

**Табела. 9.6. Компетентност наставника**

|   |   |  |  |                                     |
|---|---|--|--|-------------------------------------|
| <b>Име и презиме</b>  |   | Саша Дујко   |  |                                     |
| <b>Звање</b>  |   | Научни саветник                                      |  |                                     |
| <b>Ужа научна област</b>  |   | Физика јонизованих гасова и плазме                   |  |                                     |
| <b>Академска каријера</b>   | Година  | Институција  | Област   | Ужа научна односно уметничка област |
| Избор у звање   | 2015  | Институт за физику Београд                           | Физика   | Физика јонизованих гасова и плазме  |
| Докторат  | 2009  | Џејмс Кук Универзитет Аустралија                     | Физика   | Кинетичка теорија плазме            |
| Магистратура  | 2004  | Физички факултет Универзитет у Београду              | Физика   | Физика јонизованих гасова и плазме  |
| Диплома   | 2001  | Физички факултет Универзитет у Београду              | Физика   | Физика јонизованих гасова и плазме  |
| <b>Списак предмета које наставник држи на докторским студијама</b>  |   |  |  |                                     |
| <b>Р.Б.</b>   | <b>Ознака</b>   | <b>Назив предмета</b>                                |  |                                     |
| 1,  | ФИЗДФП5   | Сударни и транспортни процеси у јонизованим гасовима |  |                                     |
| Најзначајнији радови у складу са захтевима допунских услова стандарда за дато поље (минимално 10 не више од 20) |   |  |  |                                     |
| 1.  | Monte Carlo simulation of resonance effects of electron transport in a spatially modulated electric field in Ar, N2 and their mixtures, A. Albert, D. Bošnjaković, S. Dujko and Z. Donko, J. Phys. D: Appl. Phys. <b>54</b> (2021) 135202                 |  |  | M21                                 |
| 2.  | Third-order transport coefficient tensor of electron swarms in noble gases, I. Simonović, D. Bošnjaković, Z.Lj. Petrović, R.D. White and S. Dujko, Eur. Phys. J. D <b>74</b> (2020) 63  |  |  | M23                                 |
| 3   | Third-order transport coefficient tensor of charged-particle swarms in electric and magnetic fields I. Simonović, D. Bošnjaković, Z.Lj. Petrović, P. Stokes, R.D. White and S. Dujko Phys. Rev. E 101 (2020) 023203                                       |  |  | M21                                 |
| 4   | Experimental observation and simulation of the equilibration of electron swarms in a scanning drift tube, Z. Donko, P. Hartman, I. Korolov, V. Jeges, D. Bošnjaković and S. Dujko Plasma Sources Sci. Technol. 28 (2019) 095007                           |  |  | M21a                                |
| 5.  | Streamer propagation in the atmosphere of Titan and other N2:CH4 mixtures compared to N2:O2 mixtures, C. Köhn, S. Dujko, O. Chanrion and T. Neubert Icarus 333 (2019) 294 - 305   |  |  | M22                                 |
| 6.  | Electron transport and negative streamers in liquid xenon, I. Simonović, N.A. Garland, D. Bošnjaković, Z.Lj. Petrović, R.D. White and S. Dujko, Plasma Sources Sci. Technol. 28 (2019) 015006   |  |  | M21a                                |
| 7.  | Electron transport in mercury vapor: cross sections, pressure and temperature dependence of transport coefficients and NDC effects, J. Mirić, I. Simonović, Z.Lj. Petrović, R.D. White and S. Dujko, Eur. Phys. J. D 71 (2017) 289                        |  |  | M23                                 |
| 8.  | Electron swarm properties under the influence of a very strong attachment in SF6 and CF3I obtained by Monte Carlo rescaling procedures, J.Mirić, D. Bošnjaković, I. Simonović, Z.Lj. Petrović and S. Dujko, Plasma Sources Sci. Technol. 25 (2016) 065010 |  |  | M21a                                |
| 9.  | Fluid modeling of resistive plate chambers: impact of transport data on development of streamers and induced signals, D. Bošnjaković, Z.Lj. Petrović and S. Dujko, J. Phys. D: Appl. Phys. 49 (2016) 405201   |  |  | M21                                 |
| 10.   | Heating mechanisms for electron swarms in radio-frequency electric and magnetic fields S. Dujko, D. Bošnjaković, R.D. White and Z.Lj. Petrović Plasma Sources Sci. Technol. 24 (2015) 054006  |  |  | M21a                                |
| <b>Збирни подаци научне активност наставника</b>  |   |  |  |                                     |
| Укупан број цитата, без аутоцитата  |   |  | WoS: 841   |                                     |
| Укупан број радова са SCI (или SSCI) листе  |   |  | 77   |                                     |
| Тренутно учешће на пројектима   |   |  | Домаћи   | Међународни                         |
| Усавршавања   |   |  | Постдок, Холандски национални институт за математику и информатику, Амстердам, Холандија |                                     |
| Други подаци које сматрате релевантним  |   |  |  |                                     |
| Максимална дужине не сме бити већа од 1 странице А4   |   |  |  |                                     |

**Table. 9.6** Teachers' competences

|   |   |  |               |   |
|---|---|--|---------------|---|
| <b>Name and family name</b>   |   | Saša Dujko   |               |   |
| <b>Title</b>  |   | Principal research fellow at the Institute of Physics Belgrade                                 |               |   |
| <b>Narrow scientific area</b>   |   | Physics of ionized gases and plasma physics  |               |   |
| <b>Academic career</b>  | Year  | Institution  | Area          | Narrow scientific or art area               |
| Election to the title   | 2015  | Institute of Physics Belgrade  | Physics       | Physics of ionized gases and plasma physics |
| PhD   | 2009  | James Cook University Australia  | Physics       | Kinetic theory of plasmas                   |
| Master degree   | 2004  | Faculty of Physics, University of Belgrade   | Physics       | Physics of ionized gases and plasma physics |
| Diploma   | 2001  | Faculty of Physics University of Belgrade  | Physics       | Physics of ionized gases and plasma physics |
| <b>List of subjects the teacher is lecturing in doctoral studies</b>  |   |  |               |   |
| <b>No.</b>  | <b>Mark</b>   | <b>Subject name</b>  |               |   |
| 1,  | ФИЗДФПИС  | Collisional and transport processes in ionized gases   |               |   |
| The most significant papers, in compliance with the requirements of the additional requirements of the standard for the given field ( <b>minimum 10, not more than 20</b> ) |   |  |               |   |
| 1.  | Monte Carlo simulation of resonance effects of electron transport in a spatially modulated electric field in Ar, N <sub>2</sub> and their mixtures, A. Albert, D. Bošnjaković, S. Dujko and Z. Donko, J. Phys. D: Appl. Phys. <b>54</b> (2021) 135202                                     |  |               | M21   |
| 2.  | Third-order transport coefficient tensor of electron swarms in noble gases, I. Simonović, D. Bošnjaković, Z.Lj. Petrović, R.D. White and S. Dujko, Eur. Phys. J. D <b>74</b> (2020) 63  |  |               | M23   |
| 3   | Third-order transport coefficient tensor of charged-particle swarms in electric and magnetic fields I. Simonović, D. Bošnjaković, Z.Lj. Petrović, P. Stokes, R.D. White and S. Dujko Phys. Rev. E <b>101</b> (2020) 023203  |  |               | M21   |
| 4   | Experimental observation and simulation of the equilibration of electron swarms in a scanning drift tube, Z. Donko, P. Hartman, I. Korolov, V. Jeges, D. Bošnjaković and S. Dujko Plasma Sources Sci. Technol. <b>28</b> (2019) 095007  |  |               | M21a  |
| 5.  | Streamer propagation in the atmosphere of Titan and other N <sub>2</sub> :CH <sub>4</sub> mixtures compared to N <sub>2</sub> :O <sub>2</sub> mixtures, C. Köhn, S. Dujko, O. Chanrion and T. Neubert Icarus <b>333</b> (2019) 294 - 305  |  |               | M22   |
| 6.  | Electron transport and negative streamers in liquid xenon, I. Simonović, N.A. Garland, D. Bošnjaković, Z.Lj. Petrović, R.D. White and S. Dujko, Plasma Sources Sci. Technol. <b>28</b> (2019) 015006  |  |               | M21a  |
| 7.  | Electron transport in mercury vapor: cross sections, pressure and temperature dependence of transport coefficients and NDC effects, J. Mirić, I. Simonović, Z.Lj. Petrović, R.D. White and S. Dujko, Eur. Phys. J. D <b>71</b> (2017) 289   |  |               | M23   |
| 8.  | Electron swarm properties under the influence of a very strong attachment in SF <sub>6</sub> and CF <sub>3</sub> I obtained by Monte Carlo rescaling procedures, J.Mirić, D. Bošnjaković, I. Simonović, Z.Lj. Petrović and S. Dujko, Plasma Sources Sci. Technol. <b>25</b> (2016) 065010 |  |               | M21a  |
| 9.  | Fluid modeling of resistive plate chambers: impact of transport data on development of streamers and induced signals, D. Bošnjaković, Z.Lj. Petrović and S. Dujko, J. Phys. D: Appl. Phys. <b>49</b> (2016) 405201  |  |               | M21   |
| 10.   | Heating mechanisms for electron swarms in radio-frequency electric and magnetic fields S. Dujko, D. Bošnjaković, R.D. White and Z.Lj. Petrović, Plasma Sources Sci. Technol. <b>24</b> (2015) 054006  |  |               | M21a  |
| <b>Cumulative data of scientific activity of the teacher</b>  |   |  |               |   |
| Total number of citations, without self citations   |   | WoS: 841   |               |   |
| Total number of papers on the SCI (or SSCI) list  |   | 77   |               |   |
| Current participation in projects   |   | Domestic   | International |   |
| Specialization  |   | Postdoc, Multiscale Dynamics, Centrum Wiskunde & Informatica (CWI), Amsterdam, The Netherlands |               |   |
| Other information you consider to be important  |   |  |               |   |
| Maximum length may not be over 1 A4 page  |   |  |               |   |