PUBLICATION LIST OF DR. JOVANA PETROVIC

Summary: 48 articles, 1386 citations, h = 16
16 invited conference talks
8 seminars by invitation

RESEARCH ARTICLES

1. P. Vildoso, R. A. Vincencio, J. Petrovic, Ultra-low-loss broadband multiport optical splitters, **Optics Express** 31, 12703 (2023)
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Editors's pick

2. J. Petrovic, J, Krsic, J.J.P. Veerman, A. Maluckov, High-density optical interconnects based on self-imaging in coupled waveguide arrays, **Journal of Optics and Laser Technology** 163, 109381 (2023)
https://www.sciencedirect.com/science/article/abs/pii/S0030399223002748

3. J. Petrovic, A. Maluckov, N. Stojanovic Bend-free multiarm interferometers on optical chips, *Opt. Quant. El.* **54**, 687 (2022) https://doi.org/10.1007/s11082-022-04048-1

4. S.Zdravković, S.Zeković, A.N.Bugay, J.Petrovic, Two component model of microtubules and continuum approximation, **Chaos, Solitons & Fractals** 152, 111352 (2021)
https://doi.org/10.1016/j.chaos.2021.111352

5. P. Rui, E. Zapolnova, T. Golz, A. J. Krmpot, M. D. Rabasovic, J. Petrovic, V. Asgekar, B. Faatz, F. Tavella, A. Perucchi, S. Kovalev, B. Green, G. Geloni, T. Tanikawa, M. Yurkov, E. Schneidmiller, M. Gensch, N. Stojanovic, Photon diagnostics at the FLASH THz beamline, **Journal of Synchrotron Radiation** 26, 700 (2019)
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6. J. Petrovic and J.J.P. Veerman, A new method for multi-bit and qudit transfer based on commensurate waveguide arrays, **Annals of Physics** 392, 128 (2018)
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7. M. D. Ivanovic, J. Petrovic, A. Savic, G. Gligoric, M. Miletic, M. Vukcevic, B. Bojovic, Lj. Hadzievski, T. D. P. Allsop and D. J. Webb, Real-time chest-wall-motion tracking by a single optical fibre grating: a prospective method for ventilator triggering, **Physiological Measurement** 39, 045009 (2018)
https://doi.org/10.1088/1361-6579/aab7ac

8. V. Atanasoski, M. D. Ivanovic, M. Marinkovic, G. Gligoric, B. Bojovic, A. V. Shvilkin, J. Petrovic, Unsupervised Classification of Premature Ventricular Contractions Based on RR Interval and Heartbeat Morphology, **Conf. Proc. IEEE** 14th Symposium on Neural Networks and Applications – NEUREL (2018)
https://doi.org/10.1109/NEUREL.2018.8586997

9. G. Gligoric, A. Radosavljevic, J. Petrovic, A. Maluckov, Lj. Hadzievski, and B. A. Malomed, Models of spin-orbit-coupled oligomers, **Chaos** 27, 113102 (2017)
https://doi.org/10.1063/1.5000345

10. M. D. Ivanovic, J. Petrovic, A long-period fibre grating monitor of respiratory volumes for the use in non-invasive mechanical ventilation, **Optical and Quantum Electronics** 48, 1 (2016)
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11. N. Raicevic, M. D. Ivanovic, P. P. Belicev, J. Petrovic, Monitoring of respiratory volumes by an LPG sensor of bending, INERA Conference 2015: Light in Nanoscience and Nanotechnology (LNN 2015), **Journal of Physics: Conference Series** 682, 012008 (2016)
https://doi.org/10.1088/1742-6596/682/1/012008

12. A. Radosavljevic, A. Danicic, J. Petrovic, A. Maluckov, Lj. Hadzievski, Coherent light propagation through multi-core optical fibers with linearly coupled cores, **Journal of Optical Society of America B** 32(12), 2520 (2015)
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13. N. Raicevic, A. Maluckov and J. Petrovic, Theoretical Analysis of a Mach-Zehnder Interferometer with a Porous-Film Waveguide, **Journal of Optics** 17, 055802 (2015)
https://doi.org/10.1088/2040-8978/17/5/055802

14. P. P. Belicev, G. Gligoric, J. Petrovic, A. Maluckov, Lj. Hadzievski and B. A. Malomed, Composite localized modes in discretized spin-orbit-coupled Bose-Einstein condensates, **Journal of Physics B: Atomic, Molecular and Optical Physics** 48, 065301 (2015)
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15. J. Petrovic, Multiport waveguide couplers with periodic energy exchange, **Optics Letters** 40, 139 (2015)
https://doi.org/10.1364/ol.40.000139

16. M. Ivanovic, J. Petrovic, M. Miletic, A. Danicic, B. Bojovic, M. Vukcevic, B. Lazovic, Z. Gluvic, H. Ljupco, T. Allsop and D. Webb, Rib-Cage-Movement Measurements As a Potential New Trigger Signal in Non-Invasive Mechanical Ventilation, **Conf. Proc. IEEE Eng. Med. Biol. Soc.** 2015:4511 (2015)
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17. M. D. Petrovic, J. Petrovic, A. Danicic, M. Vukcevic, B. Bojovic, Lj. Hadzievski, T. Allsop, G. Lloyd and D. J. Webb, Non-invasive respiratory monitoring using long-period fiber grating sensors, **Biomedical Optics Express** 5, 1136 (2014)
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18. P. Lombardi, F. Schaefer, I. Herrera, S. Cherukattil, J. Petrovic, C.Lovecchio, F. Marin, and F.S. Cataliotti, Reading the phase of a Raman excitation with a multi-state atomic interferometer, **Optics Express** 22, 19141 (2014)
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19. N. Raicevic, S. Maluckov and J. Petrovic, Multimode Sensor of Fluids Based on a Porous Thin Film, **Optofluidics, Microfluidics and Nanofluidics Journal** 1, 4955 (2014)

20. J. Petrovic, M. Petrovic, A. Danicic, B. Bojovic, Lj. Hadzievski, M. Vukcevic, T. Allsop, D. Webb, Fiber opticki senzori krivine na bazi resetki sa dugim periodom i njihova primena u pulmologiji, **Tehnika** 3/2014 (2014)

21. N. Raicevic, A. Maluckov and J. Petrovic, Evanescent-wave optical gas sensor with a porous thin film coating, **Physica Scripta** T162, 014037 (2014)
https://doi.org/10.1088/0031-8949/2014/t162/014037

22. I. Herrera, P. Lombardi, J. Petrovic, F. Schaefer, F. S. Cataliotti, Light pulse analysis with a multi-state atom interferometer, **AIP Conf. Proc.** 1633, 237 (2014)
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23. J. Petrovic, I. Herrera, P. Lombardi, F. Schaefer and F. S. Cataliotti, A Multi-State Interferometer on an Atom Chip, **New Journal of Physics** 15, 043002 (2013)
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24. M. D. Petrovic, A. Danicic, V. Atanasoski, S. Radosavljevic, V. Prodanovic, N. Miljkovic, J. Petrovic, D. Petrovic, B. Bojovic, Lj Hadzievski, T. Allsop, G. Lloyd and D. J. Webb, Fibre-grating sensors for the measurement of physiological pulsations, **Physica Scripta** T157, 014022 (2013)
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25. M. Petrovic, J. Petrovic, G. Simic, I. Ilic, A. Danicic, M. Vukcevic, B. Bojovic, Lj. Hadzievski, T. Allsop, D. J Webb, A new method for respiratory-volume monitoring based on long-period fibre

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26. J. Petrovic, Lj. Hadzievski and S. Turitsyn, Nelinearna optika u sluzbi telekomunikacija, **Telekomunikacije** 10, 32 (2012)

27. S. Zdravkovic, A. Maluckov, J. Petrovic, S. Zekovic, L. Kavitha and M. V. Sataric, Nonlinear Dynamics of Microtubules, **Nonlinear Phenomena in Complex Systems** 15, 339 (2012)

28. S. Zdravkovic, L. Kavitha, M. V. Sataric, S. Zekovic and J. Petrovic, Modified extended tanhfunction method and nonlinear dynamics of microtubules, **Chaos, Solitons and Fractals** 45(11), 1378 (2012)
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29. A. Maluckov, J. Petrovic, G. Gligoric, Lj. Hadzievski, P. Lombardi, F. Schafer and F. S. Cataliotti, Control of a cigar-shaped Bose-Einstein condensate by light and magnetic potentials produced by structures integrated with an atom chip, **Annals of Physics - New York** 327(9), 2152 (2012)
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47. A. Grigorenko, A. K. Geim, H. F. Gleeson, Y. Zhang, A. A. Firsov, I. Y. Khrushchev and J. Petrovic, Nanofabricated Media with Negative Permeability at Visible Frequencies, **Nature** 438, 335 (2005)
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BOOK CHAPTERS AND EDITING

1. J. Petrovic and M. D. Ivanovic, Application of fibre-grating optical sensors in medical diagnostics, Monography " Light And Its Role In Developing Our Society Past, Present And Future", Serbian Academy of Sciences and Arts, pp. 125-135 (2016)
2. J. Petrovic, M. Stepic and Lj. Hadzievski as Guest Editors in Topical Issue of Physica Scripta T149, The International School and Conference on Photonics - PHOTONICA 2011 (2012)
3. J. Petrovic, Modelling of Long Period Gratings in Photonic Crystal Fibres and Sensors Based on Them, Recent Advances in Modelling and Simulation, Ed. Petrone & Cammarata, I-Tech, Vienna (2008)

INVITED CONFERENCE TALKS

1. High-density bend-free photonic integrated circuits, The 13th International Symposium on Photonics and Optoelectronics (SOPO), Guilin, China (2022 postponed until 2023)

2. Multi-SENSor SysteM and ARTificial intelligence in service of heart failure diagnosis (SensSmart), 15th Photonics Workshop, Kopaonik, Serbia (2022)

3. Ultrafast optical control and investigation of molecules and complexes, The 12th International Symposium on Photonics and Optoelectronics (SOPO), Xi'an, China (2019)

4. Ultrafast optical control and investigation of small molecules and complexes, 12th Photonics Workshop, Kopaonik, Serbia (2019)

5. Precision measurements with cold-atom interferometers, 19th School on Condensed Matter Physics: Advances in Nanostructured Condensed Matter: Research and Innovations, Varna, Bulgaria (2016)

6. Coherent light propagation through open and closed linearly coupled waveguide arrays, 8th Mediterranean Conference on Nano-Photonics (MediNano-8), Athens, Greece (2016)

7. Coherent state transfer through linearly coupled optical waveguide arrays, XIX Photonic Workshop, Kopaonik, Serbia (2016)

8. Periodic state revivals in commensurate waveguide arrays, International Workshop on Advances in Nanophysics and Nanophotonics, Bucharest, Romania (2015)

9. Characterization of Optical Sensors Using Fisher Information, VIII Photonic Workshop, Kopaonik, Serbia (2015)

10. Cold-atom interferometers, XII Congress of Serbian Physicists, Vrnjacka Banja, Serbia (2013)

11. The coolest toy in the world, VI Photonic Workshop, Kopaonik, Serbia (2013)

12. Ultrafast-Laser Fabrication of Photonic Components, Symposium on Non-linear Dynamics with Multi and Interdisciplinary Applications (SNDMIA 2012), Belgrade, Serbia (2012)

13. Fibre Grating Sensors: Fabrication, Modelling and Applications, IX Conference of the Society of Physicists of Macedonia, Ohrid, Macedonia (2012)

14. Interferometry on Atom Chip, IV Photonic Workshop, Kopaonik, Serbia (2011)

15. Coherent Control of Ultracold Atoms and Molecules, PHOTONICA, Belgrade, Serbia (2009)

16. Plasma Assisted Inscription of Photonic Components in Dielectrics, 23rd Summer School and International Symposium on the Physics of Ionized Gases - SPIG, Kopaonik, Serbia (2006)

SEMINARS BY INVITATION

1. Bend-free photonic integrated circuits with the crosstalk as a resource, Max Born Institute, Berlin, Germany (2020)

2. Bend-free photonic integrated circuits with the crosstalk as a resource, the Annual General Assembly of the Optical Society of Serbia (2020)

3. How to improve the quality of life by one-dimensional photonic lattices, Helmut Schmidt University, Hamburg, Germany (2018)

4. Fibre-grating sensors for applications in cardio and respiration monitoring, Institute of Physics Belgrade, Serbia (2013)

5. One-dimensional lattices in cold-atom systems and photonics, LENS, Florence, Italy (2012)

6. Matter Modification by Ultrafast Laser Pulses, IMDEA Seminar, Madrid, Spain (2010)

7. Laser-Matter Interactions: From Atoms to Chips, Institute of Physics Belgrade, Serbia (2010)

8. Coherent Control of Ultracold Atoms, Institute of Solid State Physics Seminar, Sofia, Bulgaria (2009)