

FISA DE INDEPLINIRE A STANDARDELOR MINIMALE-ABILITARE IN DOMENIUL FIZICA

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| Evaluare | Punctaj cerut in Anexa nr. 3, Ordinul 6129 |
|--|--|
| 1. Activitatea didactica si profesionala | $A \geq 2$ |
| 2. Activitatea de cercetare | $I \geq 4$ |
| | $P \geq 4$ |
| 3. Recunoasterea impactului activatii | $C \geq 40$ |
| | $h \geq 10$ |
| 4. Punctaj total CNADTCU $T = A + P/2 + I/2 + C/20 + h/5$ | $T \geq 12$ |

DATA

26/10.2020

SEMNATURA



1. Activitatea didactica si profesionala

1.6 Lucrari in extenso (cel putin 3 pagini) publicate in Proceedings-uri indexate ISI

| Nr. | Authors | Title | Journal | Vol (Year) Pages | Conference | n_i | n_i^{ef} | $A_{6,i}$ ($0.2/n_{ref}$) |
|-----|---|---|-------------------------|----------------------|---|-------|------------|--------------------------------|
| 1 | M.Misheva, I.Avrămova, St.Plachkova and N.Djourellov | Study Of Defects In GeTe and (GeTe) _{1-x} (AgBiTe ₂) _x Solid Solutions By Positrons | Acta Phys Pol A | 99 (2001) 423-428 | 32nd Polish Seminar on Positron Annihilation Jarnołtówek, Poland, September 18-22, 2000 | 4 | 4.0 | 0.05 |
| 2 | M.Misheva, N.Djourellov, I.Seganov | Effect Of Annealing On Free-Volume Properties Of Poly(Ethylene Terephthalate) Studied By Positron Annihilation | Acta Phys Pol A | 99 (2001) 429-434 | 32nd Polish Seminar on Positron Annihilation Jarnołtówek, Poland, September 18-22, 2000 | 3 | 3.0 | 0.07 |
| 3 | R.S.Yu, T.Suzuki, Y.Ito, N.Djourellov, K.Kondo, V.Shantarovich, | Application of coincidence Doppler broadening spectroscopy to hydrocarbons at different substance states | Acta Phys Pol A | 107 (2005) 697-701 | 35th Polish Seminar on Positron Annihilation (PSPA), Turawa, September 20-24, 2004 | 6 | 5.5 | 0.04 |
| 4 | V.P. Shantarovich, T. Suzuki, N. Djourellov, A. Shimazu, V.W. Gustov, I.B. Kevdima, | Some Aspects of Free Volume Studies in Molecular Substances Using Positronium Annihilation Experiments | Acta Phys Pol A | 107 (2005) 629-634 | 35th Polish Seminar on Positron Annihilation (PSPA), Turawa, September 20-24, 2004 | 6 | 5.5 | 0.04 |
| 5 | Dauwe, C., De Baerdemaeker, J., Djourellov, N., Laforest, N., Van Waeyenberge, B., | Is kapton* really that simple? | Acta Phys Pol A | 113 (2008) 1315-1319 | 37th Polish Seminar on Positron Annihilation Łądek-Zdrój, Poland, September 3-7, 2007 | 5 | 5.0 | 0.04 |
| 6 | G.Gutierrez, N.Toulhoat, N.Moncoffre, Y.Pipon, N.Djourellov, A.Maitre, M.Gendre, P.Nedelec, | High temperature annealing of Xe implanted ZrC0.95O0.05 investigated by RBS, TEM and PAS-DBS | Prog Nucl Energy | 57 (2012) 57-61 | E-MRS 2011 Spring Meeting, Symposium V on Nuclear Materials (2011 : Nice, France) | 8 | 6.5 | 0.03 |
| 7 | G. Zamfirova, S. Cherneva, V. Gaydarov, N. Djourellov | Nanocomposites based on epoxy resin. Simulation of microindentation process | Colloids and Surfaces A | 460 (2014) 254-264 | 27th European Colloid and Interface Society | 4 | 4.0 | 0.05 |

| | | | | | | | | | |
|------------------------------|---|---|-----------------------|----------------------|--|---|----|-----|-------------|
| | | | | | | conference (27th ECIS 2013) | | | |
| 8 | G. Victor, Y. Papon, N. Bérend, N. Toulhoat, N. Moncoffre, N. Djourellov, S. Miro, J. Baillet, N. Pradeilles, O. Rapaud, A. Maître, D. Gosset | Structural modifications induced by ion irradiation and temperature in boron carbide B4C | Nucl Instr Meth B | 365 (2015) 300-304 | | 19th International Conference on Ion Beam Modification of Materials (IBMM 2014) | 12 | 8.5 | 0.02 |
| 9 | D. Dinescu, N. Djourellov | Using a Bent Tube as an Energy Filter for a Positron Beam. Simulations on Determining the Optimum Angle of the Bend | Acta Physica Polonica | 132 (2017) 1624-1627 | | 12th International Workshop on Positron and Positronium Chemistry, August 28 – September 01, Lublin, Poland, 2017 | 2 | 2.0 | 0.10 |
| Subtotal indicator A6 | | | | | | | | | 0.43 |

1.10 Director/ responsabil pentru proiecte de cercetare in valoare Vi euro castigate prin competitie nationala sau international

| List | Project Title | Program | Contract | Value (Euro) | Role | Indicator (Value/100000) |
|-------------------------------|--|---------|--------------------|--------------|----------|--------------------------|
| 1 | Development of new experimental setups and materials for the positron converter and moderator for the ELI-NP positron beamline (COMPOSITE) | ELI-RO | 27-ELI/ 02.09.2016 | 251 246 | Director | 2.51 |
| Subtotal indicator A10 | | | | | | 2.51 |

Total Indicator A = 2.94

2. Activitatea de cercetare

List of articles in journals indexed in the ISI database (note, $f_i = 1$ for first or corresponding author)

| Nr. | Authors | Title | Journal | Volume (Year) Pages | f_i | n_i | AIS _i | n_i^{ef} | I_i (AIS _i / n_i^{ef}) | P_i ($f_i \times$ AIS _i) |
|-----|--|---|-----------------------------------|---------------------|-------|-------|------------------|------------|---|--|
| 1 | N.Nancheva, P.Docheva, N.Feshiev, M.Misheva and N.Djourelou | Defects in sputter-deposited aluminium films, studied by X-ray diffraction and positron annihilation | Scripta Metalurgica et Materialia | 33 (1995) 575-581 | 0 | 5 | 0.248 | 5.0 | 0.050 | 0.000 |
| 2 | M.Misheva, N.Djourelou, F.M.A.Margaca, I.M.Miranda Salvado and G.Passage | A study of free-volume hole distributions in xTiO ₂ .(1-x)SiO ₂ by positron annihilation spectroscopy | J Phys Cond Matter | 8 (1996) 6313-6321 | 0 | 5 | 1.032 | 5.0 | 0.206 | 0.000 |
| 3 | N.Djourelou and M.Misheva | Source correction in positron annihilation lifetime spectroscopy | J Phys Cond Matter | 8 (1996) 2081-2087 | 1 | 2 | 1.032 | 2.0 | 0.516 | 1.032 |
| 4 | M.Misheva, N.Djourelou, Tzv.Kotlarova, D.Elenkov and G.Passage | Study of defects in thin titanium films by positron annihilation spectroscopy | Thin Solid Films | 283 (1996) 26-29 | 0 | 5 | 0.767 | 5.0 | 0.153 | 0.000 |
| 5 | N.Nancheva, N.Feshiev, D.Tzaneva, M.Misheva and N.Djourelou | Positron trapping at defects in Y-Ba-Cu-O, La-Nd-Ba-Cu-O and La-Nd-Pb-Cu-O superconductors | J Mater Proc Tech | 68 (1997) 8-12 | 0 | 5 | 0.096 | 5.0 | 0.019 | 0.000 |
| 6 | N.Nancheva, P.Docheva P.Hadjijiska, M.Misheva, N.Djourelou and D.Elenkov | Investigation of the effect of oxygen and substrate bias on the defect structure of sputter-deposited SnOx films | Scripta Materialia | 37 (1997) 1957-1962 | 1 | 6 | 0.248 | 5.5 | 0.045 | 0.248 |
| 7 | N.Djourelou, D.Gogova and M.Misheva | Study of thin chemical vapour deposited tungsten oxide films by positron annihilation spectroscopy | Thin Solid Films | 347 (1999) 302-306 | 0 | 3 | 0.749 | 3.0 | 0.250 | 0.000 |
| 8 | M.Misheva, M.Mihaylova, N.Djourelou, M.Kresteva, V.Krestev, E.Nedkov | Radiation Positron Annihilation Life-Time Spectroscopy Studies of Irradiated Poly(propylene-co-ethylene)/Poly(ethylene-co vinyl acetate) Blends | Radiat Phys Chem | 58 (2000) 39-47 | 0 | 6 | 0.270 | 5.5 | 0.049 | 0.000 |

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|----|---|--|--------------------|----------------------|---|---|-------|-----|-------|-------|
| 9 | M.Misheva, N.Djourellov, A.Dimitrova, G.Zamfirova | Ultrahigh molecular weight polyethylene free volume hole structure studied by positron annihilation lifetime technique | Macromol Chem Phys | 201 (2000) 2348-2353 | 0 | 4 | 0.730 | 4.0 | 0.183 | 0.000 |
| 10 | M.Misheva, N.Djourellov, F.M.A.Margasa, I.M.Miranda Salvado | Positronium Decay Study of Zirconia-Silica-gels | J Non Cryst Solids | 272 (2000) 209-217 | 1 | 4 | 0.666 | 4.0 | 0.167 | 0.666 |
| 11 | M.Misheva, N.Djourellov and E.T.Nedkov | Gamma Irradiation Effect Upon Positron Annihilation in Ultra High Molecular Weight Poly (Ethylene Oxide) | Radiat Phys Chem | 62 (2001) 379-385 | 1 | 3 | 0.342 | 3.0 | 0.114 | 0.342 |
| 12 | M.Misheva, N.Djourellov, F.M.A.Margaca and I.M.Miranda Salvado | Positron Annihilation Spectroscopy Applied On Sol-Gel Prepared SiO2 | J Non Cryst Sol | 279 (2001) 196-203 | 1 | 4 | 0.765 | 4.0 | 0.191 | 0.765 |
| 13 | N.Nancheva, P.Docheva, N.Djourellov and M.Balcheva | Positron and X-Ray Diffraction Study of In-Se, Cu-Se and Cu-In-Se2 | Materials Letters | 54 (2002) 169-174 | 0 | 4 | 0.438 | 4.0 | 0.109 | 0.000 |
| 14 | G.Zamfirova, M.Misheva, M.Kresteva, N.Djourellov, R.Benevente, E.Perez, J.M.Perena | Physical Aging of Poly(diethylene glycol-p,p' bibenzoate) | J Applied Pol Sci | 83 (2002) 2363-2368 | 0 | 7 | 0.526 | 6.0 | 0.088 | 0.000 |
| 15 | G.Zamfirova, M.Misheva, E.Perez, R.Benavente, M.Cerrada, N.Djourellov, M.Kresteva, J.M.Perena | Norbormene-Ethylene Copolymers Studied by Non-Destructive Methods | Polymer Journal | 34 (2002) 779-785 | 0 | 8 | 0.438 | 6.5 | 0.067 | 0.000 |
| 16 | N.Djourellov, M.Misheva, G.Zamfirova, R.Benavente, E.Perez, J.M.Pereña | Positron Annihilation in Norbormene-Ethylene Copolymers | Macromol Chem Phys | 204 (2003) 1531-1538 | 1 | 6 | 0.680 | 5.5 | 0.124 | 0.680 |
| 17 | C.He, E.Hamada, N.Djourellov, T.Suzuki, H.Kobayashi, K.Kondo, Y.Ito | Development on a pulsed slow positron beam: Moderator and bunching signal waveform | Nucl Instr Meth B | 211 (2003) 571-576 | 0 | 7 | 0.446 | 6.0 | 0.074 | 0.000 |
| 18 | N.Djourellov, C.He, T.Suzuki, V.P.Shantarovich, Y.Ito, K.Kondo, Y.Ito | Positron Annihilation in Polypropylene studied by Lifetime and Coincidence Doppler-Broadening Spectroscopy | Radiat Phys Chem | 68 (2003) 689-695 | 1 | 7 | 0.267 | 6.0 | 0.045 | 0.267 |
| 19 | N.Djourellov, T.Suzuki, Y.Ito, K.Velitchkova, K.Kondo | Variable-Energy Positron Annihilation Lifetime and Doppler-Broadening of the | Nucl Instr Meth B | 225(2004) 357-363 | 1 | 5 | 0.450 | 5.0 | 0.090 | 0.450 |

| | | | | | | | | | | |
|----|--|---|--------------------|--------------------|---|---|-------|-----|-------|-------|
| 20 | N.Djourelou, T.Goworek, K.Kondo, T.Suzuki, R.Zaleski | Annihilation Line Study of Carbon-Implanted Polyethylene Enhancement of positronium formation by trapped electrons in solid n-nonadecane. Light bleaching effect | Phys Lett A | 323 (2004) 165-168 | 1 | 5 | 0.663 | 5.0 | 0.133 | 0.663 |
| 21 | C. He, T. Suzuki, V.P.Shantarovich, N.Djourelou, K. Kondo, Y. Ito | Positron annihilation studies of hyper-cross-linked polystyrenes | Chem Physics | 303 (2004) 219-226 | 0 | 5 | 1.028 | 5.0 | 0.206 | 0.000 |
| 22 | N.Djourelou, T.Suzuki, R.S.Yu, V.Shantarovich, K.Kondo | Application of coincidence Doppler broadening spectroscopy to polypropylene and polyethylene: taking into account the positronium formation | Chem Physics | 302 (2004) 179-184 | 1 | 5 | 1.028 | 5.0 | 0.206 | 1.028 |
| 23 | N.Djourelou, T.Suzuki, Y.Ito, V.P.Shantarovich, Y.Ito, K.Kondo, J.Onoe | Application of Coincidence Doppler Broadening Spectroscopy to simple hydrocarbons | Chem Physics | 298 (2004) 183-187 | 1 | 7 | 1.028 | 6.0 | 0.171 | 1.028 |
| 24 | N.Djourelou, C.He, T.Suzuki, Y.Ito, K.Velitchkova, E.Hamada, K.Kondo | Carbon Implanted Ultra High Molecular Weight Polyethylene Studied by Slow Positron Beam | Nucl Instr Meth B | 215 (2004) 83-89 | 1 | 7 | 0.450 | 6.0 | 0.075 | 0.450 |
| 25 | N.Djourelou, T.Suzuki, V.P.Shantarovich, T.Dobreva, Y.Ito | Transitions and Relaxations in Gamma-Irradiated Polypropylene Studied by Positron Annihilation Lifetime Spectroscopy | Radiat Phys Chem | 72 (2005) 13-18 | 1 | 5 | 0.323 | 5.0 | 0.065 | 0.323 |
| 26 | N.Djourelou, T.Suzuki, M.Misheva, F.M.A.Margaça, I.M.Miranda Salvado | Positron annihilation lifetime study of organic-inorganic hybrid materials prepared by irradiation | J Non Cryst Solids | 351 (2005) 340-345 | 1 | 5 | 0.606 | 5.0 | 0.121 | 0.606 |
| 27 | T.Xu, Y.Bin, N.Djourelou, T.Suzuki, M.Matsuo | Positron annihilation study of density fluctuation of amorphous poly(ethylene terephthalate) films in terms of the quasi-spinodal decomposition | Phys Rev B | 71 (2005) 075204 | 0 | 5 | 1.391 | 5.0 | 0.278 | 0.000 |

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|----|--|---|----------------------|---------------------|---|---|-------|-----|-------|-------|
| 28 | R.S.Yu, T.Suzuki, N.Djourelov, K.Kondo, Yasuo Ito, and V.Shantarovich | Positron annihilation lifetime and coincidence Doppler broadening study of g-irradiated polyethylene | Chem Physics | 313 (2005) 63–69 | 0 | 6 | 0.976 | 5.5 | 0.177 | 0.000 |
| 29 | S.Okamoto, R.S.Yu, N. Djourelov, T.Suzuki | Study on thermal behavior of solution-cast liquid crystalline polymer film by positron annihilation lifetime spectroscopy | Polymer | 46 (2005) 6455–6460 | 0 | 4 | 1.004 | 4.0 | 0.251 | 0.000 |
| 30 | N.Djourelov, T.Suzuki, V.Shantarovich, K.Kondo | Positronium formation in sol- gel-prepared silica-based glasses. Temperature and positron-irradiation effect | Radiat Phys Chem | 72 (2005) 723-729 | 1 | 4 | 0.323 | 4.0 | 0.081 | 0.323 |
| 31 | N.Djourelov, T.Suzuki, Y.Ito, V.Shantarovich, K.Kondo | Gamma and positron irradiation effects on polypropylene studied by coincidence Doppler broadening spectroscopy | Radiat Phys Chem | 72 (2005) 687-694 | 1 | 4 | 0.323 | 4.0 | 0.081 | 0.323 |
| 32 | N.Djourelov, T.Suzuki, R.S.Yu, Y.Ito, | Coincidence Doppler broadening study on hydrocarbons with pi and sigma valence electrons. Positronium correction | Nucl Instr Meth A | 540 (2005) 487-494 | 1 | 4 | 0.398 | 4.0 | 0.099 | 0.398 |
| 33 | A.Macková, V.Havránek, V.Švorčík, N. Djourelov, T.Suzuki, | Degradation of PET, PEEK and PI induced by irradiation with 150 keV Ar ⁺ and 1,76 MeV 4He ions | Nucl Instr Meth B | 240 (2005) 245–249 | 0 | 5 | 0.446 | 5.0 | 0.089 | 0.000 |
| 34 | R.S.Yu, T.Suzuki, Y.Ito, N.Djourelov, K.Kondo, | V.Shantarovich, Coincidence Doppler broadening study of polar and nonpolar molecules in liquid and solid states | Chem Phys Lett | 406 (2005) 101–105 | 0 | 6 | 1.096 | 5.5 | 0.199 | 0.000 |
| 35 | B.Ganguly, N.Djourelov, T.Suzuki, S.Kundu, | Surface Modification of Mica by Titanium Sputtering and Studied by Positron Annihilation | Appl Radiat Isot | 64 (2006) 651–655 | 0 | 4 | 0.400 | 4.0 | 0.100 | 0.000 |
| 36 | R.S.Yu, T.Suzuki, N.Djourelov, Y.Ito, K.Kondo, | Study of irradiation effect on positronium formation in polypropylene | Radiat Phys Chem | 75 (2006) 247–252 | 0 | 5 | 0.305 | 5.0 | 0.061 | 0.000 |
| 37 | N. Djourelov, Z. Ateş, O. Güven, M. Misheva, T. Suzuki, | Positron Annihilation Lifetime Spectroscopy of Molecularly | Polymer | 48 (2007) 2692-2699 | 1 | 5 | 1.044 | 5.0 | 0.209 | 1.044 |

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|----|--|--|--------------------|----------------------|---|----|-------|------|-------|--|--|-------|--|
| | | Imprinted Hydroxyethyl Methacrylate Based Polymers | | | | | | | | | | | |
| 38 | N. Djourelov, N. Charvin, C. Bas, J. Viret, V. Samoylenko, D. Sillou, | Symmetric analog positron lifetime spectrometer utilizing charge-to-digital converters | Nucl Instr Meth B | 264 (2007) 165-170 | 1 | 6 | 0.359 | 5.5 | 0.065 | | | 0.359 | |
| 39 | M. Misheva, N. Djourelov, G. Zamfirova, V. Gaydarov, M. L. Cerrada, V. Rodriguez-Amor, E. Pérez, | Effect of compatibilizer and electron irradiation on free-volume and microhardness of syndiotactic polypropylene/clay nanocomposites | Radiat Phys Chem | 77 (2008) 138-145 | 1 | 7 | 0.306 | 6.0 | 0.051 | | | 0.306 | |
| 40 | N. Djourelov, C.A. Palacio, J. De Baerdaemaeker, C. Bas, N. Charvin, K. Delendik, G. Drobychev, D. Sillou, O. Voitik, S. Gninenko, | A study of positronium formation in anodic alumina | J Phys Cond Matter | 20 (2008) 095206 | 1 | 10 | 0.951 | 7.5 | 0.127 | | | 0.951 | |
| 41 | Kellerbauer, A., Amoretti, M., Belov, A.S., Bonomi, G., Boscolo, I., Brusa, R.S., Bu?chner, M., Byakov, V.M., Cabaret, L., Canali | Proposed antimatter gravity measurement with an antihydrogen beam | Nucl Instr Meth B | 266 (2008) 351-356 | 0 | 53 | 0.363 | 22.7 | 0.016 | | | 0.000 | |
| 42 | R. Bryaskova, R. Mateva, N. Djourelov, M. Krasteva, | Study of multiblock Polyamide 6Poly (isoprene) copolymers by positron annihilation spectroscopy | Cent Eur J Chem | 6 (2008) 575-580 | 0 | 4 | 0.186 | 4.0 | 0.047 | | | 0.000 | |
| 43 | Uhlenhaut, D.I., Dalla Torre, F.H., Castellero, A., Gomez, C.A.P., Djourelov, N., Krauss, G., Schmitt, B., Patterson, B., Löffler | Structural analysis of rapidly solidified Mg-Cu-Y glasses during room-temperature embrittlement | Philos Mag | 89 (2009) 233-248 | 0 | 8 | 0.666 | 6.5 | 0.102 | | | 0.000 | |
| 44 | D. Fabris, the AEGIS collaboration, A.S. Belov, G. Bonomi, I. Boscolo, N. Brambilla, R.S. Brusa, V.M. Byakov, L. Cabaret, C. Canal | The AEGIS detection system for gravity measurements | Nucl Phys A | 834 (2010) 751c-753c | 0 | 72 | 0.811 | 29.0 | 0.028 | | | 0.000 | |
| 45 | N. Djourelov, Corine Bas, Daniel Sillou, Rosario Benavente, Ernesto Pérez, Maria L. Cerrada | Positron Spectroscopy Analysis in Metalocene Propylene\1-Octadecene Copolymers: Parameters Dependence on | J Polym Sci B | 48 (2010) 1994-2002 | 1 | 6 | 0.556 | 5.5 | 0.101 | | | 0.556 | |

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|----|---|--|-----------------------|----------------------|---|----|-------|------|-------|--|--|-------|--|
| | | Monoclinic and Mesomorphic Polymorphs | | | | | | | | | | | |
| 46 | N. Djourelov, Yann Aman, Kalin Berovski, Patrick Nédélec, Nicolas Charvin, Vincent Garnier, and Elisabeth Djurado, | Structure characterization of spark plasma sintered alumina by positron annihilation lifetime spectroscopy | Phys Stat Solidi A | 208 (2011) 795-802 | 1 | 7 | 0.506 | 6.0 | 0.084 | | | 0.506 | |
| 47 | N. Laforest, C. Bas, J. De Debaerdemaker, N. Djourelov, C. Dauwe, | The Free Positron Lifetime in Amorphous Polymers at Low Temperature | Phys Stat Solidi A | 248 (2011) 1453-1458 | 0 | 5 | 0.506 | 5.0 | 0.101 | | | 0.000 | |
| 48 | N. Laforest, C. Bas, J. De Debaerdemaker, N. Djourelov, C. Dauwe, | Extra formation of positronium in amorphous polymers at low temperature | Phys Stat Solidi B | 248 (2011) 1459-1463 | 0 | 5 | 0.504 | 5.0 | 0.101 | | | 0.000 | |
| 49 | Ferragut, R, Belov, A.S., Bonomi, G., Boscolo, I., Brusa, R.S., Byakov, V.M., Cabaret, L., Calloni, A., Canali, C., Carra | Antihydrogen physics: Gravitation and spectroscopy in AEGIS | Can J Phys | 89 (2011) 17-24 | 0 | 57 | 0.294 | 24.0 | 0.012 | | | 0.000 | |
| 50 | N.Djourelov, G.Gutierrez, H.Marinov, E.Popov, N.Toulhoat, N.Moncoffre, Y.Pipon, P.Nédélec, | Xe-implanted zirconium oxycarbide studied by variable energy positron beam | Nucl Instr Meth B | 269 (2011) 2709-2714 | 1 | 8 | 0.365 | 6.5 | 0.056 | | | 0.365 | |
| 51 | N. Djourelov, Y. Aman, D. Sillou, P. Nedelec, | Pore closure in spark plasma sintered alumina studied by variable energy positrons | Eur Phys J Appl Phys | 57 (2012) 20402 | 1 | 4 | 0.597 | 4.0 | 0.149 | | | 0.597 | |
| 52 | Chateau, D., Chaput, F., Lopes, C., Lindgren, M., Brännlund, C., Öhgren, J., Djourelov, N., Nedelec, P., Desroches, C., Eliasson, | Silica hybrid sol-gel materials with unusually high concentration of ptorganic molecular guests: Studies of luminescence and nonlinear absorption of light | ACS Appl Mater Interf | 4 (2012) 2369-2377 | 0 | 14 | 1.321 | 9.5 | 0.139 | | | 0.000 | |
| 53 | N. Djourelov, B. Marchand, H. Marinov, N. Moncoffre, Y. Pipon, P. Nédélec, N. Toulhoat, D. Sillou, | Variable energy positron beam study of Xe-implanted uranium oxide | J Nucl Mater | 432 (2013) 287-293 | 1 | 8 | 0.563 | 6.5 | 0.087 | | | 0.563 | |
| 54 | P. Staikov, N. Djourelov, | Simulations of <100> Edge and 1/2<111> Screw Dislocations in | Physica B | 413 (2013) 59-63 | 0 | 2 | 0.301 | 2.0 | 0.151 | | | 0.000 | |

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|----|---|---|--------------------------------|-----------------------|---|----|-------|------|-------|-------|
| 55 | N. Djourelou, B. Marchand, H. Marinov, N. Moncoffre, Y. Pipon, N. Béreid, P. Nédélec, L. Raimbault, T. Epicier, | a-iron and Tungsten and Positron Lifetime Calculations Study of temperature and radiation induced microstructural changes in Xe-implanted UO ₂ by TEM, STEM, SIMS and positron spectroscopy | J Nucl Mater | 443 (2013) 562-569 | 1 | 9 | 0.563 | 7.0 | 0.080 | 0.563 |
| 56 | H. Marinov, N. Djourelou, P. Nédélec, L. Petrov, | Design, simulation and performance of a slow positron beam with secondary electron tagging for positron annihilation lifetime spectroscopy | Nucl Instr Meth A | 729 (2013) 569-575 | 1 | 4 | 0.407 | 4.0 | 0.102 | 0.407 |
| 57 | M. Lépinay, N. Djourelou, H. Marinov, L. Broussous, K. Courouble, C. Licitra, F. Bertin, V. Rouessac, A. Ayral | Depth-resolved impact of integration process on porosity and solvent diffusion in a SiOCH low- <i>k</i> material | J Por Mater | 21 (2014) 475-484 | 0 | 9 | 0.329 | 7.0 | 0.047 | 0.000 |
| 58 | L. T. Dimowa, O. E. Petrov, N. I. Djourelou, and B. L. Shivachev | Structural study of Zn-exchanged natural clinoptilolite using powder XRD and positron annihilation data | Clay Miner | 50 (2015) 41-54 | 0 | 4 | 0.337 | 4.0 | 0.084 | 0.000 |
| 59 | N. Djourelou, A. Oprisa, V. Leca | Source of slow polarized positrons using the brilliant gamma beam at ELI-NP. Converter design and simulations | Nucl Instr Meth A | 806 (2016) 146-153 | 1 | 3 | 0.373 | 3.0 | 0.124 | 0.373 |
| 60 | N. Djourelou, C. Huhenschmidt, S. Balascuta, V. Leca A. Oprisa, C. Pochacz, C. Teodorescu, C. A. Ur | Positron production by gamma beam at ELI-NP | Rom Rep Phys | 68 (2016) S735 – S797 | 1 | 8 | 0.242 | 6.5 | 0.037 | 0.242 |
| 61 | D. Dinescu, N. Djourelou | Simulations on reducing the influence of backscattered slow positrons on lifetime measurements | UPB Scientific Bulletin A | 79 (2017) 317-326 | 0 | 2 | 0.094 | 2.0 | 0.047 | 0.000 |
| 62 | S. Gales, K. A. Tanaka, D. L. Balabanski, F. Negoita, D. Stutman, O. Tesileanu, C. A. Ur, D. Ursescu, I. rei, | The extreme light infrastructure—nuclear physics (ELI-NP) facility: new horizons in physics with 10 PW ultra- | Reports on Progress in Physics | 81 (2018) 094301 | 0 | 22 | 6.880 | 12.3 | 0.558 | 0.000 |

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|-----------------|--|---|---------------------------|-----------------------------|---|---|-------|-----|-------|-------|--|--|--|--|--|--|--|--|--|------------------|-------------------|
| | S.Ataman, M.O.Cernaianu, L.D' Alessi, I.Dancus, B.Diaconescu, N.Djourelou, D.Filipescu, P.Ghenuche, D.G.Ghita, C.Matei, K.Seto, M.Zeng, N.V.Zamfir | intense lasers and 20 MeV brilliant gamma beams | | | | | | | | | | | | | | | | | | | |
| 63 | V.L. Ene, D. Dinescu, N. Djourelou, I. Zai, B.S. Vasile, A.B. Serban, V. Leca, E. Andronescu | Study of Edge and Screw Dislocation Density in GaN/Al2O3 Heterostructure | Materials | 12 (2019) 4205 | 0 | 8 | 0.608 | 6.5 | 0.094 | 0.000 | | | | | | | | | | | |
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| 66 | N. Djourelou, D. Dinescu and V. Leca | An overview of the design of ELIPS-a new slow positron beam line | Nucl Instr Meth A | 934 (2019) 19-25 2019 | 1 | 3 | 0.384 | 3.0 | 0.128 | 0.384 | | | | | | | | | | | |
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| Subtotal | | | | | | | | | | | | | | | | | | | | I = 8.126 | P = 17.664 |

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Total C = 78.12

