

А. Пълен списък на публикациите на на гл. ас. д-р Цв. Паунска

Общ брой публикации: **38 с общ импакт фактор (29.9).**

Публикации в реномирани списания съгласно изискванията на ФзФ на СУ: **18.1.**

Публикации в списания, в които кандидатът има водеща роля съгласно изискванията на ФзФ на СУ: **8.**

Публикации в материали на конференции, в които кандидатът има водеща роля: **8.**

В публикации **1-10, 18-22, 26-34** авторите са подредени по **азбучен ред.**

Публикации **1-4**, част от статия **5, 27** и **28** са включени в дисертацията ми за образователната и научна степен „доктор“.

Работи **10, 13** и **17** са доклади, представени на международни конференции и публикувани в реномирани списания с импакт фактор.

Списъкът с публикациите в списания, в които гл. ас. д-р Цветелина Паунска е водещ автор са добавени в края на този документ.

Статии в научни списания с импакт фактор

1. I. Koleva, Ts. Paunskа, H. Schlüter, A. Shivarova and Kh. Tarnev
“Surface-wave produced discharges in hydrogen: I. Self-consistent model of diffusion controlled discharges”
Plasma Sources Sci. Technol. (2003) **12**, 597–607.
2. Ts. Paunskа, H. Schlüter, A. Shivarova and Kh. Tarnev
“Surface-wave produced discharges in hydrogen: II. Modifications of the discharge structure with varying gas-discharge conditions”
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3. I. Koleva, K. Makasheva, Ts. Paunskа, H. Schlüter, A. Shivarova and Kh. Tarnev
“Guided-wave-produced plasmas”
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4. Ts. Paunskа, A. Shivarova and Kh. Tarnev
“Low-pressure discharges in surface-wave fields”
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5. Ts. Paunskа, H. Schlüter, A. Shivarova and Kh. Tarnev
“Low-pressure hydrogen discharges”
Phys. Plasmas (2006) **13**, 023504 (1-10).
6. Zh. Kiss’ovski, St. Kolev, S. Müller, Ts. Paunskа, A. Shivarova and Ts. Tsankov
“Expanding hydrogen plasmas: photodetachment-technique diagnostics.”
Plasma Phys. Control. Fusion (2009) **51**, 015007 (12 pp).
7. Ts. Paunskа, A. Shivarova and Kh. Tarnev
“A small radius hydrogen discharge: An effective source of volume produced negative ions”
J. Appl. Phys. (2010) **107**, 083301-1-8.
8. S. Iordanova, I. Koleva and T. Paunskа
"Hydrogen Degree of Dissociation in a Low Pressure Tandem Plasma Source"
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9. Ts. Paunskа, A. Shivarova, Kh. Tarnev, and Ts. Tsankov
"Negative hydrogen ion maintenace in small radius discharge: Two-dimensional modeling"
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10. St. Lishev, Ts. Paunska, A. Shivarova, and Kh. Tarnev
"Matrix of small-radius radio-frequency discharges as a volume-production based source of negative hydrogen ions"
Rev. Sci. Instrum. (2012) **83**, 02A702.
11. St. Lishev, A. Shivarova, Kh. Tarnev, S. Iordanova, I. Koleva, Ts. Paunska and D. Iordanov
"On the two modes of operation of planar-coil-driven inductive discharges in hydrogen"
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12. Kh. Tarnev, D. Todorov, B. Gilev, St. Lishev and Ts. Paunska
"On the spatial distribution of the electromagnetic field in small-radius planar coil inductive discharges"
Plasma Sources Sci. Technol. (2013) **22**, 055015 (9pp).
13. D. Todorov, Kh. Tarnev, Ts. Paunska, St. Lishev and Kh. Tarnev
"Spatial distribution of the plasma parameters in a radio-frequency driven negative ion source"
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14. D. Todorov, A. Shivarova, Ts. Paunska and Kh. Tarnev
"Low-pressure hydrogen discharge maintenance in a large-size plasma source with localized high radio-frequency power deposition"
Phys. Plasmas (2015) **22**, 033504.
15. A. Shivarova, St. Lishev, D. Todorov and Ts. Paunska
"Discharge regime of non-ambipolarity with a self-induced steady-state magnetic field in plasma sources with localized radio-frequency power deposition"
Phys. Plasmas (2015) **22**, 100705.
16. S. Iordanova, Ts. Paunska and A. Pashov
"Spectroscopic study of neutral species in a planar-coil inductive discharge in hydrogen"
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17. S. Iordanova and Ts. Paunska
"A collisional radiative model of hydrogen plasmas developed for diagnostic purposes of negative ion sources "
Rev. Sci. Instrum. (2016) **87**, 02B110.

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18. St. Kolev, Ts. Paunska, A. Shivarova and Kh. Tarnev
"Low-pressure inductive discharge"
J. Phys.: Conf. Series (2007) **63**, 012006, (1-10).
19. Ts. Paunska, A. Shivarova, Kh. Tarnev and Ts. Tsankov
"2D Model of a Tandem Plasma Source: The Role of the Transport Processes"
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20. Ts. Paunska, A. Shivarova, Kh. Tarnev and Ts. Tsankov
"Spatial Distribution of the Plasma Characteristics of a Tandem Plasma Source"
AIP Conf. Proc. (2009) **1097**, (99-108).
21. Ts. Paunska, A. Shivarova and Kh. Tarnev
"Low-pressure Small-Radius Hydrogen Discharge as a Volume-production Based Source of Negative Ions"
AIP Conf. Proc. (2010) **1390**, 165-174.
22. Ts. Paunska, A. Shivarova, Kh. Tarnev and Ts. Tsankov
"Spatial Distribution of the Plasma Characteristics of a Tandem Plasma Source"
J. Phys.: Conf. Series (2010) **223**, 012002.

23. Ts. Paunska, A. Shivarova, Kh. Tarnev and D. Todorov
 “Small-radius planar-coil driven inductive discharge as a source of negative hydrogen ions”
AIP Conf. Proc. (2013) **1515**, 99-106.
24. D. Todorov, Ts. Paunska, Kh. Tarnev and A. Shivarova
 “Neutral Particle Dynamics in a High-Power RF Source”
AIP Conf. Proc. (2015) **1655**, 050007.
25. Ts. Paunska, D. Todorov, Kh. Tarnev and A. Shivarova
 “Single Discharge of the Matrix Source of Negative Hydrogen Ions: Influence of the Neutral Particle Dynamics”
AIP Conf. Proc. (2015) **1655**, 020009.

Други публикации

Публикации в материали на конференции

26. V. Gagov, I. Koleva and Ts. Paunska
 “Influence of the self-absorption on the profiles of the ArI 696.53 nm spectral line”
 in: *Meetings in Physics at University of Sofia*, ed. A. Proykova (Heron Press, Sofia, 2002) **3**, p. 7–11.
27. Ts. Paunska, A. Shivarova and Kh. Tarnev
 “High-frequency hydrogen discharges sustained in the field of surface waves”
 in: *Meetings in Physics at University of Sofia*, ed. A. Proykova (Heron Press, Sofia, 2003) **4**, p. 76–80.
28. Ts. Paunska, A. Shivarova and Kh. Tarnev
 “Hydrogen discharges in transition to a free-fall regime”
 in: *Meetings in Physics at University of Sofia*, ed. A. Proykova (Heron Press, Sofia, 2004) **5**, p. 11–15.
29. St. Kolev, Ts. Paunska, A. Shivarova, Kh. Tarnev and Ts. Tsankov
 “Self-consistent model of an inductively driven plasma source of negative hydrogen ions”
36th EPS Conf. Proc. (2009) **33E**, O-5.064.
30. Ts. Paunska, A. Shivarova, Kh. Tarnev and Ts. Tsankov
 “2D model of an inductively coupled hydrogen discharge”
36th EPS Conf. Proc. (2009) **33E**, P-2.120.
31. S. Iordanova, E. Kostov and Ts. Paunska
 “Determination of the degree of dissociation of hydrogen discharges in a tandem type plasma source”
36th EPS Conf. Proc. (2009) **33E**, P-2.125.
32. Ts. Paunska, A. Shivarova, Kh. Tarnev and Ts. Tsankov
 “2D model of hydrogen discharges with account for the volume produced negative ions”
XIX ESCAMPIG (2010) P2.55.pdf
33. Ts. Paunska, A. Shivarova and Kh. Tarnev
 “Negative-ion yield in low-pressure rf discharges in hydrogen: effects of nonlocality”
30th Int. Conf. on Phenomena in Ionized Gases (Aug. 28th – Sept. 2nd 2011, Belfast, Northern Ireland, UK)
 in: *the Conference Proceedings*, topic number: C9; 024_C9_Paunska.pdf.
34. Ts. Paunska, A. Shivarova and Kh. Tarnev
 “Comments on the boundary conditions for metal dielectric walls in the fluid- plasma modelling”

- 30th *Int. Conf. on Phenomena in Ionized Gases* (Aug. 28th – Sept. 2nd 2011, Belfast, Northern Ireland, UK)
in: *the Conference Proceedings*, topic number: C9; 023_C9_Paunsk.pdf.
35. Ts. Paunsk, A. Shivarova and Kh. Tarnev
"2D self-consistent model of a hydrogen discharge inductively driven by a planar coil"
21th *ESCAMPIG* (July 10th – 14th 2012, Viana do Castelo, Portugal)
in: *the Conference Proceedings*, topic number: 9.
36. Kh. Tarnev, I. Koleva, St. Lishev, Ts. Paunsk, S. Iordanova and A. Shivarova
"Mode transition in a small-radius planar-coil inductively-driven discharge"
21th *ESCAMPIG* (July 10th – 14th 2012, Viana do Castelo, Portugal)
in: *the Conference Proceedings*, topic number: 5.
37. Д. Тодоров, Хр. Търнев, Цв. Паунска, Ст. Лишев и А. Шиварова
"Пространствено разпределение на плазмените параметри в многокамерен плазмен източник, основаващ се на индуктивни разряди във водород"
2nd *National Congress on Physical Sciences*, 25-26 September 2013, Sofia.
38. Ts. Paunsk, D. Todorov, Kh. Tarnev, and A. Shivarova,
"Influence of the neutral particle dynamics on the discharge structure"
22nd *Europhys. Conf. on Atomic and Molecular Physics of Ioniz. Gases* (ESCAMPIG, Greifswald, Germany, July 15-19, 2014), topic number: 6.

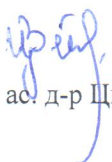
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1. I. Koleva, Ts. Paunsk, H. Schlüter, A. Shivarova and Kh. Tarnev
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8. Ts. Paunskа, D. Todorov, Kh. Tarnev and A. Shivarova
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Neutral Particle Dynamics“
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