

S. No.	Title of the paper	Journal Name	Author/ Co-authors	Volume, Page no.	Year
1	A rational assembly of paradodecatungstate anions from clusters to morphology-controlled nanomaterials	Materials Chemistry Frontiers	AK Jassal, RK Mudsainiyan, R Shankar	Review article by Royal Society of Chemistry	2021
2	Self-assembled H-bonded supramolecular interactions in monomeric complex [Mg(H ₂ O)(6)] center dot L-2 center dot 2bipy center dot H ₂ O; [LH= 2-amino-5-nitrobenzoic acid, bipy= 4,4'-bipyridine): joint theoretical calculations and Hirshfeld surface analysis	Journal of Molecular structure	Rahul Kumar Mudsainiyan, Amanpreet Kaur Jassal, Nasarul Islam	1232, 130073	2021
3	Structural diversity from co-crystal to 1D coordination polymers of 2, 6-naphthalenedicarboxylic acid with 4, 4'-bipyridine as coligand: structural and computational approach	Journal of Coordination Chemistry	Rahul Kumar Mudsainiyan, Amanpreet Kaur Jassal, Sarvesh Kumar Pandey	73, 3363-3381	2020
4	Structural transformation from 1D to 3D in [K(μ ₅ -L1).H ₂ O] _n (L1 = 2,4-dinitrobenzoate) by nitro group coordination: Comparison with theoretical and Hirshfeld surface calculations	Supramolecular Chemistry	Rahul Kumar Mudsainiyan, KeshavChander	32, 535-545	2020

5	Tunable M-type nano barium hexaferrite material by Zn ²⁺ /Zr ⁴⁺ co-doping	Materials Research Express	Sachin Kumar Godara, Varinder Kaur, SB Narang, Mandeep Singh, Gopala Ram Bhadu, Jayesh C Chaudhari, RK Mudsainiyan, Ashwani Kumar Sood	6, 116111	2019
6	Anion controlled geometrically different Cu(II) ion based coordination polymers and green synthetic route for copper nanoparticles: A combined experimental and computational insight	Journal of Coordination Chemistry	M. Arora, A. K. Jassal, S. K. Pandey, S. K. Chawla & R. K. Mudsainiyan	71, 2243-2266	2018
7	Cu(II) ion based 1D coordination polymer: Its thermal, fluorescence properties, Hirshfeld surface analysis and theoretical calculations	Molecular Crystals and Liquid Crystals	M. Arora, A. K. Jassal, S. K. Chawla & R. K. Mudsainiyan	664, 142-155	2018
8	Study the cooperative noncovalent interactions in Lithium-1, 10-Phenanthroline complex, its DFT calculations and Hirschfield surface analysis	Molecular Crystals and Liquid Crystals	A. K. Jassal & R. K. Mudsainiyan	664:1, 124-134	2018
9	Sol-gel route approach and improvisation in physicochemical, structural, magnetic and electrical properties of BaCo _{x/2} Zn _{x/2} Zr _x Fe _(12-2x) O ₁₉	Journal of Magnetism and Magnetic Materials	A. K. Jassal, R. K. Mudsainiyan , S. K. Chawla, Anu, S. BindraNarang, K. Pubby	447, 32-41	2018

	ferrites				
10	Li doping induced physicochemical modulations in Cd ferrite ($\text{CdLi}_x\text{Fe}_{(2-x)}\text{O}_{4-x}$) synthesized using aqueous ammonia assisted Co-precipitation route	Materials Science and Engineering: B	M. Gupta, Anu, R.K. Mudsainiyan , B.S. Randhawa	227, 1-8	2017
11	A combined theoretical calculations and Hirshfeld surface analysis of cooperative non-covalent interactions in the crystal packing in $[\text{Cu}(\text{L1})_2(\text{EDA})]$	Zeitschrift für anorganische und allgemeine Chemie	R. K. Mudsainiyan , S. K. Pandey	10.1002/zaac.201700182	2017
12	Sol-gel route approach and improvisation in physicochemical, structural, magnetic and electrical properties of $\text{BaCo}_{x/2}\text{Zn}_{x/2}\text{Zr}_x\text{Fe}_{(12-2x)}\text{O}_{19}$ ferrites	Journal of Magnetism and Magnetic Materials	A. K. Jassal, R. K. Mudsainiyan , S. K. Chawla, Anu, S. BindraNarang, K. Pubby	447, 32-41	2017
13	Effect of H-bonding interactions of water molecules in the self-assembly of supramolecular architecture-joint experimental and computational studies	Journal of Molecular Structure	A. K. Jassal, Rajwinder K., Nasarul Islam, Anu, R. K. Mudsainiyan	1142, 148-155	2017

Research activities (Conferences and Symposia)

1. Paper presentation in 24th Congress and General Assembly of International Union of Crystallography (IUCr, 2017) in Hyderabad, India from 21st – 28th August 2017.

2. Participate in National Workshop on Single Molecule Magnetism organized by Department of Chemistry, G.N.D.U., Amritsar, from 06.-10 August **2017**.
3. Poster presentation in VIth National Symposium on Advances in Chemical Sciences organized by of Chemistry, G.N.D.U., Amritsar, from 6th – 7th March **2017**.
4. Poster Presentation in 20th Punjab Sciences Congress National Seminar on Innovative research in science and technology for sustainable development, organized by IET Bhaddal Technical Campus, Ropar, Punjab 07th – 9th February **2017**.
5. Poster presentation in National Seminar on Recent trends in chemical sciences organized by Department of Chemistry, G.N.D.U., Amritsar, 27.01.**2017**.

