

## VINOD PRASAD

### Selected Publications:

- 1) Laser induced vibration-rotation excitation of hydroxyl ions  $\text{OH}^+$  : B. Sharma, V. Prasad and M. Mohan, **J. Chem. Phys.** **89**, 1322 (1988). ISSN: 0021-9606 E-ISSN: 1089-7690. I.F.-3.12
- 2) Vibrational energy transfer in a collinear HF-HF collisions involving low-lying states in the presence of an infrared laser beam: B. Sharma, V. Prasad and M. Mohan, **Pramana: J. of Phys.** **32**, 241 (1989). ISSN: 0304-4289 (print version) ISSN: 0973-7111 (electronic version). I.F. 0.720
- 3) Interaction of strong laser beam with He-atom using non-perturbative Floquet method: M. Mohan, V. Prasad and B. Sharma, **Pramana: J. of Phys.** **34**, 117 (1990).ISSN: 0304-4289 (printversion) ISSN: 0973-7111 (electronic version). I.F.0.720
- 4) Collisional energy transfer between atoms in the presence of laser field: M.Mohan and V. Prasad **Phys. Lett. A** **148**, 327 (1990). ISSN: 0375-9601. I.F. 1.706
- 5) Laser assisted vibrational excitation during ion-molecule collisions: V. Prasad and M. Mohan **J. Phys.** **B24**, L81 (1991). Print ISSN: 0022-3700 I.F. 1.916
- 6) Vibrational excitation of SH radical due to proton impact in the presence of laser field: V. Prasad and M. Mohan **Chem. Phys. Lett.** **187**, 161 (1991). ISSN: 0009-2614. I.F. 2.088
- 7) Electron impact excitation of CI XI from its ground state: M. Mohan, K.L. Baluja, V. Prasad and A. Hibbert **J. Phys. B** **24**, 3881 (1991). Print ISSN: 0022-3700 I.F. 1.916
- 8) Multi photon vibration-rotation excitation of SH,  $\text{SH}^-$  and  $\text{SH}^+$  ions: V. Prasad, B. Sharma and M. Mohan **Physica Scripta** **45**, 52 (1992). Online ISSN: 1402-4896 Print ISSN: 0031-8949, I.F. 1.296
- 9) Vibrational excitation of CO molecule in collision with He-atom in the presence of an IR laser beam. B. Sharma, V. Prasad and M. Mohan, **Physica Scripta** **45**, 340(1992). Online ISSN:1402-4896Print ISSN: 0031-8949, I.F. 1.296
- 10) Photoionization of the ground IS and twenty lowest excited states of Ne like Fe : M. Mohan, M.le Douneuf and V. Prasad **Pramana : J. of Physics** **39**, 305 (1993). ISSN: 0304-4289 (print version) ISSN: 0973-7111 (electronic version). I.F.0.720
- 11) Laser assisted electron impact rovibrational excitation in HF: B. Sharma, V. Prasad, K.L. Baluja and M. Mohan **Zeit. Fur Physik** **D27**, 65 (1994). ISSN: 0178-7683 (Print) 1431-5866 (Online).I.F. 1.398
- 12) Excitation of Atomic hydrogen due to proton impact in the presence of resonant laser field: V. Prasad, B. Sharma and M. Mohan **Physica Scripta** **52**, 372 (1995). Online ISSN:1402-4896Print ISSN: 0031-8949, I.F. 1.296
- 13) Laser assisted electron-alkali atom collisions: V. Prasad, R. Sharma and M. Mohan **Aus. J. Phys.** **49**, 1109 (1996). ISSN. 0004-9506. I.F. 0.52

- 14) Rovibrational excitation of diatomic molecule due to ion impact in the presence of an IR laser beam: V. Prasad, B. Sharma and M. Mohan **Zeit. Fur Physik D36**, 47(1996). ISSN: 0178-7683 (Print) 1431-5866 (Online). I.F. 1.398
- 15) Suppression of ionization due to intense laser pulse: M. Mohan, V. Prasad and R. Sharma **Phys. Rev. A54**, 2496 (1997). ISSN1050-2947 (print) 1094-1622 (online) I.F. 3.04
- 16) Photoionization of ground and excited states of neon like KXx: M. Mohan, V. Prasad, M. Le Dourneuf: **Physica Scripta 56**, 275 (1997). OnlineISSN:1402-4896Print ISSN: 0031-8949, I.F. 1.296
- 17) Rotational excitation of a heteronuclear diatomic molecule : V. Prasad, R. Sharma, P.C. Mathur and M. Mohan **Mol. Phys. 95**, 689 (1998). ISSN 0026-8976 (Print), 1362-3028 (Online). I.F. 1.642
- 18) Excitation dynamics of an atom due to heavy ion impact in the laser field: V. Prasad, R. Sharma and M. Mohan **Aus. J. Phys. 51**, 527 (1998). ISSN. 0004-9506. I.F.0.52
- 19) Ultrashort laser pulse suppression of dissociation in a molecule : M. Mohan and V. Prasad **Pramana: J. of Physics 53**, 863 (1999). ISSN: 0304-4289 (printversion) ISSN: 0973-7111 (electronic version). I.F.0.720
- 20) Two Photon process in an atom using pseudo state summation technique : R. Kundliya, V. Prasad and M. Mohan: **J. Phys. B 33**, 5263 (2000). Print ISSN: 0022-3700 I.F. 1.916
- 21) Collisional excitation of Rydberg atoms: K. Batra, V. Prasad and M. Mohan **European Physical Journal. D20**, 197 (2002). ISSN: 1434-6060 (print version) ISSN: 1434-6079 (electronic version) I.F. 1.420
- 22) Two-photon excitation using  $L^2$  technique, R Kundliya, V Prasad and M. Mohan, Indian J. Physics, 76B(4), 535-536 (2002)
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- 24) Selective excitation of vibrational modes of polyatomic molecule: Singhal N, Prasad V, Mohan M **Pramana : J.Phys. 62**, 883 (2004) ISSN: 0304-4289 (print version) ISSN: 0973-7111 (electronic version) I.F.0.720.
- 25) Effect of laser field ellipticity on the rovibrational excitations of a diatomic molecule: V. Prasad and K. Yamashita, **Chem.Phys. Lett. 426**, 8-12 (2006). ISSN: 0009-2614. I.F. 2.088
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- 27) Intersubband transitions in a finite quantum well: M. Gudwani, V. Prasad, P.K. Jha and M. Mohan, **International Journal of Nanoscience 7**, 215 (2008). Print ISSN: 0219-581X Online ISSN: 1793-5350

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- 29) Dynamics of a particle in a box in time varying potential due to chirped laser pulse: B. Dahiya and V. Prasad **Journal of Modern Physics**, **1**, 372-378(2010)ISSN Print: 2153-1196ISSN Online: 2153-120X I.F. 0.33
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- 35) Pulse shape effect of delayed pulse on Non-adiabatic rotational excitation : U. Arya, B. Dahiya and V. Prasad **Spectrochimica acta A** **95**, 491(2012) ISSN: 1386- 1425. I.F.2.00.
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