

BIBLIOGRAPHY (1966–2019) OF ACAD. RATKO K. JANEV

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E. Invited Talks at International Conferences

1. Modern methods in the theory of heavy particle collisions. IV SPIG, Herceg-Novci, 1968 (published, see C. 1)
2. Inelastic processes in slow collisions of highly excited atoms with ground state atoms. VII All-Union Conf. Electron. Atom. Collisions, Petrozavodsk, USSR, 1978 (unpublished)
3. Atomic and molecular processes involving ionic-covalent nonadiabatic coupling. IX SPIG, Dubrovnik, 1978 (published, see C. 3)
4. Charge exchange in slow ion-atom collisions. Nordic Summer School on Atomic Collision Processes, Sandbjerg Manor, Denmark, August 1980 (unpublished)
5. Charge exchange processes in atom-multicharged ion collisions. X SPIG, Dubrovnik, 1980 (published, see C. 4) (with T.P. Grozdanov)
6. Excited states created in charge transfer collisions between atoms and highly charged ions. Symposium on Production and Physics of Highly Charged Ions, Stockholm, 1982 (published, see C. 8)
7. A critical review of theoretical cross section data for charge exchange in collisions of hydrogen atoms with highly charged ions. IAEA RCM on "Atomic Data for Fusion Plasma Diagnostics", Vienna, 1982 (with B.H. Bransden) (published, C.6)
8. Charge transfer processes in fusion plasmas. RAL/JET workshop on Atomic Physics of Fusion Plasmas, Abingdon, 1984 (unpublished)
9. Atomic physics aspects of particle transport in fusion plasmas. XII SPIG, Sibenik, 1984 (published, see B. 1) (with D.E. Post)
10. Influence of excited states on neutral beam heating on controlled fusion plasma experiments. 8th Conf. Application of Accelerators in Research and Industry, Denton, TX 1984 (unpublished) (with D. Post, C. Boley and R. Wieland)
11. Theory of charge-exchange and ionization in ion-atom (ion) collisions. 2nd Intern. Symposium on Electron-Ion and Ion-Ion Collisions, Han sur Less, Belgium, 1985); (published, see

B. 2)

12. Collision processes involving excited species in fusion edge plasmas. IAEA Specialists' Meeting on Atomic and Molecular Data for Plasma Edge Studies, Vienna, 8-10 July 1987 (unpublished)

13. Atomic and molecular processes in tokamak edge plasmas. IX ESCAMPIG, Lisbon, August 1988 (unpublished; Abstract in: ECA-Series, Vol.12-H,P.36, 1988)

14. Atomic collisions for fusion: A review. IV International conference on the physics of multiply charged ions Grenoble, September 1988 (published, see C. 13)

15. Dynamic processes involving quasi-stationary states. International conference on spectroscopy and collisions of few-electron ions Bucharest, September 1988 (with P.S. Krstic, published, see B. 3)

16. Energetic neutral beam penetration in fusion reactor plasmas. All-Union Seminar on "Toroidal Systems in Controlled Fusion", Dubna, USSR, February 20-24 (1989) (unpublished)

17. Atomic physics database for neutral beam stopping cross sections. ITER Workshop on "Current Drive and Heating Physics", Garching, June 12-16 (1989) (unpublished)

18. Atomic processes in fusion plasmas. XIX Int. Conf. Phenomena Ioniz. Gases, Belgrade, July 10-14, 1989, (published, see C. 14)

19. Atomic and molecular data for controlled thermonuclear fusion. Belgian Physical Society Meeting, Mons, Belgium, May 26-27, 1994, (unpublished)

20. Atomic and molecular processes in fusion plasmas. Int. Symposium on Atomic and Molecular Processes in fusion plasmas. Nagoya, NIFS, Sept. 17-19, 1996, (published; see C.15)

21. Hidden crossings approach to inner-shell ion-atom collision processes. 6th Workshop on Fast Ion-Atom Collisions, Debrecen (Hungary), Sept. 4-6, 1996, (published, see C.16)

22. Application of hidden crossing theory to positron-hydrogen atom collisions. (with E.A. Solov'ev), XX Internat. Conf. Physics of Electronic and Atomic Collisions, Vienna (Austria), July 23-29, 1999, (published, see C. 17)

23. Atomic and molecular processes in SOL / divertor plasmas. 6th Internat. Workshop on Plasma Edge Theory in Fusion Devices, Oxford, UK, September 15-16, 1997, (published, see C. 18)

24. International coordination of atomic and molecular data efforts. 1st ICAMDATA, Gaithersburg, NIST, Sept. 29 - Oct. 2, 1997, (published, see C. 19)

25. Atomic and molecular databases for fusion plasma research. Internat. Workshop on Collisional and Radiative Spectroscopy in Laboratory and Space Research, Moscow, October 12-14, 1998, (unpublished)

26. Role of dissociative recombination and related molecular processes in fusion edge plasmas. 4th Internat. Conf. on Dissociative Recombination, Näslingen, Sweden, June 16-20, 1999, (published, see C. 20).

27. Molecular processes in fusion edge plasmas. Internat. Seminar on Atomic Processes in Plasmas, Toki, Japan, July 29-30, 1999, (published, see C.21)

28. Atomic and molecular processes for MAR: Status and prospects. Internat. Workshop on Molecule Assisted Plasma Recombination (MAR), Nagoya Univ., Nagoya, Japan; November 8, 1999, (unpublished)

29. Alternative mechanisms for molecule assisted recombination of divertor plasmas. Internat. Workshop on Atomic and Molecular Processes in Divertor Plasmas, Oak Ridge National Laboratory, Oak Ridge, USA, Oct.12-13, 2000, (published; D.176)

30. Electron-molecule collisions in fusion divertor plasmas. Internat. Symp. Electron-Molecule Collisions and Swarms, EMS-01, Lincoln, NE, USA; July 14-16, 2001, (published; C. 22)

31. Cross section data for hydrogen plasma applications. (with R.Celiberto) 3rd ICAMDATA, Gatlinburg, USA, April 24-27, 2002, (published, C.23)

32. Collision processes of atomic and molecular hydrogen in fusion plasmas. IAEA Techn. Meeting on “Atomic and Plasma-Material Interaction Data for Fusion Science and Technology”, Juelich, Germany, Oct. 28-31, 2002, (published, B11)
33. The role of atomic and molecular processes in magnetic fusion plasmas. (with D.Reiter) 4th ICAMDATA, Toki, Japan, Nov. 28 – Dec.2, 2004, (published, C.24).
34. Molecular processes in fusion edge plasmas. Ann. Meeting of Japan Society of Plasma Science and Fusion Research, Tsukuba, Japan, Nov.28 – 30, 2006 (unpublished).
35. Debye plasma effects on atomic structure and dynamics (with J.G.Wang). 6th ICAMDATA, Beijing, China, Oct. 28 – 31 (2008) (published, C.25)
36. Resonant vibrational excitation of rovibrationally excited H₂ and D₂ by electron impact. (with R.Celiberto, V.Laporta, J.M.Wadehra) 28th Summer School & Internat. Symp. on the Physics of Ionized Gases - SPIG 2016, Belgrade, Aug 29 - Sep 2, 2016 (unpublished; Abstract in: Contributed Papers & Abstracts of Invited Lectures, Topical Invited Lectures, Progress Reports and Workshop Lectures, SPIG 2016, Eds D. Marić et al., Belgrade, Faculty of Physics, 2016. P. 24)
37. Oscillator strengths of hydrogen-like ions in quantum plasmas. (with Y.Y. Qi, J.G. Wang) 28th Summer School & Internat. Symp. on the Physics of Ionized Gases - SPIG 2016, Belgrade, Aug 29 - Sep 2, 2016 (unpublished; Abstract in: Contributed Papers & Abstracts of Invited Lectures, Topical Invited Lectures, Progress Reports and Workshop Lectures, SPIG 2016, Eds D. Marić et al., Belgrade, Faculty of Physics, 2016. P. 59)
38. Polarization of Lyman- α radiation from H⁺ + H collisions in Debye plasmas. (with D. Jakimovski) 28th Summer School & Internat. Symp. on the Physics of Ionized Gases - SPIG 2016, Belgrade, Aug 29 - Sep 2, 2016 (unpublished; Abstract in: Contributed Papers & Abstracts of Invited Lectures, Topical Invited Lectures, Progress Reports and Workshop Lectures, SPIG 2016, Eds D. Marić et al., Belgrade, Faculty of Physics, 2016. P. 67)
39. Electron capture in H⁺ + H collisions with cosine-Debye-Hückel screened interaction. (with D. Jakimovski) 28th Summer School & Internat. Symp. on the Physics of Ionized Gases - SPIG 2016, Belgrade, Aug 29 - Sep 2, 2016 (unpublished; Abstract in: Contributed Papers & Abstracts of Invited Lectures, Topical Invited Lectures, Progress Reports and Workshop Lectures, SPIG 2016, Eds D. Marić et al., Belgrade, Faculty of Physics, 2016. P. 71)
40. Spin-resolved electron capture in Be³⁺ + Li collisions. (with L. Liu, C.H. Liu, J.G. Wang) 28th Summer School & Internat. Symp. on the Physics of Ionized Gases - SPIG 2016, Belgrade, Aug 29 - Sep 2, 2016 (unpublished; Abstract in: Contributed Papers & Abstracts of Invited Lectures, Topical Invited Lectures, Progress Reports and Workshop Lectures, SPIG 2016, Eds D. Marić et al., Belgrade, Faculty of Physics, 2016. P. 75)
41. Atomic and molecular processes in plasma-surface interactions and boundary plasma science. (with D. Reiter) International Conference on Plasma-Surface Interactions, Princeton, USA, June 18–22, 2018.
42. Electron capture and excitation in proton collisions with Li⁺ and Sn. And: Electron capture and excitation in H⁺ collisions with Li⁺ and Sn (PPT, 31 slds.). (with D. Jakimovski) 1st Research Coordination Meeting of the CRP on Atomic Data for Vapour Shielding in Fusion Devices, (org. IAEA), Vienna, Austria, IAEA Headquarters, Room C0229, 13–15 March 2019.

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