
List of publications

- [1] Electron interactions with analogous of DNA/RNA nucleobases: 3-hydroxytetrahydrofuran and α -Tetrahydrofurfuryl alcohol
Dhaval Chauhan, Chetan Limbachiya
Radiation Physics and Chemistry, **207** (2023) 110802 (Impact factor: 2.9)
- [2] Theoretical investigation of electron interaction processes for furfural (C₅H₄O₂) and p-benzoquinone (C₆H₄O₂)
Dhaval Chauhan, Smruti Parikh, Nirav Thakkar, Chetan Limbachiya
Molecular Physics, **122** (2024) e2314706 (Impact factor: 1.937)
- [3] Double differential distributions of e-emission in ionization of N₂ by 3, 4 and 5 keV electron impact
Madhusree Roy Chowdhury, **Dhaval Chauhan**, Chetan G Limbachiya, Karoly Tokesi, Christophe Champion, Philippe F Weck and Lokesh C Tribedi
Journal of Physics B: Atomic, Molecular and Optical Physics, **53** (2020) 235201.
(Impact factor: 1.6)
- [4] Scattering of Electrons with aqueous Biomaterials
Smruti Parikh, **Dhaval Chauhan**, Nirav Thakkar, Chetan Limbachiya
Radiation Physics and Chemistry, **214** (2024) 111248 (Impact factor: 2.9)
- [5] Electron driven processes for Perfluoronitriles
Nirav Thakkar, **Dhaval Chauhan**, Smruti Parikh, Chetan Limbachiya
European Physical Journal D **78** (2024) 62, (Impact factor: 1.8)
- [6] Total cross-sections for Adenine in aqua phase by electron collision
Dhaval Chauhan, Smruti Parikh, Chetan Limbachiya
Proceedings of International Conference on Recent Advances in (Applied) Sciences & Engineering, RRRNA, GoI, **vol 3**, (2023) 388–394.

[7] Correlation study of electron scattering total cross-sections, impact energy and target parameters

Smruti Parikh, **Dhaval Chauhan**, Chetan Limbachiya

Proceedings of International Conference on Recent Advances in (Applied) Sciences & Engineering, RRRNA, GoI, **vol 3**, (2023) 357–361.

List of papers presented in the Conferences/ Seminar/ Workshop

- [1] Investigation of Electron Interactions with Furfural ($C_5H_4O_2$)
Dhaval Chauhan, Chetan Limbachiya
AISAMP-13th (Asian International Seminar on Atomic and Molecular Physics), 3 to 8 December 2018, IIT Bombay and TIFR-Mumbai.
- [2] Study of Electron interactions with Plasma Processing gases
Dhaval Chauhan, Rakesh Bhavsar, Yogesh Thakar, Chetan Limbachiya
22nd National Conference on Atomic and Molecular Physics (22nd NCAMP 2019), 25th to 28th March 2019, IIT Kanpur.
- [3] Cross-sectional Study of electron interaction with Bio-Molecules, Furfural ($C_5H_4O_2$), α -Tetrahydrofurfuryl Alcohol ($C_5H_{10}O_2$) and 3-HydroxytetrahydroFuran ($C_4H_8O_2$)
Dhaval Chauhan, Yogesh Thakar, Chetan Limbachiya
International conference on Atomic, Molecular, Optical and Nano Physics with Applications (CAMNP 2019), 18th – 20th December 2019, DTU, Delhi.
- [4] Electron interaction with p-Benzoquinone ($C_6H_4O_2$) and Naphthoquinone ($C_{10}H_6O_2$)
Dhaval Chauhan, Chetan Limbachiya
Topical conference (TC 2020) on Atomic and Molecular collisions for Plasma Applications, 3rd – 5th March 2020, IIT Roorkee, Uttarakhand.
- [5] Electron impact cross-sectional study for p-Benzoquinone ($C_6H_4O_2$)
Dhaval Chauhan, Chetan Limbachiya
One Day Seminar on Dynamics of Electron collision processes, Department of Electronics, V.P. & R.P.T.P. Science college, V.V. Nagar, 8 November 2020.
- [6] Cross-sectional study for electron collision with Rhodanine ($C_3H_3NOS_2$) and Cyanoacetic acid ($C_3H_3NO_2$)
Dhaval Chauhan, Chetan Limbachiya
XXII International Symposium on Electron-Molecule Collisions and Swarms (POSMOL) Conference, 29th - 30th July 2021, University of Norte Dame, USA (online mode).

[7] Total cross-sections for Adenine in aqua phase by electron collision

Dhaval Chauhan, Smruti Parikh, Chetan Limbachiya

International Conference on Recent Advances in Applied Science and Engineering (RAISE 2023), 12th -13th April, 2023

[8] Electron Scattering for p-Benzoquinone (C₆H₄O₂)

Dhaval Chauhan, Chetan Limbachiya

International conference on Fundamental Sciences and Quantum technologies using Atomic System, Physical Research Laboratory- Ahmedabad, 28th September,2020- 1st October,2020.