

Табела. 9.6. Компетентност наставника

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|-----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|------------------------------------------------|
| Име и презиме | | Зоран Љ Петровић | | |
| Звање | | Научни саветник, професор | | |
| Ужа научна област | | Физика јонизованих гасова, Атомска и молекулска физика, Плазма технологије, Физика неравнотежне плазме | | |
| Академска каријера | Година | Институција | Област | Ужа научна односно уметничка област |
| Избор у звање | 1.3.1994. | Институт за физику-научни саветник | Физика плазме | Физика јонизованих гасова |
| Докторат | 10.09.1985 | Аустралијски национални универзитет Камбера | Атомска и молекулска физика | Атомска и молекулска физика јонизованих гасова |
| Магистратура | 1980 | Електротехнички факултет, Универзитет у Београду | Атомска и молекулска физика | Атомска и молекулска физика јонизованих гасова |
| Мастер диплома | | | | |
| Диплома | 22.02.1978 | Електротехнички факултет, Универзитет у Београду | Техничка физика | физика плазме |
| Списак предмета које наставник држи на докторским студијама | | | | |
| Р.Б. | Ознака | Назив предмета | | |
| 1 | ФИЗДФЈП5 | Сударни и транспортни процеси у јонизованим гасовима | | |
| 2 | ФИЗДФПФ10 | Примена плазме у биологији и медицини | | |
| 3 | ФИЗДФЈП9 | Физичке основе савремених примена плазме | | |
| Најзначајнији радови у складу са захтевима допунских услова стандарда за дато поље (минимално 10 не више од 20) | | | | |
| 1 | Plasma Electronics: Applications in Microelectronic Device Fabrication, T.Makabe Z.Petrović , 2nd edition | | Taylor and Francis, CRC Press, New York (2015). M11 | |
| 2 | Physically based fluid modeling of collisionally dominated low-temperature plasmas, R. E. Robson, R. D. White and Z. Lj. Petrović , | | Rev.Modern Phys. 77 (4) (2005) 1303-1320 M21a | |
| 3 | Cold cathode discharges and breakdown in argon: surface and gas phase production of secondary electrons, A.V.Phelps and Z.Lj.Petrović , | | Plasma Sources Sci. Technol. 8 (1999) R21-44 M21 | |
| 4 | Measurement and interpretation of swarm parameters and their application in plasma modelling, Z Lj Petrović , S Dujko, D Marić, G Malović, Ž Nikitović, O Šašić, J Jovanović, V Stojanović and M Radmilović-Radenović, | | J. Phys. D: Appl. Phys. 42 (2009) 194002 (33pp) M21 | |
| 5 | The 2017 Plasma Roadmap: Low temperature plasma science and technology I Adamovich, ... Z Lj Petrovic , ... A Vardelle | | J. Phys. D: Appl. Phys. 50 (2017) 323001 (46pp) M21 | |
| 6 | Plasma–liquid interactions: a review and roadmap P J Bruggeman, M J Kushner, ..., D Maric, ..., Z Lj Petrovic , ... and G Zvereva | | Plasma Sources Sci. Technol. 25 (2016) 053002 (59pp) M21a | |
| 7 | Momentum transfer theory of non-conservative particle transport in mixtures of gases: General equations and negative differential conductivity, S.B. Vrhovac and Z.Lj. Petrović | | Phys. Rev. E 53 (1996) 4012-4025 M21 | |

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| 8 | Plasma-Activated Medium Potentiates the Immunogenicity of Tumor Cell Lysates for Dendritic Cell-Based Cancer Vaccines Sergej Tomić, Anđelija Petrović, Nevena Puač, Nikola Škoro, Marina Bekić, Zoran Lj. Petrović and Miodrag Čolić | Cancers 13 (7) (2021) 1626 M21 |
| 9 | Long and short term effects of plasma treatment on meristematic plant cells N. Puač, S. Živković, N. Selaković, M. Milutinović, J. Boljević, G. Malović, and Z. Lj. Petrović | Applied Physics Letters 104 (2014) 214106 M21 |
| 10 | Non-equilibrium of charged particles in swarms and plasmas from binary collisions to plasma effects Z Lj Petrović , I Simonović, S Marjanović, D Bošnjaković, D Marić, G Malović and S Dujko | Plasma Phys. Control. Fusion 59 (2017) 014026 (9pp) M21 |
| 11 | Monte Carlo modeling and optimization of buffer gas positron traps Srđan Marjanović and Zoran Lj Petrović | Plasma Sources Sci. Technol. 26 (2017) 024003 (14pp) M21a |
| 12 | Destruction of chemical warfare surrogates using a portable atmospheric pressure plasma jet Nikola Škoro, Nevena Puač, Suzana Živković, Dijana Krstić-Milošević, Uroš Cvelbar, Gordana Malović and Zoran Lj. Petrović | The European Physical Journal D 72 (2018) 2 (8pp) M23 |
| 13 | Monte Carlo modeling of radio-frequency breakdown in argon, Marija Puač, Dragana Marić, Marija Radmilović-Radjenović, Milovan Šuvakov and Zoran Lj Petrović | Plasma Sources Science and Technology, 27 (2018) 075013 M21a |
| 14 | Functional separation of biasing and sustaining voltages in two frequency capacitively coupled plasma, T.Kitajima, Y.Takeo, Z.Lj.Petrović and T.Makabe, | Appl.Phys.Lett. 77 (2000) 489-491. M21 |
| 15 | A set of cross sections and transport coefficients for CF ₃ ⁺ ions in CF ₄ ; J V Jovanović V Stojanović Z M Raspopović J de Urquijo and Z Lj Petrović | 2019 Plasma Sources Sci. Technol.28 045006 M21a |
| 16 | Excitation by and Surface Reflection of Fast Hydrogen Atoms in Low Pressure Hydrogen Discharges, Z.Lj.Petrović, B.M.Jelenković and A.V.Phelps, | Phys. Rev. Lett. 68 (1992) 325. M21a |
| Збирни подаци научне активност наставника | | |
| Укупан број цитата, без аутоцитата | | 4500 |
| Укупан број радова са SCI (или SSCI) листе | | 292 |
| Тренутно учешће на пројектима | | 2 3 |
| Усавршавања | | Keio University Japan; Ecole polytechnique, JILA Boulder CO USA, University of Ulster |
| Други подаци које сматрате релевантним редовни члан САНУ и АИНС, fellow and distinguished referee APS, награда Марко Јарић, награда Никола Тесла за технолошки допринос, 3 годишње награде Института за физику за научни рад и посебна награда за значајан допринос у науци, гостујући професор Кеио Универзитета Јапан, Професор физике плазме Универзитет Улстера, Велика Британија. | | |
| Максимална дужине не сме бити већа од 1 странице А4 | | |

Table. 9.6 Teachers' competences

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|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------------------------------|
| Name and family name | | Petrović Lj. Zoran | | |
| Title | | professor, research professor | | |
| Narrow scientific area | | Physics of ionized gases, Atomic and Molecular physics, Plasma applications, Physics of non-equilibrium plasmas | | |
| Academic career | Year | Institution | Area | Narrow scientific or art area |
| Election to the title | 1.3.1994 | Institute of physics-research professor | Plasma Physics | physics of ionized gases |
| PhD | 10.09.1985 | Australian National University Canberra | Atomic and molecular physics | Atomic and Molecular physics of ionized gases |
| Master degree | 1980. | Faculty of electrical engineering University of Belgrade | Atomic and molecular physics | Atomic and Molecular physics of ionized gases |
| Master diploma | | | | |
| Diploma | 22.2.1978. | Faculty of electrical engineering University of Belgrade | Applied physics | physics of plasmas |
| List of subjects the teacher is lecturing in doctoral studies | | | | |
| No. | Mark | Subject name | | |
| 1 | ФИЗДФП5 | Collisions and transport in ionized gases | | |
| 2 | ФИЗДФПФ10 | Application of plasmas in biology and medicine | | |
| 3 | ФИЗДФП9 | Physical foundation of plasma applications | | |
| The most significant papers, in compliance with the requirements of the additional requirements of the standard for the given field (minimum 10, not more than 20) | | | | |
| | | | | R |
| 1 | | Plasma Electronics: Applications in Microelectronic Device Fabrication, T.Makabe Z.Petrović , 2nd edition | | Taylor and Francis, CRC Press, New York (2015). M11 |
| 2 | | Physically based fluid modeling of collisionally dominated low-temperature plasmas, R. E. Robson, R. D. White and Z. Lj. Petrović , | | Rev.Modern Phys. 77 (4) (2005) 1303-1320 M21a |
| 3 | | Cold cathode discharges and breakdown in argon: | | Plasma Sources Sci. |

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|--------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| | surface and gas phase production of secondary electrons, A.V.Phelps and Z.Lj.Petrović , | Technol. 8 (1999) R21-44 M21 |
| 4 | Measurement and interpretation of swarm parameters and their application in plasma modelling, Z Lj Petrović , S Dujko, D Marić, G Malović, Z Nikitović, O Šašić, J Jovanović, V Stojanović and M Radmilović-Radenović, | J. Phys. D: Appl. Phys. 42 (2009) 194002 (33pp) M21 |
| 5 | The 2017 Plasma Roadmap: Low temperature plasma science and technology I Adamovich, ... Z Lj Petrovic , ... A Vardelle | J. Phys. D: Appl. Phys. 50 (2017) 323001 (46pp) M21 |
| 6 | Plasma–liquid interactions: a review and roadmap P J Bruggeman, M J Kushner, ..., D Maric, ..., Z Lj Petrovic , ... and G Zvereva | Plasma Sources Sci. Technol. 25 (2016) 053002 (59pp) M21a |
| 7 | Momentum transfer theory of non-conservative particle transport in mixtures of gases: General equations and negative differential conductivity, S.B. Vrhovac and Z.Lj. Petrović | Phys. Rev. E 53 (1996) 4012-4025 M21 |
| 8 | Plasma-Activated Medium Potentiates the Immunogenicity of Tumor Cell Lysates for Dendritic Cell-Based Cancer Vaccines Sergej Tomić, Anđelija Petrović, Nevena Puač, Nikola Škoro, Marina Bekić, Zoran Lj. Petrović and Miodrag Čolić | Cancers 13 (7) (2021) 1626 M21 |
| 9 | Long and short term effects of plasma treatment on meristematic plant cells N. Puač, S. Živković, N. Selaković, M. Milutinović, J. Boljević, G. Malović, and Z. Lj. Petrović | Applied Physics Letters 104 (2014) 214106 M21 |
| 10 | Non-equilibrium of charged particles in swarms and plasmas from binary collisions to plasma effects Z Lj Petrović , I Simonović, S Marjanović, D Bošnjaković, D Marić, G Malović and S Dujko | Plasma Phys. Control. Fusion 59 (2017) 014026 (9pp) M21 |
| 11 | Monte Carlo modeling and optimization of buffer gas positron traps Srđan Marjanović and Zoran Lj Petrović | Plasma Sources Sci. Technol. 26 (2017) 024003 (14pp) M21a |
| 12 | Destruction of chemical warfare surrogates using a portable atmospheric pressure plasma jet Nikola Škoro, Nevena Puač, Suzana Živković, Dijana Krstić-Milošević, Uroš Cvelbar, Gordana Malović and Zoran Lj. Petrović | The European Physical Journal D 72 (2018) 2 (8pp) M23 |
| 13 | Monte Carlo modeling of radio-frequency breakdown in argon, Marija Puač, Dragana Marić, Marija Radmilović-Radjenović, Milovan Šuvakov and Zoran Lj Petrović | Plasma Sources Science and Technology, 27 (2018) 075013 M21a |
| 14 | Functional separation of biasing and sustaining voltages in two frequency capacitively coupled plasma, T.Kitajima, Y.Takeo, Z.Lj.Petrović and T.Makabe, | Appl.Phys.Lett. 77 (2000) 489-491. M21 |
| 15 | A set of cross sections and transport coefficients for CF ₃ ⁺ ions in CF ₄ ; J V Jovanović V Stojanović Z M Raspopović J de Urquijo and Z Lj Petrović | 2019 Plasma Sources Sci. Technol. 28 045006 M21a |
| 16 | Excitation by and Surface Reflection of Fast Hydrogen Atoms in Low Pressure Hydrogen Discharges, Z.Lj.Petrović , B.M.Jelenković and A.V.Phelps, | Phys. Rev. Lett. 68 (1992) 325. M21a |
| Cumulative data of scientific activity of the teacher | | |
| Total number of citations, without self citations | | 4500 |
| Total number of papers on the SCI (or SSCI) list | | 292 |

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| Current participation in projects | 2 | 2 |
| specialization | Keio University Japan; Ecole polytechnique, JILA Boulder CO USA, University of Ulster | |
| <p>Other information you consider to be important</p> <p>Fellow of Serbian Academy of Sciences and Arts and Engineering Sciences Academy of Serbia, fellow and distinguished referee APS, Marko Jarić award and Nikola Tesla award for technological achievement, 3 times annual award and a special award for a major contribution to science, of the Institute of Physics University of Belgrade, visiting professor Keio University Japan and professor of plasma physics Ulster University United Kingdom</p> | | |
| Maximum length may not be over 1 A4 page | | |