CV of Prof. Kedar Singh

1. Name: Prof. Kedar Singh
2. Current Position and Address: Professor of Physics, School of Physical Sciences,
   Director , Advanced Instrumentation Research Facility (AIRF),
   Jawaharlal Nehru University, New Delhi-110067,
   Phone No. 01126738934/01126704784 (O),
   Mobile No. 8318360128
   Email: kedar@mail.jnu.ac.in , kedarbhp@rediffmail.com
3. Educational Qualifications: M.Sc.(Physics), Ph.D. (Experimental Condensed Physics)
4. Academic/Research experience/Employment:

S. No.	Post held	Organization	From	To
1	Professor of Physics, School of Physical Sciences,	Jawaharlal Nehru University, New Delhi	01.12.2017	Continue
2	Associate Professor of Physics, School of Physical Sciences,	Jawaharlal Nehru University, New Delhi	01.12.2014	*30*.11.2017
3	Assistant Professor, Department of Physics, Institute of Science	Banaras Hindu University, Varanasi	17.05.2004	30.11.2014

5. Administrative experience:

S. No.	Post held	Organization	From	Continue
1	Director, Advanced Instrumentation Research Facility	Jawaharlal Nehru University, New Delhi	05.01.2024	Continue
2	Dean, School of Physical Sciences, JNU	Jawaharlal Nehru University, New Delhi	08.02.2022	07.03.2024
3	Dean, School of Physical Sciences, JNU	Jawaharlal Nehru University, New Delhi	08.02.2020	07.02.2022

6. Area of Specialization: Experimental Condensed Matter Physics
7. Dissertations Supervised
   (a) Ph.D. Thesis supervised : 12
   (b) Ph.D. Thesis under supervision: 04
   (b) Post Graduation (M.Sc.) Projects: 30
   (c) Mentored of Post Doctoral Fellows: 05

8. List of research publications:
   Total published research papers in reputed Journals: 152 (Please see enclosure-1)
9. Number of Books/Book Chapters/ Edited / Authored: 05
   01 Book "Smart Nanostructure Material and Sensor Technology" ISBN 978-981-19-2684-6, Published (2022) in Springer Nature.
   02. Book "Advanced Functional Materials for Optical and Hazardous Sensing: Synthesis and Applications" ISBN 978-981-99-6013-2, Published (2023) in Springer Nature
   03. Book " Low-Dimensional Multifunctional Hybrid Nanostructured Materials (Engineering Materials): Energy and Environmental Applications" ISBN 978-981-96-7952-2, Published (2025) in Springer Nature
   01 Book Chapter "Core/Shell Quantum Dots: Synthesis, Properties and Devices", 2020, 28, 1–28, Springer Nature
   02. Metal halide perovskite nanomaterials for battery applications" 2023, 537-558, book chapter, Woodhead Publishing , Elsevier, UK
10. Patent :01
    Patent Applied: "Advanced Current Collector for Alkali/Alkali Earth Metal Batteries and A Method of Fabricating the Same", Application Number: **IN 202311078891**, Application Date 20 November 2023.
11. h-index-31, i10-index-94, citation 3215
12. Honors/ Award/ Recognitions received :
    (a) Raman fellow for Post Doctoral Studies in US under Indo-US 21st Century Knowledge Initiative Program (2013-14) availed at High Magnetic Field Laboratory, Florida, USA.
    (b) Better Opportunities for Young Scientists in Chosen Areas of Science and Technology (BOYSCAST) fellow (2008-09) availed at Florida State University, USA.
13. Members :
    Member of Executive Council, JNU (2021-22)
    Member of JNU Court, Academic Council JNU (2016-18), (2020- 2022) (2022-2024)
    Member of Board of study in various reputed institutes.
    Member of Admission Advisory Committee, JNU (2020-22)
    Executive member of Thermo-physical Society of India,
    Member of Microscope Society of India, American Chemical Society, Chaloginde Forum.
    Convener of International conferences, workshops, training programs and Vigyan Manthan Series.

14. Number of Research Projects Handled: Nine (Approximate grant 230 Lakks)
    School of Physical Sciences has received Rs 468 Lakhs under DST FIST program during my Deanship.

S. No.	Title	Grant Period	Cost (Rs. in L)	Funding Agency
i	Development of radiation-resistant high entropy alloys for energy applications	01/08/2024 t0 31/07/2027	74.17	STARS, Ministry of Education, New Delhi
ii	Self Assemble and Investigations of Low Dimensional Pervoskites for Photovoltaic Applications	March, 2022 – March 2025 (Running)	30.60	SERB , New Delhi
iii	Investigation of Optical and Magnetic Properties of Some Transition Metal Doped Diluted Magnetic Semiconductors for Spintronic Applications	May 15, 2017 to May 14, 2021 (completed)	46.52	SERB , New Delhi
iv	Synthesis and characterization of Magnetic Semiconductor Quantum Dots for Device Applications	July 2015 to 31 March 2019 (completed)	11.00	UPE-II, JNU
v	Development and Characterization of Ge-Sb-Te Phase Change Materials for Memory Applications	April 1, 2015 to March 31, 2018 (completed)	23.00	SERB , New Delhi
vi	Preparation and investigation of Carrier-Type Reversal Metal modified Chalcogenide Glasses	April 1, 2013 to March 31, 2015 (Completed)	10.51	UGC, New Delhi
vii	Synthesis and Characterization of Carbon Nanotube Doped Chalcogenide Glassy Composites	July 1, 2011 to June 30, 2014 (Completed)	15.50	CSIR, New Delhi
viii	Synthesis and characterization of multi-component chalcogenide glasses	April , 2008 to March 31, 2011	11.82	UGC, New Delhi
ix	Study of structural relaxation in chalcogenide glasses	July 1, 2006 to Jun30, 2009	8.00	CSIR, New Delhi

Curricular activities

Convener of Vigyan Manthan Series, JNU (2018-2021)

Chairman, Webinar on National Education Policy 2020 : Opportunities in Research and Innovation (31 Mar 2021), SPS, JNU, Delhi

Coordinator, 18th Refresher Course in Physical and Nanosciences (16-28, Nov 2020), HRDC, JNU, New Delhi

Chairman, Webinar on Nanoscience and Nanotechnology in the Present Scenario (9th & 10th June, 2020), SPS, JNU, New Delhi

Convener, Webinar on Material Science, Technology & Society (8-9, May 2020), SPS, JNU, New Delhi

Coordinator, 17th Refresher Course in Physical and Nanosciences (18-30, Nov 2019), HRDC, JNU, New Delhi

Coordinator of Refresher Course in Physics held on Oct 5-30, 2015 at HRDC, JNU, New Delhi

List of Publication of Prof. Kedar Singh Annexture-1

S. No.	Details of the Paper
1.	Simultaneous measurements of thermal conductivity and diffusivity of $Se_{85-X}Te_{15}Sb_x$ (X =2, 4, 6, 8 and 10) chalcogenide glasses at room temperature Kedar Singh, N. B. Mahrjan and N. S. Saxena* phys. stat. sol. (a) 189, 1 197-202, (2002).
2.	Simultaneous measurements of thermal conductivity and thermal diffusivity of $Se_{80}Te_{20-X}In_X$ (X = 2, 4, 6 and 10) chalcogenide glasses at room temperature N. S. Saxena*, Mousa M. A. Imran and Kedar Singh Bulletin of Material Science 25, 241, (2002).
3.	Thermal properties of neutron irradiated $Se_{80}Te_{10}In_{10}$ glass Kedar Singh and N. S. Saxena* Mater. Sci. Engg. A. 346, 287, (2003).
4.	Temperature dependence study of thermal conductivity and thermal diffusivity of treated Oil-Palm-Fiber Reinforced phenolformaldehyde composites Kedar Singh, N. S. Saxena*, M. S. Sreekal and S. Thomas Journal of Applied Polymer Science 98, 13, 3458, (2003).
5.	Calorimetric Studies in $Se_{75}Te_{25-X}Sn_X$ Chalcogenide glasses N. B. Maharjan, Kedar Singh and N. S. Saxena* phys. stat. sol. 395, 1, 305-310, (2003).
6.	Structural relaxation of hybrid composite of phenol formaldehyde Kedar Singh, N. S. Saxena*, S. Thomas and M. S. Sreekala Indian J. Eng. &Material Science 10, 65, (2003).
7.	Kinetics of Ge-As-Se in Glass Transition Region Kedar Singh and N. S. Saxena* Bulletin of Material Science 26, 543, (2003).
8.	Temperature dependence of thermo-physical properties of untreated oil- palm- fiber reinforced phenol-formaldehyde composites Kedar Singh, N. S. Saxena* and S. Thomas J. Scientific & Industrial research 62, 903, (2003).
9.	Pressure dependence of thermal conductivity and thermal diffusivity of Se-Te -In chalcogenide glasses" Kedar Singh and N. S. Saxena* Indian J. Pure & Appl. Physics 41, 466, (2003).
10.	Thermal properties of pine apple leaf fiber reinforced composites for different filler concentrations using transient plane source technique Ravindra Mangal, N. S. Saxena*, M. S. Sreekala, S. Thomas and Kedar Singh Mater. Sci. Engg. A 339, 281-285, (2003).
11.	Temperature dependence of thermo-physical properties of $Se_{80}Te_{10}In_{10}$ chalcogenide Glass. Kedar Singh and N. S. Saxena* Mater. Sci. Engg. A 329 (1-2), 38, (2005).
12.	Thermophysical properties on Zn -Se pellets N. S. Saxena*, R. Sharma, Kedar Singh and T. P. Sharma J. Mat. Sci. Lett. 40, 523, (2005).
13.	Simultaneous measurements of thermal conductivity and diffusivity of $Se_{100-X}In_x$(x = 0, 5, 10, 15 and 20) chalcogenide glasses at room temperature Kedar Singh, N. S. Saxena* and D. Patidar Journal of Physics and Chemistry of Solids, 66, 946, (2005).
14.	Composition dependence of the electrical conductivity of $Se_{85-X}Te_{15}Sb_x$ (x = 2, 4, 6, 8 and 10) chalcogenide glasses at room temperature V. K. Saraswat, Kedar Singh, N. S. Saxena*, V. Kishore, T. P. Sharma and P. K. Saraswat, Current Appl. Physics, 6, 64, (2006).

15.	Energy band gap of $Se_{100-X}In_X$ chalcogenide glasses Kedar Singh*, N. S. Saxena, O. N. Srivastav, D. Patidar and T. P. Sharma Chalcogenide Letters, 3, 3, 33-36, (2006).
16.	Electrical conductivity of Se-In Chalcogenide Glasses V.K. Saraswat*, V.Kishore, Kedar Singh, N.S.saxena and T.P.Sharma Chalcogenide Letters 3, 8, 61-65, (2006).
17.	Electrical measurements of $Se_{85-x}Te_{15}Sb_x$ glasses Vibhav K Saraswat, K. Singh, N.S.Saxena* Indian Journal of Pure and Applied Physics 44, 782, (2006).
18.	Thermal Transport in $Se_{81}Te_{15}Sb_4$ Chalcogenide Glass A.K. Singh, Pushpendra Kumar, Kedar Singh* and N.S.Saxena Chalcogenide Letters, 3, (2006), 139–144.
19.	Thermo-physical properties of Se-Te-Sb vitreous chalcogenide semiconductors Pushpendra Kumar, Kedar Singh* Chalcogenide Letters 4, (2007), 127-132.
20.	Correlative study of optical, electrical and thermal transport properties of $Se_{100-x}In_x$chalcogenide glasses, Abhay Kumar Singh, Kedar Singh* Journal of Optoelectronics and Advanced Materials 9, 3756 – 3759, (2007).
21.	Temperature dependence of effective thermal conductivity and effective thermal diffusivity of $Se_{90}In_{10}$ bulk chalcogenide glass Kedar Singh*, Abhay Kumar Singh and N.S. Saxena Current Applied Physics, 8, 159-162, (2008).
22.	Pre-exponential Factor for the Non-Isothermal Crystallization in Glassy $Se_{85-x}Te_{15}Sb_x$ ($0 \leq x \leq 10$) Alloys N. Mehta & K. Singh* Philosophical Magazine, 88 (2008) 1411-1421.
23.	Effect of Slow Neutron Radiation on the Pre-exponential Factor of Thermally Activated Crystallization in $Se_{96}In_4$ Chalcogenide Glass N. Mehta, K. Singh* & N. S. Saxena Journal of Physics D: Applied Physics, 41 (2008) 135406.
24.	Comparative Analysis of Some Thermo-physical Properties of $Se_{90}Zn_{10}$ and $Te_{90}Zn_{10}$ alloys N. Mehta, K. Singh* & N. S. Saxena Thermochimica Acta, 475 (2008) 80-82.
25.	Effect of annealing on structures and effective thermal conductivity of $Se_{90}In_{10}$ chalcogenide glass, Abhay Kumar Singh, Kedar Singh*, N.S.Saxena Journal of Ovnic Research 4, 107 – 111, (2008).
26.	Comparative Analysis of Thermal Crystallization in $Cu_{50}Ti_{50}$ and $Cu_{50}Zr_{50}$ Metallic Glasses N. Mehta, K. Singh* & N. S. Saxena Physica B, 403 (2008) 3928-3931.
27.	Effect of Sb and Sn additives on the activation energies of glass transition and crystallization in binary $Se_{85}Te_{15}$ alloy N. Mehta, K. Singh* & S. Kumar Phase Transitions, 82 (2009) 43-51.
28.	Effect of Lithium ion-irradiation on crystallization kinetics of glassy $Se_{98}In_2$ alloy H. Kumar, N. Mehta*, K. Singh & N. S. Saxena Philosophical Magazine Letters, 89 (2009) 126-135.
29.	Electrical Properties of $Se_{93-x}Zn_2Te_5In_x$ Chalcogenide Glasses A. K. Singh, N. Mehta & K. Singh* Chalcogenide Letters, 6 (2009) 9-14.
30.	Correlation between Meyer-Neldel Rule and phase separation in $Se_{98-x}Zn_2In_x$ chalcogenide glasses A. Singh, N. Mehta & K. Singh* Current Applied Physics, 9 (2009) 807-811.
31.	Observation of inverse Meyer-Neldel rule in thermally activated crystallization of hybrid composite of phenol formaldehyde

	N. Mehta, K. Singh* & S. Kumar Philosophical Magazine, 89 (2009) 797 - 806.
32.	Electrical properties of Se-Zn-In chalcogenide glasses A. Singh, N. Mehta & K. Singh* The European Physical JournalApplied Physics, 46 (2009) 20303.
33.	On the glass transition phenomenon in Se-Te and Se-Ge based ternary chalcogenide glasses N. Mehta, K. Singh*, A. Kumar Physica B, 404 (2009)1835-1838.
34.	Effect of ionic irradiation on the pre-exponential factor of thermally activated crystallization in $Co_{66}Si_{16}B_{12}Fe_4Mo_2$ metallic glass N. Mehta, K. Singh* & N. S. Saxena Journal of Physics and Chemistry of Solids, 70 (2009) 811–815.
35.	Co-relation between pre-exponential factor and activation energy of non-isothermal crystallization for virgin and irradiated $Fe_{78}B_{13}Si_9$ metallic glass N. Mehta, K. Singh* & N. S. Saxena Physica B, 404 (2009) 2184–2188.
36.	Optical and FTIR properties of $Se_{93-x}Zn_2Te_5In_x$ Chalcogenide Glasses A. K. Singh, N. Mehta & K. Singh* Physica B, 404 (2009) 3470–3474.
37.	Effect of indium additive on glass forming ability and thermal stability of Se-Zn-Te chalcogenide glasses A. K. Singh, N. Mehta & K. Singh* Philosophical Magazine Letters, 90 (2010) 201-208.
38.	Crystallization kinetics and thermal stability of $Se_{98-x}Zn_2In_x$ chalcogenide glasses, Abhay Kumar Singh and Kedar Singh* Philosophical Magazine, 89, 1457–1472, (2009).
39.	Composition dependence UV-Visible and MID-FTIR properties of $Se_{98-x}Zn_2In_x$ (X= 0, 2, 4, 6 and 10) chalcogenide glasses Abhay Kumar Singh and Kedar Singh* Journal of Modern Optics 56, 471-476, (2009).
40.	Element directed aqueous solution synthesis of copper telluride nanoparticles characterizations and optical properties Pushpendra Kumar and Kedar Singh* Crystal growth & Design, 9, (7), 30089-30094, (2009).
41.	Effect of annealing below crystallization temperature on structural and mechanical properties of $Co_{66}Si_{16}B_{12}Fe_4Mo_2$ metallic glass Pushpendra Kumar, Kedar Singh*, T.P. Yadav, O.N. Srivastava. Journal of Optoelectronics and advanced materials 11, (8), 1082-1087, (2009).
42.	Calorimetric studies of glass transition phenomenon in glassy $Se_{80-x}Te_{20}Sn_x$ alloys H. Kumar, N. Mehta & K. Singh* Physica Scripta, 80 (2009) 065602.
43.	Composition dependence of thermal stability, micro-hardness and compactness in glassy $Se_{90}In_{10-x}Ge_x$ alloys H. Kumar, N. Mehta*, K. Singh & A. Kumar Physica B, 404 (2009) 3761-3765.
44.	Effect of Lithium ion-irradiation on glass transition kinetics of glassy $Se_{98}In_2$ alloy H. Kumar, N. Mehta*, K. Singh & N. S. Saxena Phase Transitions, 83 (2010) 1-9.
45.	Effect of In and Zn additives on some thermal properties of a-Se N. Mehta, K. Singh* & N. S. Saxena Solid State Science, 12 (2010) 963-965.
46.	Effect of high energetic ionic radiation in thermally activated crystallization of $Co_{66}Si_{15}B_{16}Fe_6Ni_1$ metallic glass: Observation of MN rule N. Mehta, K. Singh* & N. S. Saxena Radiation Effects and Defects in Solids, 166 (4) (2011) 251-257

47.	Study of dielectric properties of Se-Zn-In chalcogenide glasses A.K. Singh, N. Mehta, K. Singh* Optoelectronics and advanced materials-Rapid Communication 12, (2010), 1700-1705.
48.	Synthesis of CdSe nanoparticles at 50 ^{0}C by wet chemical method Pushpendra Kumar and Kedar Singh* Current Nanoscience, 6, (1) 89-93, (2010).
49.	Ferromagnetism in Cu doped ZnSe Semiconducting Quantum Dots Pushpendra Kumar and Kedar Singh* Journal of Nanoparticle Research, 13 (2011) 1613- 1620.
50.	Calorimetric studies of crystallization kinetics of $Se_{75}Te_{15-x}Cd_{10}In_x$ multicomponent chalcogenide glasses using non-isothermal DSC S Kumar, K Singh*, N Mehta Philosophical Magazine Letter, 90, (2010), 547-557.
51.	Template-free Solvothermaly Synthesized ZnSe/ZnSe: Eu^{3+} Nanoparticles, Structural, Optical and Raman Studies Pushpendra Kumar and Kedar Singh* Current Nanoscience 6, (5) 402-407, (2010).
52.	Calorimetric studies of $Se_{75}Te_{15}Cd_{10}$ and $Se_{75}Te_{10}Cd_{10}In_5$ multicomponent chalcogenide glasses Sunil Kumar, Kedar Singh* Physica B: Condensed Matter 405, (2010), 3135-3140.
53.	Wurtzite ZnSe quantum dots: Synthesis, Characterization and PL properties Pushpendra Kumar and Kedar Singh* Journal of Optoelectronics and advanced materials 1, (2009) 59-69.
54.	Structural, Optical and Raman studies of Template-free Solvothermaly Synthesized ZnSe/ZnSe: Ce^{3+} Nanoparticles Pushpendra Kumar and Kedar Singh* Journal of Luminescence, 130, (2010), 2026-2031.
55.	Template Free -Solvothermaly Synthesized Copper Selenide (CuSe, Cu_2-xSe, β-Cu_2Se and Cu_2Se) Hexagonal Nanoplates from Different Precursors at Low Temperature Pushpendra Kumar, Kedar Singh* and O. N. Srivastava Journal of Crystal Growth, 312, (2010), 2804-2813.
56.	Observation of Meyer Neldel rule and crystallization rate constant stability for $Se_{93-x}Zn_2Te_5Inx$ chalcogenide glasses A K Singh and Kedar Singh* The European Physical Journal of Applied Physics, 51(3) (2010)30301
57.	Calorimetric studies of glass transition in glassy $Se_{75}Te_{15-x}Cd_{10}In_x$ alloys using non- isothermal DSC technique Sunil Kumar, Kedar Singh* and Neeraj Mehta Physica Scripta, 82, (2010), 04560-04565.
58.	Synthesis, characterizations, and optical properties of copperselenide quantum dots Pushpendra Kumar , Kedar Singh* Structural Chemistry 22(2011) 103-110
59.	Calorimetric studies of non-isothermal crystallization in amorphous Cu*x*Ti100–*x* alloys N Mehta K Singh and N S Saxena Bull. Mater. Sci., 34, No. 7(2011) 1459–1463
60.	Localized structural growth and kinetics of $Se_{98-X}Zn_2In_X$ ($0 \le x \le 10$) amorphous alloys A. K. Singh and Kedar Singh* Physica Scripta, 83, (2011), 025605
61.	The effect of Indium additives on crystallization kinetics and thermal stability of Se-Te-Sn chalcogenide glasses Sunil Kumar and Kedar Singh* Physica B 406, (2011)1519
62.	Calorimetric studies of thermal crystallization in glassy $Se_{80-X}Te_{20}Sn_X$ ($0 \le x \le 10$) alloys H Kumar, N Kumar and K Singh Phys. Scr. 83 (2011)065602

63.	Simultaneous measurements of thermal conductivity and thermal diffusivity of $Se_{90-x}Te_5Sn_5In_x$ (x = 0, 3, 6 and 9) multi-component chalcogenide glasses Sunil Kumar and Kedar Singh J Mater Sci. 47 (2012) 3949
64.	Room temperature ferromagnetism in magic- sized Cr- doped CdS dilute magnetic semiconducting quantum dots P .Srivastava, P. Kumar and K. Singh J. of Nano particle research ,13 (2011)5077- 5085
65.	Effect of some metallic additives (Ag, Cd and Sn) on thermal transport properties of a-Se A. Sharma, K. Singh and N Mehta J of therm. Anal. Calorim. (2012) 109:915–920
66.	Glass Transition, Thermal stability and glass-forming tendency of $Se_{90-x}Te_5Sn_5$Inx multicomponent chalcogenide glasses Sunil Kumar and Kedar Singh* Thermochimica Acta, 528 (2012) 32-37
67.	Quantum Phase Transition from Superparamagnetic to Quantum Superparamagnetic State in Ultrasmall Cd1_xCr(II)xSe Quantum Dots? Weiwei Zheng, Pushpendra Kumar, Aaron Washington, ZhenxingWang,Naresh S. Dalal, Geoffrey F. Strouse, and Kedar Singh* J . of the American Chemical Society 134 (2012) 2172–2179
68.	Investigations on structural, optical and second harmonic generation in solvothermally synthesized pure and Cr-doped ZnO nanoparticles P. Kumar,J. Singh, Kedar Singh, R. S. Tiwari, O. N. Srivastava and A. C. Pandey CrystEngComm 14 (2012)1653
69.	Low temperature synthesized thermoelectric Sb_2Te_3 irregular nanoflakes Punita Srivastava and Kedar Singh* Materials Letters 75(2012)42-44
70.	Evidence of a $ZnCr_2Se_4$ Spinel Inclusion at the Core of a Cr-Doped ZnSe Quantum Dot Weiwei Zheng, Kedar Singh, Zhenxing Wang, Joshua T. Wright, Johan van Tol, Naresh S. Dalal, Robert W. Meulenberg, and Geoffrey F. Strouse J . of American Chemical Society 134 (2012) 5577-5585
71.	Effect of Indium additive on thermal Transport properties of Se-Te-Cd multi- component chalcogenide glasses Sunil Kumar and Kedar Singh* J. of Thermal Analysis and Calorimetry(2012) 110:519–522
72.	Effect ofPbadditiveoncrystallizationkineticsof$Se_{80}In_{20}$ glassy matrix Indra Sen Ram, Kedar Singh Physica B: Condensed Matter 407 (2012) 3472
73.	Structural and Thermal properties of chemically synthesized Bi_2Te_3 nanoparticles Punita Srivastava and Kedar Singh J. of Thermal Analysis and Calorimetry (2012) 110:523–527
74.	Synthesis of CdSe nanoparticles by solvothermal route: Structural, Optical and Spectroscopic properties Punita Srivastava and Kedar Singh* Advanced Materials Letters (Accepted)-2012
75.	Morphological evolution in single-crystalline Bi_2Te_3 nanoparticles, nanosheets and nanotubes with different synthesis temperatures Punita Srivastava and Kedar Singh Bull. Mater. Sci 26,5 2013, 765-770
76.	Effect of Pb addition on dielectric relaxation in $Se_{80}In_{20}$ glassy system Indra Sen Ram, R K Singh, P Singh, Kedar Singh* Journal of Alloys and Compounds, 552 (2013) 480–485,ISSN : 0925-8388 (International J.)
77.	Two Dimensional Bi2Te3 nano-sheets with enhanced electrical and dielectric properties : scope of novel storage renewable energy in nanoelectronics

	Punita Srivastava and Kedar Singh Science of Advanced materials Volume 5, Number 7, July 2013, pp. 836-843(8)
78.	Low temperature reduction route to synthesis bismuth telluride (Bi2Te3) nanoparticles: structural and optical studies Punita Srivastava and Kedar Singh* Journal of Experimental Nanoscience 9 (10) (2014), 1064-1074
79.	Thermal and mechanical properties of CNT-$Se_{90-X}Te_{10}Ag_X$ (0, 5and 10) glassy composites. Indra Sen Ram, Kedar Singh* Journal of Alloys and Compounds, 576 (2013) 358-362, ISSN: 0925-8388 (International J.)
80	Synthesis and dielectric relaxation behavior of metallic Bi_2Te_3 Nanotube Punita Srivastava and Kedar Singh Materials Letters, 108 (2013) 25-28,
81.	Layered Sb_2Te_3 nanoflakes as chalcogenide dielectrics Punita Srivastava and Kedar Singh J of Electronic Materials 42(2013) 2733-2738
82.	Study of Crystallization Process in $Se_{80}In_{10}Pb_{10}$ by Iso-Conversional Methods Indra Sen Ram, Kedar Singh Journal of Crystallization Process and Technology, 2013, 3, 49-55
83	Effect of Cs-on morphological, optical and electrical properties of Bi2Te3 nanostructures Punita Srivastava and Kedar Singh Materials Letters, 136 (2014) 337-340
84	Enhancement of electrical, thermal and mechanical properties of carbon Nanotube additive Se85Te10Ag5 glassy allys A.N Upadhyay, R.S. Tiwari and Kedar Singh Materials Letters, 136 (2014) 445-448
85	Study of Glass-Transition Kinetics of Pb-Modified Se80In20 System by using Non-isothermal Differential Scanning Calorimetry Indra Sen Ram and Kedar Singh Int J Thermo-physics 35 (2014) 123-135
86	Electro-optical, UV absorbance, and UV photoluminescence analysis of Se95In5 chalcogenide glass microparticle doped ferroelectric liquid crystal Dharmendra Pratap Singh, Swadesh Kumar Gupta, Shivani Pandey, Kedar Singh, and Rajiv Manohar JOURNAL OF APPLIED PHYSICS 115, 214103 (2014) **ISSN**: 0021-8979
87	Effect of carbon nano tube additive on the structural and thermal properties of Se85Te10Ag5 glassy alloys A.N Upadhyay, R.S. Tiwari and Kedar Singh J. Thermal Anal. Calorimetri 15 (2015) 4825-6
88	Electrical conduction mechanism in Se90-xTe5Sn5Inx (X= 0, 3, 6 and 9) multi-component glassy alloys I S Ram, Sunil Kumar, R K Singh, P S Singh and Kedar Singh AIP Advances 5, (2015) 087164-7 **ISSN**: 2158-3226
89	Electrical and dielectric properties of carbon Nanotube containing Se85Te10Ag5 glassy composites A.N Upadhyay, R.S. Tiwari and Kedar Singh Adv. Mater. Lett 6 (2015) 1089
90	Microstructural and thermal investigations of carbon nanotube additive $Se_{80}Te_{16}Cu_4$ glassy composites AN Upadhyay, RS Tiwari, Kedar Singh* Materials Letters 164 (2016), 449-451
91	Glass transition and crystallization kinetics of $Se_{98-x}Cd_2In_x$ (x= 0, 2, 6 and 10) glassy alloys Sunil Kumar and Kedar Singh * J. of Thermal Analysis and Calorimetry, 124 (2016) 675-682

92	Optical and electrical properties of carbon nanotube- containing $Se_{85}Te_{10}Ag_5$ glassy composites AN Upadhyay, RS Tiwari, Kedar Singh* Philosophical Magazine 96 (2016) 576-583
93	Study of optical properties of vacuum evaporated carbon nanotube containing $Se_{80}Te_{16}Cu_4$ thin films A. N. Upadhyay, R. S. Tiwari, and Kedar Singh* *Materials Research Express,* IOP 3 (2016), 086405
94	Kinetics of phase transformation of carbon nanotube containing Se85Te10Ag5 glassy composites A. N. Upadhyay, and Kedar Singh *Materials Research Express,* IOP 3 (2016) 125201
95	Shape and Size-Dependent Magnetic Properties of Fe3O4 Nanoparticles Synthesized Using Piperidine Ashwani Kumar Singh, O. N. Srivastava and Kedar Singh Nanoscale Research Letters 12 (2017) 298
96	Annealing effect on thermal conductivity and microhardness of carbon nanotube containing Se80Te16Cu4 glassy composites A N Upadhyay , R S Tiwari and Kedar Singh Mater. Res. Express 5 (2018) 025203
97	An efective approach to study the biocompatibility of Fe3O4 nanoparticles, graphene and their nanohybrid composite Ashwani Kumar Singh, Pallavi Singh, Rajiv Kumar Verma, Suresh Yadav, Kedar Singh Amit Srivastava Applied Nanoscience, **8**, (2018) 831–838
98	Experimental Validation of Ferromagnetic–Antiferromagnetic Competition in $Fe_xZn_{1-x}Se$ Quantum Dots by Computational Modeling *Jasleen K. Bindra, Lavrenty Gennady Gutsev, Johan Van Tol, Kedar Singh, Naresh S. Dalal and Geoffrey F. Strouse* *Chemistry. Materials.*, *30* (6)(**2018**), 2093
99.	Lightweight Reduced Graphene Oxide-Fe3O4 Nanoparticle Composite for the Quest of Excellent Electromagnetic Interference Shielding Material. AK Singh , Ajit Kumar, KK Haldar , Vinay Gupta , Kedar Singh Nanotechnology (IOP) 29(2018) 245204
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