

Institute of Scientific Instruments of the ASCR, v. v. i.

ASEP Publications

Document types: Impacted Journal Article, Journal Article, Monograph, Monograph Chapter, Proceedings Paper (International conf.), Proceedings Paper (Czech conf.)

Year(s): 2014

Database: ASEP

0431897 - UPT-D 2015 RIV NL eng J - Journal Article

Adolph, C. - Akhunzyanov, R. - Alekseev, M. - Alexakhin, V. Yu. - Alexandrov, Yu. - Alexeev, G. D. - Amoroso, A. - Andrieux, V. - Anosov, V. A. - Austregisilio, A. - Badelek, B. - Balestra, F. - Barth, J. - Baum, G. - Beck, R. - Bedfer, Y. - Berlin, A. - Bernhard, J. - Bertini, R. - Bicker, K. - Bieling, J. - Birsá, R. - Bisplinghoff, J. - Bodlak, M. - Boer, M. - Bordalo, P. - Bradamante, F. - Braun, C. - Bravar, A. - Bressan, A. - Büchele, M. - Burtin, E. - Capozza, L. - Chiosso, M. - Chung, S.U. - Cicuttin, A. - Crespo, M. - Curiel, Q. - Dalla Torre, S. - Dasgupta, S. S. - Dasgupta, S. - Denisov, O. - Donskov, S. - Doshita, N. - Duic, V. - Dünneberger, W. - Dziewiecki, M. - Efremov, A.V. - Elia, C. - Eversheim, P. - Eyrich, W. - Faessler, M. - Ferrero, A. - Filin, A. - Finger, M. - Finger jr., M. - Fischer, H. - Franco, C. - Fresne von Hohenesche, N. - Friedrich, J. - Frolov, V. - Garfagnini, R. - Gautheron, F. - Gavrichtchouk, O. - Gerassimov, S. - Geyer, R. - Giorgi, M. - Gnesi, I. - Gobbo, B. - Goertz, S. - Gorzellik, M. - Grabmüller, S. - Grasso, A. - Grube, B. - Guskov, A. - Guthörl, T. - Haas, F. - von Harrach, D. - Hahne, D. - Hashimoto, R. - Heinsius, F. - Herrmann, F. - Hinterberger, F. - Höppner, Ch. - Horikawa, N. - d'Hose, N. - Huber, S. - Ishimoto, S. - Ivanov, A. - Ivanshin, Yu. - Iwata, T. - Jahn, R. - Jary, V. - Jasinski, P. - Joerg, P. - Joosten, R. - Kabuss, E. - Kang, D. - Ketzer, B. - Khaustov, G. - Khokhlov, Y. - Kisselev, Y. - Klein, F. - Klimaszewski, K. - Koivuniemi, J. - Kolosov, V. - Kondo, K. - Königsman, K. - Konorov, I. - Konstantinov, V. - Kotzinian, A. - Kouznetsov, O. - Král, Z. - Krämer, M. - Kroumchtein, Z. - Kuchinski, N. - Kunne, F. - Kurek, K. - Kurjata, R. P. - Lednev, A. - Lehmann, A. - Levorato, S. - Lichtenstadt, J. - Maggiora, A. - Magnon, A. - Makke, N. - Mallot, G. - Marchand, C. - Martin, A. - Marzec, J. - Matoušek, J. - Matsuda, H. - Matsuda, T. - Meshcheryakov, G. - Meyer, W. - Michigami, T. - Mikhailov, Y. - Miyachi, Y. - Nagaytsev, A. - Nagel, T. - Nerling, F. - Neubert, S. - Neyret, D. - Nikolaenko, V. - Nový, J. - Nowak, W. D. - Nunes, A.S. - Orlov, I. - Olshevsky, A. - Ostrick, M. - Panknin, R. - Panzieri, D. - Parsamyan, B. - Paul, S. - Pešek, M. - Peshekhonov, D. - Piragino, G. - Platchkov, S. - Pochodzalla, J. - Polak, J. - Polyakov, V. - Pretz, J. - Quaresma, M. - Quintans, C. - Ramos, S. - Reicherz, G. - Rocco, E. - Rodionov, V. K. - Rondio, E. - Rychter, A. - Rossiyskaya, N. S. - Ryabchikov, D. - Samoylenko, V. - Sandacz, A. - Sarkar, S. - Savin, I. - Sbrizzai, G. - Schiavon, P. - Schill, C. - Schlütter, T. - Schmidt, A. - Schmidt, K. - Schmiden, H. - Schmitt, L. - Schöning, K. - Schopferer, S. - Schott, M. - Shevchenko, O. - Silva, L. - Sinha, L. - Sirtl, S. - Slunicka, M. - Sosio, S. - Sozzi, F. - Srnka, Aleš - Steiger, L. - Stolarski, M. - Sulc, M. - Sulej, R. - Suzuki, H. - Szabelski, A. - Szameitat, T. - Sznajder, P. - Takekawa, S. - Ter Wolbeek, J. - Tessaro, S. - Tessarotto, F. - Thibaud, F. - Uhl, S. - Uman, I. - Vandenbroucke, M. - Virius, M. - Vondra, J. - Wang, L. - Weisrock, T. - Wilfert, M. - Windmolders, R. - Wislicki, W. - Wollny, H. - Zarembo, K. - Zavertyaev, M. - Zemlyanichkina, E. - Ziembicki, M.

A high-statistics measurement of transverse spin effects in dihadron production from muon-proton semi-inclusive deep-inelastic scattering.

Physics Letters. B. Roč. 736, 7 SEPT (2014), s. 124-131. ISSN 0370-2693

Institutional Support: RVO:68081731

Subject RIV: BG - Nuclear, Atomic and Molecular Physics, Colliders

Impact factor: 6.019, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236426>

• [DOI](#)

0428202 - UPT-D 2015 RIV NL eng J - Journal Article

Adolph, C. - Akhunzyanov, R. - Alekseev, M. - Alexakhin, V. Yu. - Alexandrov, Yu. - Alexeev, G. D. - Amoroso, A. - Andrieux, V. - Anosov, V. A. - Austregisilio, A. - Badelek, B. - Balestra, F. - Barth, J. - Baum, G. - Beck, R. - Bedfer, Y. - Berlin, A. - Bernhard, J. - Bertini, R. - Bicker, K. - Bieling, J. - Birsá, R. - Bisplinghoff, J. - Bodlak, M. - Boer, M. - Bordalo, P. - Bradamante, F. - Braun, C. - Bravar, A. - Bressan, A. - Büchele, M. - Burtin, E. -

Capozza, L. - Chiosso, M. - Chung, S.U. - Cicuttin, A. - Crespo, M. - Curiel, Q. - Dalla Torre, S. - Dasgupta, S. S. - Dasgupta, S. - Denisov, O. - Donskov, S. - Doshita, N. - Duic, V. - Dünneweber, W. - Dziewiecki, M. - Efremov, A.V. - Elia, C. - Eversheim, P. - Eyrich, W. - Faessler, M. - Ferrero, A. - Filin, A. - Finger, M. - Finger jr., M. - Fischer, H. - Franco, C. - Fresne von Hohenesche, N. - Friedrich, J. - Frolov, V. - Garfagnini, R. - Gautheron, F. - Gavrichtchouk, O. - Gerassimov, S. - Geyer, R. - Giorgi, M. - Gnesi, I. - Gobbo, B. - Goertz, S. - Gorzellik, M. - Grabmüller, S. - Grasso, A. - Grube, B. - Gushterski, R. - Guskov, A. - Guthörl, T. - Haas, F. - von Harrach, D. - Hahne, D. - Hashimoto, R. - Heinsius, F. - Herrmann, F. - Hess, C. - Hinterberger, F. - Höppner, Ch. - Horikawa, N. - d'Hose, N. - Huber, S. - Ishimoto, S. - Ivanov, A. - Ivanshin, Yu. - Iwata, T. - Jahn, R. - Jary, V. - Jasinski, P. - Joerg, P. - Joosten, R. - Kabuss, E. - Kang, D. - Ketzer, B. - Khaustov, G. - Khokhlov, Y. - Kisselev, Y. - Klein, F. - Klimaszewski, K. - Koivuniemi, J. - Kolosov, V. - Kondo, K. - Königsman, K. - Konorov, I. - Konstantinov, V. - Kotzinian, A. - Kouznetsov, O. - Král, Z. - Krämer, M. - Kroumchtein, Z. - Kuchinski, N. - Kunne, F. - Kurek, K. - Kurjata, R. P. - Lednev, A. - Lehmann, A. - Levorato, S. - Lichtenstadt, J. - Maggiora, A. - Magnon, A. - Makke, N. - Mallot, G. - Marchand, C. - Martin, A. - Marzec, J. - Matoušek, J. - Matsuda, H. - Matsuda, T. - Meshcheryakov, G. - Meyer, W. - Michigami, T. - Mikhailov, Y. - Miyachi, Y. - Nagaytsev, A. - Nagel, T. - Nerling, F. - Neubert, S. - Neyret, D. - Nikolaenko, V. - Nový, J. - Nowak, W. D. - Nunes, A.S. - Orlov, I. - Olshevsky, A. - Ostrick, M. - Panknin, R. - Panzieri, D. - Parsamyan, B. - Paul, S. - Pešek, M. - Peshekhonov, D. - Piragino, G. - Platchkov, S. - Pochodzalla, J. - Polak, J. - Polyakov, V. - Pretz, J. - Quaresma, M. - Quintans, C. - Ramos, S. - Reicherz, G. - Rocco, E. - Rodionov, V. K. - Rondio, E. - Rossiyskaya, N. S. - Ryabchikov, D. - Samoylenko, V. - Sandacz, A. - Sapozhnikov, M. - Sarkar, S. - Savin, I. - Sbrizzai, G. - Schiavon, P. - Schill, C. - Schlütter, T. - Schmidt, A. - Schmidt, K. - Schmiden, H. - Schmitt, L. - Schönning, K. - Schopferer, S. - Schott, M. - Shevchenko, O. - Silva, L. - Sinha, L. - Sirtl, S. - Slunicka, M. - Sosio, S. - Sozzi, F. - ~~Srnka, Aleš~~ - Steiger, L. - Stolarski, M. - Sulc, M. - Sulej, R. - Suzuki, H. - Szabelski, A. - Szameitat, T. - Sznajder, P. - Takekawa, S. - Ter Wolbeek, J. - Tessaro, S. - Tessarotto, F. - Thibaud, F. - Uhl, S. - Uman, I. - Vandenbroucke, M. - Virius, M. - Vondra, J. - Wang, L. - Weisrock, T. - Wilfert, M. - Windmolders, R. - Wislicki, W. - Wollny, H. - Zarembo, K. - Zavertyaev, M. - Zemlyanichkina, E. - Zhuravlev, N. - Ziembicki, M.

Transverse target spin asymmetries in exclusive $\rho(0)$ muoproduction.

Physics Letters. B. Roč. 731, APR 4 (2014), s. 19-26. ISSN 0370-2693

Institutional Support: RVO:68081731

Keywords: generalized parton distributions * vector-meson electroproduction * scattering

Subject RIV: BG - Nuclear, Atomic and Molecular Physics, Colliders

Impact factor: 6.019, year: 2013

Permanent link: <http://hdl.handle.net/11104/0233595>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0431695 - UPT-D 2015 RIV US eng J - Journal Article

Arzola, Alejandro V. - Ják, Petr - Chvátal, Lukáš - Zemánek, Pavel

Rotation, oscillation and hydrodynamic synchronization of optically trapped oblate spheroidal microparticles.

Optics Express. Roč. 22, č. 13 (2014), s. 16207-1621. ISSN 1094-4087

R&D Projects: GA MŠK LH12018

Institutional Support: RVO:68081731

Keywords: orbital angular-momentum * lineary polarized-light * ellipsoidal molecules * microscopic particles * Gaussian beams * tweezers

Subject RIV: BH - Optics, Masers, Lasers

Impact factor: 3.525, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236277>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0431811 - UPT-D 2015 RIV US eng J - Journal Article

Bartoš, M. - Jiřík, Radoan - Kratochvíla, Jiří - Standara, M. - Starčuk jr., Zenon - Torfinn, T.

The precision of DCE-MRI using the tissue homogeneity model with continuous formulation of the perfusion parameters.

Magnetic Resonance Imaging. Roč. 32, č. 5 (2014), s. 505-513. ISSN 0730-725X

R&D Projects: GA ČR GAP102/12/2380; GA MŠK ED0017/01/01

Institutional Support: RVO:68081731

Keywords: dynamic contrast-enhanced MRI (DCE-MRI) * perfusion * parameter estimation * bolus arrival time

Subject RIV: FS - Medical Facilities & Equipment

Impact factor: 2.022, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236363>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0431772 - UPT-D 2015 RIV AT eng J - Journal Article

Bočková, M. - Chládek, Jan - Jurák, Pavel - Halánek, Josef - Štillová, K. - Baláž, M. - Chrastina, J. - Rektor, I.
Complex Motor-Cognitive Factors Processed in the Anterior Nucleus of the Thalamus: An Intracerebral Recording Study.
Journal of Neural Transmission. -, - (2014). ISSN 0300-9564

R&D Projects: GA ČR GAP103/11/0933; GA MŠk ED0017/01/01

Institutional Support: RVO:68081731

Keywords: Anterior nucleus of the thalamus * Complex cognitive functions * Deep brain stimulation * ERD/S * ERP

Subject RIV: BD - Theory of Information

Impact factor: 2.871, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236341>

- [DOI](#)

0430353 - UPT-D 2015 RIV GB eng J - Journal Article

Bok, Jan - Schauer, Petr

Apparatus for temperature-dependent cathodoluminescence characterization of materials.
Measurement Science and Technology. Roč. 25, č. 7 (2014), 075601:1-7. ISSN 0957-0233

R&D Projects: GA TA ČR TE01020118; GA ČR(CZ) GA14-20012S

Institutional Support: RVO:68081731

Keywords: cathodoluminescence * electron beam * cryostat * scintillator * YAG:Ce

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Impact factor: 1.352, year: 2013

Permanent link: <http://hdl.handle.net/11104/0235310>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0430357 - UPT-D 2015 RIV US eng J - Journal Article

Bok, Jan - Schauer, Petr

Performance of SEM Scintillation Detector Evaluated by Modulation Transfer Function and Detective Quantum Efficiency Function.

Scanning. Roč. 36, č. 4 (2014), s. 384-393. ISSN 0161-0457

R&D Projects: GA TA ČR TE01020118; GA ČR GAP102/10/1410; GA MŠk EE.2.3.20.0103

Institutional Support: RVO:68081731

Keywords: MTF * DQE * image detection * scintillator * e-beam scanning

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Impact factor: 1.435, year: 2013

Permanent link: <http://hdl.handle.net/11104/0235314>

- [DOI](#)

0431931 - UPT-D 2015 RIV US eng C - Proceedings Paper (International conf.)

Číp, Ondřej - Buchta, Zdeněk - Lešundák, Adam - Randula, A. - Mikel, Břetislav - Lazar, Josef - Veverková, L.
Laser-induced fluorescence spectroscopy in tissue local necrosis detection.

Optical Interactions with Tissue and Cells XXV; and Terahertz for Biomedical Applications (Proceedings of SPIE 8941).

Bellingham : SPIE, 2014, 89411D:1-6. ISSN 1605-7422.

[Optical Interactions with Tissue and Cells /25./; and Terahertz for Biomedical Applications. San Francisco (US), 02.02.2014-04.02.2014]

R&D Projects: GA ČR GAP102/10/1813; GA MŠk EE2.4.31.0016; GA MŠk ED0017/01/01

Institutional Support: RVO:68081731

Keywords: IndoCyanine Green * fluorescence spectroscopy * small intestine * surgery

Subject RIV: BH - Optics, Masers, Lasers

Permanent link: <http://hdl.handle.net/11104/0236454>

- [WOS](#)
- [DOI](#)

0424308 - UPT-D 2014 RIV CH eng J - Journal Article

Čížek, Martin - Hucl, Václav - Hrabina, Jan - Šmíd, Radek - Mikel, Břetislav - Lazar, Josef - Číp, Ondřej

Two-Stage System Based on a Software-Defined Radio for Stabilizing of Optical Frequency Combs in Long-Term Experiments.

Sensors. Roč. 14, č. 1 (2014), s. 1757-1770. ISSN 1424-8220

R&D Projects: GA ČR GPP102/11/P819; GA ČR GAP102/10/1813; GA MŠk ED0017/01/01; GA MŠk EE2.4.31.0016

Institutional Support: RVO:68081731

Keywords: optical frequency combs * digital signal processing * software-defined radio * beat note * stabilization * long-term operation

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Impact factor: 2.048, year: 2013

Permanent link: <http://hdl.handle.net/11104/0230388>

- [SCOPUS](#)
- [DOI](#)
- [Result - RIV](#)

0431982 - UPT-D 2015 RIV BG eng J - Journal Article

Dupák, Libor

Electron beam micromachining of plastics.

Elektrotechnika & Elektronika. Roč. 49, 5-6 (2014), s. 310-314. ISSN 0861-4717

R&D Projects: GA MŠk(CZ) LO1212; GA MŠk ED0017/01/01; GA MŠk EE.2.3.20.0103

Institutional Support: RVO:68081731

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Permanent link: <http://hdl.handle.net/11104/0236493>

0429252 - UMCH-V 2015 RIV NL eng J - Journal Article

Hajduová, J. - Procházka, K. - Raus, Vladimír - Šlouf, Miroslav - Krzyžánek, Vladislav - Garamus, V. M. - Štěpánek, M.

Structure of polymeric nanoparticles in surfactant-stabilized aqueous dispersions of high-molar-mass hydrophobic graft copolymers.

Colloids and Surfaces. A - Physicochemical and Engineering Aspects. Roč. 456, 20 August (2014), s. 10-17. ISSN 0927-7757

R&D Projects: GA TA ČR TE01020118

Institutional Support: RVO:61389013 ; RVO:68081731

Keywords: nanoprecipitation * graft copolymer * light scattering

Subject RIV: EA - Cell Biology; JA - Electronics & Optoelectronics, Electrical Engineering

Impact factor: 2.354, year: 2013

Permanent link: <http://hdl.handle.net/11104/0235826>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0431911 - UPT-D 2015 RIV SK eng C - Proceedings Paper (International conf.)

Halámek, Josef - Jurák, Pavel - Leinveber, P. - Veselý, P.

Excitation Specificity of Repolarization Parameters.

Electrocardiology 2014. Proceedings of the 41st International Congress on Electrocardiology. Bratislava : Institute of Measurement Science, 2014, s. 15-18. ISBN 978-80-969-672-7-8.

[Electrocardiology 2014. International Congress on Electrocardiology /41./. Bratislava (SK), 04.06.2014-07.06.2014]

R&D Projects: GA ČR GAP102/12/2034

Institutional Support: RVO:68081731

Keywords: repolarization analysis * QT/RR slope * QT restitution * excitation specificity

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Permanent link: <http://hdl.handle.net/11104/0236434>

0431995 - UPT-D 2015 RIV IT eng C - Proceedings Paper (International conf.)

Halámek, Josef - Jurák, Pavel - Veselý, P. - Vondra, Vlastimil - Leinveber, P.

The analysis of linear/nonlinear coupling between heart rate and QT intervals.

8th Conference of the European Study Group on Cardiovascular Oscillations (ESGCO 2014). Trento : IEEE, 2014, s. 57-58. ISBN 978-1-4799-3968-8.

[ESGCO 2014. Conference European Study Group on Cardiovascular Oscillations /8./. Trento (IT), 25.05.2014-28.05.2014]

Institutional Support: RVO:68081731

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Permanent link: <http://hdl.handle.net/11104/0236509>

- [DOI](#)

0431674 - UPT-D 2015 RIV FI eng J - Journal Article

Hlubina, P. - Kadulová, M. - Ciprian, D. - Sobota, Jaroslav

Reflection-based fibre-optic refractive index sensor using surface plasmon resonance.

Journal of the European Optical Society: Rapid publications. Roč. 9, August 19 (2014), 14033:1-5. ISSN 1990-2573

Institutional Support: RVO:68081731

Keywords: surface plasmon resonance * fibre-optic sensor * spectral interrogation technique * aqueous solutions of ethanol * refractive index

Subject RIV: BH - Optics, Masers, Lasers

Impact factor: 1.152, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236267>

- [DOI](#)

0398017 - UPT-D 2014 RIV DE eng C - Proceedings Paper (International conf.)

Holá, Miroslava - Hrabina, Jan - Fejfar, A. - Kočka, J. - Stuchlík, J. - Číp, Ondřej - Oulehla, Jindřich - Lazar, Josef

Displacement Interferometry within a Passive Fabry-Perot Cavity.

Fringe 2013. 7th International Workshop on Advanced Optical Imaging and Metrology (Proceedings). Berlin : Springer-Verlag, 2014, s. 891-894. ISBN 978-3-642-36358-0.

[International Workshop on Advanced Optical Imaging and Metrology /7./. Nürtingen (DE), 08.09.2013-11.09.2013]

R&D Projects: GA ČR GPP102/11/P820; GA MŠk ED0017/01/01; GA MŠk EE2.4.31.0016; GA TA ČR TA02010711; GA TA ČR TE01020233

Institutional Support: RVO:68081731

Keywords: interferometry * Fabry-Perot Cavity * transparent photodetector * standing wave

Subject RIV: BH - Optics, Masers, Lasers

Permanent link: <http://hdl.handle.net/11104/0225590>

- [DOI](#)

- [Result - RIV](#)

0431959 - UPT-D 2015 RIV US eng C - Proceedings Paper (International conf.)

Hrabina, Jan - Lazar, Josef - Klapetek, P. - Valtr, M. - Číp, Ondřej - Oulehla, Jindřich - Čížek, Martin - Holá, Miroslava - Šerý, Mojmír

6-axis interferometric coordinates measurement system for nanometrology.

Photonic Instrumentation Engineering (Proceedings of Spie 8992). Bellingham : SPIE, 2014, 89920W:1-8. ISSN 0277-786X.

[Photonic Instrumentation Engineering. San Francisco (US), 02.02.2014-05.02.2014]

R&D Projects: GA ČR GPP102/11/P820; GA MŠk ED0017/01/01; GA MŠk EE2.4.31.0016; GA TA ČR TA02010711; GA TA ČR TE01020233

Institutional Support: RVO:68081731

Keywords: nanometrology * AFM * nanoscale * nanopositioning interferometry

Subject RIV: BH - Optics, Masers, Lasers

Permanent link: <http://hdl.handle.net/11104/0236468>

- [WOS](#)
- [DOI](#)

0431672 - UPT-D 2015 RIV SK eng J - Journal Article

Hrabina, Jan - Acef, O. - Du Burck, F. - Chiodo, N. - Candela, Y. - Šarbort, Martin - Holá, Miroslava - Lazar, Josef

Comparison of Molecular Iodine Spectral Properties at 514.7 and 532 nm Wavelengths.

Measurement Science Review. Roč. 14, č. 4 (2014), s. 213-218. ISSN 1335-8871

R&D Projects: GA ČR GPP102/11/P820; GA MŠk(CZ) LO1212; GA MŠk ED0017/01/01; GA MŠk EE2.4.31.0016; GA TA ČR TA02010711; GA TA ČR TA01010995; GA TA ČR TE01020233

Institutional Support: RVO:68081731

Keywords: laser spectroscopy * metrology * molecular iodine * absorption cells * frequency doubling * nterferometry

Subject RIV: BH - Optics, Masers, Lasers

Impact factor: 1.162, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236261>

- [DOI](#)

0398012 - UPT-D 2014 RIV DE eng C - Proceedings Paper (International conf.)

Hrabina, Jan - Holá, Miroslava - Lazar, Josef - Šarbort, Martin - Číp, Ondřej

Spectral Properties of Saturation Pressure Filled Iodine Absorption Cells.

Fringe 2013. 7th International Workshop on Advanced Optical Imaging and Metrology (Proceedings). Berlin : Springer-Verlag, 2014, s. 839-842. ISBN 978-3-642-36358-0.

[International Workshop on Advanced Optical Imaging and Metrology /7./. Nürtingen (DE), 08.09.2013-11.09.2013]

R&D Projects: GA ČR GPP102/11/P820; GA MŠk ED0017/01/01; GA MŠk EE2.4.31.0016; GA TA ČR TA02010711; GA TA ČR TE01020233; GA TA ČR TA01010995

Institutional Support: RVO:68081731

Keywords: laser spectroscopy * metrology * molecular iodine * absorption cells

Subject RIV: BH - Optics, Masers, Lasers

Permanent link: <http://hdl.handle.net/11104/0225589>

- [DOI](#)
- [Result - RIV](#)

0431220 - UPT-D 2015 RIV CZ eng C - Proceedings Paper (International conf.)

Hudec, Jiří - Neděla, Vilém - Polsterová, H.

The Different Percentage Performance of Nanoparticles and their Effect on the Properties of Exposy Resin.

Workshop of Interesting Topics of SEM and ESEM. Brno : Institute of Scientific Instruments AS CR, v. v. i, 2014, s. 47-48. ISBN 978-80-87441-12-1.

[Workshop of Interesting Topics of SEM and ESEM. Mikulov (CZ), 26.08.2014-31.08.2014]

R&D Projects: GA MŠk EE.2.3.20.0103

Institutional Support: RVO:68081731

Keywords: performance of nanoparticles * properties of exposy resin

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Permanent link: <http://hdl.handle.net/11104/0235966>

0431781 - UPT-D 2015 RIV US eng J - Journal Article

Chiodo, N. - Du-Burck, F. - Hrabina, Jan - Lours, M. - Chea, E. - Acef, O.

Optical phase locking of two infrared continuous wave lasers separated by 100 THz.

Optics Letters. Roč. 39, č. 10 (2014), s. 2936-2939. ISSN 0146-9592

R&D Projects: GA ČR GPP102/11/P820; GA MŠk ED0017/01/01; GA MŠk EE2.4.31.0016

Institutional Support: RVO:68081731

Keywords: Continuous wave lasers * Frequency allocation * Harmonic generation * Laser optics

Subject RIV: BH - Optics, Masers, Lasers

Impact factor: 3.179, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236357>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0431682 - UPT-D 2015 RIV US eng J - Journal Article

Janča, Josef - Sobota, Jaroslav

Trends in Polymer and Particle Characterization by Microfluidic Field-Flow Fractionation Methods: Science or Business?.

International Journal of Polymer Analysis and Characterization. Roč. 19, 16 May (2014), s. 296-308. ISSN 1023-666X

Institutional Support: RVO:68081731

Keywords: Asymmetrical flow FFF * Electrical FFF * Field-flow fractionation * Flow FFF * Microelectrical FFF *

Microfluidic channels * Microthermal FFF * Miniaturization and resolution * Polymers and particles separation *

Sedimentation FFF * Technical benefits of microchannels * Thermal FFF

Subject RIV: CF - Physical & Theoretical Chemistry

Impact factor: 1.487, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236269>

- [DOI](#)

0431994 - UPT-D 2015 RIV IT eng C - Proceedings Paper (International conf.)

Jurák, Pavel - Halámek, Josef - Leinveber, Pavel - Reichlova, T. - Plešinger, Filip - Veselý, P. - Vondra, Vlastimil - Klimeš, Petr - Šumbera, J. - Zeman, K. - Novák, M.

Time-frequency interpretation of ultra-high-frequency QRS components.

8th Conference of the European Study Group on Cardiovascular Oscillations (ESGCO 2014). Trento : IEEE, 2014, s. 75-76. ISBN 978-1-4799-3968-8.

[ESGCO 2014. Conference European Study Group on Cardiovascular Oscillations /8./. Trento (IT), 25.05.2014-28.05.2014]

Institutional Support: RVO:68081731

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Permanent link: <http://hdl.handle.net/11104/0236507>

- [DOI](#)

0431976 - UPT-D 2015 RIV US eng J - Journal Article

Krausko, J. - Runštuk, Jiří - Neděla, Vilém - Klán, P. - Heger, D.

Observation of a Brine Layer on an Ice Surface with an Environmental Scanning Electron Microscope at Higher Pressures and Temperatures.

Langmuir. Roč. 30, č. 19 (2014), s. 5441-5447. ISSN 0743-7463

Institutional Support: RVO:68081731

Keywords: microstructural characterization * chemical-properties * organic-molecules * SEM

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Impact factor: 4.384, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236483>

- [WOS](#)
- [DOI](#)

0431823 - UPT-D 2015 RIV US eng J - Journal Article

Krejčí, J. - Sajdlová, Z. - Neděla, Vilém - Flodrová, Eva - Šejnohová, R. - Vránová, H. - Plička, R.

Effective Surface Area of Electrochemical Sensors.

Journal of the Electrochemical Society. Roč. 161, č. 6 (2014), B147-B150. ISSN 0013-4651

R&D Projects: GA MPO FR-TI1/118

Institutional Support: RVO:68081731

Keywords: scanning electron microscopy * glassy-carbon electrode * gold electrodes * biosensors

Subject RIV: JB - Sensors, Measurement, Regulation

Impact factor: 2.859, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236366>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0398011 - UPT-D 2014 RIV DE eng C - Proceedings Paper (International conf.)

Lazar, Josef - Holá, Miroslava - Hrabina, Jan - Buchta, Zdeněk - Číp, Ondřej - Oulehla, Jindřich

Interferometry with Stabilization of Wavelength within a Fixed Measuring Range.

Fringe 2013. 7th International Workshop on Advanced Optical Imaging and Metrology (Proceedings). Berlin : Springer-Verlag, 2014, s. 645-648. ISBN 978-3-642-36358-0.

[International Workshop on Advanced Optical Imaging and Metrology /7./. Nürtingen (DE), 08.09.2013-11.09.2013]

R&D Projects: GA ČR GPP102/11/P820; GA MŠk ED0017/01/01; GA MŠk EE2.4.31.0016; GA TA ČR TA02010711; GA TA ČR TE01020233

Institutional Support: RVO:68081731

Keywords: Nanometrology * refractometry * interferometry * refractive index

Subject RIV: BH - Optics, Masers, Lasers

Permanent link: <http://hdl.handle.net/11104/0225588>

- [DOI](#)
- [Result - RIV](#)

0431221 - UPT-D 2015 RIV CZ eng C - Proceedings Paper (International conf.)

Mašová, Šárka - Foitová, I. - Tihlaříková, Eva - Neděla, Vilém

Electron Microscopy as Unreplaceable Method in Parasitology: SEM and ESEM Utilization.

Workshop of Interesting Topics of SEM and ESEM. Brno : Institute of Scientific Instruments AS CR, v. v. i, 2014, s. 49-51. ISBN 978-80-87441-12-1.

[Workshop of Interesting Topics of SEM and ESEM. Mikulov (CZ), 26.08.2014-31.08.2014]

R&D Projects: GA MŠk EE.2.3.20.0103

Institutional Support: RVO:68081731

Keywords: electron microscopy in parasitology * SEM and ESEM utilization

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Permanent link: <http://hdl.handle.net/11104/0235967>

0431978 - UPT-D 2015 RIV CA eng J - Journal Article

Meluzín, J. - Hude, P. - Leinveber, P. - Jurák, P. - Soukup, L. - Višcor, Ivo - Špinarová, L. - Štěpánová, R. - Podroužková, H. - Vondra, Vlastimil - Langer, P. - Němec, P.

The magnitude and course of exerciseinduced stroke volume changes determine the exercise tolerance in heart transplant recipients with heart failure and normal ejection fraction.

Experimental and Clinical Cardiology. Roč. 20, č. 1 (2014), s. 674-687. ISSN 1205-6626

Institutional Support: RVO:68081731

Keywords: heart failure * stroke volume index * exercise tolerance * bioimpedance

Subject RIV: FA - Cardiovascular Diseases incl. Cardiotharic Surgery

Impact factor: 0.758, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236485>

0431771 - UPT-D 2015 RIV AT eng J - Journal Article

Minks, E. - Jurák, Pavel - Chládek, Jan - Chrastina, J. - Halánek, Josef - Shaw, D. J. - Bareš, M.
Mismatch negativity-like potential (MMN-like) in the subthalamic nuclei in Parkinson's disease patients.
Journal of Neural Transmission. -, - (2014). ISSN 0300-9564

R&D Projects: GA ČR GAP103/11/0933; GA MŠk ED0017/01/01

Institutional Support: RVO:68081731

Keywords: Mismatch negativity * MMN * MMN-like * Subthalamic nucleus * STN * Intracranial electrodes

Subject RIV: BD - Theory of Information

Impact factor: 2.871, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236340>

• [DOI](#)

0431529 - UPT-D 2015 RIV NL eng C - Proceedings Paper (International conf.)

Mrňa, Libor - Šarbort, Martin

Plasma bursts in deep penetration laser welding.

Physics Procedia. 8th International Conference on Laser Assisted Net Shape Engineering (LANE 2014). Amsterdam : Elsevier, 2014, s. 1-1436. ISSN 1875-3892.

[LANE 2014. International Conference on Photonic Technologies /8./. Fürth (DE), 08.09.2014-11.09.2014]

R&D Projects: GA MŠk ED0017/01/01; GA MŠk(CZ) LO1212; GA MŠk EE2.4.31.0016; GA MPO 2A-3TP1/113

Institutional Support: RVO:68081731

Keywords: laser welding * plasma bursts * intensity oscillations * frequency analysis

Subject RIV: BH - Optics, Masers, Lasers

Permanent link: <http://hdl.handle.net/11104/0236193>

0431217 - UPT-D 2015 RIV CZ eng C - Proceedings Paper (International conf.)

Müllerová, Ilona

History of Electron Microscopy at the Institute of Scientific Instruments.

Workshop of Interesting Topics of SEM and ESEM. Brno : Institute of Scientific Instruments AS CR, v. v. i, 2014, s. 9-10. ISBN 978-80-87441-12-1.

[Workshop of Interesting Topics of SEM and ESEM. Mikulov (CZ), 26.08.2014-31.08.2014]

R&D Projects: GA MŠk EE.2.3.20.0103

Institutional Support: RVO:68081731

Keywords: Institute of Scientific Instruments * history of electron microscopy

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Permanent link: <http://hdl.handle.net/11104/0235962>

0431216 - UPT-D 2015 RIV CZ eng C - Proceedings Paper (International conf.)

Müllerová, Ilona - Radlička, Tomáš - Mika, Filip - Krzyžánek, Vladislav - Neděla, Vilém - Sobota, Jaroslav - Zobač, Martin - Kolařík, Vladimír - Starčuk jr., Zenon - Srnka, Aleš - Jurák, Pavel - Zemánek, Pavel - Číp, Ondřej - Lazar, Josef - Mrňa, Libor

Main Activities of the Institute of Scientific Instruments.

Workshop of Interesting Topics of SEM and ESEM. Brno : Institute of Scientific Instruments AS CR, v. v. i, 2014, s. 7-8. ISBN 978-80-87441-12-1.

[Workshop of Interesting Topics of SEM and ESEM. Mikulov (CZ), 26.08.2014-31.08.2014]

R&D Projects: GA MŠk EE.2.3.20.0103

Institutional Support: RVO:68081731

Keywords: Institute of Scientific Instruments * electron microscopes * nuclear magnetic resonance equipment * coherent optics and related techniques

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Permanent link: <http://hdl.handle.net/11104/0235960>

0431218 - UPT-D 2015 RIV CZ eng C - Proceedings Paper (International conf.)

Neděla, Vilém

Environmental Scanning Electron Microscopy and its Application Possibilities in ISI ASCR.

Workshop of Interesting Topics of SEM and ESEM. Brno : Institute of Scientific Instruments AS CR, v. v. i, 2014, s. 11-13. ISBN 978-80-87441-12-1.

[Workshop of Interesting Topics of SEM and ESEM. Mikulov (CZ), 26.08.2014-31.08.2014]

R&D Projects: GA MŠK EE.2.3.20.0103

Institutional Support: RVO:68081731

Keywords: Institute of Scientific Instruments * Environmental Scanning Electron Microscopy

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Permanent link: <http://hdl.handle.net/11104/0235964>

0429503 - UPT-D 2015 RIV SK eng J - Journal Article

Nešpor, D. - Bartušek, Karel - Dokoupil, Zdeněk

Comparing Saddle, Slotted-tube and Parallel-plate Coils for Magnetic Resonance Imaging.

Measurement Science Review. Roč. 14, č. 3 (2014), s. 171-176. ISSN 1335-8871

R&D Projects: GA ČR GA13-09086S

Institutional Support: RVO:68081731

Keywords: MRI measurements * RF coils * homogeneity of B1 * numerical analysis

Subject RIV: BH - Optics, Masers, Lasers

Impact factor: 1.162, year: 2013

Permanent link: <http://hdl.handle.net/11104/0234633>

• [DOI](#)

0431219 - UPT-D 2015 RIV CZ eng C - Proceedings Paper (International conf.)

Oral, Martin - Radlička, Tomáš

Computations in Charged Particle Optics.

Workshop of Interesting Topics of SEM and ESEM. Brno : Institute of Scientific Instruments AS CR, v. v. i, 2014, s. 23-24. ISBN 978-80-87441-12-1.

[Workshop of Interesting Topics of SEM and ESEM. Mikulov (CZ), 26.08.2014-31.08.2014]

R&D Projects: GA MŠK EE.2.3.20.0103

Institutional Support: RVO:68081731

Keywords: charged Particle Optics * computations

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Permanent link: <http://hdl.handle.net/11104/0235965>

0431815 - UPT-D 2015 RIV CZ cze J - Journal Article

Pikálek, Tomáš - Fořt, Tomáš - Buchta, Zdeněk

Metody detekce středu interferenčního proužku v interferometrii nízké koherence.

[Interference fringe center detection techniques in low-coherence interferometry.]

Jemná mechanika a optika. Roč. 59, č. 8 (2014), s. 220-223. ISSN 0447-6441

R&D Projects: GA MŠK(CZ) LO1212; GA MŠK ED0017/01/01

Institutional Support: RVO:68081731

Keywords: low-coherence interferometry * interference fringe center detection techniques * surface analysis

Subject RIV: BH - Optics, Masers, Lasers

Permanent link: <http://hdl.handle.net/11104/0236369>

0431996 - UPT-D 2015 RIV IT eng C - Proceedings Paper (International conf.)

Plešinger, Filip - Matějková, M. - Halánek, Josef - Jurák, Pavel - Višcor, Ivo - Vondra, Vlastimil

Influence of tilt load on pulse wave velocity in the lower limbs.

8th Conference of the European Study Group on Cardiovascular Oscillations (ESGCO 2014). Trento : IEEE, 2014, s. 77-78. ISBN 978-1-4799-3968-8.

[ESGCO 2014. Conference European Study Group on Cardiovascular Oscillations /8./. Trento (IT), 25.05.2014-28.05.2014]

Institutional Support: RVO:68081731

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Permanent link: <http://hdl.handle.net/11104/0236510>

- [DOI](#)

0431773 - UPT-D 2015 RIV AT eng J - Journal Article

Rusnáková-Aulická, Š. - Jurák, Pavel - Chládek, Jan - Daniel, P. - Halánek, Josef - Baláž, M. - Bočková, M. - Chrastina, J. - Rektor, I.

Subthalamic nucleus involvement in executive functions with increased cognitive load: a subthalamic nucleus and anterior cingulate cortex depth recording study.

Journal of Neural Transmission. -, - (2014). ISSN 0300-9564

R&D Projects: GA ČR GAP103/11/0933

Institutional Support: RVO:68081731

Keywords: ERD/S * Anterior cingulate cortex * Subthalamic nucleus * Flanker test * Executive functions

Subject RIV: BD - Theory of Information

Impact factor: 2.871, year: 2013

Permanent link: <http://hdl.handle.net/11104/0236342>

- [DOI](#)

0431958 - UPT-D 2015 RIV US eng C - Proceedings Paper (International conf.)

Řeřucha, Šimon - Šarbot, Martin - Čížek, Martin - Hrabina, Jan - Lazar, Josef - Číp, Ondřej

Interferometric measurement system for cost effective e-beam writer.

Photonic Instrumentation Engineering (Proceedings of Spie 8992). Bellingham : SPIE, 2014, 89920X:1-6. ISSN 0277-786X.

[Photonic Instrumentation Engineering. San Francisco (US), 02.02.2014-05.02.2014]

R&D Projects: GA ČR GAP102/10/1813; GA TA ČR(CZ) TA03010663; GA MPO FR-TI2/705; GA MŠk EE2.4.31.0016; GA MŠk ED0017/01/01; GA MŠk EE2.3.30.0054

Institutional Support: RVO:68081731

Keywords: laser interferometry * nanometrology * homodyne detection * scale linearization; * signal processing * e-beam writer * laser frequency modulation

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Permanent link: <http://hdl.handle.net/11104/0236467>

- [WOS](#)

0421614 - UPT-D 2015 RIV NL eng J - Journal Article

Sháněl, O. - Zlámal, Jakub - Oral, Martin

Calculation of the performance of magnetic lenses with limited machining precision.

Ultramicroscopy. Roč. 137, FEB 2014 (2014), s. 1-6. ISSN 0304-3991

Institutional Support: RVO:68081731

Keywords: tolerance analysis * perturbed geometry * spot size * aberrations * saturated magnetic lens

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Impact factor: 2.745, year: 2013

Permanent link: <http://hdl.handle.net/11104/0227911>

- [SCOPUS](#)

- [WOS](#)

- [DOI](#)

0428243 - UPT-D 2015 CZ eng J - Journal Article

Stránský, K. - Kavička, F. - Rek, Antonín - Masarik, M.

K roztržení plynule lité bramy (18 t) a prasknutí opěrného válce (32 t).

[On the rupture of continually cast slab (18 t) and breaking of an idle roll (32 t).]

Slévárství. Roč. 62, 1-2 (2014), s. 26-29. ISSN 0037-6825

Institutional Support: RVO:68081731

Keywords: continually cast * slab * rupture * idle roll * breaking * co-effect * hydrogen

Subject RIV: JG - Metallurgy

Permanent link: <http://hdl.handle.net/11104/0233628>

0429848 - UPT-D 2015 RIV CZ cze J - Journal Article

Urbánek, Michal - Krátký, Stanislav - Matějka, Milan - Kolařík, Vladimír - Horáček, Miroslav

Plazmochemické leptání křemíku v zařízení Diener nano.

[Plasmochemical Etching of Silicon in Diener Nano Device.]

Chemické listy. Roč. 108, č. 6 (2014), s. 592-595. ISSN 0009-2770

R&D Projects: GA MŠK(CZ) LO1212; GA TA ČR TE01020233

Institutional Support: RVO:68081731

Keywords: plasmochemical etching * silicon * etching rate * selectivity

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Impact factor: 0.196, year: 2013

Permanent link: <http://hdl.handle.net/11104/0234865>

- [SCOPUS](#)

0430597 - UPT-D 2015 RIV DE eng J - Journal Article

Urban, Pavel - Hanzelka, Pavel

Heat transfer in cryogenic helium gas by turbulent Rayleigh-Bénard convection in a cylindrical cell of aspect ratio 1.

New Journal of Physics. Roč. 16, č. 5 (2014), 053042: 1-40. ISSN 1367-2630

R&D Projects: GA ČR GPP203/12/P897

Institutional Support: RVO:68081731

Keywords: Rayleigh-Bénard convection * heat transfer efficiency * cryogenic helium

Subject RIV: BK - Fluid Dynamics

Impact factor: 3.673, year: 2013

Permanent link: <http://hdl.handle.net/11104/0235700>

- [SCOPUS](#)
- [WOS](#)
- [DOI](#)

0429815 - UPT-D 2015 RIV US eng C - Proceedings Paper (International conf.)

Vande Craen, A. - Atieh, S. - Bajko, M. - Benda, M. - de Rijk, G. - Favre, G. - Giloux, C. - Hanzelka, Pavel - Minginette, P. - Parma, V. - Perret, P. - Pirotte, O. - Ramos, D. - Viret, P.

New vertical cryostat for the high field superconducting magnet test station at CERN.

Advances in Cryogenic Engineering. Transactions of the Cryogenic Engineering Conference - CEC. Melville, New York : American Institute of Physics, 2014, s. 229-236. ISBN 978-0-7354-1201-9. ISSN 0094-243X. - (AIP Conference Proceedings. 1573).

[Transaction of the Cryogenic Engineering Conference - CEC. Anchorage, Alaska (US), 17.06.2013-21.06.2013]

Institutional Support: RVO:68081731

Keywords: vertical cryostat * FRESCA2 * eucard * high field magnet

Subject RIV: BK - Fluid Dynamics

Permanent link: <http://hdl.handle.net/11104/0234846>

- [DOI](#)

0431913 - UPT-D 2015 RIV SK eng C - Proceedings Paper (International conf.)

Veselý, P. - Halámek, Josef - Ronzhina, M. - Janoušek, O. - Kolářová, J. - Nováková, M.

Effect of the Repeated Global Ischemia and Reperfusion on the RR and QT Interval in Isolated Rabbit Heart.

Electrocardiology 2014. Proceedings of the 41st International Congress on Electrocardiology. Bratislava : Institute of Measurement Science, 2014, s. 73-76. ISBN 978-80-969-672-7-8.

[Electrocardiology 2014. International Congress on Electrocardiology /41./. Bratislava (SK), 04.06.2014-07.06.2014]

R&D Projects: GA ČR GAP102/12/2034

Institutional Support: RVO:68081731

Keywords: isolated rabbit heart * global ischemia * QT/RR coupling

Subject RIV: JA - Electronics & Optoelectronics, Electrical Engineering

Permanent link: <http://hdl.handle.net/11104/0236436>