

Table of Contents

Research Articles

- [Insight of precursor concentration, particle size and band gap of zirconia nanoparticles synthesized by co-precipitation method](#)
Arun Bhujel, Bibek Sapkota, Ram Lochan Aryal, Bhoj Raj Poudel, Sitaram Bhattarai, Surendra K. Gautam
1-9
- [Fabrication of open type carbonizer for the preparation of activated carbon from rice husk](#)
A Rajbhandari (Nyachhyon), A Kumari Dhama
10-18
- [Surface modification of polyamide by 50 Hz dielectric barrier discharge \(DBD\) produced in air at atmospheric pressure](#)
Rajesh Prakash Guragain, Hom Bahadur Baniya, Santosh Dhungana, Bishnu Prasad Pandey, Ujjwal Man Joshi, Deepak Prasad Subedi
19-25
- [Spatial orientations of angular momentum vectors of galaxies in Supercluster S \[173+014+0082\]](#) Astrophysics
Janak Ratna Malla, Walter Saurer, B Aryal
26-32
- [Phonon dynamics of Zr₆₇Ni₃₃ AND Fe₈₀B₂₀ binary glassy alloys](#) PHONON DYNAMICS
Aditya M Vora, Alkesh L Gandhi
33-47
- [Simulated spectra \(IR and Raman\), NLO, AIM and molecular docking of carisoprodol from DFT approach](#) Physics
Manoj Kumar Chaudhary, Tarun Chaudhary, Bhawani Datt Joshi
48-57
- [Effect of electron temperature in a magnetized plasma sheath using kinetic trajectory simulation](#)
R Chalise, S K Pandit, G Thakur, R Khanal
58-66
- [Molecular dynamics study of structural properties of \$\gamma\$ -aminobutyric acid \(GABA\)](#)
Shyam P Khanal, Rajendra P Koirala, Esha Mishra, Narayan Prasad Adhikari
67-74
- [Modeling and parameter analysis of deflection of a beam](#)
Puskar Raj Pokhrel, Bhabani Lamsal
75-82
- [Facile methods of preparing pure hydroxyapatite nanoparticles in ordinary laboratories](#)
Gokarna Pandey, Kedar Nath Dhakal, Ajaya Kumar Singh, Suresh Kumar Dhungel, Rameshwar Adhikari
96-103
- [Study of tunneling and oscillation in a GaAs/ \[Al\] \(0.3\) \[Ga\] \(0.7\) As superlattice: using transfer matrix method](#)
S Shrestha, N Bhusal, S. Byahut, C. K. Sarkar
104-112

- [A spectroscopic study of the low redshift dwarf galaxy SDSS J134326.99+431118.7 to calculate star formation rate](#)
Daya Nidhi Chhatkuli, Sanjaya Paudel, Binil Aryal
113-120
- [Diffusion of oxytocin in water: a molecular dynamics study](#)
Khimananda Acharya, Rajendra Prasad Koirala, Nurapati Pantha
121-130
- [Analysis of Aerosol Optical Depth and Angstrom Exponents over an AERONET site at Pokhara, Nepal](#)
Jeevan Regmi, Khem N Poudyal, Amod Pokhrel, Madhu Gyawali, Anthony Barinelli, Rudra Aryal
131-140
- [Structural analysis of Cu substituted Ni/Zn in Ni-Zn Ferrite](#)
Deependra Parajuli, K Samatha
141-146
- [Modulation frequency and velocity variation of ions in a magnetized plasma sheath for different obliqueness of the field](#)
Bhesha Raj Adhikari, Hari Prasad Lamichhane, Raju Khanal
147-152
- [Thermal properties of normal and sickled hemoglobin protein](#)
Jhulan Powrel, Narayan P Adhikari
153-161
- [Investigation on thermo-physical properties of liquid In-Tl alloy](#)
I B Bhandari, N Panthi, I koirala
179-187
- [Prediction of daily global solar radiation using different empirical models on the basis of meteorological parameters at Trans Himalaya Region, Nepal](#)
Usha Joshi, I B Karki, N P Chapagain, K N Poudyal
188-198
- [Study of aerosol optical properties at different tourist places of Nepal](#)
Rejeena Jha, Binod Adhikari, Dharmendra Singh
199-212
- [Thermodynamic, structural, surface and transport properties of Au-Ni liquid alloy at 1150 K](#)
S K Yadav, N Chaudhary, D Adhikari
236-244
- [Empirical model for estimation of global solar radiation at lowland region Biratnagar using satellite data](#)
Ganesh Kumar Shrestha, Binod Pandey, Usha Joshi, Khem N. Poudyal
245-252

Review Articles

- [An overview on the non-destructive in-depth surface analysis of corrosion-resistant films: A case study of W-xCr deposits in 12 M HCl solution](#)
Jagadish Bhattarai
83-95
- [Schiff base metal complex as a potential therapeutic drug in medical science: A critical review](#)
Narendra Kumar Chaudhary, Biswash Guragain, Siyanand Kumar Chaudhary, Parashuram Mishra
162-178

- **Pyrolyzed human hair: a review on synthesis, characterization and applications**
Tika Ram Bhandari, Bidit Lamsal, Rameshwar Adhikari
213-221
- **Degradation of fundamental polymers/plastics used in daily life: a review**
Netra Lal Bhandari, Ganesh Bhandari, Sunita Bista, Basant Pokhrel, Kabita Bist, Kedar Nath Dhakal
222-235