



- PROCEEDINGS / OTHER PUBLICATIONS -

- 2022 -

1. N. Pavel, G. Croitoru, O.-V. Grigore, N.-T. Vasile, T. Dascalu, A. Birtas, N. Boicea, M. Dinca, F. Draghici, and R. Chiriac, "Laser spark-plug development: from experimental device to successful engine ignition," Proc. SPIE **12170**, Advances in 3OM: Opto-Mechatronics, Opto-Mechanics, and Optical Metrology, 121700M (5 May 2022); <https://doi.org/10.1117/12.2620045>

- 2019 -

1. A. Birtas, N. Boicea, G. Croitoru, M. Dinca, N. Pavel, F. Draghici, R. Chiriac "On the possibility to improve petrol engine operation by laser ignition," Energy Procedia **157**, 1022-1028 (2019); Proceeding paper, Technologies and Materials for Renewable Energy, Environment and Sustainability (TMREES), TMREES18, 19-21 Sept. 2018, Athens, Greece. <https://doi.org/10.1016/j.egypro.2018.11.269>

- 2017 -

1. A. Birtas, N. Boicea, F. Draghici, R. Chiriac, G. Croitoru, M. Dinca, T. Dascalu and N. Pavel, "On the assessment of performance and emissions characteristics of a SI engine provided with a laser ignition system," IOP Conf. Ser.: Mater. Sci. Eng. **252**, art. 012071 (2017); doi:10.1088/1757-899X/252/1/012071

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1. C.-A. Stanciu, T. Dascalu, G. Stanciu, N. Pavel, "Transparent Nd doped YAG ceramics," Journal of Physics: Conference Series **741**(1), art. 012074 (2016); 3rd International School and Conference on Optoelectronics, Photonics, Engineering and Nanostructures (Saint Petersburg OPEN 2016), 28–30 March 2016, St Petersburg, Russia; doi:10.1088/1742-6596/741/1/012074

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1. G. Salamu, F. Voicu, F. Jipa, M. Zamfirescu, T. Dascalu, and N. Pavel, "Laser emission from diode-pumped Nd:YAG cladding waveguides obtained by direct writing with a femtosecond-laser beam," Proc. SPIE **9135**, Laser Sources and Applications II, 91351F (May 1, 2014); doi:10.1117/12.2052250; <http://dx.doi.org/10.1117/12.2052250>

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5. L. Sirbu, L. Ghimpu, M. Danila, R. Muller, A. Matei, F. Comanescu, A. Ionescu, O. Grigore, T. Dascalu, and A. Sarua, "Porous and RF sputtering InP for portable THz-TDS in pharmaceutical and medical applications," IEEE Proceeding of Semiconductor Conference (CAS), 2013 International, 14-16 Oct. 2013, Sinaia, Romania; vol. **1**, pp. 69-72 (2013). DOI: 10.1109/SMICND.2013.6688092
4. C. A. Brandus, L. Gheorghe, and T. Dascalu, "Infrared laser emission in a compact CW and quasi-CW diode pumped Nd³⁺:GdLuCOB laser," Conference Proc. IEEE, Advanced Optoelectronics and Lasers (CAOL), 2013 International Conference on, 9 - 13 Sept. 2013, Sudak, Ukraine; pages 102-103, ISSN: 2160-1518, ISBN: 978-1-4799-0016-9, doi: 10.1109/CAOL.2013.6657543.
3. S. Georgescu, A. M. Voiculescu, C. Matei, A. G. Stefan, and O. Toma, "Upconversion luminescence in La₃Ga_{5.5}Ta_{0.5}O₁₄ codoped with Er³⁺ and Yb³⁺," Proc. SPIE **8882**, ROMOPTO 2012: Tenth Conference on



Optics: Micro- to Nanophotonics III, 888204 (June 10, 2013); doi: 10.1117/12.2032265; <http://dx.doi.org/10.1117/12.2032265>.

2. G. Salamu, A. Ionescu, C. Brandus, O. Grigore, N. Pavel and T. Dascalu, "Generation of high-peak power 532-nm green pulses from composite, all-ceramics, passively Q-switched Nd:YAG/Cr⁴⁺:YAG laser," Proc. SPIE **8882**, ROMOPTO 2012: Tenth Conference on Optics: Micro- to Nanophotonics III, 888206 (June 10, 2013); doi:10.1117/12.2032267; <http://dx.doi.org/10.1117/12.2032267>.
1. M. Tsunekane, N. Pavel, and T. Taira, "Simultaneously 3-Point Ignitable, Nd:YAG/Cr:YAG Ceramic Micro-Lasers," The Review of Laser Engineering **41** (2), 117-122 (2013) (in Japanese).

- 2012 -

1. J. Rafael Molina Contreras, **A. Ionescu**, and T. Dascalu, "THz-Time Domain Spectroscopy of (001) ZnSe," Proceedings of the Physics Conference TIM-11, 24-27 November 2011, Timisoara, Romania, AIP Conf. Proc. **1472**, 114-120 (2012).
2. O. Toma, L. Gheorghe, and R. Birjega, "Solubility limits of Erbium in partially disordered crystals langanite and langatate," Romanian Journal of Physics **57** (9-10), xxx-xxxx (2012). Proceeding of the 12th International Balkan Workshop on Applied Physics (IBWAP), July 6-8, 2011, Constanta, Romania.
3. L. Gheorghe, A. Achim, and F. Voicu, "A new nonlinear optical (NLO) crystal for visible and ultraviolet (UV) regions," Proceedings of the Physics Conference TIM-11, 24-27 November 2011, Timisoara, Romania, AIP Conf. Proc., vol. **1472** (1), 141-147 (2012).
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3. O. Toma and S. Georgescu, "Modeling of two wavelengths emission in erbium upconversion laser," AIP Conference Proceedings **1400**, 385-390 (2011).
4. Nicolaie Pavel, Masaki Tsunekane and Takunori Taira (2011). All-Poly-Crystalline Ceramics Nd:YAG/Cr⁴⁺:YAG Monolithic Micro-Lasers with Multiple-Beam Output, Laser Systems for Applications, Dr Krzysztof Jakubczak (Ed.), ISBN: 978-953-307-429-0, InTech, DOI: 10.5772/24071. Available from: <http://www.intechopen.com/books/laser-systems-for-applications/all-poly-crystalline-ceramics-nd-yag-cr4-yag-monolithic-micro-lasers-with-multiple-beam-output>

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2. L. Gheorghe, A. Achim, P. Loiseau, and G. Aka, "New nonlinear Gd_{1-x}R_xCa₄O(BO₃)₃ (R = Lu, Sc) crystals



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4. M. Mernea, O. Calborean, L. Petrescu, M. P. Dinca, A. Leca, D. Apostol, T. Dascalu, and D. Mihailescu, "The flexibility of hydrated bovine serum albumin investigated by THz spectroscopy and molecular modeling," Proceedings SPIE **7469**, Micro- to Nano-Photonics II - ROMOPTO 2009 Conference, August 31 - Sept. 03, 2009, Sibiu, Romania; paper 74690N (2010).

- 2009 -

1. V. Lupei, "New directions for performance enhancement and power scaling of the Nd lasers," Proceedings of International Conference "MODERN LASER APPLICATIONS", INDLAS, Second Edition 2008, May 20-23, 2008, Bran, Romania; J. of Optoelectron. & Adv. Mat. (JOAM) - Symposia, Vol. **1**, No. 4, 621-629 (2009).
2. T. Dascalu, O. Sandu, N. Vasile, A. Leca, N. Pavel, and T. Taira, "End-Pumped Yb:KGW Laser Mode-Locked by Saturable Absorber Mirror," Proceedings of International Conference "MODERN LASER APPLICATIONS", INDLAS, Second Edition 2008, May 20-23, 2008, Bran, Romania; J. of Optoelectron. & Adv. Mat. (JOAM) - Symposia, Vol. **1**, No. 4, 658-661 (2009).
3. A. M. Voiculescu, E. Cotoi, O. Toma, S. Georgescu, S. Constantinescu, I. Bibicu, "Optical and Mössbauer spectroscopy studies on YVO₄:Eu nanophosphor," Proceedings of International Conference "MODERN LASER APPLICATIONS", INDLAS, Second Edition 2008, May 20-23, 2008, Bran, Romania; J. of Optoelectron. & Adv. Mat. (JOAM) - Symposia, Vol. **1**, No. 4, 670-672 (2009).
4. N. Pavel, N. Vasile, A. Leca, and T. Dascalu, "Diode-Pumped Nd-based Lasers for Generation of Visible Radiations," Proceedings of International Conference "MODERN LASER APPLICATIONS", INDLAS, Second Edition 2008, May 20-23, 2008, Bran, Romania; J. of Optoelectron. & Adv. Mat. (JOAM) - Symposia, Vol. **1**, No. 4, 673-676 (2009).
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