

RESUME

Name : Dr.Brij Mohan
Father's Name : Sh. Baldev Ram
Date of Birth : 28-09-1984
Address for correspondence : Prajapati Bhawan, Village- Upper Sanhog,
PO.- Summer Hill, Shimla (India) 171005
Contact No. : +91 9418354012
Email Address : brijmohanhpu@yahoo.com
brij84mohan@gmail.com
Permanent Address : Prajapati Bhawan, Village- Upper Sanhog,
PO.- Summer Hill, Shimla (India) 171005
Nationality : Indian
Marital Status : Married
Academic Record (From Matriculation onwards):

Sr. No.	Examination Passed	Year	University/Institute	Division
1	Matric	2000	HPBSE Dharmashala	First
2	10+2	2002	HPBSE Dharmashala	First
3	B.Sc.	2005	Himachal Pradesh University, Shimla	First
4	M.Sc.	2007	Himachal Pradesh University, Shimla	First
5	Ph.D.	2015	Himachal Pradesh University, Shimla	NA

Additional Qualification:

GATE-2007, JEST-2009, NET

Teaching Experience:

Teaching since March 2017 in Govt. Colleges of Himachal Pradesh as Assistant Professor (Physics)

Research Interests:

Broad Area of Research: Condensed Matter Physics

Specific Area of Research: Computational Materials Science with specific focus on low-dimensional nanostructures.

Research Experience :

1. Research Project entitled "Physics Problem Solving using Electronic Spreadsheets: Some Case Studies" for the award of M.Sc. Degree.
2. Ph.D. thesis entitled "A First Principle Study of Electronic and Dielectric Properties of Graphene and Silicene Based Honeycomb Nanostructures" completed under supervision of Prof. P. K. Ahluwalia.

Papers published in International Journals:

1. Brij Mohan, Ashok Kumar and P.K. Ahluwalia, *A First Principle Study of Interband Transitions and Electron Energy Loss in Mono and Bilayer Graphene: Effect of External Electric Field*, *Physica E*, **44** (2012) 1670.
2. Brij Mohan, Ashok Kumar and P.K. Ahluwalia, *A First Principle Calculation of Electronic and Dielectric Properties of Electrically Gated Low-Buckled Mono and Bilayer Silicene*, *Physica E* **53** (2013) 233.
3. Brij Mohan, Ashok Kumar and P.K. Ahluwalia, *Electronic and Optical Properties of Silicene Under Uni-axial and Bi-axial Mechanical Strain: A First Principle Study*, *Physica E* **61** (2014) 40.
4. Brij Mohan, Ashok Kumar and P.K. Ahluwalia, *Electronic & Dielectric Properties of Silicene Functionalized with Monomers, Dimers and Trimers of B, C & N atoms*, *RSC Advances* **4** (2014) 31700.
5. Rajesh Thakur, P.K. Ahluwalia, Ashok Kumar, Brij Mohan and Raman Sharma, *Electronic Structure and carrier mobilities of twisted Graphene Helix*, *Physica E* **124** (2020) 114280.

Paper Published in International/National Conference Proceedings:

1. Sushila Devi, Munish Sharma, **Brij Mohan**, P.K. Ahluwalia, and Shyam Chand, *First principle study of electronic and optical properties of functionalized Stanene quantum dot*, *AIP Conf. Proc.* **2265** (2020) 030372.
2. Sushila Devi, **Brij Moha**, Munish Sharma, P.K.Ahluwalia and Shyam Chand, *Tuning of structural and electronic properties of functionalized germanene quantum dot*, *AIP Conf. Proc.* **2115** (2019) 030170.
3. **Brij Moha**, Susheela, Shyam Chand and P.K. Ahluwalia, *A first principle study of electronic and optical properties of H, F and Cl passivated triangular silicene nano-flakes*, *AIP Conf. Proc.* **1942** (2018) 090044.
4. Sushila Devi, Munish Sharma, **Brij Mohan** and P K Ahluwalia, *Influence of edge passivation on electronic properties of triangular germanene nano flake*, *AIP Conf. Proc.* **1953** (2018) 030196-(1-5).

5. Rajesh Thakur, Brij Moha, Munish Sharma, and Raman Sharma, Electronic properties of black phosphorene via Si induced quantum dot, *AIP Conf. Proc.* **1832** (2017) 050134.
6. **Brij Mohan**, Rajesh Thakur and P. K. Ahluwalia, Electronic Energy Loss Spectra from Mono-layer to Few Layers of Phosphorene, *AIP Conf. Proc.* **1731** (2016) 050026.
7. **Brij Mohan**, Munish Sharma, Ashok Kumar and P.K.Ahluwalia, Electronic and Dielectric Properties of Vacancy Clusters as Quantum Dot in Silicane, *AIP Conf. Proc.* **1665** (2015) 090041-090043.
8. **Brij Mohan**, Pooja, Ashok Kumar and P.K.Ahluwalia, Shape and Edge Dependent Electronic and Magnetic Properties of Silicene Nano-flakes, *AIP Conf. Proc.* **1665** (2015) 140054-140056.
9. **Brij Mohan**, Ashok Kumar, and P. K. Ahluwalia, Structural and Electronic Properties of Free Standing One-sided and Two-sided Hydrogenated Silicene, *AIP Conf. Proc.* **1591** (2014) 1714-1716.
10. **Brij Mohan**, Ashok Kumar, and P. K. Ahluwalia, Electronic structure and electron energy loss spectra of armchair and zigzag edged buckled silicene nano-ribbons, *AIP Conf. Proc.* **1512**, (2013) 378-379.
11. Ashok Kumar, **Brij Mohan**, Arun Kumar, and P. K. Ahluwalia, Mechanically strained tuning of the electronic and dielectric properties of monolayer honeycomb structure of tungsten disulphide(WS₂), *AIP Conf. Proc.* **1512** (2013) 1242.
12. Ashok Kumar, **Brij Mohan** and P.K.Ahluwalia, Ab-initio Study of Homo and Hetro Platinum Dimension Ge(001)-(2x1) Surface, *AIP Conf. Proc.* **1393** (2011) 195.

International/National

School/Workshops/FIP/Refresher Attended:

1. Refresher course “*Managing Online Classes & Co-creating MOOCS 24.0*”, March 11- March 25, 2023, Teaching Learning Centre, Ramanujan College, University of Delhi.
2. “*Faculty Induction Programme*” July19- August 17, 2021, Teaching Learning Centre, Ramanujan College, University of Delhi.
3. “*Induction Training Programme*” May 15-May 27, 2017, SCERT Solan (HP).
4. “*ICTP Materials Simulations Theory And Numerics Summer School*”, June 30 - July 12, 2014, Indian Institute of Science Education and Research, Pune (India).
5. “*Workshop on Parallel Computing using HPCC*”, March 2-3, 2012, Punjab University Chandigarh, Chandigarh (India).
6. “*Seminar Cum Work Shop on First Principle and other Simulation Methods in Condensed Matter Physics*”, March 22-29, 2010, Himachal Pradesh University, Shimla (India).

(Brij Mohan)