




ZAKIR HUSAIN DELHI COLLEGE
(University of Delhi)

Faculty Details

(Please Fill the form and Email it to website@zh.du.ac.in)

Dr	Satish Kumar	Rajouria	Photograph
Designation	Associate Professor		
Address	Department of Physics, Zakir Husain Delhi College, New Delhi 110002		
Phone Number	Office		
	Residence		
	Mobile	9868637541	
Email Id	s.k.rajouria@gmail.com		
Web Page			
Educational Qualification			
Degree	Institution	Year	
B.Sc Hons Physics	Acarya Narendra Dev College (University of Delhi)	2004	
M.Sc Physics	Indian Institute of Technology Delhi	2006	
Ph.D	Indian Institute of Technology Delhi	2016	
Career Profile			
Assistant Professor in Zakir Husain Delhi College August 2006 to 2020			
Associate Professor in Zakir Husain Delhi College August 2020 to continue....			
Administrative Assignments			
Organize First national Workshop on fiber optics, Photonics and Nano electronics [FOPN-1] on February 6-7, 2012 at Zakir Husain Delhi College. Debating Society, Wi-Fi Committee, Convocation Committee, Canteen Committee, Involved in Admission and Student Union Elections (Counting Officer), Convener Staff requirement Committee (SRC) (2016-18, 2022-24),			

Member NAAC Steering Committee, Member Academic Supervisory Committee, Member Library Committee, Superintendent of Practical Examination, Head of the Department of Physics, Zakir Husain Delhi College (2011-12 , 2016-17 & 2021-22), Member of Student Union Advisory Board (2018-2022), Member of Swachhata Abhiyan Committee (2020-2023), Member of Physical Science Society (2023-2024), Member Time Table Committee of the college.

Areas of Interest / Specialization

Laser Plasma Interaction

Subjects Taught

Thermal Physics and Statistical Mechanics, Wave and Optics

Research Guidance

Publications Profile

1. Yogesh Kumar Poonam Jain Pargin Bangotra Vinod Kumar D. V. Singh and **S. K. Rajouria**, Role of Time-Varying Magnetic Field on QGP Equation of State, *Advances of High Energy Physics* 2024, 1870528-11 (2024).
2. Yogesh Kumar · Poonam Jain · Pargin Bangotra · D. V. Singh · Vinod Kumar · **S. K. Rajouria** Mass Spectra of Diphotons at Finite Chemical Potential in Massive Nuclear Collisions, **Brazilian Journal of Physics** 54:6, 01384-9 (2024).
3. Anurag Upadhyaya, Bhavana Panthi, Shubham Verma, Suresh Kumar, **Satish Kumar Rajouria**, Hemant Kumar Srivastava & Pranjal Chandra, Analogue and structure based approaches for modelling HIV-1 integrase inhibitors, **Journal of Biomolecular Structure and Dynamics** 11946-11956, 41 Issue-21 (2023)
4. **Satish Kumar Rajouria and Pawan Kumar** Relativistic nonlinear frequency shift of laser pulse on reflection from critical layer in inhomogeneous plasma, **Phys. Plasmas** 27, 033101 (2020).

5. Mohd Suleman, Mohamad Deraman, S.A.Hashmi, M.A.R.Othman, Yogesh Kumar **S.K.Rajouria** and M.R.M.Jasnia Accommodating succinonitrile rotators in micro-pores of 3D nano-structured cactus carbon for assisting micro-crystallite organization, ion transport and surplus pseudo-capacitance: An extreme temperature supercapacitor behaviour ELECTROCHIMICA ACTA Volume 333, 10 February 2020, 135547.
6. Ram Kishor Singh, Monika Singh and **Satish Kumar Rajouria**, High-power terahertz radiation generation by beating of two co-propagating super-Gaussian laser beams in cluster plasma, Laser Physics, Volume 28, Number 8, 086003 June 2018.
7. Deepak Kumar, **Satish Kumar Rajouria**, Suman B. Kuhar, D.K. Kanchan Progress and prospects of sodium-sulfur batteries: A review, Solid State Ionics Volume 312, 1 December 2017, Pages 8-16.
8. Ram Kish or Singh, Monika Singh, **Satish Kumar Rajouria**, and R. P. Sharma, High power terahertz radiation generation by optical rectification of a shaped pulse laser in axially magnetized plasma, PHYSICS OF PLASMAS 24, 103103 (2017).
9. Ram Kishor Singh, Monika Singh, **Satish Kumar Rajouria**, and R. P. Sharma, Strong terahertz emission by optical rectification of shaped laser pulse in transversely magnetized plasma, Physics of Plasmas 24, 073114 (2017).
10. Shyodan Singh, D .Chao and Satish Kumar Rajoria, THE ROLE OF YOGA ON WELL-BEING OF INDIAN ELDERLY, Journal of Indian Health Psychology, VOL. 12, NO. 1, September, 2017. Page 36-44
11. Pawan Kumar, Rajeev Kumar and **Satish Kumar Rajouria**, Cherenkov terahertz surface plasmon excitation by an electron beam over an ultrathin metal film, Journal of Applied Physics 120, 223101 (2016).
12. **Satish Kr Rajouria**, H. K. Malik, V. K. Tripathi, and Pawan Kumar, Step density model of laser sustained ion channel and Coulomb explosion, Phys. Plasmas 22, 023104 (2015).
13. Manoj Kumar, **Satish Kr Rajouria** and Magesh Kr. K. K., Effect of pulse slippage on beat wave THz generation in a rippled density magnetized plasma, Journal of Physics D: Applied Physics 46, 435501(2013).
14. **Satish Kr. Rajouria**, Magesh Kr. K. K. and V. K. Tripathi, Nonlinear resonance absorption of laser in an inhomogeneous plasma, Phys. Plasmas

20, 083112 (2013).

15. Swati Arora, **Satish Kumar Rajouria**, Pankaj Kumar, P K Bhatnagar, Manoj Arora and R P Tandon, Role of donor acceptor domain formation and interface states in initial degradation of P3HT:PCBM based solar cells, Phys. Scr. 83 (2011) 035804 (6pp)

Conference Organization/ Presentations (in the last five years)

Research Projects (Major Grants/Research Collaboration)

Awards and Distinctions

Association With Professional Bodies

Other Activities