(*образец на ЛТУ*)

Приложение 1.4

СПРАВКА

за изпълнение на минималните национални изисквания по чл. 2а, ал. 2, 3 и 4 за академичната длъжност „професор“

ТАБЛИЦА

за самооценка на съответствието с минималните национални изисквания по обявен конкурс в ДВ бр. 102 от 8.12.2023 г. за заемане наакадемична длъжност "професор" по дисциплината „**Физика с биофизика**“ в научна област 4**. Природни науки, математика и информатика**, ПН 4.1. **Физически науки**

☒ **доц. д-р Илиана Наумова Апостолова** - участник от катедра **Математика, физика и информатика** при ФГП

Таблица 1. Минимални изисквани точки по групи показатели за различните научни степени и академични длъжности за НО 4. Природни науки, математика и информатика, ПН 4.1. Физически науки

Група от показатели	Съдържание	Доктор	Доктор на науките	Главен асистент	Доцент	Професор
А	Показател 1	50	50	50	50	50
Б	Показател 2	-	100	-	-	-
В	Показатели 3 или 4	-	-	-	100	100
Г	Сума от показателите от 5 до 10	30	100	-	200	200
Д	Сума от точките в показател 11	-	100	-	50	100
Е	Сума от показателите от 12 до края	-	-	-	-	150

Таблица 2. Съответствие на точките на кандидата с МНИ

Показател	Съдържание	Изисквани точки по показателя	Изисквани точки по групата показатели	Точки на кандидата по показателя	Общ брой точки на кандидата по групи показатели
1	2	3	4	5	6
А1	Дисертационен труд за присъждане на образователна инаучна степен „доктор“	50	**50**	50	50
			ВСИЧКО ТОЧКИ ПО ГРУПА ПОКАЗАТЕЛИ **„А“**:		**50**
Б2	Дисертационен труд за присъждане на научна степен „доктор на науките“	100	**-**	0	0
			ВСИЧКО ТОЧКИ ПО ГРУПА ПОКАЗАТЕЛИ **„Б“**:		0
В3	Хабилитационен труд – монография	100	**100**	0	0
В4	Хабилитационен труд — научни публикации в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация (Web of Science и Scopus)	25 т. в Q1, 20 т. в Q2 15 т. в Q3, 12 т. в Q4 10 т. в издание с SJR		190	190
			ВСИЧКО ТОЧКИ ПО ГРУПА ПОКАЗАТЕЛИ **„В“**:		**190**
Г5	Публикувана монография, която не е представена като основен хабилитационен труд	30	**200**	0	0
Г6	Публикувана книга на базата на защитен дисертационен труд за присъждане на образователна и научна степен „доктор“или за присъждане на научна степен „доктор на науките“	20		0	0
Г7	Научна публикация в издания, които са реферирани и индексирани в световноизвестни бази данни снаучна информация (Web of Science и Scopus), извън хабилитационния труд	25 т. в Q1, 20 т. в Q2 15 т. в Q3, 12 т. в Q4 10 т. в издание с SJR		871	871
Г8	Публикувана глава от книга или колективна монография	15		0	0
Г9	Изобретение, патент или полезен модел, за което е издаден защитен документ по надлежния ред	25		0	0

Г10	Публикувана заявка за патент или полезен модел	15		0	0
ВСИЧКО ТОЧКИ ПО ГРУПА ПОКАЗАТЕЛИ **„Г“**:					**871**
Д11	Цитирания в научни издания, монографии, колективни трудове и патенти, реферирани и индексирани в световната база данни (Web of Science и Scopus)	2т. за всяко цитиране	**100**	828	828
ВСИЧКО ТОЧКИ ПО ВСИЧКО ТОЧКИ ПО ГРУПА ПОКАЗАТЕЛИ **„Д“**:					**828**
Е12	Придобита научна степен „доктор на науките“	75	**150**	0	0
Е13	Ръководство на успешно защитил докторант (n е броят съръководители на съответния докторант)	50/n		0	0
Е14	Участие в национален научен или образователен проект	10		90	90
Е15	Участие в международен научен или образова-телен проект	20		0	0
Е16	Ръководство на национален научен или образователенпроект	20		0	0
Е17	Ръководство на български екип в международен научен или образователенпроект	50		0	0
Е18	Привлечени средства по проекти, ръкводени от кандидата	1 точка за всеки 5000 лв.		0	0
Е19	Публикуван университетски учебник или учебник, който се използва в училищната мрежа	40/n		60	60
Е20	Публикувано университетско учебно пособие или учебно пособие, което се използва в училищната мрежа	20/n		20	20
ВСИЧКО ТОЧКИ ПО ГРУПА ПОКАЗАТЕЛИ **„Е“**:					**170**
ВСИЧКО ТОЧКИ ПО ПОКАЗАТЕЛИ А + В + Г + Д + Е:			**600**		**2109**

Дата: 24.01.2024 г.

Подпис на кандидата:

СПИСЪК

на научната и публикационна дейност на кандидата **ДОЦ. Д-Р ИЛИАНА НАУМОВА АПОСТОЛОВА** за участие в конкурс за заемане на академична длъжност **"ПРОФЕСОР"** по дисциплината „**ФИЗИКА С БИОФИЗИКА**“ в научна област **4. ПРИРОДНИ НАУКИ, МАТЕМАТИКА И ИНФОРМАТИКА**, ПН **4.1. ФИЗИЧЕСКИ НАУКИ** във връзка с оценка на съответствието с минималните национални изисквания (МНИ)

№ на показател	**Показател**	**Брой точки за показателя**	**Бр. автори (n)**	**Брой точки на кандидата**
А1	Дисертационен труд за присъждане на образователна и научна степен „доктор“	50		
	И. Апостолова „Статични и динамични свойства на магнитни и мултифероични наночастици”, научен ръководител проф. дфн Ю. Веселинова, София 2012 г.	50	1	50
			ВСИЧКО ТОЧКИ ПО ГРУПА ПОКАЗАТЕЛИ „А“:	**50**
Б2	Дисертационен труд за присъждане на научна степен „доктор на науките“	100	-	-
			ВСИЧКО ТОЧКИ ПО ГРУПА ПОКАЗАТЕЛИ „Б“:	**0**
В3	Хабилитационен труд – монография	100	-	-
В4	Хабилитационен труд – научни публикации (не по-малко от 10) в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация			
	В4.1. **I. N. Apostolova**, A. T. Apostolov, J. M. Wesselinowa, Theoretical study of the multiferroic properties of $DyFeWO_6$, European Physical Journal B 95, 133 (2022). ISSN (Print) 1434-6028, ISSN (Online) 1434-6036, Q_3, SJR 0,4, IF 1,6 doi: 10.1140/epjb/s10051-022-00396-9	15	3	15
	В4.2. A. T. Apostolov, **I. N. Apostolova**, J. M. Wesselinowa, Origin of multiferroism in Sm_2BaCuO_5, Solid State Communications 352, 114808 (2022). ISSN 0038-1098, Q_3, SJR 0,41, IF 2,1 doi: 10.1016/j.ssc.2022.114808	15	3	15
	В4.3. **I. N. Apostolova**, A. T. Apostolov, J. M. Wesselinowa, Origin of multiferroism of β-$NaFeO_2$, Magnetochemistry 8, 104 (2022). ISSN 2312-7481, Q_2, SJR 0,43, IF 2,7 doi: 10.3390/magnetochemistry8090104	20	3	20
	В4.4. A. T. Apostolov, **I. N. Apostolova**, S. Trimper and J. M. Wesselinowa, Antiferroelectricity and weak ferromagnetism in rare earth doped multiferroic $BiFeO_3$, Solid State Communications 300, 113692 (2019). ISSN 0038-1098, Q_3, SJR 0,41, IF 1,521 doi: 10.1016/j.ssc.2019.113692	15	4	15

	B4.5. **I. N. Apostolova**, A. T. Apostolov and J. M. Wesselinowa, Room temperature ferromagnetism inmultiferroic $BaCoF_4$ thin films due to surface, substrate and ion doping effects, Thin Solid Films 722, 138567 (2021). ISSN 0040-6090, Q_2, SJR 0,47 IF 2,358 doi: 10.1016/j.tsf.2021.138567	20	3	20
	B4.6. A. T. Apostolov, **I. N. Apostolova**, J. M. Wesselinowa, Substrate and doping effects on the multiferroic properties and the band gap of Bi_2FeCrO_6 thin films, Thin Solid Films 739, 138977 (2021). ISSN 0040-6090, Q_2, SJR 0,47, IF 2,358 doi: 0.1016/j.tsf.2021.138977	20	3	20
	B4.7. **I. N. Apostolova**, A. T. Apostolov and J. M. Wesselinowa, Electric, dielectric and magnetic properties of Ga, Er and Zn ion doped Fe_2O_3 thin films, Physics Letters A 393, 127167 (2021). ISSN 0375-9601, Q_2, SJR 0,51, IF 2,707 doi:10.1016/j.physleta.2021.127167	20	3	20
	B4.8. **I. N. Apostolova,** A. T. Apostolov and J. M. Wesselinowa, Multiferroic properties of pure and ion doped $BiCrO_3$ - bulk and thin films, Physica Status Solidi B: Basic Solid State Physics 2200171 (2022). ISSN (Print) 0370-1972, ISSN (Online) 1521-3951, Q_3, SJR 0,41, IF 1,6 doi: 10.1002/pssb.202200171	15	3	15
	B4.9. A. T. Apostolov, **I. N. Apostolova**, J. M. Wesselinowa, Size, external fields and ion doping effects on the multiferroic properties of hexagonal $YMnO_3$ nanoparticles, Materials Today Communications 30, 103123 (2022). ISSN 2352-4928, Q_2, SJR 0,62, IF 3,8 doi: 10.1016/j.mtcomm.2022.103123	20	3	20
	B4.10. **I. N. Apostolova**, A. T. Apostolov, S. Trimper and J. M. Wesselinowa, Multiferroic Properties of Pure, Transition Metal, and Rare Earth–Doped $BaFe_{12}O_{19}$ Nanoparticles, Physica Status Solidi B: Basic Solid State Physics 258(7), 2100069 (2021). ISSN (Print) 0370-1972, ISSN (Online) 1521-3951 Q_3, SJR 0,41, IF 1,782 doi: 10.1002/pssb.202100069	15	4	15
	B4.11**.** A. T. Apostolov, **I. N. Apostolova**, S. Trimper and J. M. Wesselinowa, Physical Origin of Magnetoelectroporation, Physica Status Solidi B: Basic Solid State Physics 260(3), 2200523 (2023). ISSN (Print) 0370-1972, ISSN (Online) 1521-3951, Q_3, SJR 0,41, IF 1,6 doi: 10.1002/pssb.202200523	15	4	15
		ВСИЧКО ТОЧКИ ПО ГРУПА ПОКАЗАТЕЛИ „В“:		**190**
Г5	Публикувана монография, която не е представена като основен хабилитационен труд	30	-	-
Г6	Публикувана книга на базата на защитен дисертационен труд за присъждане на образователна и научна степен „доктор“ или за присъждане на научна степен „доктор на науките“	30	-	-

Г7	Научна публикация в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация (Web of Science и Scopus), извън хабилитационния труд			
	Г7.1. A. T. Apostolov, **I. N. Apostolova**, S. G. Bahoosh, S. Trimper and J. M. Wesselinowa, Enhancement of the magnetoelectric effect in doped $BaTiO_3$ nanoparticles, Physica Status Solidi B: Basic Solid State Physics 252(8), 1839 (2015). ISSN (Print) 0370-1972, ISSN (Online) 1521-3951, Q_2, SJR 0,665, IF 1,522 doi: 10.1002/pssb.201451752	20	5	20
	Г7.2. **I. N. Apostolova**, A. T. Apostolov, S. G. Bahoosh, S. Trimper and J. M. Wesselinowa, Origin of multiferroism in the charge frustrated $LuFe_2O_4$ compound, Physics Letters A 379(7), 743-746 (2015). ISSN (Print) 0375-9601, ISSN (Online) 1873-2429, Q_2, SJR 0,663, IF 1,677 doi: 10.1016/j.physleta.2014.12.043	20	5	20
	Г7.3. A. T. Apostolov, **I. N. Apostolova**, S. G. Bahoosh, S. Trimper, M. T. Georgieva and J. M. Wesselinowa, Multiferroic properties of S = 1/2 chain cuprates $LiCuVO_4$. Comparison with $LiCu_2O_2$, Modern Physics Letters B 29(17), 1550086 (2015). ISSN (print) 0217-9849, ISSN (online) 1793-6640, Q_3, SJR 0,248, IF 0,547 doi: 10.1142/S0217984915500864	15	6	15
	Г7.4. **I. N. Apostolova**, A. T. Apostolov, J. M. Wesselinowa and S. Trimper, Magnetic and dielectric properties of S = 1/2 chain cuprate Li_2ZrCuO_4, Physica Status Solidi B: Basic Solid State Physics 252(12), 2667 (2015). ISSN (Print) 0370-1972, ISSN (Online) 1521-3951, Q_2, SJR 0,665, IF 1,522 doi: 10.1002/pssb.201552311	20	4	20
	Г7.5. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, Microscopic approach to the magnetoelectric coupling in $RCrO_3$, Modern Physics Letters B 29(1), 1550251 (2015). ISSN (print) 0217-9849, ISSN (online) 1793-6640, Q_3, SJR 0,248, IF 0,547 doi: 10.1142/S0217984915502516	15	3	15
	Г7.6. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, Theory of magnetic field control on polarization in multiferroic $RCrO_3$ compounds, European Physical Journal B 88, 328 (2015). ISSN (Print) 1434-6028, ISSN (Online) 1434-6036, Q_2, SJR 0,514, IF 1,223 doi: 10.1140/epjb/e2015-60649-4	20	3	20
	Г7.7. A. T. Apostolov, **I. N. Apostolova**, S. Trimper and J. M. Wesselinowa, Magnetoelectric coupling and spin reorientation in $BiFeO_3$, Physical Status Solidi B: Basic Solid State Physics 254(4), 1600433 (2016). ISSN (Print) 0370-1972, ISSN (Online) 1521-3951, Q_1, SJR 0,96, IF 1,674 doi: 10.1002/pssb.201600433	25	4	25
	Г7.8. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, Influence of spin-phonon interactions and spin-reorientation transitions on the phonon properties of $RCrO_3$, Modern Physics Letters B 31(03), 1750009 (2017). ISSN (print) 0217-9849, ISSN (online) 1793-6640, Q_4, SJR 0,226, IF 0,731 doi: 10.1142/S0217984917500099	12	3	12
	Г7.9. A. T. Apostolov, **I. N. Apostolova**, S. Trimper and J. M. Wesselinowa, Room temperature ferromagnetism in pure and ion doped SnO_2 nanoparticles, Modern Physics Letters B 31(36) 1750351 (2017). ISSN (print) 0217-9849, ISSN (online) 1793-6640, Q_4, SJR 0,226, IF 0,731 doi: 10.1142/S0217984917503511	12	4	12

	Г7.10. A. T. Apostolov, **I. N. Apostolova**, S. Trimper and J. M. Wesselinowa, Dielectric properties of multiferroic $CuCrO_2$, European Physical Journal B 90, 236 (2017). ISSN (Print) 1434-6028, ISSN (Online) 1434-6036, Q_2, SJR 0,43, IF 1,536 doi: 10.1140/epjb/e2017-80461-4	20	4	20
	Г7.11. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, $La_{1-x}Sr_xMnO_3$ nanoparticles for magnetic hyperthermia, Physica Status Solidi B: Basic Solid State Physics 255(6), 1700587 (2018). ISSN (Print) 0370-1972, ISSN (Online) 1521-3951, Q_2, SJR 0,519, IF 1,454 doi: 10.1002/pssb.201700587	20	3	20
	Г7.12. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, A comparative study of the magnetization in transition metal ion doped CeO_2, TiO_2 and SnO_2 nanoparticles, Physica E: Low-dimensional Systems and Nanostructures 99, 202 (2018). ISSN 1386-9477, Q_2, SJR 0,538, IF 3,176 doi: 10.1016/j.physe.2018.02.007	20	3	20
	Г7.13. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, Theoretical study of room temperature ferromagnetism and band gap energy of pure and ion doped In_2O_3 nanoparticles, Journal of Magnetism and Magnetic Materials 456, 263 (2018). ISSN 0304-8853, Q_2, SJR 0,68, IF 2,683 doi: 10.1016/j.jmmm.2018.02.045	20	3	20
	Г7.14. A. T. Apostolov, I**. N. Apostolova** and J. M. Wesselinowa, Theoretical study of the phonon properties of pure and ion doped CeO_2 nanoparticles, Solid State Communications 279, 17 (2018). ISSN 0038-1098, Q_2, SJR 0,45, IF 1,433 doi: 10.1016/j.ssc.2018.05.007	20	3	20
	Г7.15. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, Size and doping dependence of the phonon properties of SnO_2 nanopartocles, Modern Physics Letter B 32(21), 1850250 (2018). ISSN (print) 0217-9849, ISSN (online) 1793-6640, Q_4, SJR 0,229, IF 0,929 doi: 10.1142/S0217984918502500	12	3	12
	Г7.16. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, Magnetic properties of rare earth-doped SnO_2, TiO_2 and CeO_2 nanoparticles, Physica Status Solidi B: Basic Solid State Physics 255(8), 1800179 (2018). ISSN (Print) 0370-1972, ISSN (Online) 1521-3951, Q_2, SJR 0,519, IF 1,454 doi: 10.1002/pssb.201800179	20	3	20
	Г7.17. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, Ferroelectricity in the multiferroic delafossite $CuFeO_2$ induced by ion doping or magnetic field, Solid State Communications 292, 11 (2019). ISSN 0038-1098, Q_3, SJR 0,419, IF 1,521 doi: 10.1016/j.ssc.2019.01.014	15	3	15
	Г7.18. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, Specific absorption rate in Zn-doted ferrites for self-controlled magnetic hyperthermia, European Physical Journal B 92, 58 (2019). ISSN (Print) 1434-6028, ISSN (Online) 1434-6036, Q_2, SJR 0,459 IF 1,347 doi: 10.1140/epjb/e2019-90567-2	20	3	20
	Г7.19. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, Phonon properties of delafossite multiferroic compound $CuFeO_2$. Comparison with $CuCrO_2$, Modern Physics Letters B 33(12), 1950141 (2019). ISSN (print) 0217-9849, ISSN (online) 1793-6640, Q_3, SJR 0,258, IF 1,224 doi: 10.1142/S0217984919501410	15	3	15

	Г7.20. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, Magnetic and dielectric properties of pure and ion doped $RCrO_3$ nanoparticles, European Physical Journal B 92, 105 (2019). ISSN (Print) 1434-6028, ISSN (Online) 1434-6036, Q_2, SJR 0,459, IF 1,347 doi: 10.1140/epjb/e2019-100112-x	20	3	20
	Г7.21. A. T. Apostolov, **I. N. Apostolova**, S. Trimper and J. M. Wesselinowa, Origin of ferromagnetism in pure and ion doped pyrite FeS_2 nanoparticles, Physica Status Solidi B: Basic Solid State Physics 256(10), 1900201 (2019). ISSN (Print) 0370-1972, ISSN (Online) 1521-3951, Q_2, SJR 0,504, IF 1,481 doi: 10.1002/pssb.201900201	20	4	20
	Г7.22. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, Dielectric Properties in Transition Metal and Rare-Earth-Doped Multiferroic $BaTiO_3$ Nanoparticles, Physica Status Solidi B: Basic Solid State Physics 257(9), 2000046 (2020). ISSN (Print) 0370-1972, ISSN (Online) 1521-3951, Q_2, SJR 0,51, IF 1,710 doi: 10.1002/pssb.202000046	20	3	20
	Г7.23. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, Magnetic field effect on the dielectric properties of rare earth doped multiferroic $BiFeO_3$, Journal of Magnetism and Magnetic Materials 513, 167101 (2020). ISSN 0304-8853, Q_2, SJR 0,665, IF 2,993 doi: 10.1016/j.jmmm.2020.167101	20	3	20
	Г7.24. A. T. Apostolov, **I. N. Apostolova** and J. M. Wesselinowa, Co, Fe and Ni ion doped CeO_2 nanoparticles for application in magnetic hyperthermia, Journal: Physica E: Low-dimensional Systems and Nanostructures 124, 114364 (2020). ISSN 1386-9477, Q_2, SJR 0,581, IF 3,382 (2020) doi: 10.1016/j.physe.2020.114364	20	3	20
	Г7.25. **I. N. Apostolova**, A. T. Apostolov and J. M. Wesselinowa, Multiferroic properties of pure and transition metal doped $LaFeO_3$ nanoparticles, Physica Status Solidi B: Basic Solid State Physics 258(2), 2000482 (2020). ISSN (Print) 0370-1972, ISSN (Online) 1521-3951, Q_2, SJR 0,51, IF 1,710 doi: 10.1002/pssb.202000482	20	3	20
	Г7.26. **I. N. Apostolova**, A. T. Apostolov and J. M. Wesselinowa, Multiferroic and phonon properties of pure and ion doped $CoCr_2O_4$ - bulk and nanoparticles, Journal of Alloys and Compounds 852, 156885 (2021). ISSN 0925-8388, Q_1, SJR 1,027, IF 6,371(2021) doi:10.1016/j.jallcom.2020.156885	25	3	25
	Г7.27. **I. N. Apostolova**, A. T. Apostolov and J. M. Wesselinowa, Differences in the multiferroic properties of $AgCrS_2$ and $AgCrO_2$, Solid State Communications 323, 114119 (2021). ISSN 0038-1098, Q_3, SJR 0,413, IF 1,934 doi: 10.1016/j.ssc.2020.114119	15	3	15
	Г7.28. **I. N. Apostolova**, A. T. Apostolov and J. M. Wesselinowa, Microscopic theory of the specific absorption rate for self-controlled magnetic hyperthermia, Journal of Magnetism and Magnetic Materials 522, 167504 (2021). ISSN 0304-8853, Q_2, SJR 0,606, IF 3,097 doi: 10.1016/j.jmmm.2020.167504	20	3	20
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			Общо по Г7	**871**
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Д11	Цитирания в научни издания, монографии, колективни трудове и патенти, реферирани и индексирани в световната база данни (Web of Science и Scopus)	2		

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	Д11.392. K. Venkatadri and D. Zarena, Structural, Optical and Magnetic Properties of $(1-x)YFeO_{3+(x)}Sr_2Bi_4Ti_5O_{18}$ (where $0 \leq x \geq 0.005$) Nanomaterials, ECS Journal of Solid State Science and Technology 12(11), 113015 (2023). – Q_3 doi: 10.1149/2162-8777/ad0dc1	2		2
	Д11.393. S. A. Mohammed, D. R. S. Reddy, Enhancement in the Magnetic Properties of Yttrium Orthoferrite Materials by the Addition of $BaO–Bi_2O_3 –B_2O_3$ Glass Sintering Aid, Physica Status Solidi (b), November 2023 (2023). – Q_3 doi: 10.1002/pssb.202300313	2		2

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63	**A. T. Apostolov, I. N. Apostolova, J. M. Wesselinowa, Size, external fields and ion doping effects on the multiferroic properties of hexagonal $YMnO_3$ nanoparticles, Materials Today Communications 30, 103123 (2022). doi: 10.1016/j.mtcomm.2022.103123** **цитирана в:** Д11.402. X. Zhang, X. Liu, Y. Wang, B. Tong and J. Zhang, Study on Photocatalytic Activity of Cage-Like PAM/$YMnO_3$ Composite Photocatalyst, Russian Journal of Physical Chemistry A 96, 3103 (2022). – Q_4 doi: 10.1134/S0036024423020310	2		2
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66	**Iliana Apostolova, Angel Apostolov and Julia Wesselinowa, Magnetic, phonon and optical properties of transition metal and rare earth ion doped ZnS nanoparticles, Nanomaterials 13, 79 (2023). doi: 10.3390/nano13010079** **цитирана в:** Д11.406. M. S. Khan, B. Zou, S. Yao, Z. ul Haq, A.S Abdulla, W. Huang, B. Zheng, Suppression of ferromagnetism due to N co-doping in Cr(II)-doped ZnS nanowires and their optical properties: Insights from density-functional calculations, Journal of Magnetism and Magnetic Materials 582, 171013 (2023). – Q_2 doi: 10.1016/j.jmmm.2023.171013 Д11.407. M. Mohammadi, E. Pakizeh, Stability and electronic properties of novel non-planar ZnS nanosheets: First-principles calculations, Chinese Journal of Physics, Available online 6 September 2023 (2023). – Q_2 doi: 10.1016/j.cjph.2023.09.006	2 2		2 2
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	Д11.409. X. Yue, Q. Hua, W. Zhang, F. Tang, X. Wang, F. Luan, X. Zhuang, C. Tian, Facile electrochemiluminescence sensing platform based on $Gd_2O_3:Eu^{3+}$ nanocrystals for organophosphorus pesticides detection in vegetable samples, Food Chemistry 438, 137985 (2024). – Q_1 doi: 10.1016/j.foodchem.2023.137985	2		2
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69	**Iliana Apostolova, Angel Apostolov and Julia Wesselinowa, Magnetic, optical and phonon properties of ion doped MgO nanoparticles. Application for magnetic hyperthermia, Materials 16, 2353 (2023). doi: 10.3390/ma16062353** **цитирана в:** Д11.412. Y. S. Itas, A. M. Danmadami, R. Razali and M. U. Khandaker,The potentials of Si-doped magnesium oxide nanotubes for decontamination of pollutants, Physica Scripta 98, 125946 (2023). – Q_2 doi: 10.1088/1402-4896/ad0941	 2		 2
70	**Iliana Apostolova, Angel Apostolov and Julia Wesselinowa, Band gap energy of ion doped multiferroic $NaFeO_2$ nanoparticles, Physica Status Solidi (RRL) - Rapid Research Letters 2300159 (2023). doi: 10.1002/pssr.202300159** **цитирана в:** Д11.413. E. N. Sgourou, A. Daskalopulu, L. H. Tsoukalas, I. L. Goulatis, R. V. Vovk and A. Chroneos, Kinetics of Ions in Post-Lithium Batteries, Applied Sciences 13(17), 9619 (2023). – Q_2 doi: 10.3390/app13179619 Д11.414. X. Zhang, J. Yang and J. Wang, Enhanced Cr(VI) Photocatalysis Reduction by Layered N-doped TiO_2 Sheets from Template Free Solvothermal Method, First published: 15 September 2023, ChemCatChem 15(22) (2023). – Q_1 doi: 10.1002/cctc.202301007	 2 2		 2 2
	ВСИЧКО ТОЧКИ ПО ГРУПА ПОКАЗАТЕЛИ **„Д“**:			**828**
E12	Придобита научна степен „Доктор на науките“	-	-	-
E13	Ръководство на успешно защитил докторант (n е броят съръководители на съответния докторант)	50/n	-	-

Е14	Участие в национален научен или образователен проект:	10		
	Е14.1. Проект ЦНИП – БН-219/19 „Теоретично и числено моделиране на трансформацията на магнитна енергия в топлина при магнитни наночастици, подходящи за in vivo in vitro приложение при лечение на тумори посредством магнитна хипертермия“, с ръководител доц. д-р Ангел Апостолов, финансиран от ЦНИП при УАСГ.	1		10
	Е14.2. Проект ЦНИП – БН-254/21 „Развитие на възможности за изследване на наноразмерниобекти с приложения за екологичен мониторинг” , с ръководител доц. д-р Георги Иванов, финансиран от ЦНИП при УАСГ.	1		10
	Е14.3. Проект ЦНИП – БН-257/22 „Магнетоелектрични взаимодействия в мултифероични обемни и наноразмерни материали“, с ръководител доц. д-р Ангел Апостолов, финансиран от ЦНИП при УАСГ.	1		10
	Е14.4. Проект ЦНИП – БН-265/22 „Експериментални изследвания по създаването на нов биосензор за органични замърсители на водата без комерсиални аналози“, с ръководител доц. д-р Георги Иванов, финансиран от ЦНИП при УАСГ.	1		10
	Е14.5. Проект ЦНИП – БН-271/23 „Влияние на дотирането, размера, формата и повърхността върху свойствата на мултифероични обемни и наноразмерни обекти“, с ръководител доц. д-р Ангел Апостолов, финансиран от ЦНИП при УАСГ.	1		10
	Е14.6. Проект ЦНИП – БН-289/23 „Изследване на нанокомпозитни сензорни покрития на базата на Метал-Органични Рамкови (MOF) съединения за екологичен мониторинг в полеви условия на замърсители на въздуха и водата“, с ръководител доц. д-р Георги Иванов, финансиран от ЦНИП при УАСГ.	1		10
	Е14.7. Проект КП-06 ПН68/17 от 2022 г./ BG-175467353-2022-04-0232, тип 2 „Обяснение и развитие на откритите от нас нови ефекти в нано тънки подредени органични филми за разработване на нанокомпозитни химически сензори за бързи, в реално време, в полеви условия измервания на газове и мониторинг на нововъзникващи органични замърсители в питейната вода (Акроним – NanoSense)“, с ръководител доц. д-р Георги Иванов, финансиран от ФНИ на р. България.	1		10
	Е14.8. Проект НИС-Б-1281/19.10.2023 „Влияние на анатомичния строеж на дървесината на дугласка, върху процесите на съсъхване и набъбване“ с ръководител доц. д-р Николай Бърдаров, финансиран от НИС на ЛТУ.	1		10
	Е14.9. Проект НИС-Б-1287/19.10.2023 „Приложение на плазменото третиране и плазмено активираната вода в селското стопанство“, с ръководител гл. ас. д-р Пламена Маринова-Драгозова, финансиран от НИС на ЛТУ.	1		10
			Общо по Е14	**90**
Е15	Участие в международен научен или образователен проект	20	**-**	**-**

Е16	Ръководство на национален научен или образователен проект	20	-	-
Е17	Ръководство на български екип в международен научен или образователен проект	50	-	-
Е18	Привлечени средства от проекти, ръководени от кандидата	1 точка за всеки 5000 лв.	-	-
Е19	Публикуван университетски учебник или учебник, който се използва в училищната мрежа: Е19.1. И. Апостолова, А. Апостолов, Физика с биофизика, Издателство „Авангард прима", ISBN 978-619-160-677-1, 323 стр., София (2016). Е19.2. И. Апостолова, Физика с биофизика за еколози, Издателство „Авангард прима", ISBN 978-619-239-896-5, 373 стр., София (2023).	40/n	 1 1	 20 40
			Общо по Е19	**60**
Е20	Публикувано университетстко учебно пособие или учебно пособие, което се използва в училищната мрежа: Е20.1. И. Апостолова, Тестове по Физика и Физика с биофизика за студентите от Лесотехнически университет, Издателство „Авангард прима", ISBN 978-619-239-712-8, 144 стр., София, (2022).	20/n	 1	 20
			Общо по Е20	**20**
ВСИЧКО ТОЧКИ ПО ГРУПА ПОКАЗАТЕЛИ „Е":				**170**
ВСИЧКО ТОЧКИ ПО ГРУПА ПОКАЗАТЕЛИ „А", „Б", „В", „Г", „Д" и „Е":				**2109**

Дата: 24.01.2024 г.

Подпис на кандидата: