

Research and Publications

Publications more than 70 (enlisted publication 2018 onwards)

1. Rather RA, Bhagat M. 2018. Cancer chemoprevention and piperine: molecular mechanisms and therapeutic opportunities. **Frontiers in Cell and Developmental Biology**. 15;6:10.ISSN: 2296634X. **Impact factor: 5.168. (Review Paper).**
2. **Bhagat M**, Anand R, Datt R, Gupta V, Arya S. 2019. Green synthesis of silver nanoparticles using aqueous extract of *Rosa brunonii* Lindl and their morphological, biological and photocatalytic characterizations. **Journal of Inorganic and Organometallic Polymers and Materials**, 29(3), pp.1039-1047. [.https://doi.org/10.1007/s10904-018-0994-5](https://doi.org/10.1007/s10904-018-0994-5). ISSN:1574-1443. **Impact factor: 1.754. (Research Paper).**
3. Godwin MA, Mahithashri K, Shiney OJ, **Bhagat M**, Praseetha PK. 2019. Metal incorporated g-C3N4 nanosheets as potential cytotoxic agents for promoting free radical scavenging in cancer cell lines. **Journal of nanoscience and nanotechnology**. 2019 Sep 1;19(9):5448-55. **Impact Factor: 1.354. (Research Paper).**
4. Rather RA, **Bhagat M**. 2020. Quercetin as an innovative therapeutic tool for cancer chemoprevention: Molecular mechanisms and implications in human health. **Cancer medicine**. 9(24):9181.**Impact Factor: 3.362. (Review Paper).**
5. Faheem MM, Seligson ND, Ahmad SM, Rasool RU, Gandhi SG, **Bhagat M**. 2020. Goswami A. Convergence of therapy-induced senescence (TIS) and EMT in multistep carcinogenesis: current opinions and emerging perspectives. **Cell death discovery**. 15;6(1):1-2. **Impact Factor. 4.53. (Review Paper).**
6. **Bhagat M**, Sangral M, Kumar A, Rather RA, Arya K. 2020. Chemical, biological and in silico assessment of *Ocimum viride* essential oil. **Heliyon**. 6(6):1-7;10.1016/j.heliyon.2020.e04209 **Impact Factor: 2.85. (Research Paper).**
7. Kumar A, Suravajhala R, Bhagat M. Bioactive potential of *Cedrus deodara* (Roxb.) Loud essential oil (bark) against *Curvularia lunata* and molecular docking studies. **SN Applied Sciences**. 2020 Jun;2:1-9. **Impact Factor: 2.88(Research Paper).**
8. Rafiq RA, **Bhagat M**, Singh SK. 2020. Oncogenic BRAF, endoplasmic reticulum stress, and autophagy: Crosstalk and therapeutic targets in cutaneous melanoma. **Mutation Research/Reviews in Mutation Research**. 7:108321. 10.1016/j.mrrev.2020.108321.**Impact Factor: 6.041. (Review Paper).**
9. **Bhagat M**, Kumar A, Suravajhala R. 2020. *Cedrus deodara* (Bark) Essential Oil Induces Apoptosis in Human Colon Cancer Cells by Inhibiting Nuclear Factor kappa B. **Current Topics in Medicinal Chemistry**. 20(22):1981-92. 10.2174/1568026620666200722120826. **Impact Factor: 4.008. (Research Paper).**
10. Sharma K, Sharma S, Thapa S, **Bhagat M**, Kumar V, Sharma V. 2020. Nanohydroxyapatite-, Gelatin-, and Acrylic Acid-Based Novel Dental Restorative Material. **ACS omega**. 5(43):27886-95. **Impact factor: 2.87. (Research Paper).**

11. Rather RA and **Bhagat M**. 2020 Quercetin as an innovative therapeutic tool for cancer chemoprevention: Molecular mechanisms and implications in human health. **Cancer medicine**. 9(24):9181. **Impact factor: 4.452. (Review Paper)**.
12. Sharma PC, Sharma D, Sharma A, **Bhagat M**, Ola M, Thakur VK, Bhardwaj JK, Goyal RK. Recent advances in microbial toxin-related strategies to combat cancer. **In Seminars in Cancer Biology** 2021 Jul 13. Academic Press. ISSN **1044-579X**. doi: 10.1016/j.semcancer.2021.07.007. **Impact factor: 15.707. (Review Paper)**.
13. **Bhagat M**, Anand R, Sharma P, Rajput P, Sharma N, Singh K. Multifunctional Copper Nanoparticles: Synthesis and Applications. **ECS Journal of Solid State Science and Technology**. 2021 Jun 3;10(6) ; 063011 DOI: [10.1149/2162-8777/ac07f8](https://doi.org/10.1149/2162-8777/ac07f8) **Impact factor: 2.142. (Review Paper)**.
14. Yadav M, Goel G, Hatton FL, **Bhagat M**, Mehta SK, Mishra RK, Bhojak N. A review on biomass-derived materials and their applications as corrosion inhibitors, catalysts, food and drug delivery agents. **Current Research in Green and Sustainable Chemistry**. 2021 Jul 15:100153. <https://doi.org/10.1016/j.crgsc.2021.100153>. ISSN: 2666-0865. **Impact Factor: 6. 457. (Review Paper)**.
15. Sudan R, Bhagat M, Gupta S, Singh J. Shielding effect on oxidative stress and immune modulating potential of Himalayan Musk Rose (*Rosa brunonii* Lindl.). **Indian Journal of Natural Products and Resources**. Vol. 12(3), September 2021, pp. 400-417. OI: [10.56042/ijnpr.v12i3.28210](https://doi.org/10.56042/ijnpr.v12i3.28210). ISSN **09760512, 09760504. Impact factor: 0.55 (Research Paper)**.
16. Kumar A, **Bhagat M**, Rai GK, Mahajan B, Bhagat A. Chemical Characterization of Clove (*Syzygium aromaticum*) Bud Essential Oil and Microbicidal Activity against Isolated Clinical Strains. **Indian J Agric Biochem** 34 (2), 138-143, 2021 doi 10.5958/0974-4479.2021.00019.8. Print ISSN : 0970-6399. Online ISSN : 0974-4479. **(Research Paper)**.
17. Kainth S, **Sharma M**, Basu S. Yellow emissive carbon dots in ludox silica matrix with anticancer activity for enhanced imaging of developed sweat latent fingerprints. **Material today Chemistry**. Volume 23, March 2022, 100659. <https://doi.org/10.1016/j.mtchem.2021.100659>. ISSN: 2468-5194. **Impact factor: 8.301 (Research Paper)**.
18. Sharma P, Urfan M, Anand R, Sangral M, Hakla HP, Sharma S, Das R, Pal S, **Bhagat M**. Green synthesis of zinc oxide nanoparticles using *Eucalyptus lanceolata* leaf litter: characterization, antimicrobial and agricultural efficacy in maize. **Physiol Mol Biol Plants**. (2022). <https://doi.org/10.1007/s12298-022-01136-0>. Issn no 0971-5894 . **Impact factor: 2.836 (Research Paper)**.
19. Faheem MM, Bhagat M, Sharma P, Anand R. Induction of p53 mediated mitochondrial apoptosis and cell cycle arrest in human breast cancer cells by plant mediated synthesis of silver nanoparticles from *Bergenia ligulata* (Whole plant). **International Journal of Pharmaceutics**. (2022): 619 p.121710. <https://www.sciencedirect.com/science/article/abs/pii/S0378517322002654>. **Impact factor: 5.875 (Research Paper)**.
20. Faheem MM, Rahim JU, Ahmad SM, Mir KB, Kaur G, **Bhagat M**, Rai R, Goswami A. Heterochiral dipeptide d-phenylalanyl-l-phenylalanine (H-DPhe-LPhe-OH) as a potential inducer of metastatic suppressor NM23H1 in p53 wild-type and mutant cells. **Molecular Carcinogenesis**. 2022 Dec;61(12):1143-60. <https://doi.org/10.1002/mc.23465> . **Impact factor: 4.784 (Research Paper)**.
21. Mir KB, Faheem MM, Ahmad SM, Rasool JU, Amin T, Chakraborty S, **Bhagat M**, Ahmed Z, Ali A, Goswami A. β -(4-fluorobenzyl) Arteannuin B induced interaction of ATF-4 and C/EBP β mediates the transition of breast cancer cells from autophagy to senescence. **Frontiers in Oncology**. 2022;12. <https://doi.org/10.3389/fonc.2022.1013500> **Impact factor: 6.244 (Research Paper)**.

22. Gupta S, Kumar R, Rajput A, Gorka R, Gupta A, Bhasin N, Yadav S, Verma A, Ram K, Bhagat M. Atmospheric Microplastics: Perspectives on Origin, Abundances, Ecological and Health Risks. **Environmental Science and Pollution Research**. 2023 Jul 14:1-30. doi: 10.1007/s11356-023-28422-y. **Impact factor: 5.19 (Research Paper)**.
23. Amin T, Sharma RP, Mir KB, Slathia N, Chhabra S, Tsering D, Kotwal P, Bhagat M, Nandi U, Parkesh R, Kapoor KK. Quinoxalinone substituted pyrrolizine (4h)-induced dual inhibition of AKT and ERK instigates apoptosis in breast and colorectal cancer by modulating mitochondrial membrane potential. **European Journal of Pharmacology**. 2023 Aug 3:175945. doi: 10.1016/j.ejphar.2023.175945. **Impact factor: 5.23 (Research Paper)**.
24. Ganie SY, Javaid D, Singh A, Jawaid F, Anjum S, Kumari M, Singh SK, **Bhagat M**, Reshi MS. Chemoprofiling and in vitro Evaluation of Anticancer, Antioxidant and Antibacterial Activities of Asparagus racemosus (Willd). **Pharmacological Research-Natural Products**. 2024 Jan 13:100015. **(Research Paper)**.
25. Farooq K, Kumar V, Sharma V, **Bhagat M**, Kumar V, Sharma K. Synthesis, optimization, and multifunctional evaluation of amla-based novel biodegradable hydrogel. **Polymer Bulletin**. 2024 Mar 15:1-25. **Impact factor: 3.2 (Research Paper)**.

Chapter Published (15) (enlisted after 2018 onwards)

1. **Bhagat M**. “Essential oils for Wellbeing: Biology Meets The Psychology”. Recent Researches 2018 edited by Dr Chander Shekhar, Well Press Publications, Uttarakhand, India. Pp- (ISBN: 978-81-932684-4-5).
2. Rather RA and **Bhagat M**. “General Perspectives and Management”. Recent Researches 2018 edited by Dr Chander Shekhar, Well Press Publications, Uttarakhand, India. Pp- (ISBN: 978-81-932684-4-5).
3. Rather RA and **Bhagat M**. “Exploiting Ultraviolet (UV) Light as an Innovative Tool for Melanoma Therapeutics: From Cause to Cure”. Advances in Biotechnology and Biosciences 2019 . Vol 2,Pp -125-149. Published By: AkiNik Publications, New Delhi, India. (ISBN: 978-93-5335-525-8).
4. Sudan R and **Bhagat M**. “Ethnomedicinal Importance of Arisaema jacquemontii and Its Futuristic Role in Natural Therapeutics”. Plants For Novel Drug Molecules Ethanobotany to Ethanopharmacology. 2021 Pp 427- 443. Edited by Dr. Bikarma Singh and Dr. Yash Pal Sharma Published by New India Publishing Agency, New Delhi, India. (ISBN 978-93-89571-94-3).
5. **Bhagat M** , Anand R, Sangral M. Isothiocyanate and Its Contribution in the Treatment of Obesity. Spectrum of Isothiocyanate Chemistry and its Applications. (January)2021, Nova Science Publisher, NY, USA. ISBN: 978-1-53616-478-7
6. Thapa S, Rather RA, Singh SK, **Bhagat M**. Insights into the Role of Defective Apoptosis in Cancer Pathogenesis and Therapy. Regulation and dysfunction of Apoptosis 2021 (May), Publisher IntechOpen, UK. DOI: [10.5772/intechopen.97536](https://doi.org/10.5772/intechopen.97536).
7. Thapa S, Rather RA, Singh SK, **Bhagat M**. Targeting Oncogene Addiction for Cancer Therapy. Oncogenes and Tumor Suppressor Genes. 2021 (Nov) Publisher IntechOpen ,UK. DOI: <http://dx.doi.org/10.5772/intechopen.101244>.

8. Anand R, **Bhagat M.** Nanosilver and Smart Delivery in Agricultural System. In Nanotechnology in Agriculture and Environmental Science 2022 Nov 17 (pp. 156-165). CRC Press. eBook ISBN 9781003323945. 10.1201/9781003323945-13
9. Anand R, Sharma P, **Bhagat M.** Pathogenicity and genetic diversity of microbes of *Crocus sativus* L. and the various strategies combating diseases. The Saffron Genome Book. 2022 (Nov) Publisher Springer, Cham. ISBN: 978-3-031-09999-1. <https://link.springer.com/book/9783031099991>

Book Published

1. Madhulika Bhagat and Sakshima Thusoo. Phytochemical and Antioxidant Potential of Some Wild Edible Berries. LAP LAMBERT Academic Publishing, 2018. ISBN no: 978-620-2-07875-7
2. Madhulika Bhagat and Ajay Kumar. Potential of Himalayan Cedrus deodar essential oil. LAP LAMBERT Academic Publishing, 2020. ISBN-13: 978-620-2-52660-9, ISBN-10: 6202526602

Life Membership

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| 1. Indian Science congress | membership no L16308 |
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| 6. Society for free radical research-India | membership no 139 |
| 7. Bioclues | membership no 235438331 |
| 8. Microbiologists Society of India (MBSI) | membership no MS/LM/1016 |