

**СПИСЪК НА ИЗБРАНИ НАУЧНИ ТРУДОВЕ  
НА ПРОФ. ДГН СТАНИСЛАВ ВАСИЛЕВ ВАСИЛЕВ  
ЗА УЧАСТИЕ В КОНКУРС 2021 Г. ЗА ЧЛЕН-КОРЕСПОНДЕНТ НА БАН  
В НАПРАВЛЕНИЕ „НАУКИ ЗА ЗЕМЯТА“**

**Обобщена информация**

**Общ брой публикации – 60:**

- Публикации в международни списания – 58, в български – 2;
- Публикации в списания с импакт-фактор – 60, разпределени по качество в категории списания (Q) според Scopus, както следва:
  - Q1, първа четвърт (топ 25 %) – 55 броя
  - Q2, втора четвърт (между 26 и 50 %) – 2 броя
  - Q3, трета четвърт (между 51 и 75 %) – 3 броя
- Самостоятелен и първи автор - 43 публикации; втори автор - 4; трети и следващ автор - 13

**Брой публикации за последните 5 години (2016-2021) – 11** (в международни списания с импакт-фактор категория Q1 – 11)

**Общ брой цитати на избраните публикации – 7720**

**Брой цитати на избраните публикации, забелязани за последните 5 години – 4827**

**h-индекс = 37** (базиран на представения от кандидата списък с цитирания за всички 106 публикации и на базата на 62 публикации в Scopus)

В допълнение:

- 33 броя от избраните за конкурса 60 публикации са включени в класацията „Топ 1-10%” на най-цитираните публикации за съответната научна област според Scopus, 26.04.2021 г.
- 5 броя публикации (№№ 4, 33, 37, 40, 41) от избраните за конкурса публикации попадат в „Списъка на най-цитираните 211 публикации на БАН до 01.06.2020 г.“

Забележка:

- В колона 1 със \* са отбелязани публикациите, включени в класацията „Топ 1-10%” на най-цитираните публикации за съответната научна област (според Scopus, 26.04.2021 г.)
- В колона 2 в квадратни скоби са посочени номерата на съответния труд според „Списък на научните трудове за целия творчески период“

№ по ред	Автори, заглавие, списание	Q	Брой цитати
1*	[6] <b>Vassilev S.</b> Phase mineralogy studies of solid waste products from coal burning at some Bulgarian thermoelectric power plants. <i>Fuel</i> (1992), 71: 625-633. (Топ 10%, до 2020 г.)	Q1	56
2	[11] <b>Vassilev S.</b> 1994. Trace elements in solid waste products from coal burning at some Bulgarian thermoelectric power stations. <i>Fuel</i> (1994) 73: 367-374	Q1	31
3	[12] <b>Vassilev S, Yossifova M, Vassileva C.</b> Mineralogy and geochemistry of Bobov Dol coals, Bulgaria. <i>International Journal of Coal Geology</i> (1994), 26: 185-214.	Q1	58
4*	[17] <b>Vassilev S, Kitano K, Takeda S, Tsurue T.</b> Influence of mineral and chemical composition of coal ashes on their fusibility. <i>Fuel Processing Technology</i> (1995), 45: 27-51. (Топ 1%, до 2020 г.)	Q1	298
5*	[21] <b>Vassilev S, Vassileva C.</b> Mineralogy of combustion wastes from coal-fired power stations. <i>Fuel Processing Technology</i> (1996), 47: 261-280. (Топ 5%)	Q1	186
6	[22] <b>Vassilev S, Kitano K, Vassileva C.</b> Some relationships between coal rank and chemical and mineral composition. <i>Fuel</i> (1996), 75: 1537-1542	Q1	88
7	[24] <b>Vassilev S, Vassileva C.</b> Occurrence, abundance and origin of minerals in coals and coal ashes. <i>Fuel Processing Technology</i> (1996), 48: 85-106.	Q1	182
8*	[25] <b>Vassilev S, Kitano K, Vassileva C.</b> Relations between ash yield and chemical and mineral composition of coals. <i>Fuel</i> (1997), 76: 3-8. (Топ 6%)	Q1	55
9*	[26] <b>Vassilev S, Vassileva C.</b> Geochemistry of coals, coal ashes and combustion wastes from coal-fired power stations. <i>Fuel Processing Technology</i> (1997), 51: 19-45. (Топ 3%)	Q1	157
10	[28] <b>Vassilev S, Vassileva C.</b> Comparative chemical and mineral characterization of some Bulgarian coals. <i>Fuel Processing Technology</i> (1998), 55: 55-69.	Q1	29
11*	[32] <b>Vassilev S, Braekman-Danheux C, Laurent P.</b> Characterization of refuse-derived char from municipal solid waste. 1. Phase-mineral and chemical composition. <i>Fuel Processing Technology</i> (1999), 59: 95-134. (Топ 10%)	Q1	44
12	[33] <b>Vassilev S, Braekman-Danheux C.</b> 1999. Characterization of refuse-derived char from municipal solid waste. 2. Occurrence, abundance and source of trace elements. <i>Fuel Processing Technology</i> (1999), 59: 135-161.	Q1	51
13	[34] <b>Vassilev S, Braekman-Danheux C, Laurent P, Thiemann T, Fontana A..</b> Behaviour, capture and inertization of some trace elements during combustion of refuse-derived char from municipal solid waste. <i>Fuel</i> (1999), 78: 1131-1145.	Q1	84
14*	[37] <b>Vassilev S, Eskenazy G, Vassileva C.</b> Contents, modes of occurrence and origin of chlorine and bromine in coal. <i>Fuel</i> (2000), 79: 903-921. (Топ 3%)	Q1	111
15*	[38] <b>Vassilev S, Eskenazy G, Vassileva C.</b> Contents, modes of occurrence and behaviour of chlorine and bromine in combustion wastes from coal-fired power stations. <i>Fuel</i> (2000), 79: 923-937. (Топ 3%)	Q1	65
16*	[40] <b>Vassilev S, Eskenazy G, Vassileva C.</b> Behaviour of elements and minerals during preparation and combustion of the Pernik coal, Bulgaria. <i>Fuel Processing Technology</i> (2001), 72: 103-129. (Топ 1%)	Q1	119
17	[43] <b>Vassilev S, Braekman-Danheux C, Moliner R, Suelves I, Lazaro MJ, Thiemann T.</b> Low cost catalytic sorbents for NOx reduction. 1. Preparation and characterization of coal char impregnated with model vanadium components and petroleum coke ash. <i>Fuel</i> (2002), 81: 1281-1296.	Q1	20
18*	[46] <b>Vassilev S, Tascon J.</b> Methods for characterization of inorganic and mineral matter in coal: a critical overview. <i>Energy and Fuels</i> (2003), 17: 271-281. (Топ 2%)	Q1	134

19	[47] Lazaro MJ, Suelves I, Moliner R, <b>Vassilev S</b> , Braekman-Danheux C. Low cost catalytic sorbents for NOx reduction. 2. Tests with no reduction reactivities. <i>Fuel</i> (2003), 82: 771-782.	Q1	8
20*	[48] <b>Vassilev S</b> , Menendez R, Alvarez D, Diaz-Somoano M, Martinez-Tarazona MR. Phase-mineral and chemical composition of coal fly ashes as a basis for their multicomponent utilization. 1. Characterization of feed coals and fly ashes. <i>Fuel</i> (2003), 82: 1793-1811. (Ton 2%)	Q1	186
21*	[49] <b>Vassilev S</b> , Menendez R, Diaz-Somoano M, Martinez-Tarazona MR. Phase-mineral and chemical composition of coal fly ashes as a basis for their multicomponent utilization. 2. Characterization of ceramic cenosphere and water-soluble salt concentrates. <i>Fuel</i> (2004), 83: 585-603. (Ton 4%)	Q1	129
22*	[50] Lazaro MJ, Galvez M, Suelves I, Moliner R, <b>Vassilev S</b> , Braekman-Danheux C. Low cost catalytic sorbents for NOx reduction. 3. NO reduction tests using NH <sub>3</sub> as reducing agent. <i>Fuel</i> (2004), 83: 875-884. (Ton 8%)	Q1	10
23*	[51] <b>Vassilev S</b> , Menendez R, Borrego A, Diaz-Somoano M, Martinez-Tarazona MR. Phase-mineral and chemical composition of coal fly ashes as a basis for their multicomponent fly ash utilization. 3. Characterization of magnetic and char concentrates. <i>Fuel</i> (2004), 83: 1563-1583. (Ton 7%)	Q1	98
24*	[53] <b>Vassilev S</b> , Vassileva C, Karayigit A, Bulut Y, Alastuey A, Querol X. Phase-mineral and chemical composition of composite samples from feed coals, bottom ashes and fly ashes at the Soma power station, Turkey. <i>International Journal of Coal Geology</i> (2005), 61: 35-63. (Ton 2%)	Q1	120
25*	[54] <b>Vassilev S</b> , Vassileva C, Karayigit A, Bulut Y, Alastuey A, Querol X. Phase-mineral and chemical composition of fractions separated from composite fly ashes at the Soma power station, Turkey. <i>International Journal of Coal Geology</i> (2005), 61: 65-85. (Ton 2%)	Q1	58
26*	[55] <b>Vassilev S</b> , Menendez R. Phase-mineral and chemical composition of coal fly ashes as a basis for their multicomponent utilization. 4. Characterization of heavy concentrates and improved fly ash residues. <i>Fuel</i> (2005), 84: 973-991. (Ton 10%)	Q1	63
27	[57] Liu G, <b>Vassilev S</b> , Gao L, Zheng L, Peng Z. Mineral and chemical composition and some trace element contents in coals and coal ashes from Huaibei coal field, China. <i>Energy Conversion and Management</i> (2005), 46: 2001-2009.	Q1	51
28*	[58] <b>Vassilev S</b> , Vassileva C. Methods for characterization of composition of fly ashes from coal-fired power stations: a critical overview. <i>Energy and Fuels</i> (2005), 19: 1084-1098. (Ton 2%)	Q1	199
29*	[59] Vassileva C, <b>Vassilev S</b> . 2005. Behaviour of inorganic matter during heating of Bulgarian coals. 1. Lignites. <i>Fuel Processing Technology</i> (2005), 86: 1297-1333. (Ton 4%)	Q1	117
30	[60] Karayigit A, Bulut Y, Querol X, Alastuey A, <b>Vassilev S</b> . Variations in fly ash composition from the Soma power plant, Turkey. <i>Energy Sources</i> (2005), 27: 1473-1481.	Q3	9
31	[65] Karayigit A, Bulut Y, Karayigit G, Querol X, Alastuey A, <b>Vassilev S</b> , Vassileva C. Mass balance of major and trace elements in a coal-fired power plant. <i>Energy Sources</i> (2006), 28: 1311-1320.	Q3	13
32*	[66] Vassileva C, <b>Vassilev S</b> . Behaviour of inorganic matter during heating of Bulgarian coals. 2. Subbituminous and bituminous coals. <i>Fuel Processing Technology</i> (2006), 87: 1095-1116. (Ton 9%)	Q1	98
33*	[67] <b>Vassilev S</b> , Vassileva C. A new approach for the classification of coal fly ashes based on their origin, composition, properties, and behaviour. <i>Fuel</i> (2007), 86: 1490-1512. (Ton 2%)	Q1	301

34	[69] Liu G, Qi C, <b>Vassilev S</b> , Chen Y. Mineral and chemical composition of Yanzhou coal and coal ash (China), with volatilization behaviour to 1000°C. <i>Journal of the Energy Institute</i> (2007), 80/4: 199-203.	Q2	1
35*	[71] <b>Vassilev S</b> , Vassileva C. A new approach for the combined chemical and mineral classification of the inorganic matter in coal. 1. Chemical and mineral classification systems. <i>Fuel</i> (2009), 88: 235-245. ( <b>Ton 10%</b> )	Q1	101
36	[72] <b>Vassilev S</b> , Vassileva C, Baxter D, Andersen L. A new approach for the combined chemical and mineral classification of the inorganic matter in coal. 2. Potential applications of the classification systems. <i>Fuel</i> (2009), 88: 246-254.	Q1	29
37*	[73] <b>Vassilev S</b> , Baxter D, Andersen L, Vassileva C. An overview of the chemical composition of biomass. <i>Fuel</i> (2010), 89: 913-933. ( <b>Ton 2%</b> )	Q1	1507
38	[74] Vassileva C, <b>Vassilev S</b> , Daher D. Preliminary results on chemical and phase-mineral composition of Syrian petroleum coke and ash. <i>Comptes rendus de l'Academie Bulgare des Sciences</i> (2010), 63/1: 129-136.	Q2	2
39	[77] Kostova I, Hower J, Mastalerz M, <b>Vassilev S</b> . Mercury capture by selected Bulgarian fly ashes: Influence of coal rank and fly ash carbon pore structure on capture efficiency. <i>Applied Geochemistry</i> (2011), 26: 18-27.	Q1	30
40*	[81] <b>Vassilev S</b> , Baxter D, Andersen L, Vassileva C, Morgan T. An overview of the organic and inorganic phase composition of biomass. <i>Fuel</i> (2012), 94: 1-33. ( <b>Ton 2%</b> )	Q1	640
41*	[83] <b>Vassilev S</b> , Baxter D, Andersen L, Vassileva C. An overview of the composition and application of biomass ash. Part 1. Phase-mineral and chemical composition and classification. <i>Fuel</i> (2013), 105: 40-76. ( <b>Ton 2%</b> )	Q1	571
42*	[84] <b>Vassilev S</b> , Baxter D, Andersen L, Vassileva C. An overview of the composition and application of biomass ash. Part 2. Potential utilization, technological and ecological advantages and challenges. <i>Fuel</i> (2013), 105: 19-39. ( <b>Ton 6%</b> )	Q1	301
43*	[85] <b>Vassilev S</b> , Baxter D, Vassileva C. An overview of the behaviour of biomass during combustion: Part I. Phase-mineral transformations of organic and inorganic matter. <i>Fuel</i> (2013), 112: 391-449. ( <b>Ton 7%</b> )	Q1	248
44	[86] Andersen L, Morgan T, Boulamanti A, Alvarez P, <b>Vassilev S</b> , Baxter D. Quantitative X-ray fluorescence analysis of biomass: Objective evaluation of a typical commercial multi-element method on a WD-XRF spectrometer. <i>Energy and Fuels</i> (2013), 27/12: 7439-7454.	Q1	17
45*	[87] <b>Vassilev S</b> , Baxter D, Vassileva C. An overview of the behaviour of biomass during combustion: Part II. Ash fusion and ash formation mechanisms of biomass types. <i>Fuel</i> (2014), 117: 152-183. ( <b>Ton 10%</b> )	Q1	213
46*	[88] <b>Vassilev S</b> , Vassileva C, Baxter D. Trace element concentrations and associations in some biomass ashes. <i>Fuel</i> (2014), 129: 292-313. ( <b>Ton 7%</b> )	Q1	86
47*	[89] <b>Vassilev S</b> , Vassileva C, Vassilev V. Advantages and disadvantages of composition and properties of biomass in comparison with coal: An overview. <i>Fuel</i> (2015), 158: 330-350. ( <b>Ton 4%</b> )	Q1	329
48	[90] Morgan T, George A, Boulamanti A, Alvarez P, Adanouj I, Dean C, <b>Vassilev S</b> , Baxter D, Andersen L. 2015. Quantitative X-ray fluorescence analysis of biomass (switchgrass, corn stover, eucalyptus, beech, and pine wood) with a typical commercial multi-element method on a WD-XRF spectrometer. <i>Energy and Fuels</i> (2015), 29/3: 1669-1685.	Q1	19
49	[92] Vassileva C, Daher D, <b>Vassilev S</b> . 2015. Chemical and phase-mineral composition of mazut fly ash and slag generated from a Syrian power plant. <i>Comptes rendus de l'Academie Bulgare des Sciences</i> (2015), 68/10: 1277-1286.	Q3	2

<b>50*</b>	[93] <b>Vassilev S</b> , Vassileva C. Composition, properties and challenges of algae biomass for biofuel application: An overview. <i>Fuel</i> (2016), 181: 1-33. <b>(Ton 4%)</b>	Q1	217
51	[94] Qin Y, Han Q, Zhao Z, Du Z, Feng J, Li W-Y, <b>Vassilev S</b> , Vassileva C. Impact of biomass addition on organic structure and mineral matter of char during coal-biomass co-gasification under CO <sub>2</sub> atmosphere. <i>Fuel</i> (2017), 202: 556-562.	Q1	22
<b>52*</b>	[96] <b>Vassilev S</b> , Vassileva C, Song Y, Li W-Y, Feng J. Ash contents and ash-forming elements of biomass and their significance for solid biofuel combustion. <i>Fuel</i> (2017), 208: 377-409. <b>(Ton 7%)</b>	Q1	124
53	[97] Qin Y, Feng M, Zhao Z, <b>Vassilev S</b> , Feng J, Vassileva C, Li W-Y. Effect of biomass ash addition on coal ash fusion process under CO <sub>2</sub> atmosphere. <i>Fuel</i> (2018), 231: 417-426.	Q1	11
54	[98] <b>Vassilev S</b> , Vassileva C. Water-soluble fractions of biomass and biomass ash and their significance for biofuel application. <i>Energy and Fuels</i> (2019), 33 (4): 2763-2777.	Q1	13
55	[100] <b>Vassilev S</b> , Vassileva C. Contents and associations of rare earth elements and yttrium in biomass ashes. <i>Fuel</i> (2020), 262: 116525.	Q1	2
<b>56*</b>	[101] <b>Vassilev S</b> , Vassileva C. Extra CO <sub>2</sub> capture and storage by carbonation of biomass ashes. <i>Energy Conversion and Management</i> (2020), 204: 112331. <b>(Ton 10%)</b>	Q1	7
57	[102] <b>Vassilev S</b> , Kossev K, Vassileva C. Trace elements in water-soluble fractions from Bulgarian coal fly ashes and their technological and environmental importance. <i>Energy and Fuels</i> (2020), 34 (11): 13782-13798.	Q1	
58	[104] Shi W, Bai J, Kong L, Li H, Bai Z, <b>Vassilev S</b> , Li W. An overview of the coal ash transition process from solid to slag. <i>Fuel</i> (2021), 287: 119537.	Q1	
59	[105] He C, Cao F, Wei Y, Zhao Z, Cui L, Qin Y, <b>Vassilev S</b> , Vassileva C. Morphological changes and ash fusibility of coal, rice straw and their mixture during CO <sub>2</sub> gasification. <i>Fuel</i> (2021), 292: 120372.	Q1	
60	[106] <b>Vassilev S</b> , Vassileva C, Petrova N. Mineral carbonation of biomass ashes in relation to their CO <sub>2</sub> capture and storage potential. <i>ACS Omega</i> (2021), 6: 14598–14611.	Q1	