models: A comprehensive review on processing, properties, and therapeutic implications. *Biointerphases*, Volume 18, Year 2023
110. Girish, Yarabahally and Sharathkumar, Kothanahally Prashantha, Kalappa and Rangappa, Shobith and Sudhanva, Muddenahalli Significance of Antioxidants and Methods to Evaluate their Potency *Materials Chemistry Horizons*, Volume, Year 2023
111. Amita K. Rakshitha H., Sanjay M. Prashantha K Cytological features of 'Non-invasive follicular tumour with papillary like nuclear features' - A single institutional experience in India. *Journal of Cytology*, Volume 40, Year 2023, Pages 28-34.
112. Vidya C. Manjunatha C. Pranjal A. Faraaz I. Prashantha K. A multifunctional nanostructured molybdenum disulphide (MoS₂): an overview on synthesis, structural features, and potential applications. *Materials Research Innovations*, Volume 27, Year 2023, Pages 177-193.
113. Anush S.M.;J R S.;Gayathri B.H.;Girish Y.R.;Naveen Y.P.;Harshitha M.H.;Udayabhanu ;Sagar R.N.;KP A. Prashantha K. g-C₃N₄ based Chitosan Schiff base bio Nanocomposite for water purification *Polymers and Polymer Composites*, Volume 31, Year 2023.
114. Anush S, JR Sinchana, Gayathri B, K. Prashantha g-C₃N₄ based Chitosan Schiff base bio Nanocomposite for water purification. *Polymers and Polymer Composites*. 2023;31. doi:10.1177/0967 3911231170126.
115. metal Lalitha S Jairam and Akshatha Chandrashekar and T. Niranjana Prabhu and Sunil Babu Kotha and M.S. Girish and Indira Mysuru Devraj and M. Dhanya Shri and K. Prashantha. A review on biomedical and dental applications of cerium oxide nanoparticles — Unearthing the potential of this rare earth *Journal of Rare Earths*, Year 2023

116. Kalappa Prashantha, Krishnappa Amita, Insights into carcinogenic potential of micro(nano)plastics. *Express Polymer Letters*, Vol. 17., No.2., Pages 118-119, 2023. DOI: 10.3144/expresspolymlett.2023.9
117. Kouser, S., Prabhu, A., Prashantha, K. et al. In vitro evaluation of modified halloysite nanotubes with sodium alginate-reinforced PVA/PVP nanocomposite films for tissue engineering applications. *Appl Nanosci* 12, 3529–3545 (2022). <https://doi.org/10.1007/s13204-022-02684-3>.
118. Vijayan, J.G., Chandrashekar, A., AG, J., Prabhu, T.N., Prashantha, K. Polyurethane and its composites derived from bio-sources: Synthesis, characterization and adsorption studies. (2022) *Polymers and Polymer Composites*, 30. OI: 10.1177/096 73911221110347
119. Subbegowda Shruthi, Vinayakprasanna N. Hegde, Jayaprakash Jayashankar, Chimatahalli Shanthakumar Karthik, Kalappa Prashantha & Puttaswamappa Mallu (2022) Investigation of thermal, mechanical and dielectrical properties of LiYO2 filled poly(lactic acid) nanocomposites, *International Journal of Polymer Analysis and Characterization*, 27:8, 586-600, DOI: 10.1080/1023666X.2022.2123575
120. Yarabahally R. Girish, BM Anil Kumar, Kothanahally S. Sharath Kumar, Vivek K Hamse, Prashantha K, MS Sudhanva, Shobith R, Identification of novel benzimidazole-based small molecule targeting dual targets Tankyrase and Bcl2 to induce apoptosis in Colon cancer, (2022), *Journal of Molecular Structure*, <https://doi.org/10.1016/j.molstruc.2022.133813>.
121. Dhanlakshmi, B., Amita, K., Prashantha, K. Prognostic Significance of Lymphatic Vessel Density by D2-40 Immune Marker and Mast Cell Density in Invasive Breast Cancer: A Cross Sectional Study at Tertiary Care Hospital in South India, (2022) *Online Journal of Health and Allied Sciences*, 21 (1), art. no. 5,
122. Kouser, S., Prabhu, A., Prashantha, K., Nagaraja, G.K., D'souza, J.N., Meghana Navada, K., Qurashi, A., Manasa, D.J. Modified halloysite nanotubes with Chitosan incorporated PVA/PVP bionanocomposite films: Thermal, mechanical properties and biocompatibility for tissue engineering. (2022) *Colloids and Surfaces A: Physicochemical and Engineering Aspects*, 634, art. no. 127941.
123. Kouser, S., Sheik, S., Prabhu, A., Nagaraja, G.K., Prashantha, K., D'souza, J.N., Navada, M.K., Manasa, D.J. Effects of reinforcement of sodium alginate functionalized halloysite clay nanotubes on thermo-mechanical properties and biocompatibility of poly (vinyl alcohol) nanocomposites *Journal of the Mechanical Behavior of Biomedical Materials*, 118, art. no. 104441, (2021) .
124. Kouser, S., Prabhu, A., Sheik, S., Prashantha, K., Nagaraja, G.K., Neetha D'souza, J., Navada, K.M., Manasa, D.J. Chitosan functionalized halloysite nanotube/poly (caprolactone) nanocomposites for wound healing application. (2021) *Applied Surface Science Advances*, 6, art. no. 100158, .

125. Kouser, S., Prabhu, A., Sheik, S., Prashantha, K., Nagaraja, G.K., D'souza, J.N., Navada, K.M., Manasa, D.J. Poly (caprolactone)/sodium-alginate-functionalized halloysite clay nanotube nanocomposites: Potent biocompatible materials for wound healing applications (2021) *International Journal of Pharmaceutics*, 607, art. no. 121048,
126. Afzal, A., Saleel, C.A., Prashantha, K., Bhattacharyya, S., Sadhikh, M. Parallel finite volume method-based fluid flow computations using OpenMP and CUDA applying different schemes. *Journal of Thermal Analysis and Calorimetry*, (2021).
127. Kouser, S., Sheik, S., Nagaraja, G.K., Prabhu, A., Prashantha, K., D'souza, J.N., Navada, K.M., Manasa, D.J. Functionalization of halloysite nanotube with chitosan reinforced poly (vinyl alcohol) nanocomposites for potential biomedical applications. *International Journal of Biological Macromolecules*, 165, pp. 1079-1092. (2020).
128. Rashmi, B.J., Prashantha, K. Rotational molding of thermoplastic polyurethane AIP Conference Proceedings, 2274, art. no. 030052. (2020).
129. Ambika, M.R., Nagaiah, N., Prashantha, K. Investigation of unsaturated polyester based polymer composite radiation shields. (2020) AIP Conference Proceedings, 2274, art. no. 030021,
130. K. Prashantha and B J Rashmi Effect of chain extender on structural and mechanical properties of poly(butylene succinate-co-adipate)/halloysite nanotube bionanocomposites, *SPE Polymers*.2020;1:101–112. DOI: 10.1002/pls2.10022
131. Raj, A., Samuel, C., Malladi, N., Prashantha, K. Enhanced (thermo)mechanical properties in biobased poly(l-lactide)/poly(amide-12) blends using high shear extrusion processing without compatibilizers. (2020) *Polymer Engineering and Science*, 60 (8), pp. 1902-1916.
132. Ambika, M.R., Nagaiah, N., Prashantha, K. Thermal resistance and mechanical stability of tungsten oxide filled polymer composite radiation shields. *International Journal of Polymer Analysis and Characterization*, 25 (6), pp. 431-443. (2020)
133. Raj, A., Samuel, C., Prashantha, K. Role of Compatibilizer in Improving the Properties of PLA/PA12 Blends. *Frontiers in Materials*, 7, art. no. 193 . (2020).
134. A Raj, K Prashantha, C Samuel Compatibility in biobased poly (L-lactide)/polyamide binary blends: From melt-state interfacial tensions to (thermo) mechanical properties, *Journal of Applied Polymer Science* 137 (10), 48440, 2020.
135. Krishnaiah, P., Manickam, S., Ratnam, C.T., Raghu, M.S., Parashuram, L., Prashantha, K., Jeon, B.-H. Surface-treated short sisal fibers and halloysite nanotubes for synergistically enhanced performance of polypropylene hybrid composites. *Journal of Thermoplastic Composite Materials*, (2020)
136. Maurel, A., Grugeon, S., Armand, M., Fleutot, B., Courty, M., Prashantha, K., Davoisne, C., Tortajada, H., Panier, S., Dupont, L. Overview on lithium-ion battery

3d-printing by means of material extrusion. ECS Transactions, 98 (13), pp. 3-21. (2020)

137. Alexis Maurel, Sylvie Grugeon, Benoît Fleutot, Matthieu Courty, Kalappa Prashantha, Hugues Tortajada, Michel Armand, Stéphane Panier & Loïc Dupont, Three-Dimensional Printing of a LiFePO₄/Graphite Battery Cell via Fused Deposition Modeling, Scientific Reports volume 9, Article number: 18031 (2019).
138. Hydrothermal – From Geology to Technology (Part I) K. Namratha, M.B. Nayan, M.S. Darshan, P. Madesh and K. Byrappa. Journal of Geological Society of India, Springer, 2021, Impact Factor 1.08.
139. Surface plasmonic resonance and Z-scheme charge transport synergy in 3D flowers-like AgCeO₂-ZnO heterostructure for highly improved photocatalytic CO₂ reduction Mahyoub Samah, Hezam Abdo Qaraah Fahim, Namratha, Keerthiraj, Nayan Mysore, Drmosh, Qasem, Ponnamm Deepalekshmi, Byrappa Kullaiah ACS Applied Energy Materials In Press 2021, Impact Factor 4.473.
140. Recent Advances in Aggregation-Induced Emission of Mechanochromic Luminescent Organic Materials Y. R. Girish, K. Prashantha and K. Byrappa Emergent Materials, In press 2021
141. A Review on Medicinal Plants Evaluated For Anti-Diabetic Potential In Clinical Trials: Present Status and Future Perspective Naveen YP, Asna Urooj and Kullaiah Byrappa, Journal of herbal medicine, Accepted (pre-proof), 2021, Impact Factor 2.22
142. High capacitive h-MoO₃ hexagonal rods and its applications towards lithium ion battery, humidity and nitrite sensing Udayabhanu, Veerabhadrachar Pavitra, Marappa Shivanna,, Fahad A. Alharthi, Beekanahalli Mokshanatha Praveen, Yaled Thippeswamy Ravikiran, Kullaiah Byrappa, Ganganagappa Nagaraju International journal of energy Research 1-12, 2021, Impact Factor 5.16
143. Rational construction of plasmonic Z-scheme Ag-ZnO-CeO₂ heterostructures for highly enhanced solar photocatalytic H₂ evolution Abdo Hezam, Jingwei Wang, QA Drmosh, P Karthik, Mohammed Abdullah Bajiri, K Namratha, Mina Zare, TR Lakshmeesha, Srikantaswamy Shivanna, Chun Cheng, Bernaurdshaw Neppolian, K Byrappa Applied Surface Science 148457, 2021, Impact Factor 6.18
144. Effects of reinforcement of sodium alginate functionalized halloysite clay nanotubes on thermomechanical properties and biocompatibility of poly (vinyl alcohol) nanocomposites S Kouser, S Sheik, A Prabhu, GK Nagaraja, K Prashantha, JN D'souza Journal of the Mechanical Behavior of Biomedical Materials, 104441, 2021, Impact Factor 3.372
145. Vidya V, Achar RR, Himathi MU, et al. Venom peptides - A comprehensive translational perspective in pain management. Curr Res Toxicol. 2021;2:329-340.10.1016/j.crttox.2021.09.001

146. Shreevatsa B, Dharmashekara C, Swamy VH, et al. Virtual Screening for Potential Phytobioactives as Therapeutic Leads to Inhibit NQO1 for Selective Anticancer Therapy. *Molecules*. 2021;26(22):6863.10.3390/molecules26226863
147. Suryakoppa KS, Kameshwar VH, Appadurai R, Eranna S, Khan MHM. Enantiomeric Separation of Indole-3-Propanamide Derivatives by Using Supercritical Fluid Chromatography on a Polysaccharide-Based Chiral Stationary Phase. *Journal of Chromatographic Science*. 2021;60(7):692-704.10.1093/chromsci/bmab102
148. Parallelization of inhouse developed code for numerical computations on heterogeneous computing machine is becoming common. As the numerical solvers and problem complexity are evolving, the parallel computing Asif Afzal, C. Ahamed Saleel, K. Prashantha, *Journal of Thermal Analysis and Calorimetry*, 2021, Impact Factor 2.471
149. Kumara K, Prabhudeva MG, Vagish CB, et al. Design, synthesis, characterization, and antioxidant activity studies of novel thienyl-pyrazoles. *Heliyon*. 2021;7(7):e07592-e07592.10.1016/j.heliyon.2021.e07592
150. Brucein D modulates MAPK signaling cascade to exert multi-faceted anti-neoplastic actions against breast cancer cells Chakrabhavi Dhananjaya Mohan, Yin Yin Liew, Young Yun Jung, Shobith Rangappa, Habbanakuppe D Preetham, Arunachalam Chinnathambi, Tahani Awad Alahmadi, Sulaiman Ali Alharbi, Zhi-Xiu Lin, Kanchugarakoppal S Rangappa, Kwang Seok Ahn *Biochimie*, 2021, Impact Factor 3.362
151. Environmentally benign synthesis of substituted pyrazoles as potent antioxidant agents, characterization and docking studies Channa Basappa Vagish, Achutha Dileep Kumar, Karthik Kumara, Hamse Kameshwar Vivek, Nagamallu Renuka, Neratur Krishnappagowda Lokanath & Kariyappa Ajay Kumar *Journal of the Iranian Chemical Society*, 479–493, 2021, Impact Factor 1.552
152. Furan-2-Carboxamide derivative, A Novel Microtubule Stabilizing Agent Induces Mitotic Arrest and Potentiates Apoptosis in Cancer Cells B Shwetha, Muddenahalli S Sudhanva, GS Jagadeesha, NR Thimmegowda, Vivek K Hamse, BT Sridhar, Kuntebommanahalli N Thimmaiah, Ananda Kumar, R Shobith, KS Rangappa, *Bioorganic Chemistry*, 104586, 2021, Impact Factor 4.831
153. Design, synthesis, characterization, crystal structure, Hirshfeld surface analysis, DFT calculations, anticancer, angiogenic properties of new pyrazole carboxamide derivatives Achutha Dileep Kumar, Hamse Kameshwar Vivek, Bharath Srinivasan, Shivalingegowda Naveen, Karthik Kumara, Neratur Krishnappagowda Lokanath, Kullaiah Byrappa, Kariyappa Ajay Kumar *Journal of Molecular Structure*, 130271, 2021, Impact Factor 2.463
154. Rational design of Ag-ZnO-Fe₃O₄ nanocomposite with promising antimicrobial activity under LED light illumination Nael Abutaha, Abdo Hezam, Fahd A Almekhlafi,

- Adel Morshed Nagi Saeed, K Namratha, K Byrappa, Applied Surface Science, 146893, 2020, Impact Factor 5.155
155. CeO₂ Nanostructures Enriched with Oxygen Vacancies for Photocatalytic CO₂ Reduction Abdo Hezam, Keerthiraj Namratha, Q. A. Drmosh, Deepalekshmi Ponnammam, Jingwei Wang, Suchitra Prasad, Momin Ahamed, Chun Cheng, and K. Byrappa, ACS Applied Nano Materials, 138–148, 2020, Impact Factor 9
 156. Ternary Bi₂S₃/MoS₂/TiO₂ with double Z-scheme configuration as high performance photocatalyst Q.A.Drmosh, Abdo Hezam, A.H.Y.Hendi, Mohammad Qamar, Z.H.Yamani, K.Byrappa, Applied Surface Science, 143938, 2020, Impact Factor 5.155
 157. Rational design of Ag-ZnO-Fe₃O₄ nanocomposite with promising antimicrobial activity under LED light illumination Nael Abutaha, Fahd A Almekhlafi, Adel M Nagi Saeed, K, Namratha, Abdo Hezam and K, Byrappa, Applied Surface Science, 146893, 2020, Impact Factor 5.155
 158. Prostate Carcinogenesis: Insights in relation to Epigenetics and Inflammation Pandareesh MD. Vivek H.K. Byrappa K Endocrine, Metabolic & Immune Disorders - Drug Targets 253- 267, 2020, Impact Factor 1.973
 159. Polymorph of trans-Dichlorotetrakis(pyridine-N)ruthenium(II) influenced by a dihydrazone: Crystal structure, Spectral, Hirshfeld surfaces, Antimicrobial, Toxicity and in silico Docking studies Debajani Basumatary, S. Madan Kumar, K. Byrappa, K. Saikia, A.A. Dar, Vedant Borah, P. Sarma, P. Mahanta, M. Asthana, and K. Namratha Journal of Chemical Sciences In press 2020, Impact Factor 1.496
 160. Surface Treated Short Sisal Fibers and Halloysite Nanotubes for Synergistic Effect Enhanced Performance of Polypropylene Hybrid Composites S Manickam, C. Thevy Ratnam, Raghu M S, Parashuram L , K.Prashantha, Journal of Thermoplastic Composites Materials doi.org/ 2020, Impact Factor 1.529
 161. Role of compatibilizer in improving the properties of PLA/PA12 blends Amulya Raj, Kalappa Prashantha, Cedric Samuel Frontiers in Materials 193, 2020, Impact Factor 2.705
 162. Novel Chitosan grafted Halloysite Nanotube Reinforced PVA Nanocomposites for Potential Biomedical Applications Sabia Kouser, Sareen Sheik , G.K.Nagaraja , Ashwini Prabhu , Kalappa Prashantha, Josline Neetha D'souza , Meghana Navada , D.J.Manasae, International Journal of Biological Macromolecules, Volume 165, Part A, 1079-1092, 2020, Impact Factor 5.126
 163. Overview on lithium-ion battery 3d-printing by means of material extrusion Maurel, A., Grugeon, S., Armand, M., Fleutot, B., Courty, M., Prashantha, K., Davoisne, C., Tortajada, H., Panier, S., Dupont, L. ECS Transactions 98 (13), pp. 3-21, 2020, Awaited

164. Thermal resistance and mechanical stability of tungsten oxide filled polymer composite radiation shields Ambika, M.R., Nagaiah, N., Prashantha, K. International Journal of Polymer Analysis and Characterization 25 (6), pp. 431-443.2020, Impact Factor 1.796
165. Investigation of unsaturated polyester based polymer composite radiation shields Ambika, M.R., Nagaiah, N., Prashantha, K. AIP Conference Proceedings 2274, art. no. 030021, 2020
166. Rotational molding of thermoplastic polyurethane Rashmi, B.J., Prashantha, K AIP Conference Proceedings, 2274, art. no. 030052, 2020.
167. Purification and biochemical characterization of a novel secretory dipeptidyl peptidase IV from porcine serum K. Divya. H. K. Vivek. K. N. Neema. B. S. Priya. D. M. Chetan. S. Nanjunda Swamy Molecular and Cellular Biochemistry, 71–80, 2020, Impact Factor 2.884
168. Rapid detection of DPP-IV activity in porcine serum: A fluorospectrometric assay Divya, K. Vivek, H. K. Priya, B. S. Nanjunda Swamy, S. Analytical Biochemistry 113557, 2020 Impact Factor 2.507
169. Synthesis of Dihydrazones as Potential Anticancer and DNA Binding Candidates: A Validation by Molecular Docking Studies Sridhara, M. B. Rakesh, K. P. Manukumar, H. M. Shantharam, C. S. Vivek, H. K. Kumara, H. K. Mohammed, Y. H. E. Gowda, D. C Anti-Cancer Agents in Medicinal Chemistry 845 – 858, 2020, Impact Factor 2.18
170. A serine protease from Indian cobra venom: its anticoagulant property and effect on human fibrinogen Neema K N, Vivek Hamse Kameshwar, Zohara Nafeesa, Divya K, Priya B S, Nagendra Prasad, S Nanjunda Swamy, Toxin Reviews, 10-Jan 2020, Impact Factor 2.851
171. Acute toxicological and histopathological elucidation of Rheum emodi rhizome extract to demonstrate antidiabetic activity in alloxan-induced diabetic rats Radhika, R. Ramadas, D. Ragavan, B. Sudarsanam, D. Vivek, H. K, Current Bioactive Compounds, 13-Jan 2020, Impact Factor 1.6
172. Molecular docking and synthesis of caffeic acid analogous and its anti-inflammatory, analgesic and ulcerogenic studies Fares Hezam Al-Ostoot, S Grisha, Yasser Hussein Eissa Mohammed, HK Vivek, Shaukath Ara Khanum Bioorganic & Medicinal Chemistry Letters, 127743, 2020, Impact Factor 2.572
173. Coumarin-triazole hybrids: Design, microwave-assisted synthesis, crystal and molecular structure, theoretical and computational studies and screening for their anticancer potentials against PC-3 and DU-145 Channa Basappa Vagish, Karthik Kumara, Hamse Kameshwar Vivek, Srinivasan Bharath, Neratur Krishnappagowda Lokanath, Kariyappa Ajay Kumar Journal of Molecular Structure, 129899, 2020, Impact Factor 2.463

174. Synthesis, characterization, CT-DNA binding and docking studies of novel selenated ligands and their palladium complexes KM Prabhu Kumar, BC Vasantha Kumar, P Raghavendra Kumar, Ray J Butcher, HK Vivek, PA Suchetan, HD Revanasiddappa, Sabine Foro Applied Organometallic Chemistry, e5634 2020., Impact Factor 3.14
175. Design and synthesis of coumarin-triazole hybrids: biocompatible anti-diabetic agents, in silico molecular docking and ADME screening Vagish Channa Basappa, Vivek Hamse Kameshwar, Karthik Kumara, Dileep Kumar Achutha, Lokanath Neratur Krishnappagowda, Ajay Kumar Kariyappa Heliyon e05290 2020, Impact Factor 1.2
176. Influence of a Tunable Band Gap on Photoredox Catalysis by Various Two-Dimensional Transition-Metal Dichalcogenides K. Jaiswal, Y. R. Girish, and M. De ACS Applied Nano Materials 84–93, 2020, Impact Factor 9
177. Crystallography, In Silico Studies, and In Vitro Antifungal Studies of 2,4,5 Trisubstituted 1,2,3-Triazole Analogues K.N. Venugopala, M. A. Khedr, Y. R. Girish, S. Bhandary, D. Chopra, M. A. Morsy, B. E. Aldhubiab, P. K. Deb M. Attimarad, A. B. Nair, N. Sreeharsha, Rashmi V, M. Kandeel, S.H. Akrawi, M. B. Madhusudana Reddy, S. Shashikanth, O. I. Alwassil and V. Mohanlall Antibiotics 350 2020, Impact Factor 3.893
178. Smart Fortified PHBV-CS Biopolymer with ZnO-Ag Nanocomposites for Enhanced Shelf Life of Food Packaging Zare, M. Namratha, K. Ilyas, S. Hezam, A. Mathur, S. Byrappa, K ACS applied materials & interfaces 48309-48320 2019, Impact Factor 8.456
179. Novel Green Biomimetic Approach for Synthesis of ZnO-Ag Nanocomposite Antimicrobial Activity against Food-borne Pathogen, Biocompatibility and Solar Photocatalysis Mina Zare, Keerthiraj Namratha, Saad Alghamdi, Yasser Hussein Eissa Mohammad, Abdo Hezam, Mohamad Zare, Qasem Ahmed Drmash, K Byrappa, Bananakere Nanjegowda Chandrashekar, Seeram Scientific Reports, 15-Jan 2019, Impact Factor 4.525
180. Synthesis, Characterization, and Evaluation of Biological Activities of Imidazolyl-Isoxazoline Analogue N.U. Kudva, S.Y. Kotian, V. Basavanna, C.S. Vicas, D. Shridevi, S. Ningaiah, T.K. Chaitra, V. Srinivasa Murthy, K. Byrappa, and K.M. Lokanatha Rai, Bio interface Research in Applied Chemistry 7187 – 7197, 2019, Impact Factor 0.89
181. Hydrothermally synthesized Al-doped BiVO₄ as a potential antibacterial agent against methicillin-resistant Staphylococcus aureus Charles Sundar Vicas, Namratha Keerthiraj, Nayan Byrappa and Kullaiyah Byrappa, Environmental Engineering Research, 566-571, 2019, Impact Factor 1.81
182. CuO/ZnO/g-C₃N₄ heterostructures as efficient visible light-driven photocatalysts Mohammed Abdullah Bajiri, Abdo Hezam, K.Namratha, R.Viswanath, Q.A.Drmash,

- H.S.Bhojya Naik, K.Byrappa, Journal of Environmental Chemical Engineering 103412 ,2019, Impact Factor 4.09
183. A novel Cs₂O–Bi₂O₃–TiO₂–ZnO heterostructure with direct Z-Scheme for efficient photocatalytic water splitting Q.A.Drmosh, A.Hezam, M.K.Hossain, M.Qamar, Z.H.Yamani, K.Byrappa, Ceramics International, 23756-23764, 2019, Impact Factor 3.45
 184. Ex-situ fabrication of ZnO nanoparticles coated silk fiber for surgical applications P.Shubha, M, Likhith Gowda, K. Namratha, S.Shyamsunder, H.B. Manjunatha, K. Byrappa,, Materials Chemistry and Physics, 21-26, 2019, Impact Factor 2.781
 185. Sunlight-Driven Combustion Synthesis of Defective Metal Oxide Nanostructures with Enhanced Photocatalytic Activity Hezam, A. Namratha, K. Ponnamma, D. Drmosh, Q. A. Saeed, A. M. N. Sadasivuni, K. K. Byrappa, K, ACS omega, 20595-20605, 2019, Impact Factor 2.584
 186. Crystal structure, Hirshfeld surfaces and biological studies of 4, 5-dihydro-1, 3, 4-oxadiazole-2-thiones Subbulakshmi N Karanth, Badiadka Narayana, Balladka Kunhanna Sarojini, Madan Kumar S and Byrappa K. Chemical Data Collections 100179, 2019, Impact Factor 0.516
 187. Potassium iodate (I) as a novel reagent for the synthesis of isoxazolines: evaluation of antimicrobial activity of the products Sumana Y Kotian, PM Abishad, K Byrappa, KM Lokanatha Rai Journal of Chemical Sciences, 46, 2019, Impact Factor 1.495
 188. Three-Dimensional Printing of a LiFePO₄/Graphite Battery Cell via Fused Deposition Modeling Maurel, A. Grugeon, S. Fleutot, B. Courty, M. Prashantha, K. Tortajada, H. Armand, M. Panier, S. Dupont, L Scientific reports, 18031, 2019, Impact Factor 4.525
 189. Targeting Heparanase in Cancer: Inhibition by Synthetic, Chemically Modified, and Natural Compounds C. D. Mohan, Swetha Hari, Habbanakuppe, D.Preetham, Shobith Rangappa, Uri Barash, Netallan, Chandra Nayak, Vijai K. Gupta, Basappa, Israel Vlodavsky, K.S.Rangappa iScience (From the group of Cell), 360-390, 2019, Impact Factor 9.8
 190. Phyto-Fabrication of ZnO Nanoparticles Using Piper betel Aqueous Extract and Evaluation of its Applicability in Dentistry. Rao SP, Byrappa K, Keerthiraj N, Chatterjee J, Mustak MS Pharmaceutical Nanotechnology, 201-208, 2018