

1. Journal and Conference Publications

S. No.	Particular	Number
1.	Publications in International Journals	41
2.	Publications in National Journals	01
3.	Papers presented in International Conferences	04
4.	Papers presented in National Conferences	01

2. List of Publication in SCI/SCIE/Scopus Journals:

S. No.	Title of Paper	Name of Author(s)	Journal, Year, Volume, Page No.	Indexing
1.	Hypervalent Iodine (V) Catalyzed Oxidations	S. Soni, Rimi; V. Kumar, K. Kikushima, T. Dohi, V. V. Zhdankin, R. Kumar	Arkivoc, 2022, 7, 27-56	SCOPUS
2.	Recyclable hypervalent iodine reagents in modern organic synthesis	Rimi, S. Soni, B. Uttam, H. China, T. Dohi, R. Kumar	Synthesis, 2023, 54, 2731-2748	SCOPUS
3.	Thermodynamic and Electrochemical investigation of Inhibition Efficiency of Green Corrosion Inhibitor and its comparison with Synthetic Dyes on MS in Acidic Medium	P. Vashishth, H. Bairagi, R. Narang, S. K. Shukla, B. Mangla	Journal of Molecular Liquids, 2022, 365, 120042	SCOPUS
4.	Applicability of Drugs as Sustainable Corrosion Inhibitors	R. Narang, P. Vashishth, H. Bairagi, R. Sehrawat, S. K. Shukla, and B. Mangla	Advanced Materials Letter, 2023, 23041732	SCI
5.	Experimental and Computational Studies of a Novel Metal Oxide Nanoparticle/Conducting Polymer Nanocomposite (TiO ₂ /PVP) as a Corrosion Inhibitor on Low-Carbon Steel in Diprotic Acidic Medium	R. Narang, P. Vashishth, H. Bairagi, S. K. Shukla, and B. Mangla	Industrial & Engineering Chemistry Research, 2023, 62, 10982-11000	SCOPUS

6.	Advanced Polymeric Materials for Aerospace Applications	A. Rajput, Upma, S.K. Shukla, N. Thakur, A. Debnath, B. Mangla	Aerospace Polymeric materials, 2022 ISBN-9781119905264	SCOPUS
7.	Efficacy of biomass-derived nanocomposites as promising materials as corrosion inhibitors	P. Vashishth, H. Bairagi, R.Narang, H. Kumar, B. Mangla	Antiviral and Antimicrobial coatings based on Funtionalized Nanomaterials, 2023, 285-303	SCOPUS
8.	A Review on Molecular Iodine Catalyzed/Mediated Multicomponent Reactions	Monika, Chander, S. Ram, PK Sharma	Asian Journal of Organic Chemistry, 2023, 12, e202200616	SCI
9.	Novel benzenesulfonamide bearing 1,2,4-triazoles as potent anti-microbial and anti-oxidant agents	PKSSR Chander, Monika, A. Kumar, D. Sharma, P. K Sharma, S. Ram	Medicinal Chemistry and Research, 2023, 32, 542-555	SCI
10.	Recent advances in triazole-benzenesulfonamide hybrids and their biological activities	Chander, Monika, PK Sharma, S. Ram	Medicinal Chemistry and Research, 2023, 32, 777-801	SCI
11.	Ionic Liquid Induced p-Nitrophenol Prototropism	P. Kasana, S. Soni, M. Mukherjee, R. Kumar, V. Kumar	Journal of Ionic Liquids, 2023, 3, 100051	SCI
12.	Ab-initio DFT calculations and experimental investigations into optoelectronic and structural properties of Ca ₉ Al(PO ₄) ₇ :Sm ³⁺ orange phosphor	K. Jakhar, M. Dalal, V. Kumar, M. Mukherjee, A. Agarwal, D. Sharma, M. K. Sharma, H. Om	Journal of Molecular Structure, 2023, 1281, 135102	SCI
13.	Crystalline Domains Nested on 2D Nanosheets as Heterogeneous Nanomachineries for the Sustainable Production of Bioactive Compounds"	A. Agarwal, S. Jeevanandham, C. Kar, M. P. Rai, V. Kumar, H. Bohidar, S. Biswas, M. Mukherjee	ACS Sustainable Chemistry & Engineering, 2022, 10, 9732-9748	SCI

14.	Atomistic Simulations of Hydrated Sulfonated Polybenzophenone Block Copolymer Membranes	A. P. Sunda, S. Singh, S. Yadav, R. K Singh	ChemPhysChem, 2023, 24, e202300104	Scopus
15.	Formulation optimization of pH-sensitive liposomes based drug delivery of Carboplatin and anti-proliferative evaluation against A549 (human lung carcinoma) cell line	P. Aneja, P. Negi, S. Aneja, S. R. Garad, S. Kumar	Main Group Chemistry, 2023, 22, 403-42	SCI
16.	High-performance structural linear low-density polyethylene/Saccharu mmunja composite: a design-of-experiments " approach	G. Jagdeva, S. Lal, V. Kumar, S. Arora, P. Kumar, S. Panchal, S. Kumar	Iranian Polymer Journal, 2023, 32, 609-619	SCI
17.	Decoration of 1,3 oxazole modified g-C3N4 by Bio-synthesized Ag nanoparticle for the photodegradation of pharmaceutical effluent: Clotrimazole	S. Devi, S. Kumar, J. Devi, A. Sharma, A. Kumar	Materials Today: Proceedings, In press	SCI
18.	Biogenic synthesis of Allium cepa derived magnetic carbon dots for enhanced photocatalytic degradation of methylene blue and rhodamine B dyes	P. Singh, S. Kumar, K. Kumar	Biomass Conversion and Biorefinery, DOI: 10.1007/s13399-023-05047-2	SCI
20.	Assessing the biomass-based carbon dots and their composites for photocatalytic treatment of wastewater	P. Singh, N. Rani, S. Kumar*, P. Kumar, B .Mohan, Pallavi, V.Bhan kar, N. Kataria, R. Kum ar, K. Kumar	Journal of Cleaner Production, 2023, 413, 10, 137474	SCI

21.	Plant-mediated synthesis of nanoparticles and their applications: A review	N. Rani, P. Singh, S. Kumar, P. Kumar, V. Bhankar, K. Kumar	Materials Research Bulletin, 2023,163, 112233	SCI
22.	Assessing biomass-derived carbon dots as highly sensitive and selective template for sensing of hazardous ions	P. Singh, Arpita., S. Kumar, P. Kumar, R. Kumar, N. Kataria, V. Bhankar, K. Kumar, C-Te Hsieh and K. S. Khoo	Nanoscale, 2023, 15, 16241-16267	SCI
23.	Plastic Waste-Derived Carbon Dots: Insights of Recycling Valuable Materials Towards Environmental Sustainability	Arpita, P. Kumar, N. Kataria, N. Narwal, S. Kumar, R. Kumar, M. S. Khoo & P. L. Show	Current Pollution Reports, 2023, 9, 433–453	SCI
24.	Recent advancement in nanomaterials for the detection and removal of uranium: A review	N. Rani, P. Singh, S. Kumar, P. Kumar, V. Bhankar, N.Kamra, K. Kumar	Environmental Research, 2023, 234, 116536	SCI
25.	Recent Advancement in Nanotechnology for the Treatment of Pharmaceutical Wastewater: Sources, Toxicity, and Remediation Technology	S. Kumar, S. Yadav, N. Kataria, A. K. Chauhan, S. Joshi, R. Gupta, P. Kumar, J. W. R. Chong, K. S. Khoo, P. L. Show	Current Pollution Reports, 9, 2023,1 10–142	SCI
26.	Spinel ferrites/metal oxide nanocomposites for waste water treatment	Sonia, H. Kumari, Suman, S. Chahal, S. Devi, S. Kumar, S. Kumar, P. Kumar & A. Kumar	Applied Physics A, 2023, 129	SCI
27.	Enhanced photocatalytic degradation of organic dye by CeO ₂ /CNT/GO hybrid nanocomposites under UV light for wastewater treatment	S. Chahal, L. Phor, A. Kumar, S. Kumar, S. Kumar, R. Kumar, P. Kumar	Environmental Science and Pollution Research, 2023, 30, 124964-1	SCI
28.	Magnetic Fe ₂ O ₃ /CNT nanocomposites: Characterization and photocatalytic application towards	S. Devi, S. Chahal, S. Singh, P. Kumar, S. Kumar, A. Kumar, V. Kumar	Ceramics International, 2023, 49, Pages 20071-20079	SCI

	the degradation of Rose Bengal dye.			
29.	A Review on Photocatalysis Used For Wastewater Treatment: Dye Degradation	H. Kumari, Sonia, Suman, R. Ranga, S. Chahal, S. Devi, S. Sharma, S. Kumar, P. Kumar, S. Kumar, A. Kumar, R. Parmar	Water, Air, & Soil Pollution, 2023, 234, 349	SCI
30.	Carbon-based nanomaterials: systematic enumeration and proficient template for detection and remediation of hazardous pollutants	N. Kataria, V. K. Garg, P. Kumar, C. Han, I. Anastopoulos, S. Kumar	Environmental Science and Pollution Research, 2023, 30, 124829	SCI
31.	Europium-doped cerium oxide nanoparticles: investigating oxygen vacancies and their role in enhanced photocatalytic and magnetic properties	A. Ankita, S. Chahal, S. Singh, S. Kumar, P. Kumar	Environmental Science and Pollution Research, 2024, 31, 1276–1287	SCI
32.	Morphology mediated photocatalysis and room temperature ferromagnetism in cerium oxide	S. Chahal, S. Singh, K. Kanishka H De Silva, A. Kumar, S. Kumar, L. Kumar, M. Yoshimura, R. Kumar, P. Kumar	Vacuum, 2023, 215, 112280	SCI
33.	Utilization of diamagnetic Zn (II) ion to boost the anisotropic nature of Ln (III) ion in heterodinuclear Zn (II)-Ln (III) SMMs.	S. Roy, P. Shukla, R. Kumar, S. C. Sahoo, T. K. Pal, A. Rajput, J. Kłak, M. Hada, K. R. Vignesh, S. Das	Applied organometallic chemistry, 2022, 36, e6914	SCI
34.	Experimental and theoretical magnetostructural studies on discrete heterometallic cyanide-bridged dinuclear Fe ^{III} Mn ^{II} and tetranuclear Fe ^{III} ₂ Cu ^{II} ₂ complexes bearing tripodal pyrazolyl borate and	A. Kumar, A. Rajput, P. Kaur, I. Verma, R. D. Erande, S. Javed, J. Kłak, F. Shefa, Alrebei, Mota, E. A. J. Colacio and H. Arora	Dalton Transaction Journal, 2023, 52, 7225-7238	SCI

	tetradentate phenolate-based ligands			
35.	Magnetic properties and pH-controlled reversible interconversion of μ -oxido into μ -hydroxido in oxo-carboxylato bridged iron(III) dimers: Theoretical and experimental insights.	Richa, A. Kumar, I. Verma, P. Garg, R. D. Erande, S. Javed, A. Rajput, C. J. G. Garcia, A. J. Mota, H. Arora	Journal of Molecular Structure, 2023, 1285, 135426	SCI
36.	Design, Synthesis, and Applications of a Vanadium Complex: An Effective Catalyst for the Direct Conversion of Alcohols and Aldehydes to Esters	G. Mali, I. Verma, H. Arora, A. Rajput, A. Kumar, and R.D. Erande	J. Org. Chemistry, 2023, 88, 5696-5703	SCI
36.	Highly Efficient Cauliflower-like Palladium-Loaded Porous MOF as a Robust Material for the Degradation of Organic Dyes	Rimi, P. Kumar, B. Uttam, R. Kumar	ACS Omega, 2023, 8, 38895238904	Scopus
37.	Dog-bone shaped gold nanoparticle-mediated chemo-photothermal therapy impairs the powerhouse to trigger apoptosis in cancer cells	J. Ingle, B. Uttam, R. Panigrahi, S. Khatua, S. Basu	Journal of Material Chemistry B, 2023, 11, 9732-9741	Scopus
38.	Synthetic strategies for the functionalization of upper or lower rim of supramolecular calix[4]arene platform	C. P. Rao, B. Uttam, S. Polepalli	ARKIVOC, 2022, 6, 254-271	Scopus
39.	Selective Sensing and Removal of Mercury Ions by Encapsulating Dansyl Appended Calix [4] Conjugate in a Zeolitic Imidazolate Framework as an	B. Uttam, S. Polepalli, S. Sinha, A. Majumder, C. P. Rao	ACS Applied Nano-Materials, 2022, 5, 11371-11380	Scopus

	Organic–Inorganic Hybrid Nanomaterial			
40.	Investigation of thermal and dielectric behaviour of PVA-ZnO nanocomposites films	P. Yadav, V. Lahariya, P. P. Pandey, S. Behl and R. Raghav	J. Mater Sci: Mater Electron, 2023, 34, 787	Scopus
41.	Synthetic Utility of the Vilsmeier–Haack Reagent in Organic Synthesis	N. Neena, V. Chaudhri, F. V. Singh, H. China and T. Dohi, R. Kumar	Synlett, 2023, 34, 777-792	SCI
42	Adsorption of pesticides using graphene oxide through computational and experimental approach	K. Kumari, M. B. Singh, N. Tomar, A. Kumar, V. Kumar, K. L. Dabodhia, P. Singh	J. Molecular Structure, 2023, 136043	SCI