

Списак објављених радова Александре Нина

РАДОВИ ОБЈАВЉЕНИ У НАУЧНИМ ЧАСОПИСИМА

МЕЂУНАРОДНОГ ЗНАЧАЈА (M20)

Радови у врхунским међународним часописима (M21=8):

1. Escape factors for thermionic cathodes in atomic gases in a wide electric field range, (M21)

M S Benilov, G V Naidis, Z Lj Petrovic, M Radmilovic-Radjenovic and A Stojkovic
J. Phys. D: Appl. Phys. 39 (2006), 2959–2963. <http://iopscience.iop.org/0022-3727/39/14/014/>

2. Monte Carlo simulation of the back-diffusion of electrons in nitrogen,

M. Radmilović-Radjenović, A. Nina, Ž. Nikitović
Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms, Volume 267, Issue 2 (2009), 302–304, 10.1016/j.nimb.2008.10.037

3. Altitude distribution of electron concentration in ionospheric D-region in presence of time-varying solar radiation flux,

A. Nina, V. Čadež, V. Srećković, D. Šulić
Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms, Vol. 279, (2012), 110-113, doi:[10.1016/j.nimb.2011.10.019](https://doi.org/10.1016/j.nimb.2011.10.019)

4. Effective electron recombination coefficient in ionospheric D-region during the relaxation regime after solar flare from February 18, 2011,

A. Nina, V. Čadež, D. Šulić, V. Srećković, V. Žigman
Nuclear Instruments and Methods in Physics Research Section B: Beam Interactions with Materials and Atoms, Vol. 279, (2012), 106-109, doi:[10.1016/j.nimb.2011.10.026](https://doi.org/10.1016/j.nimb.2011.10.026)

5. Detection of acoustic-gravity waves in lower ionosphere by VLF radio waves,

A. Nina and V.M. Čadež
Geophysical Research Letters, Vol. 40, Issue 18, (2013), 4803-4807
<http://onlinelibrary.wiley.com/doi/10.1002/grl.50931/abstract>

Радови у међународним часописима (M23=3):

1. Neutralization of Ion Beams for Reduction of Charging Damage in Plasma Etching,

A. Stojković, M. Radmilović-Radjenović and Z. Lj. Petrović
Material Science Forum, Vol. 494, (2005), 297-302. <http://www.scientific.net/MSF.494.297>

2. Modeling of a Plasma Etcher for Charging Free Processing of Nanoscale Structures,

M. Radmilović-Radjenović, A. Stojković, A. Strinić, V. Stojanović, Ž. Nikitović, G.N. Malović and Z.Lj. Petrović
Materials Science Forum, Vol. 518, (2006), 57-62. <http://www.scientific.net/MSF.518.57>

3. Particle-in-cell Modelling of a Neutral Beam Source for Material Processing in Nanoscale Structures Fabrication,

M. Radmilović-Radjenović, Z.Lj. Petrović, Ž. Nikitović, A. Strinić, V. Stojanović, **A. Nina** and B. Radjenović

Materials Science Forum, Vol. 555, (2007), 47-52. <http://www.scientific.net/MSF.555.47>

4. The influence of solar spectral lines on electron concentration in terrestrial ionosphere,

A. Nina, V. Čadež, V. Srećković, D. Šulić

Baltic Astronomy, Vol. 20, (2011), 609-612.

5. Electron production by solar Ly- α line radiation in the ionospheric D-region,

Nina, A., and Čadež V.M. (2013),

Advances in Space Research, <http://dx.doi.org/10.1016/j.asr.2013.12.042>.

ЗБОРНИЦИ МЕЂУНАРОДНИХ НАУЧНИХ СКУПОВА (M30)

Предавања по позиву са међународног скупа штампана у изводу (M32=1.5)

1. Photo-ionization in the ionospheric d region induced by the solar Ly- α line emission

A. Nina and V.M. Čadež,

IX Serbian conference on spectral line shapes in astrophysics, May 13-17, 2013, Banja Koviljača, Serbia, Book of Abstracts, Eds. L. Č. Popović, M. S. Dimitrijević, Z. Simić and M. Stalevski, (2013), 42.

Саопштења са међународних скупова штампана у целини (M33=1)

1. Optimal Normal Velocities and Distances for the Ion Beam Neutralization at Solid Surface

A.M. Stojković, N.N. Nedeljković, Lj.D. Nedeljković and Z.Lj. Petrović

22nd Summer School and International Symposium on the Physics of Ionized Gases, August 23-27, 2004, National Park Tara, Serbia and Montenegro, Contributed papers, (2004) 235-238. 9

2. Escape factors for thermionic cathodes

M S Benilov, G V Naidis, Z Lj Petrovic, M Radmilovic-Radjenovic and A Stojkovic

XVI International Conference on Gas Discharges and their Applications, Xi'an (China), September 11-15, (2006), 781-784.

3. Numerical Simulations Of The Effect Of Localised Ionospheric Perturbations On Subionospheric VLF Propagation,

Šulić, D., **A. Nina**, and V. Srećković,

Publications de l'Observatoire Astronomique de Beograd, 89, Proceedings of 24th Summer school and international symposium on the physics of ionized gases, 23 August - 3 September 2010, Donji Milanovac, Serbia, Eds: Popović L. Č. and Kuraica M. M., (2010), 391-395.

4. Modal frequencies of ionospheric perturbations induced by solar x-flares,

Nina, A., and V. M. Čadež

Contributed papers and abstracts of invited lectures and progress reports of the 26th Summer school and international symposium on the physics of ionized gases, Eds Kuraica, M. and Mijatović Z., University of Novi Sad, Faculty of Sciences, Department of Physics, Novi Sad, (2012), 379-382.

5. Peculiarities of ionospheric response to solar eruptive events

V. Čadež and **A. Nina**

Publ. Astron. Obs. Belgrade No. 92, Proceedings of the International BELISSIMA conference, Edited by Srdjan Samurović, Branislav Vukotić and Miroslav Mićić, (2013), 157 – 160.

6. PERTURBATIONS OF THE TERRESTRIAL LOW IONOSPHERE CAUSED BY SOLAR FLARES

ALEKSANDRA NINA

Proceedings of the VIII Serbian-Bulgarian Astronomical Conference (VIII SBAC), Leskovac, Serbia, May 8-12, 2012, Editors: M. S. Dimitrijević and M. K. Tsvetkov, Publ. Astron. Soc. "Rudjer Bošković" No 12, 2013, 289-295.

Саопштења са међународних скупова штампана у изводу (M34=0.5)

1. Neutralization of ion beams for plasma etching

Z.Lj. Petrović, **A. Stojković**, M. Radmilović-Radenović and Z.M. Raspopović

Fifth General Conference of the Balkan Physical Union, august 25-29, 2003, Vrnjačka Banja, Serbia and Montenegro, Book of Abstracts, 213, (2003).

2. Modeling of ion neutralization for plasma etching

A. Stojković, M. Radmilović-Radenović and Z.Lj.Petrović

57th Gaseous electronics Conference, September 26-29, 2004, Bunratty, Ireland, Bulletin of the American Physical Society, Volume 49, (2004), No. 5 (36).

3. Neutralization of ions beams for plasma etching

A. Stojković, M. Radmilović-Radenović and Z. Lj. Petrović

The Sixth Yugoslav Materials Research Society Conference, September 13-17, 2004, Herceg Novi, Serbia and Montenegro, Book of Abstracts, (2004), 58.

4. Particle-in-cell modeling of a neutral beam source for material processing in nanoscale structures fabrication

M. Radmilović-Radenović, Z.Lj. Petrović, Z. Nikitović, A. Strinic, V. Stojanović, **A. Nina** and B. Radjenović

YUCOMAT 2006 Herceg Novi, September 4-8, 2006, Programme and the Book of Abstracts, (2006), 66.

5. The influence of the initial energy and the reflection coefficient on the back diffusion of electrons in nitrogen

M. Radmilović-Radenović, **A. Nina**, Z. Lj. Petrović

28th ICPIG, Eds: J. Schmidt, S. Pekarek, V. Prunker, July 15-20, Prague, Czech Republic, Book of abstracts, (2007), 48.

6. Gas Breakdown and Initiation of Discharges

Z.Lj. Petrović, M. Radmilović Radjenović, D. Marić, N. Škoro, A. Nina, N. Puač, S. Lazović, G. Malović

Second Workshop and Training School on Low Cost Applications of Plasma Technology in Industry and Environment, 10-15 November 2007,airo, Egypt, Book of Abstract

7. Monte Carlo calculations of the secondary electron emission induced by ions,

A. Nina, M. Radmilović-Radjenović, V. Stojanović and Z. Lj. Petrović,

4th Conference on elementary processes in atomic systems, June 18-20, 2008, Cluj-Napoca, Romania, Book of abstracts, (2008), 89.

8. Study of the Observed Amplitude and Phase Perturbations on VLF Signals From Lighting Induced Electron Precipitation and Reconstruction of D-region Electron Density Height Profile

Desanka Šulić, Vida Žigman, **Aleksandra Nina**

4th VERSIM workshop, September 13-17 2010, Prague, Czech Republic, Book of abstracts, (2010), 48.

9. Statistical analysis of D-region electron density during solar flares from vlf radio measurements, Šulić D., Nina A., Srećković V., Čadež V., XVI National Conference of Astronomers of Serbia, Belgrade, 10-12 October 2011, Book of abstracts, (2011), 54.

10. Altitude distribution of electron concentration in the ionospheric D-region in presence of time-varying solar radiation flux,

A. Nina, V. Čadež, D. Šulić, V. Srećković, Book of Abstracts, 5th Conference on Elementary Processes in Atomic, Belgrade, Serbia, June 21 - 25, (2011), 60.

11. Effective electron recombination coefficient in the ionospheric D-region during the relaxation regime following a solar flare on February 18, 2011.

Nina, A., V. Čadež, D. Šulić, V. Srećković, V. Žigman,

Book of Abstracts, 5th Conference on Elementary Processes in Atomic, Belgrade, Serbia, June 21 - 25, (2011), 61.

12. VLF remote sensing of the lower ionospheric disturbances produced by solar flares and precipitation of energetic electrons,

D. M. Sulić, V. Žigman, **A. M. Nina** and V. A. Srećković, VIII *Serbian Conference on Spectral Line Shapes in Astrophysics*, 6-10 June 2011, Divčibare, Serbia, Book of abstracts, (2011), 62.

13. Possible detection of the GRBs and γ -ray echos by analyzing the ionospheric perturbations

A. Nina, L. Č. Popović, V. A. Srećković and S. Simić

IX Serbian conference on spectral line shapes in astrophysics, May 13-17, 2013, Banja Koviljača, Serbia, Book of Abstracts, Eds. L. Č. Popović, M. S. Dimitrijević, Z. Simić and M. Stalevski, (2013), 70.

14. Perturbations of the lower ionosphere due to the γ , X and UV stellar radiation

V. A. Srećković, **A. Nina**, D. Šulić and A. A. Mihajlov

IX SERBIAN CONFERENCE ON SPECTRAL LINE SHAPES IN ASTROPHYSICS May 13-17, 2013, Banja Koviljača, Serbia **Book of Abstracts**, Eds. L. Č. Popović, M. S. Dimitrijević, Z. Simić and M. Stalevski, (2013), 75.

15. Importance Of Very Low Frequency Radio Signal Data Registered By VLF-receiver System,

Aleksandra Nina, Vladimir M. Čadež and Vladimir Srečković

Book of abstracts, Regional workshop on atomic and molecular data Belgrade, Serbia, 14-16 June 2012, Edited by Milan S. Dimitrijević, Society of Astronomers of Serbia, Belgrade, (2013), 15.

16. VLF data acquisition and central database storing

Vladimir Srečković, Desanka Šulić, **Aleksandra Nina**, Anatolij Mihajlov, Ljubinko Ignjatović

Book of abstracts, Regional workshop on atomic and molecular data Belgrade, Serbia, 14-16 June 2012, Edited by Milan S. Dimitrijević, Society of Astronomers of Serbia, Belgrade, (2013), 20.

Часописи националног значаја (M50)

Радови у водећим часописима националног значаја (M51=2)

1. Ugaone zavisnosti koeficijenata neutralizacije za jone na površinama metala

Aleksandra Stojković, Nataša Nedeljković, Ljubiša Nedeljković i Zoran Lj. Petrović
Tehnika 1, (2005), 30-34.

2. Efekat povratne difuzije pri interakciji gasova sa metalnim katodama

Aleksandra Nina, Marija Radmilović-Radjenović i Zoran Lj. Petrović
Tehnika 1, (2008), 15-20.

Зборници са скупова националног значаја (M60)

Саопштење са скупа националног значаја штампано у целини (M63=0.5)

1. Festival nauke u Beogradu 2007. godine

A. Nina

XXVI *republički seminar o nastavi fizike*, 2-4 maj 2008, Zbornik predavanja, programa radionica, prezentacija i poster radova sa XXVI republičkog seminara o nastavi fizike, (2008), 215-216.

2. Dijagnostika perturbacija plazme niske jonosphere VLF radio talasima

A. Nina, V.M. Čadež, L. Č. Popović, V. A. Srečković, D. Jevremović i S. Simić,
Zbornik radova, XII Kongres fizičara Srbije, urednici: J. Labat, N. Cvetanović, I. Dojčinović,
Izdavač: Društvo fizičara Srbije, (2013), 388-392.

Саопштење са скупа националног значаја штампано у изводу (M64=0.2)

1. Efekat povratne difuzije pri interakciji gasova sa metalnim površinama

A. Nina, M. Radmilović-Radjenović i Z. Lj. Petrović

Šesta konferencija mladih istraživača, Nauka i inženjerstvo novih materijala, 24.-26. decembar 2007, Beograd, Program i zbornik apstrakata, (2007), 16.

Магистарске и докторске тезе (M70)

Одбрањен докторски рад (M71=6)

**1. Dijagnostika plazme jonosferske D oblasti elektromagnetnim VLF talasima,
Aleksandra Nina**

Fizički fakultet Univerziteta u Beogradu, 2014.

Одбрањен магистарски рад (M72=3)

**1. Dinamika i neutralizacija naelektrisanih čestica u visokim poljima u blizini
elektroda u uređajima za proizvodnju integrisanih kola**

Aleksandra Stojković

Elektrotehnički fakultet Univerziteta u Beogradu, 2008.

$$M21 = 8 \times 5 = 40$$

$$M23 = 3 \times 5 = 15$$

$$M32 = 1.5 \times 1 = 1.5$$

$$M33 = 1 \times 6 = 6$$

$$M34 = 0.5 \times 16 = 8$$

$$M51 = 2 \times 2 = 4$$

$$M63 = 0.5 \times 2 = 0.5$$

$$M64 = 0.2 \times 1 = 0.2$$

$$M71 = 1 \times 6 = 6$$

$$M72 = 1 \times 3 = 3$$

$$\text{Ukupno: } 40 + 15 + 1.5 + 7 + 8 + 4 + 0.5 + 0.2 + 6 + 3 = 84.7$$

$$M10+M20+M31+M32+M33+M42 = 40 + 15 + 1.2 + 7 = 62.5$$

$$M11+M12+M21+M22+M23+M24 = 40 + 15 = 55$$

Табела са квантитативним условима:

Диференцијални услов- За избор у звање Научни сарадник	потребно је да кандидат има најмање XX поена, који треба да припадају следећим категоријама:		
		Неопходно XX=	Остварено
Научни сарадник	Укупно	16	84.7
	$M10+M20+M31+M32+M33$ $M41+M42 \geq$	10	62.5
	$M11+M12+M21+M22$ $M23+M24 \geq$	5	55
Виши научни сарадник	Укупно	48	
	$M10+M20+M31+M32+M33$ $M41+M42+M51 \geq$	40	
	$M11+M12+M21+M22$ $M23+M24+M31+M32+M41+M42 \geq$	28	
Научни саветник	Укупно	65	
	$M10+M20+M31+M32+M33$ $M41+M42+M51 \geq$	50	
	$M11+M12+M21+M22$ $M23+M24+M31+M32 \geq$	35	

