

PUBLICATIONS

RESEARCH ARTICLES

1. J. Wang, L. He, J. Petrovic, A. Al-Refaie, H. Bieker, J. Onvlee, K. Długołęcki, J. Küpper, Spatial separation of 2-propanol monomer and its ionization-fragmentation pathways, *Journal of Molecular Structure*, *in press* (2020), IF=2.12, <https://doi.org/10.1016/j.molstruc.2020.127863>
2. J. Petrovic, Long-Term Stability of the Refractive Index Change Induced by a Single Femtosecond Laser Pulse in Glass, **Optical Materials X** 1, 100004 (2019), IF not assigned yet (the non-open access equivalent 2.68), <https://doi.org/10.1016/j.omx.2019.100004>
3. 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), IF = 2.45, <https://doi.org/10.1107/S160057751900341>
4. J. Petrovic, J.J.P. Veerman, A new method for multi-bit and qudit transfer based on commensurate waveguide arrays, **Annals of Physics** 392, 128 (2018), IF = 2.26, <https://doi.org/10.1016/j.aop.2018.03.008>
5. 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), IF = 2.24, <https://doi.org/10.1088/1361-6579/aab7ac>
6. 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>
7. G. Gligoric, A. Radosavljevic, J. Petrovic, A. Maluckov, Lj. Hadzievski, and B. A. Malomed, Models of spin-orbit-coupled oligomers, **Chaos** 27, 113102 (2017), IF = 2.41, <https://doi.org/10.1063/1.5000345>
8. 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), IF = 1.16, <https://doi.org/10.1007/s11082-016-0613-z>
9. 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>
10. 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), IF = 2.04, <https://doi.org/10.1364/josab.32.002520>
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13. J. Petrovic, Multiport waveguide couplers with periodic energy exchange, **Optics Letters** 40, 139 (2015), IF = 3.58, <https://doi.org/10.1364/ol.40.000139>
14. 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), <https://doi.org/10.1109/embc.2015.7319397>

15. 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), IF = 3.33, <https://doi.org/10.1364/boe.5.001136>
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18. 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)
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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. J. Petrovic, Ultrafast optical control and investigation of molecules and complexes, The 12th International Symposium on Photonics and Optoelectronics (SOPO 2019), Xi'an, China (2019)
2. J. Petrovic, J. Onvlee, J. Weise, A. Trabattini, T. Mullins, S. Trippel, J. Küpper, Ultrafast optical control and investigation of small molecules and complexes, 12th Photonics Workshop, Kopaonik, Serbia (2019)
3. J. Petrovic, Precision measurements with cold-atom interferometers, 19th School on Condensed Matter Physics: Advances in Nanostructured Condensed Matter: Research and Innovations, Varna, Bulgaria (2016)
4. J. Petrovic, Coherent light propagation through open and closed linearly coupled waveguide arrays, 8th Mediterranean Conference on Nano-Photonics (MediNano-8), Athens, Greece (2016)
5. J. Petrovic, A. Radosavljević, A. Daničić, A. Maluckov, Lj. Hadžievski, J. J. P. Veerman, Coherent state transfer through linearly coupled optical waveguide arrays, XIX Photonic Workshop, Kopaonik, Serbia (2016)
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9. J. Petrovic, The coolest toy in the world, VI Photonic Workshop, Kopaonik, Serbia (2013)
10. J. Petrovic and V. Mezentsev, Ultrafast-Laser Fabrication of Photonic Components, Symposium on Non-linear Dynamics with Multi and Interdisciplinary Applications (SNDMIA 2012), Belgrade, Serbia (2012)
11. J. Petrovic, Fibre Grating Sensors: Fabrication, Modelling and Applications, IX Conference of the Society of Physicists of Macedonia, Ohrid, Macedonia (2012)
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SEMINARS BY INVITATION

1. J. Petrovic, How to improve the quality of life by one-dimensional photonic lattices, Helmut Schmidt University, Hamburg, Germany (2018)
2. J. Petrovic, Fibre-grating sensors for applications in cardio and respiration monitoring, Institute of Physics Belgrade Seminar, Serbia (2013)
3. J. Petrovic, One-dimensional lattices in cold-atom systems and photonics, LENS Seminar, Florence, Italy (2012)
4. J. Petrovic, Matter Modification by Ultrafast Laser Pulses, IMDEA Seminar, Madrid, Spain (2010)
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