

## СПИСОК НАУЧНЫХ ТРУДОВ И ИЗОБРЕТЕНИЙ

Нұғымановой Айжан Олжабекқызы на соискание степени доктора философии (PhD)  
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№	Название трудов	Рукопись или печатные	Наименование издательства, журнала (№, год), № авторского свидетельства	К-во печатных листов	Фамилии соавторов работы
<b>ПУБЛИКАЦИИ В ЖУРНАЛАХ ИНДЕКСИРУЕМЫХ БАЗАМИ ДАННЫХ THOMSON REUTERS И SCOPUS</b>					
1.	The computational study of heat and mass transfer processes at combustion of pulverized kazakh coal in real conditions of energy objects	печ.	Journal Bulgarian Chemical Communications. – 2018. – Vol. 50. – P. 51-67. ( <b>IF: 0.40</b> ).	6	Askarova A.S., Safarik P., Bolegenova S.A., Maximov V.U., Beketayeva M., Ospanova Sh.S., Manatbayev R.K.
2.	3D-modeling of Kazakhstan low-grade coal burning in power boilers of thermal power plant with application of plasma gasification and stabilization technologies	печ.	Journal of Physics: Conference Series. – 2019. – Vol. 1261. – P. 12-22. ( <b>SJR: 0.210</b> ).	10	Messerle V.E., Askarova A.S., Bolegenova S.A., Maximov V.U.
3.	Simulation of low-grade coal combustion in the real chambers of the energy objects	печ.	Acta Polytechnica, Journal of Advanced Engineering. 2019. – Vol. 59. – No. 2. – P. 98-108. ( <b>SJR:0.207</b> )	10	Askarova A.S., Safarik P., Beketayeva M., Bolegenova S.A., Maximov V.U.
4.	3-D modeling of heat and mass transfer process during the combustion of solid fuel in a swirl furnace	печ.	Acta Polytechnica, Journal of Advanced Engineering. 2019. – Vol. 59. – No. 6. – P.543-553. ( <b>SJR:0.207</b> ).	10	Askarova A.S., Safarik P., Bolegenova S.A., Maximov V.U.
5.	Processes of heat and mass transfer in furnace chambers with combustion of thermochemically activated fuel	печ.	Thermophysics and Aeromechanics. – 2019. – Vol. 26. – No. 6. – P. 925-937. ( <b>IF: 1.023</b> )	12	Messerle V.E., Askarova A.S., Maximov V.U., Bolegenova S.A.

6.	3D modelling of heat and mass transfer during combustion of low-grade coal	печ.	Thermal Science. – 2020. – Vol. 24. – No. 5. – P. 2823-2832. <b>(IF: 1.625).</b>	9	Askarova A.S., Safarik P., Maximov V.U., Bolegenova S.A.
7.	Minimization of toxic emissions during burning low-grade fuel at Kazakhstan thermal power plant	печ.	Acta Polytechnica, Journal of Advanced Engineering. 2020. – Vol. 60. – No. 3. – P. 206-213. <b>(SJR:0.207)</b>	7	Askarova A.S., Safarik P., Maximov V.U., Bolegenova S.A.
8.	3D simulation of heat and mass transfer for testing of “clean energy” production technologies	печ.	Thermophysics and Aeromechanics, 2021. Vol. 28, No 2. – P. 291-301. <b>(IF: 1.023).</b>	10	Messerle V.E., Askarova A.S., Maximov V.U., Bolegenova S.A.
9.	Computer technologies of 3D modeling by combustion processes to create effective methods of burning solid fuel and reduce harmful dust and gas emissions into the atmosphere	печ.	Energies. 2021. – Vol. 14. – P. 1236. <b>(IF: 3.004).</b>	20	Askarova A.S., Safarik P., Bolegenova S.A., Maximov V.U., Askarov N.
10.	Using plasma activation to optimize the combustion process and minimize harmful emissions	печ.	Chemical Engineering Technology. 2021. – Vol. 44, No 11. – P. 1970-1977. <b>(IF: 1.728).</b>	7	Askarova A.S., Safarik P., Bolegenova S.A., Maximov V.U., Bolegenova S.A., Askarov N.
<b>ПУБЛИКАЦИИ В ЖУРНАЛАХ, РЕКОМЕНДУЕМЫХ ККСОН МОН РК</b>					
11.	Combustion processes in furnace chambers of Kazakhstan TPPs using high-ash coal	печ.	International Journal of Mathematics and Physics. – 2017. – Vol. 2. – P. 51-60.	9	Askarova A.S., Safarik P., Bolegenova S.A., Maximov V.U.
12.	Modern computing experiments on pulverized coal combustion processes in boiler furnaces	печ.	Известия НАН РК. Серия физико-математическая. – 2018. – № 6 (322). – С. 5-14.	9	Askarova A.S., Safarik P., Bolegenova S.A., Maximov V.U., Beketayeva M.

13.	Optimization of the solid fuel combustion process in combustion chambers in order to reduce harmful emissions	печ.	Известия НАН РК. Серия физико-математическая. – 2019. – № 2 (328). – С. 34-42.	8	Askarova A.S., Safarik P., Maximov V.U., Bolegenova S.A.
14.	3D modeling of heat transfer processes in the combustion chamber boiler of thermal power plant	печ.	Известия НАН РК. Серия физико-математическая. – 2019. – №. 2 (328). – С. 5-13.	8	Askarova A.S., Bolegenova S.A., Maximov V.U.
15.	Calculation of standards for permissible environmental impact for boilers with known technical characteristics	печ.	Вестник КазНУ. Серия физическая. – 2020. – №.1 (72). – С. 90-95.	5	Askarova A.S., Mazhrenova N.R., Bolegenova S.A., Maximov V.U.
16.	Numerical simulation of heat and mass transfer at the partial stop of fuel supplying in the chamber of TPP	печ.	Известия НАН РК. Серия физико-математическая. 2020. – № 2 (330). – С. 166-174.	7	Safarik P., Tuyakbayev A.A., Bolegenova S.A., Maximov V.U.
17.	Research of characteristics of heat and mass transfer at the introduction of technology of steps fuel burning on the BKZ-75 boiler of the Shakhtinskaya TPP	печ.	Известия НАН РК. Серия физико-математическая. – 2020. – № 2 (330). – С. 88-95.	8	Askarova A.S., Safarik P., Bolegenova S.A., Maximov V.U.
18.	Using the technology of two-stage fuel combustion to minimize harmful emissions at Kazakhstan CHPPs	печ.	Известия НАН РК. Серия физико-математическая. 2021. – № 1 (335). – С. 74-80.	6	Askarova A.S., Safarik P., Maximov V.U., Bolegenova S.A.

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ДАЛЬНЕГО ЗАРУБЕЖИЯ**

19.	The use of a new ‘clean’ technology for burning low-grade coal in on boilers of Kazakhstan TPPs	печ.	First International Alternative Energy Sources, Materials & Technologies (AESMT'18), Plovdiv, Bulgaria, 14-15 May 2018. – P. 27.	1	Askarova A.S., Bolegenova S.A., Maximov V.U., Beketayeva M.T., Ospanova Sh.S.
20.	Combustion processes of pulverized coal in existing combustion chambers of real power boilers of TPP of the Republic of Kazakhstan	печ.	23nd International Congress of Chemical and Progress Engineering CHISA 2018 & 21st Conference on Process Integration, Modeling and Optimization for Energy Saving and Pollution Reduction PRES 2018, Prague, Czech Republic, 25-29 August 2018. – P. 72.	1	Askarova A.S., Safarik P., Bolegenova S.A., Maximov V.U., Beketayeva M., Ospanova Sh.S.
21.	The introduction of information and innovative technologies in the energy production processes of existing TPS of the Republic of Kazakhstan in order to address the problems of power engineering and ecology	печ.	First Annual Meeting of Kazakh Physical Society Nazarbayev University, Astana, Kazakhstan, 10-13 October 2018. – P. 25.	1	Askarova A.S., Bolegenova S.A., Maximov V.U.
22.	3D- моделирование сжигания казахстанских низкосортных углей в энергетических котлах ТЭС с применением технологии плазменной газификации и стабилизации горения	печ.	X Всероссийская конференция с международным участием «Горение топлива: теория, эксперимент, приложения», Новосибирск, Россия, 06-09 ноября 2018. – С. 13.	1	Askarova A.S., Messerle V.E., Bolegenova S.A., Maximov V.U.

23.	Numerical simulation of solid fuel combustion processes in furnaces	печ.	International Academic Conferences in Prague 2019: Engineering, Prague, Czech Republic, 8-10 August 2019. – P. 32.	1	Askarova A. S., Bolegenova S.A., Shortanbayeva Zh.K., Bergalieva S.A.
24.	Reduction harmful emissions at the pulverized fuel combustion in the furnace chamber	печ.	First International Alternative Energy Sources, Materials & Technologies (AESMT'20), Virtually, Plovdiv, Bulgaria, 14-15 May 2020. – P.4.	1	Askarova A.S., Bolegenova S.A., Maximov V.U.
25.	3D modelling of heat and mass transfer in the combustion of solid fuel	печ.	Международная научная конференция студентов и молодых ученых, «ФАРАБИ ӘЛЕМІ», Алматы, Казахстан, 6-9 апреля, 2020. – С. 264.	1	-
26.	The use of plasma activation of pulverized coal flow to reduce emissions of harmful substances during the combustion of high-ash coal at Kazakhstan's thermal power plants	печ.	The International Congress of Chemical and Process Engineering, CHISA 2021, Virtually, Prague, Czech Republic, 15-18 March 2021. – P. 1.97.	1	Askarova A.S., Safarik P., Bolegenova S.A., Maximov V.U.
27.	Influence of thermochemical activation of fuel on the combustion process in furnace chambers of thermal power plants	печ.	First International Alternative Energy Sources, Materials & Technologies (AESMT'21), Virtually, Ruse, Bulgaria, 14-15 June 2021. – P. 4.	1	Askarova A.S., Bolegenova S.A.

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