

**UNIVERSITATEA DE STAT DIN MOLDOVA**  
(Denumirea organizației)

**APROB:**  
**Rector**  
**ȘAROV Igor, dr. conf. univ.**

\_\_\_\_\_  
(semnătura)  
„\_\_\_\_\_” \_\_\_\_\_ 2023

**PROCES-VERBAL**  
**nr.1 din \_\_\_\_\_ 2023**  
**de recepție finală/punere în funcțiune a rezultatelor obținute în cadrul proiectului de cercetare și inovare cu**  
**cifrul 20.80009.5007.19**

În baza ordinului nr. 234c din „12” septembrie 2023, comisia în componența  
președintelui comisiei

|   |  |
|---|--|
| <u>Prorector pentru activitate științifică</u><br>(funcția) | <u>Stepanov Georgeta</u><br>(numele, prenumele)  |
| și membrilor comisiei                                       |  |
| <u>Sef Departament Cercetare și Inovare</u><br>(funcția)    | <u>Prisacaru Veronica</u><br>(numele, prenumele) |
| <u>Director Institutul de Fizică Aplicată</u><br>(funcția)  | <u>Sikimaka Olga</u><br>(numele, prenumele)      |
| <u>Conducător Proiect</u><br>(funcția)                      | <u>Culiuc Leonid</u><br>(numele, prenumele)      |
| <u>Contabil șef adjunct</u><br>(funcția)                    | <u>Toderas Angela</u><br>(numele, prenumele)     |

a întocmit prezentul proces-verbal de recepție finală/punere în funcțiune a următorului obiect de active materiale și/sau nemateriale (grupe de obiecte):

| Nr. d/o | Denumirea obiectului de active materiale și/sau nemateriale (grupe de obiecte) | Numărul de inventar | Data de recepție finală /punere în funcțiune | Nr. unit. | Valoarea de intrare, mii lei | Durata de funcționare utilă, ani | Suma uzurii anuale, lei |
|---------|--|---------------------|--|-----------|------------------------------|----------------------------------|-------------------------|
| 1       | 2  | 3                   | 4  | 5         | 6                            | 7                                |                         |
| 1. 2020 | <sup>1</sup> Articole în reviste științifice                                   | 001106              |  | 30        | 1796.0                       |                                  |                         |
| 2. 2020 | <sup>2</sup> Articole în culegeri științifice                                  | 001107              |  | 8         | 185.7                        |                                  |                         |
| 3. 2020 | <sup>3</sup> Teze în culegeri științifice                                      | 001108              |  | 2         | 20.0                         |                                  |                         |
| 4. 2020 | <sup>4</sup> Publicații electronice  | 001109              |  | 12        | 120.0                        |                                  |                         |
|         | <b>TOTAL 2020</b>  |                     |  |           | <b>2121.7</b>                |                                  |                         |
| 5. 2021 | <sup>5</sup> Articole în reviste științifice                                   | 001110              |  | 25        | 2277.5                       |                                  |                         |
| 6. 2021 | <sup>6</sup> Teze în culegeri științifice                                      | 001111              |  | 4         | 44.4                         |                                  |                         |
|         | <b>TOTAL 2021</b>  |                     |  |           | <b>2321.9</b>                |                                  |                         |
| 7. 2022 | <sup>7</sup> Articole în reviste științifice                                   | 001112              |  | 27        | 2354.4                       |                                  |                         |

|                   |  |        |  |           |               |  |  |
|-------------------|--|--------|--|-----------|---------------|--|--|
| 8.<br>2022        | <sup>8</sup> Articole în culegeri științifice  | 001113 |  | <b>4</b>  | 120.0         |  |  |
|                   | <b>TOTAL 2022</b>                              |        |  |           | <b>2474.4</b> |  |  |
| 10.<br>2023       | <sup>10</sup> Articole în reviste științifice  | 001114 |  | <b>10</b> | 1599.0        |  |  |
| 11.<br>2023       | <sup>11</sup> Articole în culegeri științifice | 001115 |  | <b>2</b>  | 319.8         |  |  |
| 12<br>2023i<br>uc | <sup>12</sup> Teze în culegeri științifice     | 001116 |  | <b>6</b>  | 959.4         |  |  |
|                   | <b>TOTAL 2023</b>                              |        |  |           | <b>2878.2</b> |  |  |

| Codul de clasificare a obiectului de active conform Catalogului mijloacelor fixe și activelor nemateriale | Data fabricării (elaborării) | Numărul pașaportului tehnic, altui document (se va specifica) |
|---|------------------------------|---|
| 8   | 9                            | 10  |
|   |                              |   |
|   |                              |   |
|   |                              |   |

Lista rezultatelor

**2020**

<sup>1</sup>Articole în reviste științifice

- Felea, V.**; Cong, P.T.; **Prodan, L.**; Gorbunov, D.I.; Nomura, T.; Skourski, Y.; Zherlitsyn, S.; Wosnitza, J.; Wang, Z.; Miyata, A.; Portugall, O.; Widmann, S.; Krug von Nidda, H.-A.; Deisenhofer, J.; **Tsurkan, V.**; Loidl, A. High-field phase transitions in the orbitally ordered multiferroic  $\text{GeV}_4\text{S}_8$ . *Phys Rev B*. 2020, **101(6)**, 064413-1–064413-10. ISSN 1098-0121. Doi 10.1103/PhysRevB.101.064413 (IF: 3,575).
- Miyata, A.; Suwa, H.; Nomura, T.; **Prodan, L.**; **Felea, V.**; Skourski, Y.; Deisenhofer, J.; Krug von Nidda, H.-A.; Portugall, O.; Zherlitsyn, S.; **Tsurkan, V.**; Wosnitza, J.; Loidl, A. Spin-lattice coupling in a ferrimagnetic spinel: Exotic H-T phase diagram of  $\text{MnCr}_2\text{S}_4$  up to 110 T. *Phys Rev B*. 2020, **101(5)**, 054432-1–054432-8. ISSN 1098-0121. Doi 10.1103/PhysRevB.101.054432 (IF: 3,575).
- Croitore, D.**; **Filippova, I.**; Kravtsov, V.; Günther, A.; Widmann, S.; Reuter, D.; Krug von Nidda, H.-A.; Deisenhofer, J.; Loidl, A.; **Tsurkan, V.** Structure, superconductivity, and magnetism in  $\text{Rb}_{1-x}\text{Fe}_{1.6}\text{Se}_{2-z}\text{S}_z$ . *Phys Rev B*. 2020, **101(5)**, 054516-1–054516-18. ISSN 1098-0121. Doi 10.1103/PhysRevB.101.054516 (IF: 3,575).
- Reschke, S.; Meggle, F.; Mayr, F.; **Tsurkan, V.**; **Prodan, L.**; Nakamura, H.; Deisenhofer, J.; Kuntscher, C.A.; Kézsmárki, I. Lattice dynamics and electronic excitations in a large family of lacunar spinels with a breathing pyrochlore lattice structure. *Phys Rev B*. 2020, **101(7)**, 075118-1–075118-11. ISSN 1098-0121. Doi 10.1103/PhysRevB.101.075118 (IF: 3,575).
- Wahl, P.; Singh, U.R.; **Tsurkan, V.**; Loidl, A. Nanoscale electronic inhomogeneity in  $\text{FeSe}_{0.4}\text{Te}_{0.6}$  revealed through unsupervised machine learning. *Phys Rev B*. 2020, **101(11)**, 115112-1–115112-4. ISSN 1098-0121. Doi 10.1103/PhysRevB.101.115112 (IF: 3,575).
- Sahasrabudhe, A.; Kaib, D.A.S.; Reschke, S.; German, R.; Koethe, T.C.; Buhot, J.; Kamenskyi, D.; Hickey, C.; Becker, P.; **Tsurkan, V.**; Loidl, A.; Do, S.H.; Choi, K.Y.; Grüninger, M.; Winter, S.M.; Wang, Zh.; Valentí, R.; Van Loosdrecht, P.H.M. High-field quantum disordered state in  $\alpha\text{-RuCl}_3$ : Spin flips, bound states, and multiparticle continuum. *Phys Rev B*. 2020, **101(14)**, 140410-1–140410-6. ISSN 1098-0121. Doi 10.1103/PhysRevB.101.140410 (IF: 3,575).
- Geirhos, K.; Gross, B.; Szigeti, B.G.; Mehlin, A.; Philipp, S.; White, J.S.; Cubitt, R.; Widmann, S.; Ghara, S.; Lunkenheimer, P.; **Tsurkan, V.**; Neuber, E.; Ivaneyko, D.; Milde, P.; Eng, L.M.; Leonov, A.O.; Bordács, S.; Poggio, M.; Kézsmárki, I. Macroscopic manifestation of domain-wall magnetism and magnetoelectric effect in a Néel-type skyrmion host. *npj Quantum Materials*. 2020, **5**, 44-1–44-8. ISSN 2397-4648. Doi 10.1038/s41535-020-0247-z (IF: 6,562).
- Bachus, S.; Kaib, D.A.S.; Tokiwa, Y.; Jesche, A.; **Tsurkan, V.**; Loidl, A.; Winter, S.M.; Tsirlin, A.A.; Valentí, R.; Gegenwart, P. Thermodynamic Perspective on Field-Induced Behavior of  $\alpha\text{-RuCl}_3$ . *Phys Rev Lett*. 2020, **125(9)**, 097203-1–097203-7. ISSN 0031-9007. Doi 10.1103/PhysRevLett.125.097203 (IF: 8,385).

9. Reschke, S.; Tsirlin, A.A.; Khan, N.; **Prodan, L.**; **Tsurkan, V.**; Kézsmárki, I.; Deisenhofer, J. Structure, phonons, and orbital degrees of freedom in Fe<sub>2</sub>Mo<sub>3</sub>O<sub>8</sub>. *Phys Rev B*. 2020, **102(9)**, 094307-1—094307-9. ISSN 1098-0121. Doi 10.1103/PhysRevB.102.094307 (IF: 3,575).
10. Gross, B.; Philipp, S.; Geirhos, K.; Mehlin, A.; Bordács, S.; **Tsurkan, V.**; Leonov, A.; Kézsmárki, I.; Poggio, M. Stability of Néel-type skyrmion lattice against oblique magnetic fields in GaV<sub>4</sub>S<sub>8</sub> and GaV<sub>4</sub>Se<sub>8</sub>. *Phys Rev B*. 2020, **102(10)**, 104407-1—104407-9. ISSN 1098-0121. Doi 10.1103/PhysRevB.102.104407 (IF: 3,575).
11. Gao, S.; Rosales, H.D.; Gómez Albarracin, F.A.; **Tsurkan, V.**; Kaur, G.; Fennell, T.; Steffens, P.; Boehm, M.; Čermák, P.; Schneidewind, A.; Ressouche, E.; Cabra, D.C.; Rüegg, C.; Zaharko, O. Fractional antiferromagnetic skyrmion lattice induced by anisotropic couplings. *Nature*. 2020, **586**, 37—41. ISSN 0028-0836. Doi 10.1038/s41586-020-2716-8 (IF: 42,778).
12. Strinic, A.; Reschke, S.; Vasin, K.V.; Schmidt, M.; Loidl, A.; **Tsurkan, V.**; Eremin, M.V.; Deisenhofer, J. Magnetoelectric properties and low-energy excitations of multiferroic FeCr<sub>2</sub>S<sub>4</sub>. *Phys Rev B*. 2020, **102(13)**, 134409-1—134409-10. ISSN 1098-0121. Doi 10.1103/PhysRevB.102.134409 (IF: 3,575).
13. Szaller, D.; Szász, K.; Bordács, S.; Viirik, J.; Rööm, T.; Nagel, U.; Shuvaev, A.; Weymann, L.; Pimenov, A.; Tsirlin, A.A.; Jesche, A.; **Prodan, L.**; **Tsurkan, V.**; Kézsmárki, I. Magnetic anisotropy and exchange paths for octahedrally and tetrahedrally coordinated Mn<sup>2+</sup> ions in the honeycomb multiferroic Mn<sub>2</sub>Mo<sub>3</sub>O<sub>8</sub>. *Phys Rev B*. 2020, **102(14)**, 144410-1—14441-8. ISSN 1098-0121. Doi 10.1103/PhysRevB.102.144410 (IF: 3,575).
14. Csizi, B.; Reschke, S.; Strinic, A.; **Prodan, L.**; **Tsurkan, V.**; Kézsmárki, I.; Deisenhofer, J. Magnetic and vibronic terahertz excitations in Zn-doped Fe<sub>2</sub>Mo<sub>3</sub>O<sub>8</sub>. *Phys Rev B*. 2020, **102(17)**, 174407-1—174407-10. ISSN 1098-0121. Doi 10.1103/PhysRevB.102.174407 (IF: 3,575).
15. Avdizhiyan, A.Y.; Lavrov, S.D.; Abdullaev, D.A.; Shestakova, A.P.; **Kulyuk, L.L.**; Mishina, E.D. Tunable spectral properties of photodetectors based on quaternarytransition metal dichalcogenide alloys Mo<sub>x</sub>W<sub>(1-x)</sub>Se<sub>2y</sub>S<sub>2(1-y)</sub>. *IEEE Sens J*. 2020, —. ISSN 1530-437X. Doi 10.1109/JSEN.2020.3012876 (IF: 3,073).
16. Inosov, D.S.; Onykiienko, Y.O.; Tymoshenko, Y.V.; Akopyan, A.; Shukla, D.; Prasai, N.; Doerr, M.; Gorbunov, D.; Zherlitsyn, S.; Voneshen, D. J.; Boehm, M.; **Tsurkan, V.**; **Felea, V.**; Loidl, A.; Cohn J.L. Magnetic field dependence of low-energy magnons, anisotropic heat conduction, and spontaneous relaxation of magnetic domains in the cubic helimagnet ZnCr<sub>2</sub>Se<sub>4</sub>, *Phys Rev B*. 2020, **102(17)**, 184431. DOI: 10.1103/PhysRevB.102.184431 (IF: 3,575)
17. **Ostrovsky, S.M.**; **Klokishner, S.I.** Modeling of Electron Transfer in a Linear Trinuclear Fe–Co–Fe Complex: Magnetic and Polarizability Properties. *J Phys Chem A*. 2020, **124(18)**, 3618—3525. ISSN 1089-5639. Doi 10.1021/acs.jpca.0c01717 (IF: 2,600).
18. **Ostrovsky, S.**; Tomkowicz, Z.; Foroc, S.; Reedijk, J.; Haase, W. Magneto-optical study of the zero-field splitting in a mononuclear tetrahedrally coordinated Co(II) compound with a mixed ligand surrounding. *Polyhedron*. 2020, **187**, 114630-1—114630-7. ISSN 0277-5387. Doi 10.1016/j.poly.2020.114630 (IF: 2,343).
19. Kiiamov, A.; **Tsurkan, V.**; **Croitori, D.**; Krug Von Nidda, H.-A.; Seidov, Z.; Wille, H.-Ch.; Sergueev, I.; Leupold, O.; Tayurskii, D.; Tagirov, L. Application of Nuclear Inelastic Scattering Spectroscopy to the Frequency Scale Calibration of Ab Initio Calculated Phonon Density of States of Quasi-One-Dimensional Ternary Iron Chalcogenide RbFeSe<sub>2</sub>. *Appl Sci - Basel*. 2020, **10(20)**, 7212-1—7212-8. ISSN 2076-3417. Doi 10.3390/app10207212 (IF: 2,474).
20. **Klokishner, S.**; **Ostrovsky, S.M.** Interplay of Jahn-Teller Ordering and Spin Crossover in Co(II) Compounds. *Magnetochemistry*. 2020, **6(4)**, 62-1—62-11. ISSN 2312-7481. Doi 10.3390/magnetochemistry6040062 (IF: 1,947).
21. Lozovan, V.; Kravtsov, V.Ch.; Gorincioi, E.; Rotaru, A.; Coropceanu, E.B.; **Siminel, N.**; Fonari, M. Chromism, positional, conformational and structural isomerism in a series of Zn(II) and Cd(II) coordination polymers based on methylated azine N,N0-donor linkers. *Polyhedron*. 2020, **180**, 114411-1—114411-12. ISSN 0277-5387. Doi 10.1016/j.poly.2020.114411 (IF: 2,343).
22. Lozovan, V.; Kravtsov, V.Ch.; Coropceanu, E.B.; **Siminel, A.V.**; **Kulikova, O.V.**; Costrucova, N.V.; Fonari, M.S. Water-sulfate anion interplay in the evolution of solid state architectures and emission properties of Zn and Cd coordination networks with four azine ligands. *J Solid State Chem*. 2020, **286**, 121312-1—121312-15. ISSN 0022-4596. Doi 10.1016/j.jssc.2020.121312 (IF: 2,726).
23. Croitor, L.; Petric, M.F.; Vlase, G.; Vlase, T.; **Siminel, A.V.**; Bourosh, P.N.; Crisan, M.E. The solvent effect in obtaining of acid–base multicomponent systems: thermal, structural and luminescence study. *J Therm Anal Calorim*. 2020, **141(3)**, 973—979. ISSN 1388-6150. Doi 10.1007/s10973-020-09633-8 (IF: 2,731).
24. Lozovan, V., Kravtsov, V.Ch.; Coropceanu, E.B.; **Siminel, N.**; **Kulikova, O.V.**; Costrucova, N.V.; Fonari, M.S. Seven Zn(II) and Cd(II) 1D coordination polymers based on azine donor linkers and decorated with 2-thiophenecarboxylate: Syntheses, structural parallels, Hirshfeld surface analysis, and spectroscopic and inclusion properties. *Polyhedron*. 2020, **188**, 114702-1—114702-12. ISSN 0277-5387. Doi 10.1016/j.poly.2020.114702 (IF: 2,343).

25. Croitor, L.; Crisan, M.; Vlase, G.; Vlase, T.; Bodnarescu, F.; Sumalan, R.; Petric, M.; **Siminel, A.V.**; Bourosh, P. Advances in new multicomponent crystal system: structure, thermal kinetic analysis, photoluminescent, and biological activity investigations. *J Therm Anal Calorim.* 2020, **142(1)**, 191—201. ISSN 1388-6150. Doi 10.1007/s10973-020-09524-y (IF: 2,731).
26. Chisca, D.; Croitor, L.; Melnic, E.; Petuhov, O.; **Kulikova, O.**; Fonari, M.S. Six transition metal–organic materials with the ditopic 4,40-diaminodiphenylmethane ligand: Synthesis, structure, characterization and luminescent properties. *Polyhedron.* 2020, **192**, 114844-1—114844-10. ISSN 0277-5387. Doi 10.1016/j.poly.2020.114844 (IF: 2,343).
27. Warzanowski, P.; Borgwardt, N.; Hopfer, K.; Attig, J.; Koethe, T.C.; Becker, P.; **Tsurkan, V.**; Loidl, A.; Hermanns, M.; Van Loosdrecht, P.H.M.; Grüninger, M. Multiple spin-orbit excitons and the electronic structure of  $\alpha$ -RuCl<sub>3</sub>. *Phys Rev Res.* 2020, **2(4)**, 042007-1—042007-7. ISSN 2643-1564. Doi 10.1103/PhysRevResearch.2.042007.
28. **Клокишнер, С.И.** Известный ученый-физик и организатор науки. *Электронная обработка материалов.* 2020, **56(3-4)**, 107—114. ISSN 0013-5739.
29. **Clochişner, S.** Fizician consacrat și organizator al științei. *Academicianul Leonid Culiuc la 70 de ani. Akademos.* 2020, **3(58)**, 177—180. ISSN 1857-0461.
30. **Nazarov, M.** SrAl<sub>2</sub>O<sub>4</sub>:Eu<sup>2+</sup>,Dy<sup>3+</sup>: Synthesis, luminescence, properties, and application. *Moldavian Journal of the Physical Sciences.* 2020, **19(1-2)**, 59—88. ISSN 1810-648X. Doi: 10.5281/zenodo.4118682.

## <sup>2</sup>Articole în culegeri științifice

1. **Ostrovsky, S.M.**; **Klokishner, S.I.** Modeling of Charge Transfer Induced Spin Transition in a Linear {FeCoFe} Complex. În: *IFMBE Proceedings, V. 77, Springer, 2020.* 4<sup>th</sup> International Conference on Nanotechnologies and Biomedical Engineering, September 18-21, 2019, Chisinau, Moldova, p. 43—46. ISBN: 978-3-030-31865-9. Doi: 10.1007/978-3-030-31866-6\_9.
2. **Roman, M.A.**; **Klokishner, S.I.** Modeling of the Valence Tautomeric Transformation in Heterometallic [Cr-Dhbq-Co] Molecules. În: *IFMBE Proceedings, V. 77, Springer, 2020.* 4<sup>th</sup> International Conference on Nanotechnologies and Biomedical Engineering, September 18-21, 2019, Chisinau, Moldova, p. 67—70. ISBN: 978-3-030-31865-9. Doi: 10.1007/978-3-030-31866-6\_14.
3. **Siminel, N.**; **Nedelea, V.**; **Sushkevich, K.**; **Siminel, A.**; **Micu, A.**; **Kulyuk, L.** Radiative Recombination of Bound Excitons in MoSe<sub>2</sub>:I<sub>2</sub> Layered Crystals. În: *IFMBE Proceedings, V. 77, Springer, 2020.* 4<sup>th</sup> International Conference on Nanotechnologies and Biomedical Engineering, September 18-21, 2019, Chisinau, Moldova, p. 279—283. ISBN: 978-3-030-31865-9. Doi: 10.1007/978-3-030-31866-6\_55.
4. **Kulikova, O.**; **Siminel, A.**; **Micu, A.**; **Siminel, N.** Qualitative Method to Control Toxic Impurities in Drinking Water. În: *IFMBE Proceedings, V. 77, Springer, 2020.* 4<sup>th</sup> International Conference on Nanotechnologies and Biomedical Engineering, September 18-21, 2019, Chisinau, Moldova, p. 697—701. ISBN: 978-3-030-31865-9. Doi: 10.1007/978-3-030-31866-6\_123.
5. **Siminel, N.** Investigation into Interlayer Water Structure in Na<sup>+</sup>- and Ca<sup>2+</sup>-Montmorillonite: A Molecular Dynamics Study. În: *IFMBE Proceedings, V. 77, Springer, 2020.* 4<sup>th</sup> International Conference on Nanotechnologies and Biomedical Engineering, September 18-21, 2019, Chisinau, Moldova, p. 761—765. ISBN: 978-3-030-31865-9. Doi: 10.1007/978-3-030-31866-6\_135.
6. Verlan, V.I.; Culeac, I.P.; Bordian, O.; Zubareva, V.E.; Bulhac, I.; Iovu, M.S.; Enachescu, M.; **Siminel, N.A.**; **Nedelea, V.V.** Luminescence Properties of a Novel Eu<sup>3+</sup> Dinuclear Coordination Compound. În: *IFMBE Proceedings, V. 77, Springer, 2020.* 4<sup>th</sup> International Conference on Nanotechnologies and Biomedical Engineering, September 18-21, 2019, Chisinau, Moldova, p. 161—165. ISBN: 978-3-030-31865-9. Doi: 10.1007/978-3-030-31866-6\_33.
7. **Siminel, N.** Computational models for clay minerals. În: *Conferința tehnico-științifică a studenților, masteranzilor și doctoranzilor. 1-3 aprilie 2020, Chișinău, Republica Moldova. Volumul I, Republica Moldova: Tehnica UTM, 2020.* , p. 423—426. ISBN: 978-9975-45-633-3 .
8. **Сушкевич, К.**; **Симинел, Н.**; Недеогло, Н.; **Симинел, А.**; **Недеогло, Д.** Ассоциативные центры люминесценции в кристаллах ZnSe, совместно легированных элементами V и VII групп. În: *Integrare prin cercetare și inovare. Științe ale naturii și exacte. CEP USM, 2020.* Materialele conferinței științifice naționale cu participare internațională „Integrare prin cercetare și inovare”, USM, 10-11 noiembrie 2020, Chișinău, Republica Moldova, p. 294—298. ISBN: 978-9975-152-50-1 .

## <sup>3</sup>Teze în culegeri științifice

1. **Kulikova, O.**; Cociu, V.; Pliusnina, M.; Melnic, E.; Croitor, L.; Chisca, D. Photoluminescence properties of six new metal-organic compounds with 4,4-diaminodiphenylmethane ligand. În: *ICEPOM-12 Conference Abstracts XII International Conference "Electronic Processes in Organic and Inorganic Materials" (ICEPOM-12), June 1 - 5, 2020, Kamianets-Podilskyi, Ukraine, p. 4 .*
2. Vitiiu, A.; Croitor, L.; **Siminel, A.**; Coropceanu, E.; Bourosh, P. Cadmium(II) coordination polymer compound with 2-hydroxy-5-[[4-[(2pyridinylamino)sulfonyl]henyl]azo]benzoic acid and 1,2-bis(4-

pyridine)ethane exhibiting luminescent activity. În: *INVENTICA 2020*. The 24<sup>th</sup> International Exhibition of Inventions, July 29 – 31, 2020, Iași, România. , p. 454 . ISSN:1844-7880.

#### **4Publicații electronice**

1. Geirhos, K.; Gross, B.; Szigeti, B.G.; Mehlin, A.; Philipp, S.; White, J.S.; Cubitt, R.; Widmann, S.; Ghara, S.; Lunkenheimer, P.; **Tsurkan, V.**; Leonov, A.O.; Bordacs, S.; Poggio, M.; Kezsmarki, I. Macroscopic Manifestation of Domain-wall Magnetism and Magnetoelectric Effect in a Neel-type Skyrmion Host. *arXiv:2001.08076*, 2020, 8 pages.
2. Wahl, P.; Singh, U.R.; **Tsurkan, V.**; Loidl, A. Nanoscale electronic inhomogeneity in FeSe<sub>0.4</sub>Te<sub>0.6</sub> revealed through unsupervised machine learning. *arXiv:2002.10004v1*, 2020, 5 pages.
3. Csizi, B.; Reschke, S.; Strinic, A.; **Prodan, L.**; **Tsurkan, V.**; Kézsmárki, I.; Deisenhofer, J. Magnetic and vibronic THz excitations in multiferroic Fe<sub>1.8</sub>Zn<sub>0.2</sub>Mo<sub>3</sub>O<sub>8</sub>. *arXiv:2004.02443v1*, 2020, 9 pages.
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#### **<sup>9</sup>Brevete de invenții și alte obiecte de proprietate intelectuală, materiale la saloanele de invenții**

Lozovan V.; Fonari, M.; Kravțov, V.; **Siminel, N.**; Coropceanu, E.; **Kulikova, O.**; Costrucova, N. Polimer coordinativ unidimensional al cadmiului (II) în baza liganzilor 1,2-bis(piridin-4-ilmetilen)hidrazină și acid 2-aminobenzoic, care manifestă activitate fotoluminescentă și capacitate de schimb al moleculelor de solvent. Brevet de Invenție nr. MD 4776 B1 2021.11.30.

## 2023

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”

Obiectul de mijloace fixe (grupa de obiecte) menționat(e) anterior a fost elaborat în cadrul proiectului cu cifrul 20.80009.5007.19, implementat de

**Universitatea de Stat din Moldova**

(denumirea autorității/instituției bugetare)

în baza contractului de finanțare nr. 156 PS din „03” ianuarie 2023.

Caracteristica succintă a obiectului de mijloace fixe (grupele de obiecte) :

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Documentele anexate: \_\_\_\_\_  
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| Membrii comisiei      | _____       | <u>Prisacaru Veronica</u> |
|                       | (semnătura) | (numele, prenumele)       |
|                       | _____       | <u>Șikimaka Olga</u>      |
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|                       | _____       | <u>Culiuc Leonid</u>      |
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|                       | (semnătura) | (numele, prenumele)       |

Obiectul de mijloace fixe (grupa de obiecte) menționat(ă) a fost transmis(ă) de către conducătorul proiectului  
\_\_\_\_\_ (numele, prenumele) \_\_\_\_\_ (semnătura)

Obiectul de mijloace fixe (grupa de obiecte) menționat(ă) a fost primit(ă) de către \_\_\_\_\_  
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Mențiunea contabilității privind înregistrarea intrării obiectului de mijloace fixe (grupe de obiecte):  
nr. \_\_\_\_\_ din „\_\_\_\_\_” \_\_\_\_\_ 20\_\_ (denumirea, numărul  
și data documentului primar)

Contabil-șef \_\_\_\_\_ Cojocaru Liliana \_\_\_\_\_  
(semnătura) (numele, prenumele)  
„\_\_\_\_\_” \_\_\_\_\_ 2023