Костадин Ганчев Ганев,
номиниран за академик в областта "Науки за земята",
в конкурса за нови академици (действителни членове) на БАН – 2024 г. обявен на сайта на БАН и във в. „24 часа" на 07.05.2024 г.

Списък на публикациите – в конкурса участвам със всички публикации

Обобщени данни:

Автореферати: 2

Участие в монографии и учебници: 2

Научни публикации в международни списания и поредици, включително такива с импакт-фактор: 82

Импакт-фактор: 43.671

SJR: 11.083

Доклади в сборници на международни конференции (в пълен текст): 107

Други научни публикации: 45

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I. Глави от монографии и учебници:

I.1. Ganev K., D. Yordanov, D.Syrakov 2007, In eds Melas and Paleo, Regional Transboundary Transport of Air Pollution: An Introductory Science Review, Universidad de Extremadura, Servicio de Publicaciones, 79-102

I.2. Ganev K., 2011, Handbook on ecological models used in ecosystem and environmental management, Chapter 19: AIR POLLUTION, 499-555, Taylor&Fransis Group, LLC, ISBN13: 9781439818121

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II.1 *Ganev K., D. Yordanov*, 1981: Parametrization of pollution from a source in the surface layer., Compt. rend. Acad. bulg. Sci., 34, No 8, 1087-1090., IF 0.2

II.2 *Ganev K., D. Yordanov*, 1981: Parametrization of pollution from a heavy admixture source in the surface air layer. Compt. rend. Acad. bulg. Sci., 34, No 8, 1261-1264., IF 0.2

II.3 *Andreev V., K. Ganev*, 1981: Model of convective heat exchange due to isolated thermals

in the atmospheric boundary layer, Bound. Layer Met., 20, 331-339, IF 2.

II.4 *Ganev K.*, 1981: Determination of effect functions concerning pollution protected zones in the atmospheric surface layer, Compt. rend. Acad. bulg. Sci., 34, No 12, 1659-1662., IF 0.2

II.5 *Ganev K., D.Yordanov*, 1982; Effect of full tensor of turbulent diffusion in the study of air pollution., Compt. rend. Acad. bulg. Sci., 35, No 1, 29-31., IF 0.2

II.6 *Ganev K., D.Yordanov*, 1983; Parametrization of air pollution in the surface layer by a complex of transforming and interacting admixtures., Compt. rend. Acad. bulg. Sci., 36, No 1, 69-72., IF 0.2

II.7 *Yordanov D., K.Ganev, M.Kolarova*, 1983: An air pollution analytic transport model admitting the surface and inversion layer effect., Compt. rend. Acad. bulg. Sci., 36, No 5, 627-630., IF 0.2

II.8 *Syrakov E., N.Godev, K.Ganev*, 1983: Formulation of the long-range diffusion problem taking into account the synoptic effects., Compt. rend. Acad. bulg. Sci., 36, No 7, 895-898., IF 0.2

II.9 *Syrakov E., N.Godev, K.Ganev*, 1983: Application of functions of influence for evaluation of air pollution due to long-range transport over Europe., Compt. rend. Acad./ bulg. Sci., 36, No 8, 1043-1046., IF 0.2

II.10 *Syrakov E., N.Godev, K.Ganev*, 1983: Numerical modeling of long-range transport of SO2 and SO4 above Europe., Compt. rend. Acad. bulg. Sci., 36, No 9, 1171-1174., IF 0.2

II.11 *Syrakov E., K.Ganev*, 1983: Parametrization of vertical difuusion exchange between friction layer (PBL) and the free atmosphere., Compt. rend. Acad. bulg. Sci., 36, No 12, 1523-1526., IF 0.2

II.12 *Yordanov D., K.Ganev, M.Kolarova*, 1984: Conjugated diffusion problem and effect functions for protection zones above surface layer., Compt. rend Acad. bulg. Sci., 37, No 7 859-862., IF 0.2

II.13 *Godev N., E.Syrakov, K.Ganev, D.Truhchev*, 1984: Comprehensive approach to the study of diffusion of sea pollutants., Compt. rend. Acad. bulg. Sci., 37, No 10, 1323-1326., IF 0.2

II.14 *Ganev K.*, 1988: On the conservatism of the lagrange semiempirical models of atmospheric transport of linearly interacting admixtures., Compt. rend. Acad. bulg. Sci., 41, No 8, 57-60., IF 0.2

II.15 *Ganev K.*, 1991: Formulation of the influence function problem for a complex of interacting admixtures. EUROTRAC workshop on regional and global modelling of minor atmospheric constituents. Wiesbaden, 23 - 24 April 1991 (Also published in Compt. Rend. Acad. bulg. Sci., 45, No3, 29-32)., IF 0.2

II.16 *Dimitrova R. and K.Ganev* 1999: Some examples of the mesoscale topography effects on large scale air pollution transport. Second Workshop on Large - Scale Scientific Computations of Engineering and Environmental Problems II, 2-6 June, Sozopol, Bulgaria, Notes on Numerical Fluid Mechanics, Vol. 73, pp. 267-274., SJR: 0.339

II.17 *Zerefos C., K.Ganev, K.Kourtidis, M.Tzortziou, A.Vasaras, E.Syrakov* 2000: On the origin of SO_2 above Northern Greece. *Geophysical Research Letters*, **v. 27**, No.3, pp. 365-368, IF

3.505

II.18 *Ganev K., R. Dimitrova, D. Syrakov, Ch. Zerefos*, 2003. Accounting for the mesoscale effects on the air pollution in some cases of large sulfur pollution in Bulgaria or Northern Greece, *Environmental Fluid Mechanics*, **3**, 41-53, IF 1.6

II.19 *Syrakov D., M. Prodanova, K. Ganev, Ch. Zerefos, A. Vasaras* 2002: Exchange of sulfur pollution between Bulgaria and Greece, *Environmental Science and Pollution Research,* **v.9**, No5, pp 321-326, IF 2.733

II.20 Syrakov E., K.Ganev 2003: Accounting for effects of wind rotation in the PBL on the plume characteristics. *Int. J. Environment & Pollution*, vol. **20**, No.1-6, 154-164, IF 0.706

II.21 *Zerefos Ch., D. Syrakov, K. Ganev, A. Vasaras, K. Kourtidis, M. Tzortziou, M. Prodanova, R. Dimitrova, E. Georgieva, D. Yordanov, N. Miloshev*, 2004: Study of the pollution exchange between Bulgaria and Northern Greece, *Lecture Notes in Computer Sciences*, Lirkov, S. Margenov, and J. Waśniewski (Eds.): LSSC 2003, LNCS 2907, pp. 328–336, c. Springer-Verlag Berlin Heidelberg 2004., SJR: 0.339

II.22 Zerefos Ch., D. Syrakov, K. Ganev, A. Vasaras, K. Kourtidis, M. Tzortziou, M. Prodanova,R. Dimitrova, E. Georgieva, D. Yordanov, N. Miloshev, (2004), Study of the pollution exchange between Bulgaria and Northern Greece. *Int. J. Environment & Pollution*, vol. **22**, No.1/2, 163-185, IF 0.706

II.23 Ganev K. and D. Yordanov 2005: Parameterization of dry deposition processes in the surface layer for admixtures with gravity deposition. *Int. J. Environment & Pollution*, vol.**25**, 1-4, 60-70, IF 0.706

II.24 Prodanova M., J. L. Perez, D. Syrakov a, R. San Jose, K. Ganev, N. Miloshev and S, Roglev, 2007, Application of mathematical models to simulate an extreme air pollution episode in the Bulgarian city of Stara Zagora, *Applied Mathematical Modellin*g 32 (2008) 1607–1619, IF 1.502

II.25 Ganev K., D. Syrakov, Z. Zlatev, 2008, Effective Indices for Emissions from Road Transport, *Lecture Notes in Computer Sciences*, Lirkov, S. Margenov, and J. Waśniewski (Eds.): LSSC 2007, LNCS 4818, pp. 401–409, c. Springer-Verlag Berlin Heidelberg 2008., SJR: 0.339

II.26 Prodanova M., D. Syrakov, K. Ganev, N. Miloshev 2008, Study of the Pollution Exchange between Romania, Bulgaria and Greece with the US EPA Models-3 system. *Lecture Notes in Computer Sciences*, Lirkov, S. Margenov, and J. Waśniewski (Eds.): LSSC 2007, LNCS 4818, pp. 433-441 c. Springer-Verlag Berlin Heidelberg 2008., SJR: 0.339

II.27 Ganev K., M. Prodanova, D. Syrakov, N. Miloshev, 2008, Air pollution transport in the Balkan region and country-to-country pollution exchange between Romania, Bulgaria and Greece, *Ecological Modelling,* 217, 255–269, IF 2.438

II.28 Ganev K., D. Syrakov, Z. Zlatev, 2008, New parameterization scheme for effective indices for emissions from road transport, *Ecological Modelling,* 217, 270–278, IF 2.438

II.29 Ganev K., D. Syrakov, G. Gadzhev, M. Prodanova, G. Jordanov, N.Miloshev, A. Todorova, 2009: Joint Analysis of Regional Scale Transport and Transformation of Air Pollution from Road and Ship Transport, *Large-Scale Scientific Computing*, LSSC 2009,

Springer LNCS 5910, 188-195., SJR: 0.339

II.30 Todorova A., G. Gadzhev, G. Jordanov1, D. Syrakov, K. Ganev, N. Miloshev and M. Prodanova, 2009: Numerical Study of Some High PM10 Levels Episodes, *Large-Scale Scientific Computing*, LSSC 2009, Springer LNCS 5910, 231-236., SJR: 0.339

II.31 Syrakov D., K. Ganev, M. Prodanova, N. Miloshev, G. Jordanov, E. Katragkou, D. Melas, A. Poupkou and K. Markakis, 2009: Background Pollution Forecast over Bulgaria, *Large-Scale Scientific Computing*, LSSC 2009, Springer LNCS 5910, 531-537., SJR: 0.339

II.32 Syrakov D., M. Prodanova, N. Miloshev, K. Ganev, G. Jordanov, V. Spiridonov, A. Bogatchev, E. Katragkou, D. Melas, A. Poupkou, and K. Markakis, 2009: Climate Change Impact Assessment of Air Pollution Levels in Bulgaria, *Large-Scale Scientific Computing*, LSSC 2009, Springer LNCS 5910, 538-546., SJR: 0.339

II.33 Etropolska I., M. Prodanova, D. Syrakov, K. Ganev, N. Miloshev, K. Slavov, 2011, Bulgarian Operative System for Chemical Weather Forecast, *Lecture Notes in Computer Sciences*, Dimov, I. S. Dimova, and N. Kolkovska (Eds.): LNCS 6046, c. Springer-Verlag Berlin Heidelberg, 141-149., SJR: 0.339

II.34 Gadzhev G., G. Jordanov, K. Ganev, M. Prodanova, D. Syrakov, N. Miloshev, 2011, Atmospheric Composition Studies for the Balkan Region, *Lecture Notes in Computer Sciences*, Dimov, I. S. Dimova, and N. Kolkovska (Eds.): LNCS 6046, c. Springer-Verlag Berlin Heidelberg, 150-157., SJR: 0.339

II.35 Syrakov D., V. Spiridonov, K. Ganev, M. Prodanova, A. Bogachev, N. Miloshev, K. Slavov, 2011, First Results of SEE-GRID-SCI Application CCIAQ, *Lecture Notes in Computer Sciences*, Dimov, I. S. Dimova, and N. Kolkovska (Eds.): LNCS 6046, c. Springer-Verlag Berlin Heidelberg, 215-223., SJR: 0.339

II.36 Todorova A., Syrakov D., Gadjhev G., Georgiev G., Ganev K., Prodanova M., Miloshev N., Spiridonov V., Bogatchev A., Slavov K. (2010) Grid computing for atmospheric composition studies in Bulgaria, Earth Sci Inform 3: 259–282, DOI 10.1007/s12145-010-0072-1., IF=0.657

II.37 Brandiyska A., K. Ganev, D. Syrakov, M. Prodanova, N. Miloshev, 2011, Modelling of Toxic Substances in the Atmosphere - Risk Analysis and Emergency Forecast, 8th International Conference on Large-Scale Scientific Computations (LSSC'11), Sozopol, Bulgaria June 6 - 10, 2011., SJR: 0.339

II.38 Ganev K., D. Syrakov, A. Todorova, G. Gadzhev, N.Miloshev, M. Prodanova, 2011 Study of regional dilution and transformation processes of the air pollution from road transport, *Int. J. Environment & Pollution* Vol. 44, Nos. 1/2/3/4, 56-70, ISSN (Online): 1741-5101 - ISSN (Print): 0957-4352, IF 0.706

II.39 A, Todorova, G. Gadzhev, G. Jordanov, D. Syrakov, K. Ganev, N. Miloshev and M. Prodanova, 2011, Numerical study of some high PM10 level episodes, Int. J. Environment and Pollution, Vol. 46, Nos. 1/2, 69-82, ISSN (Online): 1741-5101 - ISSN (Print): 0957-4352, IF 0.706

II.40 D. Syrakov, V. Spiridonov, M. Prodanova, A. Bogatchev, N. Miloshev, K. Ganev, E. Katragkou, D. Melas, A. Poupkou, Kostas Markakis, R. San Jose and J. L. Pérez, 2011, A system for assessment of climatic air pollution levels in Bulgaria: description and first

steps towards validation, Int. J. Environment & Pollution Vol. 46, Nos. 1/2, 8-42, ISSN (Online): 1741-5101 - ISSN (Print): 0957-4352, IF 0.706

II.41 Ebel A., D. Melas, K. Ganev, M. Banja, I. Sandu5, E. Friese1, T. Giannaros, H. Jakobs1, I. Kioutsioukis, K. Markakis, M. Memmesheimer, N. Miloshev, V. Pescaru, A. Poupkou, 2012, Assessment of impacts and risks of air pollution applying two strategies of numerical chemistry transport modelling, Journal of Environmental Protection, 3, 26-40, IF 0.178

II.42 Brandiyska A., Ganev, K., Syrakov, D., Prodanova, M., Miloshev, N. and Gadjhev, G., Bulgarian emergency response system for release of hazardous pollutants – brief description and some examples (submitted to International Journal of Environment and pollution, ISSN: 0957-4352, IF 0.706)

II.43 Gadzhev G., K. Ganev, D. Syrakov, N. Miloshev, M. Prodanova, 2012, Contribution of Biogenic Emissions to the Atmospheric Composition of the Balkan Region and Bulgaria. Journal of Environment and pollution, Vol. 50, Nos. 1/2/3/4, 130-139., ISSN: 0957-4352, IF 0.706

II.44 Syrakov E., K. Ganev, M. Tsankov, E. Cholakov, Estimation and parameterization of the influence of turbulent regimes on pollution characteristics in the PBL (submitted to International Journal of Environment and pollution, ISSN: 0957-4352, IF 0.706)

II.45 Syrakov E., K. Ganev, M. Tsankov, E. Cholakov, A comparative analysis of diferent conventional and none-local stable/neutral PBL regimes and their parameterization in air pollution problems (submitted to International Journal of Environment and pollution, ISSN: 0957-4352, IF 0.706)

II.46 Gadzhev G., K. Ganev, N. Miloshev, D. Syrakov, M. Prodanova, 2013, Numerical Study of the Atmospheric Composition in Bulgaria. Computers and Mathematics with Applications, 65, 402–422, ISSN: 0898-1221, doi:10.1016/j.camwa.2012.07.002, IF 1.472

II.47 E. Syrakov, K.Ganev (2013)Extension and modification of the bulk Richardson number method for parameterization of exchange and interaction processes over urban areas (accepted for publishing in International Journal of Environment and pollution, ISSN: 0957-4352), (IF: 0.71)

II.48 Gadzhev G., K. Ganev, N. Miloshev, D. Syrakov, and M. Prodanova (2014): Some Basic Facts About the Atmospheric Composition in Bulgaria – Grid Computing Simulations, in I. Lirkov et al. (Eds.): LSSC 2013, LNCS 8353, pp. 484–490, DOI: 10.1007/978-3-662-43880-0 55, © Springer-Verlag Berlin Heidelberg 2014., SJR: 0.339

II.49 Syrakov D., M. Prodanova, I. Etropolska, K. Slavov, K.Ganev, N. Miloshev, and T. Ljubenov (2014): A Multy-Domain Operational Chemical Weather Forecast System, in I. Lirkov et al. (Eds.): LSSC 2013, LNCS 8353, pp. 413–420, DOI: 10.1007/978-3-662-43880-0 55, © Springer-Verlag Berlin Heidelberg 2014., SJR: 0.339

II.50 Gadzhev G., K. Ganev, N. Miloshev, D. Syrakov, and M. Prodanova (2014): Analysis of the Processes Which Form the Air Pollution Pattern over Bulgaria, in I. Lirkov et al. (Eds.): LSSC 2013, LNCS 8353, pp. 390–396, DOI: 10.1007/978-3-662-43880-0 55, © Springer-Verlag Berlin Heidelberg 2014., SJR: 0.339

II.51 Gadzhev G., K. Ganev, N. Miloshev, D. Syrakov, M. Prodanova (2014) HPC simulations of the fine particulate matter climate of Bulgaria, Eight International Conference on

Numerical Methods and Applications August 20 – 24, 2014, Borovets, Bulgaria, accepted for publishing in Springer Lecture Notes in Computer Science (LNCS) SJR: 0.339

II.52 Gadzhev, G., Ganev, K., Syrakov, D., Prodanova, M., Georgieva, I., Georgiev, G., *Computer simulations of the atmospheric composition climate of Bulgaria*, Física de la Tierra, Vol. 27 (2015) 171-189, DOI: 10.1007/978-3-319-15585-2_20

II.53 Gadzhev, G.**,** Ganev, K., Miloshev, N., Syrakov, D., Prodanova, M., *HPC simulations of the fine particulate matter climate of Bulgaria*, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), (2015), 8962, pp. 178-186. **(SJR: 0.339)**

II.54 Georgieva, I., Gadzhev, G., Ganev, K., Prodanova, M., Syrakov, D., Miloshev, N., *Numerical study of the air quality in the city of Sofia - Some preliminary results*, International Journal of Environment and Pollution, (2015), 57 (3-4), pp. 162-174. DOI: 10.1504/IJEP.2015.074500 (IF: 0.71)

II.55 Gadzhev, G., Ganev, K., Miloshev, N., *Numerical study of the atmospheric composition climate of Bulgaria - Validation of the computer simulation results*, International Journal of Environment and Pollution, (2015), 57 (3-4), pp. 189-201. DOI: 10.1504/IJEP.2015.074503 (IF: 0.71)

II.56 Ivelina Georgieva, Georgi Gadzhev, Kostadin Ganev, Dimitris Melas, Tijian Wang. *High Performance Computing Simulations of the Atmospheric Composition in Bulgaria and the City of Sofia.* CYBERNETICS AND INFORMATION TECHNOLOGIES, Volume 17, No 5, 2017, pp. 37-48, SJR:0.203

II.57 Hristo Chervenkov, Vladimir Ivanov, Georgi Gadzhev, Kostadin Ganev. *Sensitivity study of Different RegCM4.4 model set-ups – recent results from the TVRegCM experiment*. CYBERNETICS AND INFORMATION TECHNOLOGIES, Volume 17, No 5, 2017, pp. 17-26, SJR:0.203

II.58 Ivelina Georgieva, Georgi Gadzhev, Kostadin Ganev, and Nikolay Miloshev., *Computer Simulations of Atmospheric Composition in Urban Areas. Some Results for the City of Sofia*, Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 2018, Volume 10665, LNCS, pp. 474-482. (SJR: 0.339)

II.59 Georgi Gadzhev, Vladimir Ivanov, Kostadin Ganev, and Hristo Chervenkov, *TVRegCM Numerical Simulations - Preliminary Results,* Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), Volume 10665 LNCS, 2018, pp. 266-274. (SJR: 0.339)

II.60 Gadzhev, G., Georgieva, I., Ganev, K., Ivanov, V., Miloshev, N., Chervenkov, H., Syrakov, D. *Climate applications in a virtual research environment platform.* Scalable Computing, Volume 19, Issue 2, 2018, Pages 107-118, SJR:0.180

II.61 Georgieva, I., Gadzhev, G., Ganev, K. and Miloshev, N., *ANALYSIS OF DYNAMICAL AND CHEMICAL PROCESSES WHICH FORM ATHMOSPHERIC COMPOSITION OVER BULGARIA*, SGEM 2018, 18, 4.3, (2018), ISBN:978-619-7408-70-6, ISSN:1314-2704, DOI:10.5593/sgem2018/4.3, pp. 167-179 (SJR: 0.232)

II.62 G. Gadzhev and K. Ganev. *VERTICAL STRUCTURE OF SOME POLLUTANT OVER BULGARIA - OZONE AND NITROGEN DIOXIDE.* SGEM 2018, 18, 4.3, (2018), ISBN:978-619-7408-70-6, ISSN:1314-2704, DOI:10.5593/sgem2018/4.3, pp. 449-454 (SJR: 0.232)

II.63 Gadzhev, G., Georgieva, I., Ganev, K., and Miloshev, N. *Contribution of different emission sources to the atmospheric composition formation in the city of Sofia,* Int. J. Environment and Pollution, Vol. 64, Nos. 1/3, 2018, pp. 47–57 DOI: 10.1504/IJEP.2018.099146 (IF: 0.71)

II.64 Ivanov V., Gadzhev G., Ganev K., Chervenkov H. *Sensitivity of the simulated Heat Risk in Southeastern Europe to the RegCM Model Configuration - preliminary results.* In: I. Lirkov and S. Margenov (Eds.): LSSC 2019, LNCS 11958, pp. 340–347, 2020. https://doi.org/10.1007/978-3-030-41032-2_39 (SJR: 0.339)

II.65 Georgieva I., Gadzhev G., Ganev K., Miloshev N. *Process Analysis of Atmospheric Composition Fields in Urban Area (Sofia City).* In: I. Lirkov and S. Margenov (Eds.): LSSC 2019, LNCS 11958, pp. 228–236, 2020. https://doi.org/10.1007/978-3-030-41032-2_26 (SJR: 0.339)

II.66 Gadzhev G., Ganev K., Mukhtarov P. *Statistical Moments Of The Vertical Distribution Of Air Pollution Over Bulgaria.* I. Lirkov and S. Margenov (Eds.): LSSC 2019, LNCS 11958, pp. 213–219, 2020. https://doi.org/10.1007/978-3-030-41032-2_24 (SJR: 0.339)

II.67 Gadzhev G., Ganev K., Mukhtarov P. *HPC Simulations of the Atmospheric Composition Bulgaria's Climate (on the example of coarse particulate matter pollution),* HPC 2019, SCI 902, pp. 221-233, (2021) https://doi.org/10.1007/978-3-030-55347-0_19 (SJR: 0.215)

II.68 Gadzhev G., Ivanov V., Valcheva R., Ganev K., Chervenkov H., *HPC Simulations of the Present and Projected Future Climate of the Balkan Region,* HPC 2019, SCI 902, pp. 234-248, (2021) https://doi.org/10.1007/978-3-030-55347-0_20 (SJR: 0.215)

II.69 Ivanov V., Chervenkov H., Gadzhev G., Ganev K. *DEGREE-DAYS AND AGRO-METEOROLOGICAL INDICES IN PROJECTED FUTURE CLIMATE OVER SOUTHEAST EUROPE,* SGEM 2020, Vol 20, N 4.1, ISBN:978-619-7603-09-5, ISSN:1314-2704, pp. 373-380 DOI:10.5593/sgem2020/4.1/s20.047 (SJR: 0.232)

II.70 Hristo Chervenkov, Georgi Gadzhev, Vladimir Ivanov and Kostadin Ganev , *Trend Analysis of CMIP5 Ensemble of Climate Indices over Southeast Europe with Focus on Agricultural Impacts*, CYBERNETICS AND INFORMATION TECHNOLOGIES, Volume 20, No 6, (2020), ISSN:1311-9702, pp. 155-165, DOI:10.2478/cait-2020-0069 (SJR 0.27)

II.71 Hristo Chervenkov, Georgi Gadzhev, Vladimir Ivanov, Kostadin Ganev and Dimitrios Melas, *Degree-day Climatology over Central and Southeast Europe for the Period 1961–2018 - Evaluation in High Resolution*, CYBERNETICS AND INFORMATION TECHNOLOGIES, Volume 20, No 6, (2020), ISSN:1311-9702, pp. 166-174, DOI:10.2478/cait-2020-0070 (SJR 0.27).

II.72 Ivelina Georgieva, Georgi Gadzhev and Kostadin Ganev, *Study the Recurrence of the Dominant Pollutants in the Formation of AQI Status over the City of Sofia for the Period*

2013–2020. In: Lirkov I., Margenov S. (eds) Large-Scale Scientific Computing. LSSC 2021. Lecture Notes in Computer Science, (2022), vol 13127. Springer, Cham, pp. 109-116, https://doi.org/10.1007/978-3-030-97549-4_12 (IF: 0.302) Q4

II.73 Hristo Chervenkov, Georgi Gadzhev, Vladimir Ivanov and Kostadin Ganev, *Degree-days and Agro-meteorological Indices in CMIP5 RCP8.5 Future Climate - Results for Central and Southeast Europe,* Dobrinkova and G. Gadzhev (eds.), Environmental Protection and Disaster Risks, Studies in Systems, Decision and Control 361, (2021), pp. 19 – 30, https://doi.org/10.1007/978-3-030-70190-1_2 (SJR: 0.135)

II.74 Hristo Chervenkov, Georgi Gadzhev, Vladimir Ivanov and Kostadin Ganev, *Assessment of the Joint Quantiles of Temperature and Precipitation in CMIP5 Future Climate Projections over Europe,* Dobrinkova and G. Gadzhev (eds.), Environmental Protection and Disaster Risks, Studies in Systems, Decision and Control 361, (2021), pp. 31 – 42, https://doi.org/10.1007/978-3-030-70190-1_3 (SJR: 0.135)

II.75 Gadzhev, G.; Ganev, K. *Computer Simulations of Air Quality and Bio-Climatic Indices for the City of Sofia.* Atmosphere, 2021, 12, 1078. https://doi.org/10.3390/atmos12081078 (IF: 3.11) Q3

II.76 Gadzhev, G.; Ganev, K.; Mukhtarov, P. *Influence of the Grid Resolutions on the Computer Simulated Surface Air Pollution Concentrations in Bulgaria.* Atmosphere 2022, 13, 774. https://doi.org/10.3390/atmos13050774 (IF: 3.11) Q2

II.77 Ganev, K.; Gadzhev, G. *Editorial for the Special Issue „Atmospheric Composition and Regional Climate Studies in Bulgaria".* Atmosphere, 2022, 13, 1547. https://doi.org/10.3390/atmos13101547 (IF: 3.11) Q2

II.78 Ivanov, V., Gadzhev, G., Ganev, K., Georgieva, I., *Estimation of the Historical and Future Renewable Energy Potential with RegCM4 over the Region of Southeastern Europe.* In: Dobrinkova, N., Nikolov, O. (eds) Environmental Protection and Disaster Risks. EnviroRISKs 2022. Lecture Notes in Networks and Systems, vol 638. Springer, Cham. (2023), pp. 160–169, https://doi.org/10.1007/978-3-031-26754-3_14 (SJR: 0.151)

II.79 Georgieva, I., Gadzhev, G., Ganev, K., Ivanov, V., *Evaluation of the Effects of the National Emission Reduction Strategies for Years 2020–2029 and After 2030 on the Sulphur and Nitrogen Wet and Dry Depositions on the Territory of Bulgaria.* In: Dobrinkova, N., Nikolov, O. (eds) Environmental Protection and Disaster Risks. EnviroRISKs 2022. Lecture Notes in Networks and Systems, vol 638. Springer, Cham. (2023), pp. 249–259, https://doi.org/10.1007/978-3-031-26754-3_22 (SJR: 0.151)

II.80 Gadzhev, G., Georgieva, I., Ganev, K., Ivanov, V., Miloshev, N., Influence of the Grid Resolutions on the Computer Simulated Transport and Transformation Atmospheric Composition Processes over the Territory of Bulgaria, Large-Scale Scientific Computations. LSSC 2023. Lecture Notes in Computer Science, vol 13952. Springer, Cham , pp. 316-324 https://doi.org/10.1007/978-3-031-56208-2_32 (IF: 0.302) Q4

II.81 Georgieva, I., Gadzhev, G., Ganev, K., Ivanov, V., Miloshev, N., Evaluation of the Effects of the National Emission Reduction Strategies for Years 2020-2029 and After 2030 on the AQI on the Territory of Bulgaria, Large-Scale Scientific Computations. LSSC 2023.

Lecture Notes in Computer Science, vol 13952. Springer, Cham , pp. 335–342 https://doi.org/10.1007/978-3-031-56208-2_34(IF: 0.302) Q4

II.82 Ivanov, V., Gadzhev, G., Georgieva, I., Ganev, K., Miloshev., N., INFLUENCE OF THE GRID RESOLUTIONS ON THE COMPUTER SIMULATED AIR QUALITY INDICES OVER THE TERRITORY OF BULGARIA, Large-Scale Scientific Computations. LSSC 2023. Lecture Notes in Computer Science, vol 13952. Springer, Cham, pp. 404–411. https://doi.org/10.1007/978-3-031-56208-2_41 (IF: 0.302) Q4

III. Доклади в сборници на международни конференции (в пълен текст) (общо 107):

III.1. *Syrakov E., K.Ganev, D.Yordanov*, 1982; On the ice forming nuclei agent propagation and convective cloud seeding optimization., Papers of the II international conference on hailstorms and hall preventation, WMO, Sofia, 20-24.09.1982, 513-527.

III.2. *Syrakov E., N. Godev, K. Ganev*, 1985: Influence of the synoptic conditions on the surrounding sea regions pollution by sulphur compounds from sources in Europe. (in Russian) Proceedings of the I-st international symposium on integrated Global Ocean Monitoring, Tallin, USSR, 2 - 10.1983, L., Gidrometeoizdat, 215-229.

III.3. *Godev N., E. Syrakov, D. Truhchev, K. Ganev*, 1985: Application of the direct and conjugated problem to the pollution studies in costal and open sea regions. (in Russian) Proceedings of the I-st international symposium on integrated Global Ocean Monitoring, Tallin, USSR, 2-10.10.1983, L., Gidrometeoizdat, 229-241.

III.4. *Syrakov E., K.Ganev*, 1985; On diffusion of reagent and the problem of optimal seeding of convective clouds., IV WMO scientific conference on weather modification, A joint WMO/IAMAP symposium, Honolulu, USA, 12-14.08.1985, WMO/TD-No 53, 235-240.

III.5. *Syrakov E., N.Godev, K.Ganev*, 1987: Influence of synoptic conditions, orography and arranged vertical motions on the long-range pollutants transport., Proceedings of the WMO conference on air pollution modelling and its application., Leningrad, USSR, 19-24.05.1986, WMO/TD No 187, v. 1, 206-225.

III.6. *Syrakov E., K.Ganev, N.Godev*, 1987: A trajectory model for studying long range pollution transport in PBL., Proceedings of the WMO conference on air pollution modelling and its application., Leningrad, USSR, 19-24.05.1986, WMO/TD No 187, v.I, 226-239.

III.7. *Syrakov E., K. Ganev*, N. Godev, 1989, A complex approachfor modeling and assessment of atmospheric pollution by sulphur and Nitrogen compounds at long-range, regional and local transport, Workshop on modeling transformation processes and transport of air pollution with special reference to nitrogen oxides, Potsdam GDR, 21-25 March 1988, 74-78

III.8. *Ganev K., D. Yordanov*, 1989: Parametrization of admixture propagation in the atmospheric surface layer in the planetary boundary layer pollution models., Special environmental report No. 17 “Changing composition of the troposphere“ - extended abstracts of the WMO technical conference, Sofia, Bulgaria, 23-27.10.1989. WMO No.724, 177 - 180.

III.9. *Syrakov E., K. Ganev, N. Godev, E. Georgieva, E. Bogdanov*, 1989: A telescopic approach

for co-ordinated study of the air pollution at long-range and regional transport over a complex terrain. Special environmental report No.17 “Changing composition of the troposphere“ - extended abstracts of the WMO technical conference. Sofia, Bulgaria, 23 - 27.10.1989. WMO No.724, 189 - 192.

III.10. *Ganev K. E. Syrakov, E. Georgieva*, 1998: An example for the interaction of local and synoptic transport scales - a case study, Swedish-Bulgarian Workshop - Long-Range Air Pollution: From Models to Policies, Sozopol 19-23 October, 1997, PENSOFT Publishers, Sofia-Moscow, 243-253

III.11. *Syrakov E., K. Ganev*, 2000: On the accounting for some sub-scale effects in the long range air pollution modeling over a complex terrain. XXIII International Technical Meeting on Air Pollution Modelling and its Applications, 28.09-02.10. 1998, Varna, Bulgaria. Kluwer Academic/Plenum Publ. Corp., pp. 107-115

III.12. *Zerefos Ch, K.Ganev, D.Syrakov, A.Vasaras, M.Tzortziou, M.Prodanova, E.Georgieva*, 2000: Numerical Study of the Total SO_2 Contents in the Air Column Over the City of Thessaloniki, Proceedings of the XIII International Technical Meeting on Air Pollution Modelling and its Applications, 28.09-02.10. 1998, Varna, Bulgaria. Kluwer Academic/Plenum Publ. Corp., pp. 175-182

III.13. *Ganev K., R. Dimitrova*, 2000: Study of the effects of the Rila and Rhodope mountains on the mesoscale pollution transport. XXIII International Technical Meeting on Air Pollution Modelling and its Applications, 28.09-02.10. 1998, Varna, Bulgaria. Kluwer Academic/Plenum Publ. Corp., pp. 721-722

III.14. *Yordanov, D., K. Ganev, M. Kolarova*, 2002: Maximal concentrations from a Gaussian Plume Model under unstable conditions, *Proceedings of the conference dedicated to Prof. Berliand 80-th anniversary,* Sanct-Peterburg,1999, 125-138

III.15. *Gromkova N., K. Ganev, D. Yordanov, E. Georgieva, R. Dimitrova***,** *N. Miloshev*, 2002: Dispersion regulatory model for designing new industrial stacks – software, *Proc. of the 8th Intern. Conf. on Harmonization within Atmospheric Dispersion Modelling for Regulatory purposes, Sofia, Bulgaria, 14-17 Oct. 2002.*, pp. 180-184,

III.16. *Syrakov E., K.Ganev* 2002: Accounting for effects of wind rotation in the PBL on the plume characteristics *Proc. of the 8th Intern. Conf. on Harmonization within Atmospheric Dispersion Modelling for Regulatory purposes, Sofia, Bulgaria, 14-17 Oct. 2002.*, pp. 232-236,

III.17. *Dimitrova, R., K. Ganev*, 2003: Simple pollution transport model with parameterized vertical structure, NATO ARW on “Air Pollution Processes in Regional Scale”, Halkidiki, Greece, 13-16 June 2002, *NATO Science Series IV. Earth and Environmental Sciences*, v.30, Kluwer Acad. Publ. pp. 45-54

III.18. *Ganev, K.,* 2003. A brief survey of the air pollution modeling activities, carried out in the Institute of Geophysics, Bulgarian Academy of Sciences, NATO ARW on “Air Pollution Processes in Regional Scale”, Halkidiki, Greece, 13-16 June 2002, *NATO Science Series IV. Earth and Environmental Sciences*, v.30, Kluwer Acad. Publ. pp.79-86

III.19. *Yordanov, M. Kolarova, K.Ganev*, 2003: - On the absolute maximal concentrations of polydispersive particles from a Gausian plume model under unstable conditions, NATO

ARW on “Air Pollution Processes in Regional Scale”, Halkidiki, Greece, 13-16 June 2002, *NATO Science Series IV. Earth and Environmental Sciences*, v.30, Kluwer Acad. Publ., 341-346

III.20. *Ganev K., R.Dimitrova, N.Miloshev* 2004: Air flows and pollution transport in the Sofia valley under some typical background conditions, Proceedings of the XXVI International Technical Meeting on Air Pollution Modelling and its Applications, 26.-30 May, 2003, Istanbul - Turkey, Kluwer Academic/Plenum Publ. Corp., 593-594

III.21. Ganev, K. and D.Yordanov 2004, Parameterization of dry deposition processes in the Surface Layer for admixtures with gravity deposition, 9th Harmonisation Conference, 1-4 June 2004, Garmish Partenkirchen

III.22. Syrakov E. and K.Ganev, 2004: Stratification, baroclinicity and inversion effects on the lagrangian and diffusion characteristics of instantaneously released clod in the PBL 9th Harmonisation Conference, 1-4 June 2004, Garmish Partenkirchen.

III.23. Ganev, K., N.Miloshev and D.Melas 2005: Application of functions of influence in air pollution problems, Proceedings of the NATO Advanced Research Workshop "Advances In Air Pollution Modelling For Environmental Security", 8-12 May 2004, Borovetz, Bulgaria in Farago et al. (eds.), Advances in Air Pollution Modeling for Environmental Security, NATO Science Series, IV: Earth and Environmental Series, Vol.54, pp.175-184., Springer, Netherlands.

III.24. Prodanova M., D. Syrakov, Z. Zlatev, K. Slavov. K. Ganev, N. Miloshev, E. Nikolova, 2005: Estimation Of Ozone Pollution Levels In Southeast Europe Using Us Epa Models-3 System. *Proc of the 3rd International Symposium on Air Quality Management at Urban, Regional and Local Scales, 26-30 September 2005, Istanbul, Turkey*. Vol. I, pp. 517-526.

III.25. Syrakov, D., Prodanova, M., Zlatev, Z., Slavov, K., Ganev, K., Miloshev, N., Nikolova E. 2005: Preliminary results from the use of MM5-CMAQ system for estimation of pollution levels in southeast Europe, Fist Accent Symposium “The Changing Chemical Climate of the Atmosphere”, Urbino, Italy, September 12-16, 2005, p.119-127.

III.26. Ganev, K. G., Yordanov, D. L., Miloshev, N. G. 2005: Parameterization of the dry deposition processes in the surface layer for the case of gravity sedimentation, Fist Accent Symposium “The Changing Chemical Climate of the Atmosphere”, Urbino, Italy, September 12-16, 2005, (on a CD)

III.27. Prodanova M., Juan L. Pérez, Dimiter Syrakov, Roberto San José, Zahari Zlatev, Kostadin Ganev, Nikolai Miloshev, 2006: Exchange of Ozone Pollution between Romania, Bulgaria and Greece, Proceedings of the 28th International Technical Meeting on Air Pollution Modelling and its Applications, 15-19 May.2006, Leipzig, Germany, 436-437.

III.28. Prodanova M., Juan L. Pérez, Dimiter Syrakov, Roberto San José, Zahari Zlatev, Kostadin Ganev, Nikolai Miloshev, 2006: Preliminary estimates of US EPA Model-3 system capability for description of photochemical pollution in southeast Europe, Proceedings of the 28th International Technical Meeting on Air Pollution Modelling and its Applications, 15-19 May.2006, Leipzig, Germany, 438-445.

III.29. Prodanova M., Dimiter Syrakov, Kostadin Ganev, Nikolai Miloshev, Stefan Roglev, 2006: Some cases of extreme air pollution in the city of Stara Zagora – Bulgaria,

Proceedings of the 28th International Technical Meeting on Air Pollution Modelling and its Applications, 15-19 May.2006, Leipzig, Germany, 446-447.

III.30. Prodanova M., Juan L. Pérez, Dimiter Syrakov, Roberto San José, Kostadin Ganev, Nikolai Miloshev and Stefan Roglev, 2006, Simulation of an extreme air pollution episode in the city of Stara Zagora, Bulgaria, Proc. of the 4th international conference on numerical models applications, 20-24 August 2006, Borovetz, Bulgaria, LNCS 4310, 432-498.

III.31. Ganev, K., Dimitrova, R., Todorova, A., Syrakov, D., Miloshev, N., Prodanova, M. (2007): Dilution and Transformation Processes of the Air Pollution from the Road Transport – Study of The Models-3 System Sensitivity to Transport Scales and Grid Resolution, in Carruthers, D., and McHugh, C., (Eds.), Proc. of 11th Intern. Conf. on Harmonization within Atmospheric Dispersion Modelling for Regulatory Purposes, Vol. 1, Cambridge, UK, 2-5 July 2007, pp.68-72.

III.32. Syrakov E., M. Tsankov, K. Ganev, 2007: Estimation of the critical pollution characteristics at different meteorological conditions in PBL. in Carruthers, D., and McHugh, C., (Eds.), Proc. of 11th Intern. Conf. on Harmonization within Atmospheric Dispersion Modelling for Regulatory Purposes, Vol. 2, Cambridge, UK, 2-5 July 2007, 136-140.

III.33. Syrakov E., K. Ganev, M. Tsankov, E. Cholakov, 2007: On the diffusion tensor and effects on some lagrangian and pollution characteristics in PBL. in Carruthers, D., and McHugh, C., (Eds.), Proc. of 11th Intern. Conf. on Harmonization within Atmospheric Dispersion Modelling for Regulatory Purposes, Vol. 2, Cambridge, UK, 2-5 July 2007, 239-243.

III.34. Syrakov E., E. Cholakov, M. Tsankov, K. Ganev, 2007: On the influence of PBL conventional and nonlocal turbulent factors on pollution characteristics in local to meso scale. in Carruthers, D., and McHugh, C., (Eds.), Proc. of 11th Intern. Conf. on Harmonization within Atmospheric Dispersion Modelling for Regulatory Purposes, Vol. 2, Cambridge, UK, 2-5 July 2007, 286-290.

III.35. Prodanova M., J. Perez, D. Syrakov, R. San Jose, K., Ganev, N. Miloshev, 2007, Local scale numerical simulation of an extreme SO_2 pollution episode in Bulgaria, Proc. of the 6th International conference on Urban Air Quality, Cyprus 27-29 March 2007

III.36. Ganev K., D. Syrakov, Z. Zlatev, 2007: On the Effective Indices for Emissions From Road Transport, Proceedings of the 29th International Technical Meeting on Air Pollution Modelling and its Applications, 24-28 Sept 2007, Aveiro, Portugal.

III.37. Ganev K., D. Syrakov, R. Dimitrova, A. Todorova, M. Prodanova, N.Miloshev, 2007: Local to Regional Dilution and Transformation Processes of the Emissions from Road Transport. Proceedings of the 29th International Technical Meeting on Air Pollution Modelling and its Applications, 24-28 Sept 2007, Aveiro, Portugal.

III.38. Prodanova M., D. Syrakov, K. Ganev, N. Miloshev, 2008: Use of US EPA models-3 system for quantitative estimate of air pollution exchange between Romania, Bulgaria and Greece, Шестнадесети международен симпозиум ЕКОЛОГИЯ 2007, 4 – 8 юни 2008, Слънчев бряг (full text on CD)

III.39. Ganev K., D. Syrakov, Z. Zlatev, 2008: Up-scaling the air pollution emissions from road

transport: effective indices approach, Шестнадесети международен симпозиум ЕКОЛОГИЯ 2007, 4 – 8 юни 2008, Слънчев бряг (full text on CD)

III.40. Syrakov Dimiter, Hristomir Branzov, Kostadin Ganev, Maria Prodanova, Nikolai Miloshev (2008): Numerical Simulation Of Sulfur, Nitrogen And Dust Pollution Due To "Maritza-Iztok" Thermal Power Plants, Proc. of the International Scientific Conference SGEM 2008, Albena, 10-12 June 2008, 757-764, ISBN 954918181-2

III.41. Ganev Kostadin, Nikolaj Miloshev, Maria Prodanova, Dimiter Syrakov (2008): Ozone Formation In Southeast Europe Simulated By An Addvanced Qir Quality Model, Proc. of the International Scientific Conference SGEM 2008, 10-12 June 2008, Albena, Bulgaria, 765-772, ISBN 954918181-2

III.42. Syrakov Dimiter, Hristomir Branzov, Kostadin Ganev, Maria Prodanova, Nikolai Miloshev (2008): On The Use Of US EPA Models-3 System For Simulation Of An Extreme Air Pollution Episode Created By Coal Burning Thermal Power Plants, Proc. of 17th International Conference Ecology&Safety 2008, 10-13 June 2008, Sl.Brjag, Bulgaria, (full text on CD)

III.43. Ganev Kostadin, Nikolaj Miloshev, Maria Prodanova, Dimiter Syrakov, Kiril Slavov (2008): Sencitivity Analysis Of MM5/CMAQ Modeling System To The Ozone Formation In Southeast Europe, Proc. of 17th International Conference Ecology&Safety 2008, 10-13 June 2008, Sl.Brjag, Bulgaria, (full text on CD)

III.44. Syrakov, D, K. Ganev, V. Spiridonov, M. Prodanova, A. Bogatchev, N. Miloshev, G. Jordanov, 2009: Assessment of climate change impact on air pollution levels in Bulgaria. 7th International Conference on Air Quality Science and Application Istanbul, 24-27 March 2009. (on a CD)

III.45. Ganev K., D. Syrakov, A. Todorova, G. Gadzhev, G. Jordanov, N. Miloshev, M. Prodanova, 2009: Joint analysis of dilution and transformation processes of air pollution from the road and ship transport. 7th International Conference on Air Quality Science and Application Istanbul, 24-27 March 2009. (on a CD)

III.46. Todorova A., G. Gadzhev, G. Jordanov, D. Syrakov, K. Ganev, N. Miloshev, M. Prodanova, 2009: Application of the US EPA models 3 sysytem for numerical simulations of high PM10 levels episodes. 7th International Conference on Air Quality Science and Application Istanbul, 24-27 March 200 (on a CD).

III.47. Ganev K., D. Syrakov, Z. Zlatev, 2009, Effective indices for emissions from road transport, Proc od the Second Accent Symposium "The Changing Chemical Climate of the Atmosphere", Urbino, Italy, July 23-27, 2007 (on a CD)

III.48. Ganev K., D. Syrakov, R. Dimitrova, M. Prodanova, N. Miloshev, 2009,Study of the dilution and transformation processes of the emissions from road transport, Proc od the Second Accent Symposium "The Changing Chemical Climate of the Atmosphere", Urbino, Italy, July 23-27, 2007 (on a CD)

III.49. Prodanova M., D. Syrakov, K. Ganev., N. Miloshev, 2009, Some cases of extreme air pollution in the city of Stara Zagora -Bulgaria, Proc od the Second Accent Symposium "The Changing Chemical Climate of the Atmosphere", Urbino, Italy, July 23-27, 2007 (on a CD)

III.50. Prodanova M., D. Syrakov, K. Ganev., N. Miloshev, 2009, Country-to-country pollution exchange studies for theBalkan region, Proc od the Second Accent Symposium "The Changing Chemical Climate of the Atmosphere", Urbino, Italy, July 23-27, 2007 (on a CD)

III.51. Gadzhev G., K. Ganev, G. Jordanov, N. Miloshev, A. Todorova, D. Syrakov and M. Prodanova, 2009, Transport and Transformation of Air Pollution from Road and Ship Transport - Joint Analysis of Regional Scale Impacts and Interactions, Proc. of the International Conference on Transport, Atmosphere and Climate, TAC2: 22-25 June 2009, Aachen, DE and Maastricht, NL (accepted for publishing)

III.52. Syrakov D., M. Prodanova, K. Ganev, N. Miloshev, E.l Atanasov, T. Gurov, and A. Karaivanova, 2009, Grid computing for multi-scale atmospheric composition modelling for the Balkan region, 18th International Symposium ECOLOGY & SAFETY, June 8 - 12, 2009, Sunny Beach, Bulgaria (published on a CD), ISSN: 1313-2563

III.53. Syrakov D., K. Ganev, M. Prodanova, K. Slavov, N. Miloshev, and G. Jordanov, 2009, Impact of climate change on air pollution levels in Bulgaria: Contemporary climate, 18th International Symposium ECOLOGY & SAFETY, June 8 - 12, 2009, Sunny Beach, Bulgaria (published on a CD), ISSN: 1313-2563

III.54. Syrakov D., K. Ganev, M. Prodanova, K. Slavov, I. Etropolska, N. Miloshev, and G. Jordanov, 2009, Background pollution forecast over Bulgaria, 18th International Symposium ECOLOGY & SAFETY, June 8 - 12, 2009, Sunny Beach, Bulgaria (published on a CD), ISSN: 1313-2563

III.55. Syrakov D., K. Ganev, M. Prodanova, N. Miloshev, G. Jordanov, I. Etropolska, K. Slavov, 2009, A system for information and forecast of air quality over Bulgaria, 9th International Multidisciplinary Scientific Geo-Conference & EXPO Modern Management of Mine Producing, Geology and Environmental Protection, SGEM 2009, Albena Resort, Bulgaria 14 - 19 June 2009, 297-304, ISBN 954918181-2

III.56. Syrakov D., M. Prodanova, N. Miloshev, K. Ganev, G. Jordanov, G. Jordanov, V.Spiridonov and A. Bogatchev, 2009, Estimation of air pollution climatic values for Bulgaria, 9th International Multidisciplinary Scientific Geo-Conference & EXPO Modern Management of Mine Producing, Geology and Environmental Protection, SGEM 2009, Albena Resort, Bulgaria 14 - 19 June 2009, 313-320, ISBN 954918181-2

III.57. Syrakov D., M. Prodanova, K. Ganev, N. Miloshev, E. Atanasov, T. Gurov and A. Karaivanova, 2009, The Grid Computing - Powerful Tool For Multi-Scale Atmospheric Composition Modelling, 9th International Multidisciplinary Scientific Geo-Conference & EXPO Modern Management of Mine Producing, Geology and Environmental Protection, SGEM 2009, Albena Resort, Bulgaria 14 - 19 June 2009, 365-372, ISBN 954918181-2

III.58. Ganev K., D. Syrakov, M. Prodanova, N. Miloshev, G. Jordanov, G. Gadjev, and A. Todorova, 2009, Atmospheric composition modeling for the Balkan region, to be presented at the SEE-GRID-SCI USER FORUM, Istanbul, December 2009, ISBN: 978-975-403-510-0, 77-85

III.59. Syrakov D., K. Ganev, M. Prodanova, N. Miloshev, G. Jordanov, G. Gadjev, and A. Todoriva Climate Change Impact Assessment of Air Quality over Bulgaria, to be presented at the SEE-GRID-SCI USER FORUM, Istanbul, December 2009, ISBN: 978-975-403-

510-0, 95-103

III.60. Ganev K., D. Syrakov, M. Prodanova, E. Atanasov, T. Gurov, A. Karaivanova, N. Miloshev, H. Chervenkov, 2009, Grid Computing for Air Quality and Environmental Studies in Bulgaria, 23rd EnviroInfo 2009 Conference - Environmental Informatics and Industrial Environmental Protection: Concepts, Methods and Tools, Berlin, September 9th - 11th 2009, v.1, 141-149

III.61. Georgi Gadzhev, Georgi Jordanov, Kostadin G. Ganev, Maria Prodanova, Dimiter E. Syrakov and Nikolai G. Miloshev, 2010, Analyzis of the processes which form the air pollution pattern over the Balkan peninsula, Proceedings of the 13th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes — 1-4 June 2010, Paris, France. ISBN: 2-8681-5062-4, 156-160

III.62. Georgi Jordanov, Georgi Gadzhev, Kostadin G. Ganev, Maria Prodanova, Dimiter E. Syrakov, Nikolai G. Miloshev, 2010, Evaluation of the contribution of diferent snap categories to the air pollution over the Balkan penninsula, Proceedings of the 13th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes — 1-4 June 2010, Paris, France. ISBN: 2-8681-5062-4, 398-402

III.63. Angelina D. Todorova, Kostadin G. Ganev, Dimiter E. Syrakov, Maria Prodanova, Georgi J. Georgiev,Nikolai G. Miloshev and Georgi K. Gadjhev, 2010, Bulgarian emergency response system for release of hazardous pollutants – design and first tests, Proceedings of the 13th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes — 1-4 June 2010, Paris, France. ISBN: 2-8681-5062-4, 495-499

III.64. E.Syrakov, K. Ganev, M. Tsankov, 2010, On the consideration of terrain slope, baroclinicity and inversion effects at forming of the critical pollution conditions in PBL, Proceedings of the 13th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes — 1-4 June 2010, Paris, France. ISBN: 2-8681-5062-4, 506-510

III.65. Iglika Etropolska, Dimiter Syrakov, Kostadin Ganev, Maria Prodanova, Nikolai Miloshev,Kiril Slavov, Georgi Jordanov, 2010, A system for information and forecasting of air quality over Bulgaria, Proceedings of the 13th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes — 1-4 June 2010, Paris, France. ISBN: 2-8681-5062-4, 530-534

III.66. E. Syrakov, M. Tsankov, K. Ganev, E. Cholakov, 2010, On the problem of heavy pollution episodes in shallow long-lived PBL, Proceedings of the 13th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes — 1-4 June 2010, Paris, France. ISBN: 2-8681-5062-4, 605-608

III.67. Spiridonov V., Syrakov D., Ganev K., Prodanova M., Bogatchev A., Miloshev N., Jordanov G., Slavov K (2010) Model Estimates of Regional Climate Changes and its Impact on the Air Quality over Bulgaria, Journal of International Scientific Publications ECOLOGY & SAFETY, Volume 4, Part 1 (http://www.science-journals.eu), ISSN: 1313-2563, pp.75-93.

III.68. Etropolska I., Syrakov D., Ganev K., Prodanova M., Miloshev N., Jordanov G., Slavov K. (2010) An Operative System for Air Pollution Levels Forecast over Bulgaria, Journal of

International Scientific Publications ECOLOGY & SAFETY, Volume 4, Part 1 (http://www.science-journals.eu), ISSN: 1313-2563, pp.94-102.

III.69. Todorova A., Ganev K., Syrakov D., Prodanova M., Georgiev G., Miloshev N., Gadjhev G. (2010) Bulgarian Emergency Response System for Release of Hazardous Pollutants – Design and First Tests, Journal of International Scientific Publications ECOLOGY & SAFETY, Volume 4, Part 1 (http://www.science-journals.eu), ISSN: 1313-2563, pp.103-118.

III.70. Syrakov D., V. Spiridonov, K. Ganev, M. Prodanova, A. Bogatchev, N. Miloshev, K. Slavov, E. Katragkou, D. Melas, A. Poupkou and K. Markakis (2010) Exploiting GRID for Model Estimates of Regional Climate Changes and Its Impact on the Air Quality of Bulgaria, in Todorov M. and Chr. Christov (eds.), APPLICATION OF MATHEMATICS IN TECHNICAL AND NATURAL SCIENCES: Proceedings of the 2nd International Conference, Sozopol, (Bulgaria), 21–26 June 2010, AIP Conference Proceedings v.1301, pp. 669-677.

III.71. G. Gadzhev, D. Syrakov, K. Ganev, A. Brandiyska, N. Miloshev, G. J. Georgiev, M. Prodanova, 2011, Atmospheric composition of the Balkan region – some numerical experiments, Journal of International Scientific Publication: Ecology & Safety, Volume 5, 224-239, ISSN: 1313-2563

III.72. Brandiyska A., Kostadin G. Ganev, Dimiter E. Syrakov, Maria Prodanova, Georgi J. Georgiev, Nikolay Miloshev, Georgi K. Gadzhev – Bulgarian Emergency Response system for Release of Hazardous Pollutants – Fast Decision Mode – 14th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Kos Island, Greece, 2-6 October 2011. pp. 217-221, ISBN: 978-960-89650-6-5

III.73. Syrakov E., K. Ganev, M. Tsankov, E. Cholakov – H14-276 Estimation and parameterization of the influence of synoptic conditions on pollution characteristics in the PBL – 14th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Kos Island, Greece, 2-6 October 2011.,pp. 251 – 254, ISBN: 978-960-89650-6-5.

III.74. Gadzhev G., K. Ganev, M. Prodanova, D. Syrakov, N. Miloshev – Biogenic Emissions Impact On The Atmospheric Composition In Bulgaria – 14th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Kos Island, Greece, 2-6 October 2011., pp. 371-375, ISBN: 978-960-89650-6-5.

III.75. Syrakov E., K. Ganev, M. Tsankov, E. Cholakov – A comparative analysis of diferent conventional and none-local stable/neutral PBL regimes and their parameterization in air pollution problems – 14th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Kos Island, Greece, 2-6 October 2011., pp. 390-395, ISBN: 978-960-89650-6-5.

III.76. Gadzhev G., D. Syrakov, K. Ganev, A. Brandiyska, N. Miloshev, G. J. Georgiev, M. Prodanova, 2011, Atmospheric composition of the Balkan region and Bulgaria – some numerical experiments, Third Conference of the Euro-American Consortium for Promoting the Application of Mathematics in Technical and Natural Sciences, Albena, Bulgaria, June 20-25, 2011, 200-209, DOI: 10.1063/1.3659921., SJR: 0.16

III.77. Todorova A., K. Ganev, D. Syrakov, M. Prodanova,, G. Georgiev, N. Miloshev, G.

Gadzhev, 2012 Bulgarian emergency response system for release of hazardous pollutants - design and first tests, 2012, D. Stein and S.Trini Castelli (eds.) Air Pollution Modelling and its Application XXI, NATO Science for Peace and Security Series C: Environmentl Security 4, 263-268, Springer Science+Business Media B.V., DOI 10.1007/978-94-007-1359-8_45

III.78. Gadzhev G., K. Ganev, M. Prodanova, D. Syrakov, E. Atanasov, N. Miloshev, 2012, Multi-scale atmospheric composition modelling for Bulgaria, 32st NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application 7-11 May, 2012, Utrecht, The Netherlands. (on a CD)

III.79. Syrakov D., K. Ganev, M. Prodanova, N. Miloshev, K. Slavov, 2012, Fine resolution modeling of climate change impact on future air quality over Bulgaria, 32st NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application 7-11 May, 2012, Utrecht, The Netherlands. (on a CD)

III.80. Brandiyska A., K. Ganev, D. Syrakov, M. Prodanova, N. Miloshev, 2012, Risk analysis and emergency forecast of toxic substances local scale transport over Bulgaria, 32st NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application 7-11 May, 2012, Utrecht, The Netherlands. (on a CD)

III.81. Syrakov E., K. Ganev, 2012, On the parameterization of dynamic and diffusion processes in the PBL over very rough surface, 32st NATO/SPS International Technical Meeting on Air Pollution Modelling and its Application 7-11 May, 2012, Utrecht, The Netherlands. (on a CD)

III.82. Jordanov G., G. Gadzhev, K. Ganev, N. Miloshev, D. Syrakov, M. Prodanova (2012) Numerical study of the wind energy potential in Bulgaria - Some preliminary results, American Institute of Physics, Conf. Proc. 1487, pp. 71 - 78; doi: 10.1063/1.4758943., SJR: 0.16

III.83. Syrakov D., I. Etropolska, M. Prodanova, K. Ganev, N. Miloshev, K. Slavov (2012) Operational Pollution Forecast for the Region of Bulgaria, American Institute of Physics, Conf. Proc. 1487, pp. 88 - 94; doi: 10.1063/1.4758945., SJR: 0.16

III.84. Brandiyska A., K. Ganev, D. Syrakov, M. Prodanova, N. Miloshev and G. Gadzhev (2012) Risk analysis and emergency response to releases of hazardous pollutants in the atmosphere, Journal of International Scientific Publications ECOLOGY & SAFETY, Volume 6, Part 2 (http://www.science-journals.eu), ISSN: 1313-2563, pp.311-328.

III.85. D. Syrakov, M. Prodanova, K. Slavov, I. Etropolska, K. Ganev, N. Miloshev, T. Ljubenov (2013) Bulgarian System for Air Pollution Forecast, Journal of International Scientific Publications ECOLOGY & SAFETY, Volume 7, Part 1 (http://www.science-journals.eu), ISSN: 1313-2563, pp.325-334.

III.86. Gadzhev G., K. Ganev, N. Miloshev, D. Syrakov D. and M. Prodanova (2013) Numerical Study of the Atmospheric Composition Climate in Bulgaria, Journal of International Scientific Publications ECOLOGY & SAFETY, Volume 7, Part 2 (http://www.science-journals.eu), ISSN: 1313-2563, pp.63-82.

III.87. Gadzhev G., K. Ganev, M. Prodanova, D. Syrakov, N. Miloshev (2013) Some statistical evaluations of numerically obtained atmospheric composition fields in Bulgaria,

Proceedings of the 15th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, ISBN 978-84-695-7353-5, 373-377

III.88. Syrakov E., K.Ganev (2013) Extension and modification of the bulk Rrichardson number method for parameterization of exchange and interaction processes over urban areas, Proceedings of the 15th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, ISBN 978-84-695-7353-5, 539-542

III.89. Syrakov D., I. Etropolska, M. Prodanova, K. Slavov, K. Ganev, N. Miloshev, T. Ljubenov (2013) Downscaling of Bulgarian Chemical Weather Forecast from Bulgaria region to Sofia city, American Institute of Physics, Conf. Proc. 1561, pp. 120-132, http://dx.doi.org/10.1063/1.4827221., SJR: 0.16

III.90. Gadzhev G, K. G. Ganev, M. Prodanov, D. E. Syrakov, N. G. Miloshev, and G. J. Georgiev (2013): Some numerically studies of the atmospheric composition climate of Bulgaria, American Institute of Physics, Conf. Proc. 1561, pp. 100-111, http://dx.doi.org/10.1063/1.4827221., SJR: 0.16

III.91. Gadzhev G., K. Ganev, N. Miloshev, D. Syrakov, M. Prodanova (2014) Calculation of some ozone pollution indices for Bulgaria, Journal of International Scientific Publications ECOLOGY & SAFETY, Volume 8, Part 1 http://www.scientific-publications.net/en/issue/1000001/), ISSN: 1313-2563, 384-392.

III.92. Gadzhev G., K. Ganev, D. Syrakov, M. Prodanova, N. Miloshev (2014) Computer simulations of the atmospheric composition climate of Bulgaria - some basic results, Proc. of the international conference on numerical methods for scientific computations and advanced applications, may 19-22, 2014, Bansko, ISBN978-954-91700-7-8, 35-38

III.93. Gadzhev G., K. Ganev, N. Miloshev (2014) Numerical study of the atmospheric composition climate of Bulgaria – validation of the computer simulation results, Proc. of the 16th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes 8-11 September 2014, Varna, Bulgaria, 41-45,

III.94. Syrakov E., K. Ganev (2014) Analysis of dispersion and higher order statistical moments above rural and urban areas, Proc. of the 16th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes 8-11 September 2014, Varna, Bulgaria, 320-325

III.95. Syrakov E., K. Ganev (2014) On extension and modification of the similarity format parameterization schemes over urban area, Proc. of the 16th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes 8-11 September 2014, Varna, Bulgaria, 351-355

III.96. Georgieva I., G.Gadzhev, K. Ganev, M. Prodanova, D. Syrakov, N. Miloshev (2014) Numerical study of the air quality in the city of Sofia – some preliminary results, Proc. of the 16th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes 8-11 September 2014, Varna, Bulgaria, 356-360

III.97. Ganev K., G. Jordanov, G. Gadzhev, N. Miloshev, D. Syrakov, M. Prodanova (2014) Renewable energy potential in Bulgaria – some computer simulations results, 6th International Conference "Application of Mathematics in Technical and Natural Sciences", June 26-July 1, 2014, Albena, Bulgaria, (accepted for publishing in American Institute of

Physics, Conf. Proc). SJR: 0.16

III.98. Georgieva, I., Gadzhev, G., Ganev, K., Prodanova, M., Syrakov, D., Miloshev, N., *Numerical study of the Air Quality in the city of Sofia,* 8th Congress of the Balkan Geophysical Society, (2015), BGS 2015

III.99. Gadzhev, G., Georgieva, I., Ganev, K., Miloshev, N., *CONTRIBUTION OF DIFFERENT EMISSION SOURCES TO THE ATMOSPHERIC COMPOSITION FORMATION IN CITY OF SOFIA,* HARMO 2018 - 18th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, Proceedings, (2017), pp. 236-240.

III.100.G. Gadzhev and K. Ganev. *Vertical structure of atmospheric composition fields over Bulgaria,* International Conference on "Numerical Methods for Scientific Computations and Advanced Applications" (NMSCAA'18), Hisarya. Bulgaria, 27 – 31 May 2018, pp. 38-41

III.101.G. Gadzhev and K. Ganev. *VERTICAL STRUCTURE OF AIR POLLUTANT FIELDS OVER BULGARIA,* 19th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes (Harmo'19) 3-6 June 2019, Bruges, Belgium

III.102.Georgieva, I., Gadzhev, G., Ganev, K., Miloshev, N. *ANALYSIS OF THE CONTRIBUTION OF DIFFERENT PROCESSES (CHEMICAL AND DYNAMICAL) WHICH FORM THE ATMOSPHERIC COMPOSITION IN SOFIA,* 19th International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes (Harmo'19) 3-6 June 2019, Bruges, Belgium

III.103.Hristo Chervenkov, Vladimir Ivanov, Georgi Gadzhev and Kostadin Ganev, *Assessment of the FUTURE CLIMATE over Southeast Europe based on CMIP5 ensemble of climate indices – Part One: Results and discussion,* Proceeding of 1st International conference on ENVIROnmental protection and disaster RISKs, 29-30 September 2020, Sofia, Bulgaria, ISBN 978-619-7065-38-1, pp. 144 – 156, https://doi.org/10.48365/envr-2020.1.13

III.104.Hristo Chervenkov, Vladimir Ivanov, Georgi Gadzhev and Kostadin Ganev, *Assessment of the FUTURE CLIMATE over Southeast Europe based on CMIP5 ensemble of climate indices – Part Two: Results and discussion.,* (2020), Proceeding of 1st Internationa conference on ENVIROnmental protection and disaster RISKs, 29-30 September 2020, Sofia, Bulgaria, ISBN 978-619-7065-38-1, pp. 157 – 169, https://doi.org/10.48365/envr-2020.1.14

III.105. Georgi Gadzhev, Vladimir Ivanov, Kostadin Ganev, *Modelling of dry and wet deposition processes for the Sulphur and Nitrogen compounds over Bulgaria,* The 20th conference on "Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes" was held in Tartu, Estonia, in June 2021, https://www.harmo.org/Conferences/Proceedings/_Tartu/publishedSections/H20-160_georgi_gadzhev.pdf

III.106. Gadzhev,G., Ganev,K., Georgieva, I. and Ivanov, V., *Evaluation of the Impact of the Projected Future Emissions from Energy on the Air Quality in Bulgaria*, Proceedings of 21st International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, HARMO 2022, Code 185541

III.107. Georgieva, I., Gadzhev,G., Ganev,K. and Ivanov, V., *EVALUATION OF THE EFFECTS OF THE NATIONAL EMISSION REDUCTION STRATEGIES FOR YEARS 2020-2029 AND AFTER 2030 ON THE SULPHUR AND NITROGEN SURFACE CONCENTRATIONS ON THE TERRITORY OF BULGARIA*, Proceedings of 21st International Conference on Harmonisation within Atmospheric Dispersion Modelling for Regulatory Purposes, HARMO 2022, Code 185541

IV. Други научни публикации (в български и други национални издания) (общо 45):

IV.1. *Ganev K., N. Godev, Chr. Christov*, 1979: An approach towards investigation of the possibilities of the atmosphere for self-purification. (in Bulgarian), Bulgarian Geoph. J. v. V, 3, 9-16.

IV.2. *Ganev K. R. Lazarov* 1979: Application of the splitting up method for solving axial-symetric mesometeorological problems. (in Russian), Bulgarian Geoph. J. v. V, 4, 11-21.

IV.3. *Ganev K.*, 1981: Some results of the numerical modeling of mesometeorological processes in the Sofia field. (in Bulgarian), Bulgarian Geoph. J. v.VII, 3, 3-15.

IV.4. *Ganev K.,D. Yordanov*, 1981: Some examples of admixture transport in the Sofia field. (in Bulgarian), Bulgarian Geoph. J. v.VII, 3, 16-28.

IV.5. *Syrakov E., K. Ganev*, 1982: On the dynamics of rotating mesoscale convective turbulent vortex in an unstable stratified atmosphere. (in Bulgarian), Bulgarian Geoph. J. v.VIII, 3, 3-10.

IV.6. *Syrakov E., K. Ganev*, 1982: On the dynamics of baroclinic nonstratified Planetary Boundary Layer over land and sea. (in Bulgarian), Bulgarian Geoph. J. v.VIII, 3, 11-20.

IV.7. *Ganev K., D. Yordanov*, 1983: On the formulation of the influence function problem in air pollution models with parameterized diffusion in the surface layer. (in Russian), Bulgarian Geoph. J. v. IX, 3, 25-35.

IV.8. *Ganev K., D. Yordanov*, 1984: On the parameterization of pollution transport in the surface layer in the numerical air pollution models. (in Russian), Bulgarian Geoph. J. v.X, 4, 10-18.

IV.9. *Anufriev A., K. Ganev*, 1986: Comparison of a numerical and analitic solutions in the problem of large scale heat transport. (in Russian), Bulgarian Geoph. J. v.XII, 4, 115-121.

IV.10. *Ganev K.*, 1988: Meteorological conditions for the formation of radiowave ducts in the Planetary Boundary Layer. (in Bulgarian), Bulgarian Geoph. J. v.XIV, 1, 3-10.

IV.11. Сираков Е., К. Ганев, Н. Годев, 1988. Далечен пренос на серни и азотни съединения в ПГС при отчитане влиянието на синоптичните условия, орографията и подредените вертикални движения, Bulgarian Geoph. J. v.XIV, 1, 11-27.

IV.12. Сираков Е., К. Ганев, Н. Годев, Е. Георгиева, Е. Богданов, 1988, Регионален модел за изследване разпространението на серни и азотни съединения над територия със сложен релеф, *Bulgarian Geoph. J.* v.XIV, 1, 28-38.

IV.13. Сираков Е., К. Ганев, Н. Годев, 1988. Оценка на взаимното замърсяване между

различни райони при далечен и регионален пренос, *Bulgarian Geoph. J.* v.XIV, 4, 10-21.

IV.14. *Ganev K., D.Yordanov*, 1988: Parametrization of turbulent diffusion and transformation of pollutants in the surface layer inthe numerical models of admixture propagation, Bulg. Geophys. J., v. XIV, No 3, 5-14.

IV.15. *Syrakov E., K. Ganev*, 1989: On the evolution of the PBL characteristics under nocturnal and convective conditions. (in Russian), Z. Meteorol., 39, 2, 76 -80.

IV.16. *Syrakov E., K. Ganev*, 1989: Modelling of sulphur and nitrogen compounds transport within the PBL under nocturnal and convective conditions. (in Russian), Z. Meteorol., 39, 2, 81 - 88.

IV.17. *Syrakov E., K.Ganev, N. Godev, E. Georgieva, E. Bogdanov*, 1989: A telescopic approach for co-ordinated study of the air pollution at long-range and regional transport over a complex terrain. (in Bulgarian), Bulgarian Geoph. J., v. XV, No 3, 9 - 21.

IV.18. *Сираков Е.Д., Годев Н.Г., Ганев К.Г., Трухчев Д.И.,* 1989, Комплексен подход за изследване на разпространението на замърсители в морска среда въз основа на правата и спрегнатата дифузионна задача. - *Океанология, 18, 1989, БАН, С., 3-13.*

IV.19. *Годев Н.Г., Ганев К.Г., Сираков Е.Д., Трухчев Д.И.* 1989, Числено моделиране на разпространението на замърсители в западната част на Черно море. - *Океанология, 18, 1989, БАН, С., 14-30.*

IV.20. *Ganev K.,* 1993: Numerical study of the local flow systems in the “Kozloduy“ NPP region - some preliminary results. 18th General Assembly of the European Geophysical Society, Wiesbaden, 1993. (Also published in Bulgarian Geoph. J., v. XIX, No 1, 9 - 23).

IV.21. Сираков Е., К. Ганев, 1994. Транспорт, химически превръщания и характеристики на замърсяването в локални мащаби, Bulgarian Geoph. J., v. XX, No 3, 5-25.

IV.22. Ганев К., Е. Сираков, 1994, Отчитане на химическите трансформации при моделиране на замърсяването в атмосферата,, *Bulgarian Geoph. J.*, v. XX, No 4, 77-89.

IV.23. *Ganev K., E. Syrakov,* 1995: Application of the method of functions of influence on the problem of reduction of thermal power plants effects on the environment. Bulgarian Geoph. J., v. XXI, No 1, 12-23.

IV.24. Ганев, К., 1995. Термичен и влажностен режим на подложната повърхност в един трислоен модел на локалния климат, *Bulgarian Geoph. J.*, v. XXI, No 4, 3-13

IV.25. Ганев, К., 1996. Числен модел на мезомащабната динамика на атмосферата с параметризирана вертикална структура, *Bulgarian Geoph. J.*, v. XXII, No 1, 15-30

IV.26. *Anufriev A., K. Ganev,* 1996: The role of the turbulent friction in the magnetic field generation. (in Russian), Bulgarian Geoph. J.,v. XXII, No3, 63-68

IV.27. *Ganev K.* 1997: A Three-layer model of the mesoscale atmospheric dynamics. Compt. Rend. Acad. bulg. Sci., v. 50, No.2, 27-30, IF 0.2

IV.28. Ganev K., V. Voinova, 1997: Study of the simulation abilities of a 3D mesoscale model, Bulgarian Geoph. J., v. XXIII, No 3-4

IV.29. *Dimitrova R., N.Miloshev, K.Ganev*, 1998: A prediction fog model with a detailed

treatment of fog microphysics. Bulgarian Geoph. J. v.XXIV, No.1

IV.30. *Yordanov D., K. Ganev*, 1998: On the Transport of Heavy Admixtures from Sources in the Surface Air Layer, Compt. Rend Acad. Bulg. Sci. V.51, No.11-12, IF 0.2

IV.31. *Ganev K.*, 1998: On the correctness of an adjustment procedure in a three layer model of the mesoscale dynamics. Bulgarian Geoph. J. v.XXIV, No.1-2, pp.39-42

IV.32. *Yordanov D., K. Ganev, M. Kolarova*, 1999: On the maximal concentrations from a Gausian plume under near neutral conditions. Meteorology and Hydrology, vol.10, No1-2, p.17-26

IV.33. *Galperin M., D. Yordanov, K. Ganev*, 2000: On the concentrations of polydispersive aerosol in the surface air layer. *Compt. rend. Acad. bulg. Sci.*, v.**53**, No8, 25-28, IF 0.2

IV.34. *Zerefos C., D. Syrakov, K. Ganev, A. Vasaras, K. Kourtidis, M. Tzortziou, M. Prodanova, R. Dimitrova, E. Georgieva, D. Yordanov, N. Miloshev*, 2000: Study of the pollution exchange between Bulgaria and Northern Greece. IV General Conference of the Balkan Physics Union, Veliko Turnovo, 22-27 August 2000, Bulgarian Journal of Physics, 27, № 3, 86-89

IV.35. *Yordanov, D., K. Ganev, M. Kolarova*, 2000. On the absolute maximal concentrations from a Gaussian Plume Model under unstable conditions, *Comt. Rend. Acad. Bulg. Sci.,* **54**, No.4, 29-32, IF 0.2

IV.36. *Dimitrova R., K. Ganev, Ch. Zerefos, A. Vasaras* 2000: Exchange of sulfur and nitrogen compounds between Bulgaria and Greece, estimated with a simple tree-layer pollution transport model. *Bulg. Geoph. J.*, v.XXVI**,** N°1-4, 114-123.

IV.37. *Yordanov D., K. Ganev, M. Kolarova*, 2001: On the Absolute Maximal Concentrations of Particles from a Gaussian Plume Model Under Unstable Conditions, *Comt. Rend. Acad. Bulg. Sci.,* **54**, No.10,49-52, IF 0.2

IV.38. *Ganev K., D. Syrakov, Ch. Zerefos, M. Prodanova, R. Dimitrova, A. Vasaras*, 2002. On some cases of extreme sulfur pollution in Bulgaria or Northern Greece, *Bulg. Geoph. J.*, XXVIII, N°1-4, 15-22

IV.39. Ganev K. 2004: Functions of influence and air pollution models sensitivity, *Compt. Rend. Acad. Bulg. Sci.,* **57**, No.10, 23-28, IF 0.2

IV.40. *Trukhchev D., D. Ivanov, R. Ibrayaev, D. Ivanova, T. Patzireva, K. Ganev, A. Rabie,* 2004, Hydrophysical study of the Bourgas bay. Environmental simulations for the prt of Bourgas expansion project, *Compt. Rend. Acad. Bulg. Sci.,* **57**, No.10, 29-34, IF 0.2

IV.41. Syrakov D., V. Spiridonov, M. Prodanova, K. Ganev, A. Bogatchev, K.Slavov, N. Miloshev, G. Jordanov, 2011, Model estimates for the regional climate changes and its impact on the air quality in Bulgaria, Bulgarian Journal of Meteorology and Hydrology, v. 16, No. 1, pp. 17-29.

IV.42. Syrakov D., H. Branzov, M. Prodanova, K. Slavov, K. Ganev, N. Miloshev, 2011, An early warning system for air pollution DEU to “MARIZAIZTOK” TPPs, Bulgarian Journal of Meteorology and Hydrology, v. 16, No. 1, pp. 26-32

IV.43. Syrakov D., M. Prodanova, I. Etropolska, K. Ganev, N. Miloshev, K. Slavov, G. Jordanov, 2011 Automated system for chemical weather forecast in Bulgaria, Bulgarian Journal of Meteorology and Hydrology, v. 16, No. 1, pp.30-40.

IV.44. Ganev K, Gadzhev G, Georgieva I, Ivanov V, Miloshev N., Assessment of the national emission reduction strategies effects for Bulgaria (2020–2029 and after 2030) on surface FPRM and CPRM concentrations. GeoStudies, 73, (1): pp. 1–10 (2024), https://doi.org/10.3897/geostudies.1.e109372

IV.45. Vladimir Ivanov, Reneta Dimitrova, Ivelina Georgieva, Georgi Gadzhev, Kostadin Ganev, Nikolay Miloshev, Modelling of the heat and the cold risks at Sofia and Varna – preliminary results, GeoStudies, 73, (1): pp. 43–58 (2024), https://doi.org/10.3897/geostudies.73.e113477

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