Справка за научната дейност на
доц. д-р Виолета Колева

в съответствие с изискванията на чл. 2б, ал. 2 от ЗРАСРБ
и допълнителните изисквания на ИОНХ-БАН

ТАБЛИЦА 1. ПОСТИГНАТИ И МИНИМАЛНИ ИЗИСКВАНИ ТОЧКИ ПО ГРУПИ ПОКАЗАТЕЛИ.

Група от показатели	**Съдържание**	**Доктор**		**Доцент**		**Професор по конкурса**	
		Постигнати	Минимални	Постигнати	Минимални	Постигнати	Минимални
А	Показател 1	**50**	50	**50**	50	**50**	50
Б	Показател 2	-	-	-	-	-	-
В	Показатели 3 или 4	-	-	**275**	100	**344**	100
Г	Сума от показателите от 5 до 10	**32**	30	**352**	220	**490**	220
Д	Показател 11	-	-	**124**	60	**1074**	120
Е	Сума от показателите от 12 до 20	-	-	-	-	**242**	150
Ж*	Сума от показателите от 21 до 29	-	-	-	-	**150**	120

ТАБЛИЦА 2. БРОЙ ТОЧКИ ПО ПОКАЗАТЕЛИ

I. За ОНС „Доктор”

Група от показатели	Показател	Постигнати брой точки
А	1. Дисертационен труд за присъждане на образователна и научна степен "доктор"	**50**
Г	7. Научна публикация в издания, които са реферирани и индексирани в (Web of Science и Scopus)	**32**
	7.1. M. Maneva, M. Georgiev, D. Nikolova, D. Rizova, **V. Koleva**, P. Kovandschiev, N. Petrov and G. Liptay Uber den Unterschied im Thermischen Verhalten von gewohnlichen und deuterierten Hydraten anorganischer Verbindungen, *Journal of Thermal Analysis* 36, 1990, 1803-1817. ISSN 1388-6150	Q2 Scimago 20 т.
	7.2. M. Maneva, **V. Koleva**, L. Genov Solubility of Magnesium Iodate in Water and Heavy Water *Bulgarian Chemical Communications* 24, 1991, 96-103. ISSN 0324-1130	Q4 Web of Science 12 т.

II. За академична длъжност „Доцент” – 2007 г.

Група от показатели	Показател	Постигнати брой точки
А	1. Дисертационен труд за присъждане на образователна и научна степен "доктор"	**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/или Scopus)	**275**
	4.1.M. Maneva, **V. Koleva**, Thermal and Calorimetric Studies of $M(IO_3)_2.6H_2O$ and $M(IO_3)_2.6D_2O$ for M = Ca, Sr, *Journal of Thermal Analysis* 38, 1992, 2491-2499. ISSN 1388-6150	Q2 Scimago 20 т.
	4.2. M. Maneva, **V. Koleva**, Thermal and Calorimetric Investigations of $M(IO_3)_2.H_2O$ and $M(IO_3)_2.D_2O$ (M = Ca, Sr, Ba), *Thermochimica Acta* 207, 1992, 85-93. ISSN 0040-6031	Q2 Scimago 20 т.
	4.3.M. Maneva, **V.Koleva**, M. Georgiev, Thermal and Calorimetric Investigations of $Me(IO_3)_2.4H_2O$ for Me = Co and Ni *Journal of Thermal Analysis* 39, 1993, 1467-1475. ISSN 1388-6150	Q2 Scimago 20 т.
	4.4. M. Maneva, **V. Koleva**, Thermal and Calorimetric Investigations of $M(IO_3)_2.2H_2O$ for M = Ni, Zn, and Their Deuterated Analogues, *Journal of Thermal Analysis* 41, 1994, 817-823. ISSN 1388-6150	Q2 Scimago 20 т.

	4.5. **V. Koleva**, M. Maneva Kinetic Analysis of the Dehydration Processes in Some Iodate Hydrates, *Thermochimica Acta* 242, 1994, 233-237. ISSN 0040-6031	Q2 Scimago 20 т.
	4.6. **V. Koleva**, D. Stoilova, D. Mehandjiev On the Formation of Copper Manganese Oxides from $Cu_xMn_{1-x}(HCOO)_2.2H_2O$ Mixed Crystals *Journal of Solid State Chemistry* **113**, 1997, 416-422. ISSN 0022-4596	Q1 Scimago 25 т.
	4.7. **V. Koleva,** D. Stoilova Infrared and Raman Studies of the Solids in the $Mg(CH_3COO)_2$ – $Zn(CH_3COO)_2$ - H_2O System *Journal of Molecular Structure* **611**, 2002, 1-8. ISSN 0022-2860	Q2 Scimago 20 т.
	4.8. **V.G. Koleva**, V.A. Georgieva, M.P. Georgiev Characterization of Beryllium Selenates by X-Ray Powder Diffraction, DTA and DSC *Crystal Research and Technology* **39**, 2004, 1020-1023. ISSN 0232-1300	Q2 Scimago 20 т.
	4.9. **V. Koleva** Vibrational Behavior of Calcium Hydrogen Triacetate Monohydrate, $CaH(CH_3COO)_3.H_2O$ *Croatica Chemica Acta* **78**, 2005, 581-591. ISSN 0011-1643	Q2 Scimago 20 т.
	4.10. **V.G. Koleva** Metal-water Interactions and Hydrogen Bonding in Dittmarite-type Compounds M'M''$PO_4.H_2O$ (M' = K^+, NH_4^+; M'' = Mn^{2+}, Co^{2+}, Ni^{2+}). Correlations of IR Spectroscopic and Structural Data *Spectrochimica Acta* **A62**, 2005, 1196-1202. ISSN 1386-1425	Q2 web of science 20 т.
	4.11. **V. Koleva**, M. Mehandjiev Characterization of $M(H_2PO4)_2.2H_2O$ (M = Mn,Co,Ni) and of Their *in situ* Thermal Decomposition by Magnetic Measurements *Materials Research Bulletin* **41**, 2006, 469-477. ISSN 0025-5408	Q1 Scimago 25 т.
	4.12. **V.G. Koleva** Vibrational Behavior of the Phosphate Ions in Dittmarite-type Compounds M'M''$PO_4.H_2O$ (M' = K^+, NH_4^+; M'' = Mn^{2+}, Co^{2+}, Ni^{2+}) *Spectrochimica Acta* **A66**, 2007, 413-418. ISSN 1386-1425	Q2 web of science 20 т.
	4.13. **V. Koleva**, H. Effenberger Crystal Chemistry of $M[PO_2(OH)_2]_2 \cdot 2H_2O$ Compounds (M = Mg, Mn, Fe, Co, Ni, Zn, Cd). Structural Investigation of the Ni-, Zn- and Cd-salts *Journal of Solid State Chemistry* **180**, 2007, 956-967. ISSN 0022-4596	Q1 Scimago 25 т.
Г	7. Научна публикация в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация (Web of Science и/или Scopus), извън хабилитационния труд	**352**
	7.1. M. Maneva, **V. Koleva**, Thermal and Calorimetric Investigations of $Mg(IO_3)_2.nH_2O$ (n = 10 and 4) and Their Deuterated Analogues *Journal of Thermal Analysis* 42, 1994, 1017-1023. ISSN: 1388-6150	Q2 Scimago 20 т.
	7.2. D. Stoilova, **V. Koleva** Thermal Dehydration of Magnesium Selenate Hydrates, *Thermochimica Acta* 255, 1995, 33-38. ISSN 0040-6031	Q2 Scimago 20 т.
	7.3. D. Stoilova, V. **Koleva**, X-ray Diffraction Study on $MgSeO_4.6H_2O$ at Elevated Temperatures, *Crystal Research and Technology* 30, 1995, 547-551. ISSN 0232-1300	Q2 Scopus 20 т.
	7.4. **V. Koleva,** D. Stoilova, DTA, DSC and X-ray Powder Diffraction Studies on Some Zinc Selenate Hydrates, *Crystal Research and Technology* 30, 1995, 997-1002. ISSN 0232-1300	Q2 Scimago 20 т.

	7.5. D. Stoilova, **V. Koleva**, TG, DTA, DSC and X-ray Powder Diffraction Studies on Some Nickel Selenate Hydrates, *Thermochimica Acta*, 290, 1996, 85-91. ISSN 0040-6031	Q2 Scimago 20 т.
	7.6. D. Stoilova, **V. Koleva**, IR Study of Dibarium Copper Formate Tetrahydrate *Journal of Molecular Structure* 404, 1997, 291-295. ISSN 0022-2860	Q3 Scopus 15 т.
	7.7. D. Stoilova, **V. Koleva**, IR and X-ray Powder Diffraction Studies on $Ba_2Me(HCOO)_6.4H_2O$ (Me = Co, Ni, Zn) *Crystal Research and Technology* 32, 1997, 865-873. ISSN 0232-1300	Q2 Scimago 20 т.
	7.8. **V. Koleva,** D. Stoilova, Thermal Dehydration of Cobalt Selenate Hydrates, *Thermochimica Acta* 296, 1997, 31-36. ISSN 0040-6031	Q2 Scimago 20 т.
	7.9. **V. Koleva** and D. Mehandjiev, Chromatographic Effect During the Preparation of γ-Al_2O_3 Supported Cu-Mn Catalysts, *Reaction Kinetics and Catalysis Letters* 63, 1998, 283-289. ISSN 1878-5190	Q4 Web of Science 12 т.
	7.10. **V. Koleva**, D. Stoilova, DTA, DSC and X-Ray Studies on Copper and Manganese Selenate Hydrates, *Thermochimica Acta* 342, 1999, 89-95. ISSN 0040-6031	Q2 Scimago 20 т.
	7.11. D. Stoilova, **V. Koleva**, FTIR Study on the Spinel Type Cobalt-Manganese Oxide Prepared from Mixed Acetates, *Comptes Rendus de LAcadémie Bulgare des Sciences* 53, 2000, 57-60. ISSN 1310-1331	Q3 Scimago 15 т.
	7.12. D. Stoilova, **V. Koleva** IR study of Solid Phases Formed in the $Mg(HCOO)_2-Cu(HCOO)_2-H_2O$ System *Journal of Molecular Structure* **553**, 2000, 131-139. ISSN 0022-2860	Q2 Scimago 20 т.
	7.13. D. Stoilova, **V. Koleva** Infrared Study of ν_{OD} Modes in Isotopically Dilute (HDO) Isostructural Compounds $M(HCOO)_2.2H_2O$ (M=Mn,Fe,Co,Ni,Cu,Zn) with Matrix-Isolated Guest Ions (Cu^{2+} in $M(HCOO)_2.2H_2O$ and M^{2+} in $Cu(HCOO)_2.2H_2O$) *Journal of Molecular Structure* **560**, 2001, 15-21. ISSN 0022-2860	Q2 Scimago 20т.
	7.14. D. Stoilova, **V. Koleva** Infrared Spectroscopic Study of Mixed Copper-Cobalt and Copper-Nickel Formate Dihydrates (Cation Distribution in Mixed Crystals) *Spectrochimica Acta* **57A,** 2001, 2629-2636. ISSN 1386-1425	Q2 Scimago 20 т.
	7.15. D. Stoilova, **V. Koleva,** V. Vassileva Infrared Study of Some Solid Synthetic Phases of the Malachite - Hydrozincite Series *Spectrochimica Acta* **A58**, 2002, 2051-2059. ISSN 1386-1425	Q2 Scimago 20 т.
	7.16. D.Stoilova, **V.Koleva,** K. Cheshkova Infrared Spectroscopic Study of NO and NH_3 Adsorption on Alumina-Supported Nickel Oxide Catalysts *Zeitschrift fur Physikalische Chemie* **216**, 2002, 737-747. ISSN 0942-9352	Q3 Web of science 15 т
	7.17.D. Stoilova, **V. Koleva** Structural Distortion of Matrix-Isolated SO_4^{2-} Guest Ions in Selenate Crystal Hydrates $MeSeO_4.nH_2O$ (Me = Mg, Mn, Co, Ni, Cu, Zn, n = 6, 5, 4) *Journal of Molecular Structure* **613**, 2002, 137-144. ISSN 0022-2860	Q2 Scimago 20 т.

	7.18. D. Stoilova, M. Wildner, **V. Koleva** Infrared Study of ν_{OD} Modes in Isotopically Dilute (HDO Molecules) $Na_2Me(XO_4)_2.2H_2O$ with Matrix-Isolated $X'O_4^{2-}$ Guest Ions (Me = Mn, Co, Ni, Cu, Zn, Cd, and X = S, Se) *Journal of Molecular Structure* **643**, 2002, 37-41. ISSN 0022-2860	Q2 Scimago 20 т.
	7.19. D. Stoilova, M. Wildner, **V. Koleva** Vibrational Behavior of the S–O Stretches in Compounds with Kröhnkite-Type Chains $Na_2Me(SeO_4)_2.2H_2O$ with Matrix-Isolated SO_4^{2-} and Me'^{2+} Guest Ions (Me = Mn,Co,Ni,Cu,Zn,Cd) *Vibrational Spectroscopy* **31**, 2003, 115-123. ISSN 0924-2031	Q3 Scimago 15 т
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) **Цитатите са включени в общия списък на цитиранията:** **62 цитата до 2007 г. по Scopus**	**124** **= 62 x 2**

III. За академична длъжност „Професор”

Група от показатели	**Показател**	**Постигнати брой точки**
А	1. Дисертационен труд за присъждане на образователна и научна степен "доктор"	**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/или Scopus)	**344**
	4.1. **V. Koleva**, E. Zhecheva, R. Stoyanova A New Phosphate-formate Precursor Method for the Preparation of Carbon Coated Nano-crystalline $LiFePO_4$ *Journal of Alloys and Compounds* 476, 2009, 950-957. ISSN 0925-8388 Scopus	Q1 web of science 25 т.
	4.2. **V. Koleva**, R. Stoyanova, E. Zhecheva Formation of Metastable Na_2CrO_4-Type $LiNiPO_4$ From a Phosphate-Formate Precursor *European Journal of Inorganic Chemistry* **2010 (1),** 2010, 127-131. ISSN 1434-1948 Scopus	Q1 Scimago 25 т.
	4.3. **V. Koleva,** R. Stoyanova, E. Zhecheva Nano-crystalline $LiMnPO_4$ Prepared by a New Phosphate-formate Precursor Method *Materials Chemistry and Physics* **121**, 2010, 370-377. ISSN 0254-0584 Scopus	Q1 Scimago 25 т.
	4.4. E. Zhecheva, Ml. Mladenov, P. Zlatilova, **V. Koleva,** R. Stoyanova Particle Size Distribution and Electrochemical Properties of $LiFePO_4$ Prepared by a Freeze-drying Method *Journal of Physics and Chemistry of Solids* **71**, 2010, 848-853. ISSN: 0022-3697 Scopus	Q2 Scimago 20 т.

	4.5. **V. Koleva,** E. Zhecheva, R. Stoyanova Ordered Olivine-Type Lithium-Cobalt and Lithium-Nickel Phosphates Prepared by a New Precursor Method *European Journal of Inorganic Chemistry* **2010 (26**), 2010, 4091-4099. ISSN 1434-1948 Scopus	Q1 Scimago 25 т.
	4.6. **V. Koleva**, E. Zhecheva, R. Stoyanova Facile Synthesis of $LiMnPO_4$ Olivines with Plate-like Morphology from Dittmarite-type $KMPO_4.H_2O$ Precursor *Dalton Transactions* **40**, 2011, 7385-7394. ISSN: 1477-9226 Scopus	Q1 Scimago 25 т.
	4.7. M. Yoncheva, **V. Koleva**, M. Mladenov, M. Sendova-Vassileva, M. Nikolaeva-Dimitrova, R. Stoyanova, E. Zhecheva Carbon Coated Nano-sized $LiFe_{1-x}Mn_xPO_4$ Solid Solutions ($0 \leq x \leq 1$) Obtained from Phosphate-Formate Precursors *Journal of Materials Science* **46**, 2011, 7082-7089. ISSN 0022-2461 Scopus	Q1 Scimago 25 т.
	4.8. **V. Koleva**, T. Boyadzhieva, E. Zhecheva, D. Nihtianova, S. Simova, G. Tyuliev, R. Stoyanova Precursor-based Methods for Low-temperature Synthesis of Defectless $NaMnPO_4$ with an Olivine- and Maricite-type Structure *CrystEngComm* **15**, 2013, 9080-9089. ISSN: 1466-8033 Scopus	Q1 web of science 25 т.
	4.9. T. Boyadzhieva, **V. Koleva**, R. Stoyanova Comparative Study on the Formation of Lithium and Sodium Manganese Phospho-olivines *Bulgarian Chemical Communications* **45B**, 2013, 208-212. ISSN 0324-1130 Scopus	Q4 web of science 12 т.
	4.10. **V. Koleva**, R. Stoyanova, E. Zhecheva, D. Nihtianova Dittmarite Precursors for Structure and Morphology Directed Synthesis of Lithium Manganese Phospho-Olivine Nanostructures *CrystEngComm* **16**, 2014, 7515-7524. ISSN 1466-8033 Scopus	Q1 Scimago 25 т.
	4.11. T. Boyadzhieva, **V. Koleva**, E. Zhecheva, D. Nihtianova, L. Mihaylov, R. Stoyanova Competitive Lithium and Sodium Intercalation into Sodium Manganese Phospho-Olivine $NaMnPO_4$ Covered with Carbon Black *RSC Advances* **5**, 2015, 87694-87705. ISSN 2046-2069 Scopus	Q1 Scimago 25 т.
	4.12. T. Boyadzhieva, R. Stoyanova, E. Zhecheva, **V. Koleva** Low Temperature Preparation of Nanosized $LiFePO_4$ by Molten Salt Reactions *Bulgarian Chemical Communications* **49F**, 2017, 59-64. ISSN 0324-1130 Scopus	Q4 web of science 12 т.
	4.13. T. Boyadzhieva, **V. Koleva,** R. Stoyanova Crystal Chemistry of Mg Substitution in $NaMnPO_4$ Olivine: Concentration Limit and Cation Distribution *Physical Chemistry Chemical Physics* **19**, 2017, 12730-12739. ISSN 1463-9076 Scopus	Q1 web of science 25 т.
	4.14. R. Stoyanova, **V. Koleva**, A. Stoyanova Lithium versus Mono/Polyvalent Ion Intercalation: Hybrid Metal Ion Systems for Energy Storage (**Review**) *Chemical Record* **19(2),** 2019, 474-501. ISSN:1528-0691 Scopus	Q1 web of science 25 т.
	4.15. **V. Koleva**, T. Boyadzhieva, R. Stoyanova Crystal and Morphology Design of Dittmarite-Type Ammonium Iron–Manganese Phosphates, $NH_4Mn_{1-x}Fe_xPO_4 \bullet H_2O$, as Precursors for Phospho-olivine Electrodes *Crystal Growth & Design* 2019, DOI: 10.1021/acs.cgd.9b00094 ISSN 1528-7483 Scopus	Q1 web of science 25 т.

Г	7. Научна публикация в издания, които са реферирани и индексирани в световноизвестни бази данни с научна информация (Web of Science и/или Scopus), извън хабилитационния труд	**490**
	7.1. **V. Koleva**, V. Stefov, A. Cahil, M. Najdoski, B. Šoptrajanov, B. Engelen, H.D. Lutz Infrared and Raman Studies of Manganese Dihydrogen Phosphate Dihydrate $Mn(H_2PO_4)_2 \cdot 2H_2O$. I. Region of the Vibrations of the Phosphate Ions and External Modes of the Water Molecules *Journal of Molecular Structure* **917**, 2009, 117-124. ISSN 0022-2860 Scopus	Q3 web of science 15 т.
	7.2. **V. Koleva**, V. Stefov, A. Cahil, M. Najdoski, B. Šoptrajanov, B. Engelen, H.D. Lutz Infrared and Raman Studies of Manganese Dihydrogen Phosphate Dihydrate, $Mn(H_2PO_4)_2 \cdot 2H_2O$. Part II. Region of the Internal OH Group Vibrations *Journal of Molecular Structure* **919**, 2009, 164-169. ISSN 0022-2860 Scopus	Q3 web of science 15 т.
	7.3. V. Stefov, A.Cahil, B. Šoptrajanov, M. Najdoski, F. Spirovski, B. Engelen, H.D. Lutz, **V. Koleva** Infrared and Raman Spectra of Magnesium Ammonium Phosphate Hexahydrate (*Struvite*) and its Isomorphous Analogues. VII. Spectra of Protiated and Partially Deuterated Hexagonal Magnesium Caesium Phosphate Hexahydrate *Journal of Molecular Structure* **924-925**, 2009, 100-106. ISSN 0022-2860 Scopus	Q3 Web of science 15 т.
	7.4. B. Šoptrajanov, A. Cahil, M. Najdoski, **V. Koleva**, V. Stefov Infrared and Raman Spectra of Magnesium Ammonium Phosphate Hexahydrate (Struvite) and its Isomorphous Analogues. VIII. Spectra of Protiated and Partially Deuterated Magnesium Rubidium Phosphate Hexahydrate and Magnesium Thallium Phosphate Hexahydrate *Acta Chimica Slovenica* **58**, 2011, 478-484. ISSN 1318-0207 Scopus	Q2 Scimago 20 т.
	7.5. **V. Koleva,** V. Petkova IR spectroscopic Study of High Energy Activated Tunisian Phosphorite *Vibrational Spectroscopy* 58, 2012, 125-132. ISSN 0924-2031 Scopus	Q3 Scimago 15 т.
	7.6. M. Najdoski, **V. Koleva**, S. Demiri Chemical Bath Deposition and Characterization of Electrochromic Thin Films of Sodium Vanadium Bronzes *Materials Research Bulletin* **47**, 2012, 737-743. ISSN 0025-5408 Scopus	Q1 Scimago 25 т.
	7.7. **V. Koleva,** V. Stefov, M. Najdoski, A. Cahil Vibrational Spectra of Cobalt Dihydrogen Phosphate Dihydrate, $Co(H_2PO_4)_2.2H_2O$ *Vibrational Spectroscopy* **62**, 2012, 229-237. ISSN 0924-2031 Scopus	Q3 Scimago 15 т.
	7.8. M. Najdoski, **V. Koleva**, S. Demiri, S. Stojkovikj A Simple Chemical Method for Deposition of Electrochromic Potassium Manganese Oxide Hydrate Thin Films *Materials Research Bulletin* **47**, 2012, 2239-2244. ISSN 0025-5408 Scopus	Q1 web of science 25 т.
	7.9. **V. Koleva,** V. Stefov Phosphate Ion Vibrations in Dihydrogen Phosphate Salts of the Type $M(H_2PO_4)_2 \bullet 2H_2O$ (M = Mg, Mn, Co, Ni, Zn, Cd): Spectra – Structure Correlations *Vibrational Spectroscopy* **64**, 2013, 89-100. ISSN 0924-2031 Scopus	Q3 Scimago 15 т.
	7.10. S. Stojkovikj, M. Najdoski, **V. Koleva**, S. Demiri Preparation of Electrochromic Thin Films by Transformation of Manganese (II) Carbonate *Journal of Physics and Chemistry of Solids* **74**, 2013, 1433-1438. ISSN 0022-3697 Scopus	Q2 Scimago 20 т.

7.11. V. Stefov, Z. Abdija, M. Najdoski, **V. Koleva,** V.M. Petruševski, T. Runčevski, R.E. Dinnebier, B. Šoptrajanov Infrared and Raman Spectra of Magnesium Ammonium Phosphate Hexahydrate (Struvite) and its Isomorphous Analogues. IX. Spectra of Protiated and Partially Deuterated Cubic Magnesium Caesium Phosphate Hexahydrate *Vibrational Spectroscopy* **68**, 2013, 122-128. ISSN 0924-2031 Scopus	Q3 Scimago 15 т.
7.12. M. Najdoski, **V. Koleva**, A. Samet Influence of Vanadium Concentration and Temperature on the Preparation of Electrochromic Thin Films of Ammonium Intercalated Vanadium(V) Oxide Xerogel Nanoribbons *Dalton Transactions* **43**, 2014, 12536-12545. ISSN: 1477-9226 Scopus	Q1 web of science 25 т
7.13. M. Najdoski, **V. Koleva**, A. Samet Effect of Deposition Conditions on the Electrochromic Properties of Nanostructured Thin Films of Ammonium Pentoxide Xerogel *Journal of Physical Chemistry **C*** **118**, 2014, 9636-9646. ISSN 1932-7447 Scopus	Q1 web of science 25 т
7.14. Z. Abdija, M. Najdoski, **V. Koleva**, T. Runčevski, R.E. Dinnebier, B. Šoptrajanov, V. Stefov Preparation, Structural, Thermogravimetric and Spectroscopic Study of Magnesium Potassium Arsenate Hexahydrate *Zeitschrift fur Anorganische und Allgemeine Chemie* **640**, 2014, 3177-3183. ISSN 0044-2313 Scopus	Q3 Web of science 15 т.
7.15. V. Petkova, **V. Koleva,** B. Kostova, S. Sarov Structural and Thermal Transformations on High Energy Milling of Natural Apatite *Journal of Thermal Analysis and Calorimetry* **121**, 2015, 217-225. ISSN 1388-6150 Scopus.	Q2 Scimago 20 т.
7.16. M. Najdoski, **V. Koleva**, S. Stojkovikj, T. Todorovski Electrochromic Thin Films of Sodium Intercalated Vanadium(V) Oxide Xerogels: Chemical Bath Deposition and Characterization *Surface & Coatings Technology* **277**, 2015, 308–317. ISSN 0257-8972 Scopus	Q1 Web of science 25 т.
7.17. **V. Koleva**, V. Stefov, M. Najdoski, A. Cahil Thermal, Spectral and Microscopic Studies of Water-Rich Hydrates of the Type $Mg_2KH(PO_4)_2 \cdot 15H_2O$. Thermal Transformations *Thermochimica Acta* **619**, 2015, 20-25. ISSN 0040-6031 Scopus.	Q1 Scimago 25 т.
7.18. L. Soserov, T. Boyadzhieva, **V. Koleva,** A. Stoyanova, R. Stoyanova The Capacitive Performance of α-$Ni(OH)_2$-based Composites for Hybrid Supercapacitors *ECS Transactions* **74**, 2016, 213-222. Book series ISSN 1938-5862 Scopus	Q3 Scimago 15 т.
7.19. **V. Koleva,** V. Stefov, M. Najdoski Characterization and Thermal Decomposition of $Mg_2KH(AsO_4)_2 \cdot 15H_2O$ *Journal of Thermal Analysis and Calorimetry* **127**, 2017, 1911-1919. ISSN 1388-6150 Scopus	Q2 web of science 20 т
7.20. V. Stefov, **V. Koleva,** M. Najdoski, Z. Abdija, A. Cahil ,B. Šoptrajanov Vibrational Spectra of $Mg_2KH(XO_4)_2 \cdot 15H_2O$ (X = P, As) Containing Dimer Units $[H(XO_4)_2]$ *Spectrochimica Acta* **183**, 2017, 387-394. ISSN 1386-1425 Scopus	Q1 Scimago 25 т.
7.21. **V. Koleva,** V. Stefov, M. Najdoski, Z. Ilievski, A. Cahil Spectral and Thermal Studies on $MgI_2 \cdot 8H_2O$ *Journal of Molecular Structure* **1146**, 2017, 744-749. ISSN 0022-2860 Scopus	Q3 Web of science 15 т.
7.22. L. Soserov, T. Boyadzhieva, **V. Koleva,** Ch. Girginov, A. Stoyanova, R. Stoyanova Effect of the Electrolyte Alkaline Ions on the Electrochemical Performce of α-$Ni(OH)_2$/Activated Carbon Composites in the Hybrid Supercapacitor Cell *ChemistrySelect* 2 (23), 2017, 6693- 6698. ISSN: 2365-6549 Scopus	Q3 Web of science 15 т.

	7.23. M. Pecovska-Gjorgjevich, V. Stefov, M. Najdoski, **V. Koleva**, S. Mentus, G. Petruševski $Mg_2KH(XO_4)_2 \cdot 15H_2O$ (X = P, As) Containing Acidic Dimer Units: Electrochemical Impedance Spectroscopy, IR Spectroscopy and DSC Studies *Journal of Alloys and Compounds* **746**, 2018, 699-709. ISSN 0925-8388 Scopus	Q1 Web of science 25 т
	7.24. L. Soserov, A. Stoyanova, T. Boyadzhieva, V. Koleva, M. Kalapsazova, R. Stoyanova Nickel-Manganese Structured and Multiphase Composites as Electrodes for Hybrid Supercapacitors *Electrochimica Acta* **283**, 2018, 1063-1071. ISSN 0013-4686 Scopus	Q1 Web of science 25 т
	7.25. V. Stefov, **V. Koleva**, M. Najdoski, A. Kahil, Z. Abdija Infrared and Raman Spectra of Cubic Form of Magnesium Caesium Arsenate Hexahydrate *Macedonian Journal of Chemistry and Chemical Engineering* **37(2),** 2018, 193-201. ISSN 1857-5552 Scopus	Q3 Scimago 15 т.
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) **Цитати след хабилитиране 2008-2019 г. по Scopus : 537** Тези цитати са включени в списъка на цитиранията към всички публикации (Документ № 11). Тук са изброени само малка част от тях, достатъчни за регистрацията в НАЦИД	**1074 = 537 x 2**
	Цитирания за НАЦИД	**130**
	V. Koleva, V. Stefov, A. Cahil, M. Najdoski, B. Šoptrajanov, B. Engelen, H.D. Lutz, Infrared and Raman Studies of Manganese Dihydrogen Phosphate Dihydrate $Mn(H_2PO_4)_2 \cdot 2H_2O$. I. Region of the Vibrations of the Phosphate Ions and External Modes of the Water Molecules, *Journal of Molecular Structure* **917**, 2009, 117-124. 1. M. Gu, D. Yu, H. Zhang, P. Sun, H. Huang, Metal (IV) phosphates as solid catalysts for selective dehydration of sorbitol to isosorbide, *Catalysis Letters*, 133, 2009, 214-220. 2. Hosseini, S., Wan Daud, W.R., Badiei, M., Kadhum, A.A.H., Mohammad, A.B., Effect of surfactants in synthesis of CsH_2PO_4 as protonic conductive membrane, *Bulletin of Materials Science*, 34, 2011, 759-765 3. Caille, F., Riera, J.L., Rosell-Melé, A., Modelling nitrogen and phosphorus loads in a Mediterranean river catchment (La Tordera, NE Spain)", *Hydrology and Earth System Sciences* 16, 2012, 2417-2435. 4. Elwej, R., Hannachi, N., Adil, K., Hlel, F., Hydrothermal synthesis and characterization properties of $C_7H_{12}N_2[H_2PO_4]_2.1/2H_2O$, *Phosphorus, Sulfur and Silicon and the Related Elements* 187, 2012, 1173-1182 5. Alfonso, B.F., Trobajo, C., Piqué, C., García, J.R., Blanco, J.A., From dihydrated iron(III) phosphate to monohydrated ammonium-iron(II) phosphate: Solvothermal reaction mediated by acetone-urea mixtures, *Journal Solid State Chemistry* 196, 2012, 458-464. 6. F. Ben Brahim, H. Boughzala, Crystal structure, vibrational spectra and thermal analysis of a new centrosymmetric transition metal phosphate compound, $Mn(H_2PO_4)_2.4H_2O$, *Journal of Molecular Structure* 1034, 2013, 336-345. 7. Sun, C., Xue, D., "In situ iR spectral observation of $NH_4H_2PO_4$ crystallization: Structural identification of nucleation and crystal growth", J. Phys. Chem., C 117 (2013) 19146-19153. 8. Sun, C., Xue, D., In situ ATR-IR observation of nucleation and crystal growth of KH_2PO_4 in aqueous solution, *CrystEngComm* 15, 2013, 10445-10450. 9. Harichandran, G., Amalraj, S.D., Shanmugam, P., Synthesis and characterization of phosphate anchored MnO_2 catalyzed solvent free synthesis of xanthene laser dyes, .*Journal of Molecular Catalysis A: Chemical*, 392, 2014, 31-38=	**32**

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	V. Koleva, V. Stefov, A. Cahil, M. Najdoski, B. Šoptrajanov, B. Engelen, H.D. Lutz Infrared and Raman Studies of Manganese Dihydrogen Phosphate Dihydrate, $Mn(H_2PO_4)_2 \cdot 2H_2O$. Part II. Region of the Internal OH Group Vibrations *Journal of Molecular Structure* 919, 2009, 164-169. 17. T. Svoboda, R. Jambor, A. Růžička, Z. Padělková, M. Erben, R. Jirásko, L. Dostál, NCN chelated organoantimony(III) and organobismuth(III) phosphinates and phosphites: Synthesis, structure and reactivity, *European Journal of Inorganic Chemistry*, 2010, 2010, 1663-1669. 18. T. Svoboda, R. Jambor, A. Růžička, Z. Padělková, M. Erben, R. Jirásko, L. Dostál, NCN-chelated organoantimony(III) and organobismuth(III) phosphonates: Syntheses and structures, *European Journal of Inorganic Chemistry*. 2010, 2010, 5222-5230. 19. Garanin, E.M., Tolmachev, Y.V., Bunge, S.D., Khitrin, A.K., Turanov, A.N., Malkovskiy, A., Sokolov, A.P., Fast protonic conductivity in crystalline benzenehexasulfonic acid hydrates, *Journal of Solid State Electrochemistry*. 15, 2011, 549-560. 20. O. Kaman, L. Smrcok, I. Cisarova, D. Havlicek, Dihydrogen phosphate and hydrogen sulphate of 1,4-dimethyl-1,4- diazabicyclo[2.2.2]octane-1,4-diium: Crystal structures, hydrogen bonding and infrared spectra, *Journal of Chemical Crystallography*, 41, 2011, 1539-1546. 21. F. Ben Brahim, H. Boughzala, Crystal structure, vibrational spectra and thermal analysis of a new centrosymmetric transition metal phosphate compound, $Mn(H_2PO_4)_2.4H_2O$, Journal of Molecular Structure 1034, 2013, 336-345. 22. Srungavruksham, N.K., Baskar, V., Organoantimony(V) phosphinates, phosphonates, and seleninates, *European Journal of Inorganic Chemistry* 2013 (24), 2013, 4345-4352. 23. Shangguan, L.-J., Ma, W., Liu, G., Song, W. Anticorrosive properties of styrene-acrylic resins containing aluminum tripolyphosphate, *Chemik*, 69 (9), 2015, 582-585. 24. Blanco, E., Lorentz, C., Delichere, P., Burel, L., Vrinat, M., Millet, J.M.M., Loridant, S. Dehydration of ethyl lactate over alkaline earth phosphates: Performances, effect of water on reaction pathways and active sites, *Applied Catalysis B: Environmental*, 180, 2016, 596-606.	**16**
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Е	13. Ръководство на успешно защитил докторант (n е броят съръководители на съответния докторант)	**75**
	13.1. **Таня Йорданова Бояджиева**: „Метални фосфати като електродни материали в алкални йонни батерии"; ИОНХ-БАН; 2017 г.	25
	13.2. **Аксу Самет:** „Получаване и охарактеризиране на електро-хромни тънки филми от ванадиеви оксиди"; Университет "Св. св. Кирил и Методий", Скопие, Македония; 2016 г.	25
	13.3. **Сани Демири:** „Химическо отлагане и охарактеризиране на неорганични електрохромни тънки филми"; Университет "Св. св. Кирил и Методий", Скопие, Македония; 2012 г.	25
	14. Участие в национален научен или образователен проект	**100**
	14.1. Проект за двустранно сътрудничество с република Македония "Синтез, структурно и спектроскопско охарактеризиране на метални фосфати с потенциална протонна проводимост"; НФНИ; Договор БМ-1/06 (Д01-616/08.08.2006); 2006 - 2008 г.; Участник	10
	14.2. Проект, "Нанокомпозитни материали като ново поколение електроди за литиево-йонни батерии"**;** НФНИ; Договор ТК-Х-1701/07 (Д01-1122/2007); 2007-2010; Участник	10
	14.3. Проект „Национален център за нови материали UNION", Модул 1: Национален център за съвременни материали (ДО 02-82/2008 г.); ФНИ; Участник	10
	14.4. Проект „Национален център за нови материали UNION", Модул 2: Нови материали за медицината и фармацията (ДЦВП 02-2/2009 г.); ФНИ; участник	10
	14.5. Проект „Системи за съхранение на основата на асиметрични и хибридни суперкондензатори с нанокомпозитни електроди"; ФНИ; Договор ДФНИ-Е02/18 от 12.12.2014 г; 2014-2017 г.; Участник	10
	14.6. Проект „Съвместна интеркалация на алкални и алкалоземни йони в дву- и тримерни структури: експериментално и теоретично моделиране"; Договор ДН09/13 от 16.12.2016 г , ФНИ; 2016-2020 г.; Участник	10
	14.7. Проект „Иновативни хибридни суперкондензатори като	10

	предизвикателство за ефективно, безопасно и екологично съхранение на енергия“; ФНИ; КП-06-ОПР 04/5 от 14.12.2018 г.; 2018-2021 г.; Участник 14.8. Проект Национален Център за върхови постижения по „Мехатроника и чисти технологии”, BG05M2OP001-1.001-0008, ОП „Наука и образование за интелигентен растеж“; Участник 14.9. Проект Национална научна програма "Нисковъглеродна енергия за транспорта и бита" (Е+), 2018 – 2019; Участник; 14.10. Проект Научна инфраструктура "Съхранение на енергия и водородна енергетика" (НИ СЕВЕ), Д01-160/28.08.2018, Национална пътна карта за научна инфраструктура, ОП Наука и образование за интелигентен растеж (2014-2020) - МОН; Участник	10 10 10
	16. Ръководство на национален научен или образователен проект	**60**
	16.1. Проект за двустранно сътрудничество между България и Македония: ”Динамика на протона при метални фосфати хидрати: спектроскопски изследвания”; ФНИ; Договор ДНТС/Македония 01/3/2011; 40 000 лв; Получена сума 9 000 лв. 16.2. Проект „Спектроскопски и структурни изследвания на някои метални комплекси”, 2014-2016, Двустранно сътрудничество между БАН и МАНУ; Получена сума: 15 000 лв; 16.3. Проект „Получаване и охарактеризиране на електрохромни тънки филми от ванадиеви оксиди”; 2014-2016; Двустранно сътрудничество между БАН и МАНУ; Получена сума: 12 950 лв.;	20 20 20
	18. Привлечени средства по проекти, ръководени от кандидата Общо: **36 950 лв**	**7.4** 1 точка за всеки 5000 лв.
Ж*	21. Индекс по Хирш (Н) (Scopus) Н = 5 (минимум) за доцент Н = 10 (минимум) за професор **Н = 13**	**130** = 13х10 (Нх10)
	23. Участие в национален научен или образователен проект	**20**
	23.1. Проект „Стабилизиране на $NaMnPO_4$ в структура тип оливин чрез контролирано заместване на мангановите с магнезиеви йони”; ДФНП № 78 от 28.04.2016 , Програма за подпомагане на младите учени в БАН; 2016-2017 г.; Консултант 23.2. Проект Център за компетентност" ХИТМОБИЛ – Технологии и системи за генериране, съхранение и потребление на чиста енергия", АДБФП № BG05M20P001-1.002-0014-C01; Участник	10 10

Списък на забелязани цитати

на доц. д-р Виолета Г. Колева

върху публикациите, представени за участие в конкурс за заемане на академичната длъжност „професор”

по професионално направление 4.2. Химически науки (Неорганична химия)

Общ брой: **379** (според Scopus, Google scholar и др)

275 (според Scopus)

Индекс по Хирш (h): **10** (според Scopus) за публикациите, представени в конкурса

Публикация 1. *V. Koleva, V. Stefov, A. Cahil, M. Najdoski, B. Šoptrajanov, B. Engelen and H.D. Lutz, ”Infrared and Raman studies of manganese dihydrogen phosphate dihydrate, $Mn(H_2PO_4)_2 \cdot 2H_2O$. I. Region of the vibrations of the phosphate ions and external modes of the water molecules” J. Mol. Struct., 917 (2009) 117-124:*

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