

ПУБЛИКАЦИИ НА ДОЦ. ИРЕНА КОСТОВА

Публикации при хабилитиране (1996-2007)

1. **Kostova, I.**, O. Petrov, J. Kortenski. 1996. Mineralogy, geochemistry and pyrite content of Bulgarian subbituminous coals, Pernik Basin. – In: *Coalbed Methane and Coal Geology*, R. Gayer & I. Harris (Editors), Geological Society London Special Publication № 109, 301-314. (**IF 1,265**)
2. Kortenski, J., **I. Kostova**. 1996. Occurrence and morphology of pyrite in Bulgarian coals. - *International Journal of Coal Geology*, 29, 273-290. (**IF 4,201**)
3. **Kostova, I.**, K. Markova, K. Kuntchev. 1997. Mossbauer spectroscopic investigation of low rank coal lithotypes. – In: *European Coal Geology and Technology*, R. Gayer & J. Pesek (Editors), Geological Society London Special Publication № 125, 195-199. (**IF 1,265**)
4. **Костова, И.** 1999. Геохимия на сярата във въглищата от басейн Марица Изток. - *Годишник на минно-геоложки университет «Св. Ив. Рилски»*, 42, 1, 69-74.
5. Кортенски, Й., К. Попов, **И. Костова**. 1999. Разпространение на халкофилните елементи във въглищата от VI пласт – р-к Качулка, Балкански басейн. – *Списание на БГД*, 60, 1-3, 83-91.
6. **Костова, И.** 2002. Петрографски и минерален състав на лигнитите от Източномаришкия басейн. - *Год. на СУ*, 95, 1, 87-101.
7. **Костова, И.** 2002. Генетични фактори, свързани с натрупването и стратиграфското разпределение на сярата във въглищата от Пернишкия и Балканския басейн. - *Год. на СУ*, 95, 1, 67-85.
8. **Kostova, I.**, J. Kortenski. 2002. Inorganic composition of lignite from the Maritza East Basin. – *Comp. Rend. Acad. Bulg. Sci.* 55, 10, 49-55. (**IF 0,233**)
9. Markova, K., **I. Kostova**. 2003. Study of the effect of auto-oxidation processes on the generation of low rank coal lithotypes from some Bulgarian basins. - *Oxidation Communications*, 26, 2, 288-293. (**IF 0,266**)
10. **Костова, И.** 2003. Закономерности в латералното разпространение на сярата по площта на Балканския въглищен басейн – опит за палеогеографска реконструкция. - *Геология и минерални ресурси*, 10, 17-22.
11. Marinov, S., M. Stefanova, P. Gadjanov, **I. Kostova**, V. Stamenova. 2004. Polycyclic aromatic compounds and sulphur contents in ashes at Maritza-East lignite combustion. – *Journal of Environmental Protection and Ecology*, 5, 1, 43-48.
12. Markova, K., **I. Kostova**. 2004. Transformation of low rank coal lithotypes from Maritza East basin at autoxidation. - *Annual of the Sofia University*, 96, 1, 103-108.

13. **Костова, И.** 2005. Геохимична характеристика на въглищата от Източномаришкия, Пернишкия и Балканския басейни и връзката на елементите с пиритната сяра. – *Списание на БГД*, 66, 1-3, 1-18.
14. Marinov, S., M. Stefanova, **I. Kostova**, V. Stamenova, R. Carleer, J. Yperman. 2005. Peculiarities of sulphur functionalities in the Thracian coal province, Bulgaria. - *Bulletin of Geosciences*, 80, 1, 33-38. (**IF 1,700**)
15. **Kostova, I.**, S. Marinov, M. Stefanova, K. Markova, V. Stamenova. 2005. The distribution of sulphur forms in high-S coals of the Maritza West Basin, Bulgaria. - *Bulletin of Geosciences*, 80, 1, 23-32. (**IF 1,700**)
16. **Костова, И.** 2005. Петрографска характеристика на въглищата от VI пласт на Балканския басейн. - *Геология и минерални ресурси*, 1-2, 7-15.
17. Bechtel, A., R. Sachsenhofer, A. Zdravkov, **I. Kostova**, R. Gratzer. 2005. Influence of floral assemblage, facies and diagenesis on petrography and organic geochemistry of the Eocene Bourgas coal and the Miocene Maritza-East lignite (Bulgaria). - *Organic Geochemistry*, 36, 11, 1498-1522. (**IF 3,420**)
18. **Костова, И.** 2005. Сулфидни минерали във въглища от някои български басейни. - *Год. на СУ*, 98, 1, 109-125.
19. **Костова, И.** 2005. Генезис и видово разнообразие на сулфатните минерали във въглищата. - *Год. на СУ*, 98, 1, 87-107.
20. **Костова, И.** 2005. Геохимично поведение на сярата в процеса на торфогенеза и ранна диагенеза (Част I). - *Геология и минерални ресурси*, 6, 13-19.
21. **Костова, И.** 2005. Геохимично поведение на сярата в процеса на торфогенеза и ранна диагенеза (Част II). - *Геология и минерални ресурси*, 7-8, 27-31.
22. Zdravkov, A., **I. Kostova**, J. Kortenski. 2005. Palaeoenvironmental settings during coal deposition in Elhovo Neogene Basin, Bulgaria. - *Compt. Rend. Acad. Bulg. Sci.* 58, 9, 1075-1082. (**IF 0,233**)
23. **Kostova, I.**, K. Markova. 2005. Organic petrology, mineralogy and depositional environment of the high sulphur Eocene Bourgas coal, Bulgaria. - *Rev. Bulg. Geol. Society*, 80-th Anniversary, 164-167.
24. **Костова, И.** 2005. Съдържание на сяра във въглищата на някои български басейни. – *Минно дело и геология*, 9, 40-44.
25. **Kostova, I.**, A. Zdravkov. 2005. Petrology and depositional environment of lignite from Maritza West Basin, Bulgaria. – *Compt. Rend. Acad. Bulg. Sci.* 58, 12, 1421-1428. (**IF 0,233**)
26. **Костова, И.** 2006. Морфология и етапи на отлагане на железните дисулфиди във въглищата от Източномаришкия, Белобрежкия, Бургаския, Пернишкия и Балканския басейни. - *Сп. на БГД*, 67, (1-3), 1-25.

27. **Kostova, I.**, A. Zdravkov. 2006. Mineralogy of lignite from Maritza West Basin, Bulgaria. - *Compt. Rend. Acad. Bulg. Sci.* 59, 1, 57-64. (**IF 0,233**)
28. Zdravkov, A., **I. Kostova**, R. Sachsenhofer, J. Kortenski. 2006. Reconstruction of paleoenvironment during coal deposition in the Neogene Karlovo graben, Bulgaria. – *International Journal of Coal Geology*, 67, 1-2, 79-94. (**IF 4,201**)
29. Zdravkov, A., **I. Kostova**, J. Kortenski. 2007. Properties and depositional environment of the Neogene Elhovo lignite, Bulgaria. – *International Journal of Coal Geology*, 71, 4, 488-504. (**IF 4,201**)
30. **Kostova, I.**, A. Zdravkov. 2007. Organic petrology, mineralogy and depositional environment of a lignite seam from Maritza West Basin, Bulgaria. - *International Journal of Coal Geology*, 71, 4, 527-541. (**IF 4,201**)

СПИСЪК НА ПУБЛИКАЦИИТЕ ЗА УЧАСТИЕ В КОНКУРС ЗА ПРОФЕСОР

(2007-2017)

СТАТИИ В НАУЧНИ СПИСАНИЯ

31. Николова, Н., **И. Костова**. 2008. Влияние на изгарянето на въглищата в ТЕЦ “Марица Изток” върху качеството на атмосферния въздух в района. - *Год. на СУ*, **100**, 2, 137-155.
32. Hower, J., B. Valentim, **I. Kostova**, K. Henke. 2008. Discussion on “Characteristics of Fly Ashes from Full-Scale Coal-Fired Power Plants and Their Relationship to Mercury Adsorption” by Lu et al. - *Energy & Fuels*, **22**, 2, 1055-1058. (**IF 2,835**)
33. Hower, J., J. O’Keefe, M. Watt, T. Pratt, C. Eble, J. Stucker, A. Richardson, **I. Kostova**. 2009. Notes on the origin of inertinite macerals in coals: Observations on the importance of fungi in the origin of macrinite. – *International Journal of Coal Geology*, **80**, 135-143. (**IF 4,201**)
34. Hower, J., J. O’Keefe, C. Eble, T. Volk, A. Richardson, A. Satterwhite, R. Hatch, **I. Kostova**. 2011. Notes on the origin of inertinite macerals in coals: Funginite associations with cutinite and suberinite. – *International Journal of Coal Geology*, **85**, 186-190. (**IF 4,201**)
35. **Kostova, I.**, C. Vassileva, J. Hower, M. Mastalerz, S. Vassilev, N. Nikolkova. 2011. Mercury in coals and fly ashes from Republika and Bobov Dol thermoelectric power plants - *Comp. Rend. Acad. Bulg. Sci.*, **64**, 2, 253-263. (**IF 0,233**)
36. **Kostova, I.**, J. Hower, M. Mastalerz, S. Vassilev. 2011. Mercury capture by selected Bulgarian fly ashes: Influence of coal rank and fly ash carbon pore structure on capture efficiency. – *Applied Geochemistry*, **26**, 18-27. (**IF 2,542**)
37. **Kostova, I.**, C. Vassileva, S. Dai, S. Vassilev, D. Apostolova, V. Darakchieva. 2012. Influence of surface area properties on mercury capture behavior of coal fly ashes from some Bulgarian power plants. – *In: Proceedings of 64th Annual Meeting of the ICCP, Beijing*, 52-54.

38. Silva, Luis, Katia DaBoit, Carlos Sampaio, Andre Jasper, Maria Andrade, **Irena Kostova**, Frans Waanders, Kevin Hanke, James Hower. 2012. The occurrence of hazardous volatile elements and nanoparticles in Bulgarian coal fly ashes and effect on human health exposure – *Science of the Total Environment*, **416**, 513-526. (**IF 4,317**)
39. **Kostova, I.** Laura Tormo, Elena Crespo-Feo, Javier Garcia-Guinea. 2012. Study of coal and graphite specimens by means of Raman and cathodoluminescence. – *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, **91**, 67-74. (**IF 2,582**)
40. **Kostova, I.** C. Vassileva, S. Dai, J. Hower, D. Apostolova. 2013. Influence of surface area properties on mercury capture behavior of coal fly ashes from some Bulgarian power plants. – *International Journal of Coal Geology*, **116-117**, 227-235. (**IF 4,201**)
41. Hower, J. S. Dai, V. Seredin, L. Zhao, **I. Kostova**, L. Silva, S. Mardon, G. Gurdal. 2013. A Note on the Occurrence of Yttrium and Rare Elements in Coal Combustion Products. - *Coal Combustion and Gasification Products*, **5**, 39-47.
42. **Kostova, I.**, D. Apostolova, S. Dia. 2015. Investigation of some mercury organic compounds in coal and fly ash samples from Bulgarian and Greek thermoelectric power plants. *Compt. Rend. Acad. Bulg. Sci.*, **68**, 7, 889-896. (**IF 0,233**)
43. **Kostova, I.**, D. Apostolova, E. Filcheva, L. Klain, M. Popov. 2015. Geochemical composition and properties of Antarctic soil samples from Livingstone Island. – *Annual of the University of Mining and Geology*, **58**, 107-116.
44. **Kostova, I.** 2016. Mineralogical composition and some hazardous trace elements related to pyrite in coals from Beli Breg basin, Bulgaria. – *Annual of the Sofia University*, **104**, 123-136.
45. **Kostova, I.**, E. Isaeva. 2016. Petrography, mineralogy and geochemistry of lignite from Stanyantsi basin, Bulgaria. – *Rev. Bulg. Geol. Soc.*, **77**, 1, 65-80.
46. Ikeda, S., **I. Kostova**, H. Sekine, Y. Sekine. 2016. Effect of Coal Fly Ash Leachate to Bioluminescence Intensity of *Vibrio fischeri*. – *Coal Combustion and Gasification Products*, **8**, 60-67.
47. **Kostova, I.** C. Vassileva, S. Dai, J. Hower. 2016. Mineralogy, geochemistry and mercury content characterization of fly ashes from Maritza 3 and Varna thermoelectric power plants, Bulgaria. – *Fuel*, **186**, 674-684. (**IF 4,140**)
48. **Костова, И.** 2016. Петрография, минералогия и геохимия на въглища от пчеларовското находище, Източни Родопи. I част. Петрографска и минераложка характеристика. - *Год. на МГУ «Св. Ив. Рилски»*, **59**, 1, 83-90.
49. **Костова, И.** 2016. Петрография, минералогия и геохимия на въглища от пчеларовското находище, Източни Родопи. II част. Геохимична характеристика. - *Год. на МГУ «Св. Ив. Рилски»*, **59**, 1, 91-98.
50. Apostolova, D., A. Bechtel, K. Markova, I. **Kostova**. 2017. Biomarkers composition and polycyclic aromatic hydrocarbons (PAHs) characteristic of Bulgarian coals with different rank and origin. - *Compt. Rend. Acad. Bulg. Sci.*, **70**, 2, 243-252. (**IF 0,233**)

51. Hower, J., J. Groppo, U. Graham, C. Ward, **I. Kostova**, M. Maroto-Valer, S. Dai. 2017. Coal-derived Fly Ash Carbon: A review. – *International Journal of Coal Geology*, **179**, 11-27. (IF 4,201)
52. **Kostova, I.** 2017. Geochemical characterization and mercury content of feed coals and fly ashes from Russe thermoelectric power plant, Bulgaria. - *Compt. Rend. Acad. Bulg. Sci.*, 70, 6, 829-838. (IF 0,233)
53. **Kostova, I.** 2017. Abundance, distribution and mode of occurrence of mercury in Bulgarian low to medium-sulphur coals. - *Compt. Rend. Acad. Bulg. Sci.*, (in press). (IF 0,233)
54. **Kostova, I.** 2017. Abundance, distribution and mode of occurrence of mercury in Bulgarian high-sulphur coals. - *Annual of the Sofia University*, (in press).
55. **Костова, И.** 2017. Съдържание на живак във въглища от български басейни. (I Част). – *Минно дело и геология*, (под печат).
56. **Костова, И.** 2017. Съдържание на живак във въглища и пепели от български топлоелектрически централи. Влияние на живака върху човешкото здраве и околната среда (II Част). – *Минно дело и геология*, (под печат).

ПУБЛИКАЦИИ В СБОРНИЦИ С РАЗШИРЕНИ АБСТРАКТИ ОТ КОНФЕРЕНЦИИ

57. Hower, J., **I. Kostova**. 2008. Comparative studies of Mercury capture by Bulgarian and Kentucky fly ash carbon – Prep. Pap.-American Chemical Society, Div. Fuel Chem., 53 (1). 115-116.
58. Kostov, R., **I. Kostova**, O. Pelevina. 2010. Coal (jet) beads from Varna Chalcolithic necropolis (V mill. BC) in a prehistoric weight system. – In: *Proceedings of the National Conference of the Bulg. Geol. Soc., GEOSCIENCES 2010*, 177-178.
59. **Kostova, I.** J. Garcia-Guinea, E. Crepo-Feo. 2011. Micro-Raman and Cathodoluminescence Spectroscopic Investigations on Coal Specimens. - In: *Proceedings of CORALS-2011 Conference on the Micro-Raman and Luminescence in Earth and Space Sciences*, 118-119.
60. S. Ikeda, **I. Kostova**, Y. Sekine. 2011. Characterization of bio-hazardous properties of coal fly ash leachate by detection of bioluminescence reduction of marine bacterium *Vibrio fischeri* and chemical analysis. – In: Abstracts of 20th Symposium on Environmental Chemistry, Kumamoto, Japan, 16-18 July, 2011, 404-405.
61. **Костова, И.** Д. Апостолова, К Маркова, Ш. Дай. 2013. Характеристика на органичните съединения на живака във въглищни и пепелни преби от ТЕЦ. – В: *Сборник от национална конференция на БГД, ГЕОНАУКИ 2013*, 127-128.
62. Исаева, Е. **И. Костова**. 2013. Мацерален състав на въглища от мина „Черно море 2“. – В: *Сборник от национална конференция на БГД, ГЕОНАУКИ 2013*, 101-102.

63. **Костова, И.** Д. Апостолова, Е. Исаева. 2014. Фазова характеристика на пепели от ТЕЦ „Република“, Перник. – В: *Сборник от национална конференция на БГД, ГЕОНАУКИ 2014*, 89-90.
64. **Kostova, I.** C. Vassileva, S. Dai, J. Hower. 2015. Mineralogy, geochemistry, and Hg content characterization of fly ashes from Maritsa 3 and Varna thermoelectric power plants, Bulgaria. - In: *Abstract volume of the 67th Annual Meeting of the International Committee for Coal and Organic Petrology*, 5-11 Sept. 2015, Potsdam, Germany, p. 32-33.
65. **Kostova, I.** E. Isaeva, I. Dimitrov, N. Georgiev. 2015. Coalification degree of organic matter in Oligocene sediments from the foodwall of the North Rhodopian Thrust. – In: *Proceedings of the National Conference of the Bulg. Geol. Soc., GEOSCIENCES 2015*, 111-112.
66. Apostolova, D., A. Bechtel, K. Markova, **I. Kostova**. 2016. Geochemical characterization of organic matter in subbituminous coals from the Pernik basin, Bulgaria. – In: *Proceedings of the National Conference of the Bulg. Geol. Soc., GEOSCIENCES 2016*, 49-50.

ПУБЛИКАЦИИ В СБОРНИЦИ ОТ КОНФЕРЕНЦИИ С АБСТРАКТИ

67. Hower, J., **I. Kostova**, M. Marks, D. Hedges. 2007. Mercury in the Coals and Fly Ashes from Bulgarian Power Plants. – In: Abstracts of American Association of Petroleum Geologists (Eastern Section) 36-th Annual Meeting, Lexington, Kentucky, USA, 16-18 Sep. 2007, 38.
68. **Kostova, I.**, J. Hower. 2007. Characterization of Environmentally Sensitive Trace Elements in Coals and Fly Ashes from Bulgarian Power Plants. In: Abstracts of American Association of Petroleum Geologists (Eastern Section) 36-th Annual Meeting, Lexington, Kentucky, USA, 16-18 Sep. 2007, 40.
69. Hower, J., S. Tewalt, H. Belkin, J. O'Keefe, J. Stucker, A. Richardson, S. Oke, **I. Kostova**. 2008. Maastrichtian coals from Nigeria: Notes on the origins of the inertinite macerals, with attention to macrinite formation as a consequence of fungal degradation. – In: Abstracts of 25th Annual International Pittsburgh Coal Conference, Pittsburgh, USA, 29 Sep. - 2 Oct. 2008, 492.
70. Ikeda, S., **I. Kostova**, Y. Sekine. 2012. Toxicity of Coal Fly Ash Leachate to Luminescent Bacterium *Vibrio fischeri*. – In: Abstracts of the 33rd Annual Meeting of Society of Environmental Toxicology and Chemistry North America, Long Beach, California, 11-15 Nov. 2012, 293.
71. Hower, J., S. Dai, **I. Kostova**, L. Silva. 2012. Lanthanides in coal combustion fly ash. – In: Abstracts of the International Pittsburgh Coal Conference, Pittsburgh, USA, 15-18 Oct. 2012, 10.

(доц. д-р Иrena Костова-Динева)