СПРАВКА ЗА ИЗПЪЛНЕНИЕ НА МИНИМАЛНИТЕ НАЦИОНАЛНИ И ДОПЪЛНИТЕЛНИ ИЗИСКВАНИЯ НА ИК

за заемане на академичната длъжност „доцент“

на гл.ас. д-р Евгени Петров Попов,

Област 4. Природни науки, математика и информатика

Професионално направление 4.2.Химически науки

Таблица 1

Група от показатели	Съдържание	Доцент	
		Минимални изисквания	Брой точки по показатели на Евгени Попов
А	Показател 1	50	**50**
Б	Показател 2		
В	Показател 3 или 4	100	**167**
Г	Сума от показателите от 5 до 10	220	**275**
Д	Показател 11	60	**166**

Таблица 2. Брой точки по показатели

А1. Дисертационен труд за присъждане на образователна и научна степен "доктор"	**Необходими 50 точки**
Тема: “Моделни пресмятания на позитронно взаимодействие в материали за ИТЕР”, защита: 05.06.2013, № 000371, издадена: 15.01.2014.	50
Общ брой	**50**

В 4. Хабилитационен труд – научни публикации в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация (Web of Science и Scopus)	**Необходими 100 точки**
В1. Q. Xu, **E. Popov,** T. Troev, J. Zhang, Y. Dai, Positron lifetime calculation of vacancy clusters in tantalum containing hydrogen and helium, Journal of Nuclear Materials, Accepted 6 June 2017, Available online 9 June 2017. (Q1, SJR 1.123, IF 2.936), https://doi.org/10.1016/j.jnucmat.2017.06.011 , SCOPUS	25
В2. Samir F. Samadov, Nguyen V.M. Trung, Alexander A. Donkov, Aleksey A. Sidorin, Oleg S. Orlov, Ertuğrul Demir, Oktay A. Samedov, Sakin H. Jabarov, Nguyen V. Tiep, **Evgeni P. Popov***, Matlab N. Mirzayev, Investigating the impact of gamma irradiation and temperature on vacancy formation and recombination in ZrB2 ceramics using positron annihilation spectroscopy, Journal of Nuclear Materials, Volume 599, (Q1, SJR 0.91, IF 3.1), October 2024, 155242, https://doi.org/10.1016/j.jnucmat.2024.155242, SCOPUS	25
В4. D.Neov, L.Slavov, A.A. Donkov, M.N.Mirzayev, **E.Popov**, E.Demir, K.Siemek, N.Djourelov, V.A.Turchenko, Z.A.Sharipov, P.Horodek, A.I.Beskrovnyi, A.H.Valizade, O.A.Samedov, A.Vladescu, K.Krezhov, I.Felicia, Structural study of W2B obtained via mechanical alloying of W, B4C, TiC and graphite before and after He ions irradiation, Nuclear Materials and Energy, Volume 31, June 2022, 101201, (Q1, SJR 1.033, IF 3.037), https://doi.org/10.1016/j.nme.2022.101201, SCOPUS	25
В3. Abiyev, A.S., Samadov, S.F., Mirzayev, M.N., Huseynov, E.M., Sidorin, A.A., Orlov, O.S., Samedov, O.A., Aliyev, Y.I., Huseynov, H.J., **Popov, E.**. Defect formation analysis in gamma-irradiated titanium nitride nanocrystals:	20

predictions from positron annihilation studies, Journal of Nanoparticle Research, 2024, DOI:10.1007/s11051-024-06059-3, 156. SJR (Scopus):0.469, IF: 2.5, Q2	
B5. Ertugrul Demir, **Evgeni Popov**, Matlab Mirzayev, Lyubomir Slavov, Dimitar Neov, Alexander Donkov, Krzysztof Siemek, Tatiana Vershinina, Ivaylo Genov, Anatolii Beskrovnyi, Vladimir Skuratov, Kiril Krezhov, Pawel Horodek, Fadahat Mamedov, Aygul Valizade, Ozlem Vural, Effects of swift heavy ions at different fluencies on WC-6Co hard metal alloy, International Journal of Refractory Metals and Hard Materials, Volume 106, August 2022, 105865, (Q1, SJR 0.994, IF 4.804), https://doi.org/10.1016/j.ijrmhm.2022.105865 , SCOPUS	25
B6. Matlab N Mirzayev, Alexander A Donkov, **Evgeni Popov**, Ertugrul Demir, Sakin H Jabarov, Levan S Chkhartishvili, Samuel A Adeojo, Aleksandr S Doroshkevich, Alexey A Sidorin, Asif G Asadov, Thabsile T Thabethe, Mayeen U Khandaker, Sultan Alamri, Hamid Osman, Alex V Trukhanov, Sergei V Trukhanov, Modeling and X-ray Analysis of Defect Nanoclusters Formation in B4C under Ion Irradiation, Nanomaterials, 2022, 12(15), 2644,(Q1, SJR 0.839, IF 5.719), https://doi.org/10.3390/nano12152644 , SCOPUS	25
B7. **E. Popov**, P. Staykov, K. Berovski, S. Peneva, N. Djourelov and T. Troev; Positron Momentum Calculation of Defects in α-Fe and Fe-Cr Containing Hydrogen and Helium; Journal of Physics: Conference Series 516 (2014) 012034. (SJR 0.264), http://dx.doi.org/10.1088/1742-6596/516/1/012034, SCOPUS	10
B8. **E.P. Popov**, A.N. Chernikov, A.I. Beskrovnyi, J. Waliszewski, M.N. Mirzayev, Cryostat for cooling samples in the study of low-temperature structural and magnetic phase transitions by neutron diffraction, Journal of Physics: Conference Series 1492 (1), 012054, 2020. DOI: 10.1088/1742-6596/1492/1/012054 , https://iopscience.iop.org/article/10.1088/1742-6596/1492/1/012054/pdf , (Q4, SJR 0.21), SCOPUS	12
Общ брой	**167**

Г 7. Научна публикация в издания, които са реферирани и индексирани в (Web of Science и Scopus), извън хабилитационния труд	**Необходим и 220 точки**
Г1. Mirzayev, M.N., Abiyev, A.S., Samedov, O.A., Demir E., **Popov, E.P**., Samadov, S.F., Structural evolution of zirconium diboride under gamma irradiation and thermal annealing, Journal of Alloys and Compounds, 2024, 1005, 175970, DOI: 10.1016/j.jallcom.2024.175970 (Q1, SJR 1.192, IF 6.3), SCOPUS	25
Г2. S.F. Samadov, A.S. Abiyev, A.G. Asadov, N.V.M. Trung, A.A. Sidorin, O.A. Samedov, **E.P. Popov**, E. Demir, T. Vershinina, Y.I. Aliyev, K.M. Hasanov, M.N. Mirzayev, Investigating the crystal structure of ZrB2 under varied conditions of temperature, pressure, and swift heavy ion irradiation, Ceramics International, Volume 50, Issue 2, Part B, 15 January 2024, Pages 3727-3732, https://doi.org/10.1016/j.ceramint.2023.11.125, (Q1, SJR 0.94, IF 5.2), SCOPUS	25
Г3. M.N. Mirzayev, K.M. Hasanov, A.C. Parau, E. Demir, A.S. Abiyev, Tamer Karaman, S.H. Jabarov, M. Dinu, **E.P. Popov**, A. Vladescu (Dragomir), Effect of the C/N ratio modification on the corrosion behavior and performance of carbonitride coatings prepared by cathodic arc deposition,	25

Journal of Materials Research and Technology, Volume 27, November–December 2023, Pages 1724-1738, https://doi.org/10.1016/j.jmrt.2023.09.318, (Q1, SJR 1.09, IF 6.4), SCOPUS	
Г4. A. Vladescu (Dragomir), M.N. Mirzayev, A.S. Abiyev, A.G. Asadov, E. Demir, K.M. Hasanov, R.S. Isayev, A.S. Doroshkevich, S.H. Jabarov, Sv. Lyubchyk, S. Lyubchyk, **E.P. Popov**, Effect of Si and Nb additions on carbonitride coatings under proton irradiation: A comprehensive analysis of structural, mechanical, corrosion, and neutron activation properties, Nuclear Materials and Energy, Volume 35, June 2023, 101457, https://doi.org/10.1016/j.nme.2023.101457, (Q1, SJR 0.7, IF 2.6), SCOPUS	25
Г5. Nabiyev A.A., Ivankov O.I.. Azhibekov A.K., Elmekawy A.H.A., **Popov E.**, Samadov S.F., Trung N.V.M., Mutali A.K., Sidorin A.A., Orlov O.S., Kuklin A.I., High-dose gamma irradiation effects on HDPE/SiO2 nanocomposite films: Structure, crystallinity, defects, radiation endurance, dispersion, and interfacial behavior, Polymer Degradation and Stability, Volume 245, 2026, 111851, (Q1, SJR 1.237, IF 7.4), DOI: 10.1016/j.polymdegradstab.2025.111851, SCOPUS	25
Г6. E. Demir, M.N. Mirzayev, **E.P. Popov**, P. Horodek, I.G. Genov, K. Siemek, D.M. Mirzayeva, V.A. Turchenko, M. Bulavin, A.I. Beskrovnyi, A.H. Valizade, H.V. Akhundzada, Effects of high-energetic 3He+ ionirradiation on tungsten-basedcomposites, Vacuum, Volume 184, February 2021, 109934. (Q1, SJR 0.738, IF 3.627) , https://doi.org/10.1016/j.vacuum.2020.109934 , SCOPUS	25
Г7. A.V. Maletskyi, T.E. Konstantinova, G.K. Volkova, D.R. Belichko, A.S. Doroshkevich, **E. Popov**, N. Cornei, B. Jasinska, Zh.V. Mezentseva, A.A. Tatarinova, M.N. Mirzayev, L.H. Khiem, I. Ristić, V. Teofilović, R. Balvanović, High hydrostatic pressure influence on the properties and tendency to agglomeration of ZrO2 grains of the Al2O3 – YSZ composite ceramics system, Ceramics International, Volume 49, Issue 10, 15 May 2023, Pages 16044-16052, https://doi.org/10.1016/j.ceramint.2023.01.202, (Q1, SJR 0.94, IF 5.2), SCOPUS	25
Г8. Samadov, S. F., Ismayılova, N., **Popov, E.**, Tuyen, L. A., Trung, N. V. M., Samedov, O. A., Sidorin, A. A., Orlov, O. S., Jabarov, S., Hue, P. T., Hue, N. T. N., Tiep, N. V., Quang Hung, N., & Mirzayev, M. N. (2026). Gamma-irradiation-induced defects and thermally driven recovery in ZrB2. Materials Chemistry and Physics, 353, 132107. (Q1, SJR 0.808, IF 4.7), https://doi.org/10.1016/j.matchemphys.2026.132107, SCOPUS	25
Г9. Luu T.A., Trung N.V.M., Van T.N., Turek M., Drozdziel A., Pyszniak K., Sidorin A.A., Donkov A.A., Orlov O.S., Ly N.L., Pham H.T., Nguyen H.T.N., Phuc T.V., Hoang L.V., Le L.T., Mitrofanov S.V., Ismayilova N., Jabarov S.H., Kirilkin N., Abiyev A.S., Tuan P.L., Vershinina T., **Popov E. P.**, Samadov S.F., Mirzayev M.N., Van N.T.T., Tran N., Tran P.D., Hung N.Q.. Ion implantation-driven defect engineering in BiVO4 thin films for catalytic applications, Ceramics International, 2026, DOI:10.1016/j.ceramint.2026.01.403, SJR (Scopus):1.034, IF: 5.2, Q1	25
Г10. Samadov S.F., Nasrabadi M.N., Ismayılova N.A., Trung N.V.M., Rizi S.H., Luu, A. Tuyen, Samedov O.A., Jabarov S.H., **Popov E.P.**, Abiyev A.S.. Interface-mediated He+irradiation tolerance of W-Ni heavy alloys for fusion plasma-facing components: Defect absorption and phase stability. 2026, DOI:10.1016/j.ijrmhm.2026.107767, SJR (Scopus):1.101, IF: 4.9, Q1	25
Г11. Mirzayev, Matlab N., Atilgan A., Samadov S.F., Buyuk B., Kamislioglu M., Isayeva S., Mauyey B., Nesipbay A.J., Lyubchik A., Demir E., Kaminski	25

G., Mirzayeva D.M., Doroshkevich A.S., Ashraf G.A., **Popov E. P.**. Interfacial interactions and free volume in multicomponent titanium-based carbon-nitrides coatings, Ceramics International, 2026, DOI:10.1016/j.ceramint.2026.01.424, SJR (Scopus):1.034, IF: 5.2, Q1	
Общ брой	**275**

Д 11. Цитирания в научни издания, монографии, колективни томове и патенти, реферирани и индексирани в световноизвестни бази данни с научна информация (Web of Science и Scopus)	**Необходими 60 точки**
Цитати от публикациите участващи в конкурса	83x2
Общ брой:	**166**