

Nikolay M. YANEV. List of Publications (2025)

1. Branching stochastic processes with immigration. Bulletin de l'Institut de Mathematiques (Acad. Bulg. Sci.), XV (1972), 71-88. (In Bulgarian).
2. On a class of decomposable age-dependent branching processes. Mathematica Balkanica, 2 (1972), 58-75. (In Russian).
3. Conditions of extinction of λ -branching processes with random λ . Theor. Probab. Appl. XX, 2 (1975), 433-440.
4. On the statistics of branching processes. Theor. Probab. Appl. XX, 3 (1975), 623-633.
5. Estimators for variances in a subcritical branching process with immigration. Annuaire de l'Universite de Sofia (1976/1977), v. 71, 2-e partie, 39-44. (In Russian).
6. Controlled branching processes in random environments. Mathematica Balkanica, 7 (1977), 137-155. (In Russian).
7. Estimation of variances in a branching process with immigration. Proceedings of the 8th Spring Conference of the UBM, Sunny Beach; BAS, Mathematics and Education in Math., Sofia (1979), 608-617. (CA: S.Choukova; In Russian).
8. On the statistics of branching processes with immigration. C. R. Acad. Bulg. Sci. 33, No. 4 (1980), 469-472. (CA: S.Tchoukova-Dantcheva).
9. Controlled branching processes: the case of random migration. C. R. Acad. Bulg. Sci. 33, No. 4 (1980), 473-475. (CA: K. V. Mitov).
10. Controlled branching processes with infinite mathematical means. Proceedings of the 9th Spring Conference of the UBM, Sunny Beach; BAS, Mathematics and Education in Math., Sofia (1980), 182-186. (CA: K.Mitov; In Russian)
11. Dynamics of induced cell proliferation systems within a framework of a branching process model: 1. Numbers of cells in successive generations. CYTOLOGY, 22 (1980), 945-953. (CA: A. Yakovlev; In Russian)
12. Combinatorial and statistical investigations of the structure and organization of DNA. Third International Conference on Automatization and Organization of Experimental Investigations, 1981, v. 3, 250-254. (CA: I.Tzankova, J.Yaneva, I.Ivanov)
13. Critical branching migration processes. Proceedings of the 10th Spring Conference of the U.B.M., Sunny Beach; BAS, Math. and Education in Math., Sofia, 1981, 321-328. (CA: K.V. Mitov, in Russian).
14. Approximation of the nucleotide sequences in DNAs with Markov chains. Proceedings of the 11th Spring Conference of the U.B.M., Sunny Beach; BAS, Math. Educ. Math.,Sofia, 1982, 268-270. (CA: I.Tzankova, J.Yaneva, I.Ivanov).
15. Limit theorems for controlled branching processes with non-homogeneous migration. C. R. Acad. Bulg. Sci. 35, No. 3, 1982, 229-301. (CA: K.V. Mitov)
16. The life-periods of critical branching processes with random migration. Theor.Probab.Appl. XXVIII, 3 (1983), 458-467. (CA: K.V. Mitov)

17. Dynamics of induced cell proliferation systems within a framework of a branching process model: 2. Some characteristics of the cell cycle temporal organization. *CYTOLOGY*, 25, 1983, 818-826. (CA: A. Yakovlev, in Russian).
18. Critical branching processes with decreasing state-dependent immigration. *C. R. Acad. Bulg. Sci.* 36, No. 2, 1983, 193-196. (CA: K.V.Mitov)
19. Subcritical branching migration processes. *Pliska – Studia Mathematica Bulgarica*, 7, 1984, 75-82. (CA: K.V.Mitov, in Russian).
20. Critical Galton-Watson processes with decreasing state-dependent immigration. *J. Appl. Probab.* 21 (1984), 22-39. (CA: K.V. Mitov).
21. Limit theorems for controlled branching processes with decreasing emigration. *Pliska - Studia Mathematica Bulgarica*. V. 7, 1984, 83-89. (CA: K.V. Mitov, in Russian).
22. Controlled branching processes with nonhomogeneous migration. *Pliska - Studia Math. Bulg.* 7, 1984, 90-96. (CA: K.V. Mitov, in Russian).
23. Continuous-time branching processes with decreasing state-dependent immigration. *Adv. Appl. Probab.* 16 (1984), 697-714. (CA: V.A. Vatutin, K.V. Mitov)
24. Branching processes with decreasing migration. *C.R.Acad.Bulg.Sci.* 37, No. 4 (1984), 465-468. (CA: K.V. Mitov)
25. Identification of nucleotide sequences common for the genes of a multi-gene family. International conference on computer-based scientific research, 1984, v. II, 597-601. (CA: I.Tzankova, J.Yaneva, I.Ivanov)
26. Generalization of a theorem for a subcritical branching process with random migration. *Proceedings of the 13th Spring Conference of the U.B.M., Sunny Beach; BAS, Mathematics and Education in Math., Sofia (1984)*, 379-383. (CA: K. Mitov, M. Tanoushev; In Russian)
27. Critical Galton-Watson processes with decreasing state-dependent immigration. *Serdica - Bulg. Math. Journal*, v.10, 1984, 412-424. (CA: V.A. Vatutin, K.V. Mitov ; In Russian)
28. Bellman-Harris branching processes with state-dependent immigration. *C.R.Acad.Bulg.Sci.* 22 (1985), 757-765. (CA: K.V. Mitov)
29. On the distribution of marks over a proliferating cell population obeying the Bellman-Harris branching process. *Mathematical Biosciences* 5 (1985), 159-173. (CA: A. Yakovlev).
30. Critical branching processes with nonhomogeneous migration. *Annals of Probability*, 13 (1985), 923-933. (CA: K. Mitov).
31. Limit theorems for estimators in Galton-Watson branching processes. *C. R. Acad. Bulg. Sci.*, v. 38, No. 6, 1985, 683-686.
32. A critical branching process with decreasing migration. *Serdica - Bulg.Math.Publ.* 11, No. 3, 1985, 240-244. CA: K.V.Mitov)
33. Branching Stochastic Structures. *Proceedings of the 14th Spring Conference of the U.B.M., Sunny Beach; BAS, Math. and Education in Math., Sofia, 1985*, 171-184. (In Russian).
34. Subcritical branching processes with random migration stopped at zero. *Proceeding of the 14-th Spring Conference of the U.B.M., Sunny Beach, 1985*, 480-483. (CA: K.V.Mitov)

35. Limit theorems for supercritical branching migration processes. Proceedings of the 14-th Spring Conference of the U.B.M., Sunny Beach, 1985, 590-593.
36. Branching processes with decreasing state-dependent immigration. *Serdica - Bulg. Math. Publ.*, v. 11, No. 1, 1985, 25-41. (CA: K.V.Mitov; In Russian)
37. Bellman-Harris branching processes with state-dependent immigration. *J. Appl. Probab.* 22 (1985), 757-765. (CA: K.V. Mitov)
38. Limit theorems for estimators of variances in a branching process with immigration. *Serdica - Bulg. Math. Publ.* 12, No. 3, 1986, 134-142. (CA: S.Tchoukova, in Russian).
39. Critical branching migration processes stopped at zero. Proceedings of the 15th Spring Conference of the U.B.M., Sunny Beach; BAS, Mathematics and Education in Math., Sofia, 1986, 511-517.(CA: V.A.Vatutin, K.V.Mitov, in Russian).
40. Limit theorems for estimators of individual characteristics in a Galton-Watson process. *Serdica - Bulg. Math. Publ.* 12, no. 3, 1986, 143-153. (In Russian)
41. Optimal moments for quality control in some technological processes. In "Math. methods in quality control theory", v.2, U.B.S., Sofia, 1986, 101-110. (CA: M.Tanouchev, In Bulgarian)
42. Supercritical branching processes with random migration stopped at zero. *Mathematics and Edu. in Math.*, BAS, 1987, 538-544. (CA: M.Slvtchova)
43. Bellman-Harris branching processes and distribution of marks in proliferating cell populations. Proceedings of the I-st World Congress of the Bernoulli Society, v. 2, 1987, 725-728. (CA: A.Yakovlev, M.S.Tanoushev)
44. Bellman-Harris branching processes with special type of state-dependent immigration. *C. R. Acad. Bulg. Sci.*, 41, No. 9, 1988, 22-25. (CA: K.V.Mitov)
45. Branching processes with multiplication. *Mathematics and Education of Mathematics*, BAS, 1988, 385-389. (CA: G.Yanev)
46. Limit theorems for non-critical Bellman-Harris branching processes with state-dependent immigration. *C. R. Acad. Bulg. Sci.*, 41, 1988, 12, 27-30. (CA: M.N.Slvtchova).
47. Optimal moments for quality control. *Serdica - Bulg. Math. J.*, 14, 1988, 333-342. (CA:M.S.Tanoushev,in Russian).
48. A method for estimation of the probability of the cell reproductive death. *Studia Biophysica*, v. 123, No. 2, 1988, 117-124. (CA: P.V.Balikin, P.E.Gut, A.V.Zorin, A.Yakovlev, M.S. Tanoushev ; In Russian).
49. Computer Simulation of Cell Renewal in Small Intestine of Intract and Irradiated Animals. *Syst. Anal. Model. Simul*, v. 6, No.4 (1989), 293-307. (CA: Gusev Yu.V., A.Yakovlev)
50. Non-parametric statistical inference for Galton-Watson branching processes. Proceedings of 6th European Y. S. Meeting, Prague, Charles University, 1989, 269-276. (CA: I.Tzankova)
51. Conditions for extinction of controlled branching processes. *Mathematics and Education of Mathematics*, 1989, 550-556. (CA: G.P.Yanev)
52. On the critical branching migration processes with predominated emigration. *C. R. Acad. Bulg. Sci.*, 12, 1989. (CA: G.P.Yanev)

53. Bellman-Harris branching processes with a special type of state-dependent immigration. *Adv. Appl. Probab.* 21 (1989), 270-283. (CA: K.V.Mitov).
54. Multitype Critical Galton-Watson Branching Processes with Final Types. *Discrete Mathematics*, v.1, no.4, 1989, 113-122. (CA: V.Vatutin)
55. Convergence in distribution of supercritical Bellman-Harris Branching processes with state-dependent immigration. *Mathematica Balkanica*, 1990, No.3, 35-42. (CA: M.N.Slvtchova)
56. Some investigations on the optimization of the verification intervals for measuring instruments. *INSIMET'90* (10th Int. Symp. on the Metrology), 1990, 11-14. (CA: M.Tanushev, P.Parushev, I.N.T7mniskov)
57. Extinction of controlled branching processes in random environments. *Mathematica Balkanica* 1990, No. 4, 368-380. (CA: G.P.Yanev)
58. Limit Theorems for Sums of a Random Number of Random Variables and Applications in Branching Processes. In : *Selected Talks on Stochastic Processes*. Aristotle University, Thessaloniki, 1990, 1-28. (CA: J.-P. Dion)
59. Non-critical Bellman-Harris branching processes with state-dependent immigration. *Serdica - Bulg. Math. Publ.* v.17, 1991, 67-79. (CA: M.Nikiforova-Slvtchova).
60. A New Transfer Limit Theorem. *C. R. Acad. Bul. Sci.* 44, 1991, No. 1. 19-22. (CA: J.-P. Dion)
61. On a New Model of Branching Migration Processes. *C. R. Acad. Bul. Sci.*, 44, 1991, #3. 19-22. (CA: G.P.Yanev)
62. Limiting Distributions of Galton-Watson Branching Processes with a Random Number of Ancestors. *C. R. Acad. Bul. Sci.* 44, 1991, No.3, 23-26. (CA: J.-P. Dion)
63. Branching Processes with Multiplication: The Supercritical Case. *C. R. Acad. Bul. Sci.*, 44, 1991, #4, 15-18. (CA: G.P.Yanev)
64. Estimation Theory for Branching Processes with and without immigration. *C. R. Acad. Bul. Sci.* 44, 1991, #4, 19-22. (CA: J.-P. Dion)
65. Estimation Theory for the Variance in a Branching Process with an Increasing Random Number of Ancestors. *C. R. Acad. Bul. Sci.*, v.45, 1992, # 11, 27-30. (CA: J.-P. Dion)
66. Statistical Inference for Branching Processes with Censored Observations. *C. R. Acad. Bul. Sci.*, v.45, 1992, # 12, 21-24, (CA: J.-P. Dion)
67. Statistical Inference for Branching Processes with an Increasing Random Number of Ancestors. *J. Stat. Planning and Inference*, 39, 1994, 329-352 (CA:J.P.-Dion)
68. Non-critical branching processes with two types of state-dependent immigration. *C. R. Acad. Bul. Sci*, v.47, No. 6, 1994, 13-16. (CA: M. Slvtchova-Bojkova).
69. CLT for martingales in BGWR branching processes with some statistical applications. *C. R. Acad. Bul. Sci.*,v.47, No. 10, 1994, 17-20. (CA: J.P.Dion)
70. Age-dependent branching processes with state-dependent immigration. In: C.C. Heyde (Editor), *Branching Processes, Proceedings of the First World Congress. Lecture Notes in Statistics*, 99. Springer-Verlag, New York, 1995, 77-89. (CA: M. Slvtchova-Bojkova).

71. Critical branching processes with random migration. In: C.C. Heyde (Editor), *Branching Processes (Proceedings of the First World Congress)*. Lecture Notes in Statistics, 99, Springer-Verlag, New York, 1995, 36-46. (CA: G.P. Yanev)
72. Central limit theorem for martingales in BGWR branching processes with some statistical applications. *Math. Methods of Statistics*, V. 4, No. 3, 1995, 344-358. (CA: J.P.-Dion)
73. Branching Processes with two types of emigration and state-dependent immigration. In: *Lecture Notes in Statistics 114*, Springer-Verlag, New York, 1996, 216-228. (CA:G.P. Yanev)
74. Limit Theorems For Regenerative Processes. *C. R. Acad. Bulg. Sci.*, 49, No. 6, 1996, 29-32. (CA:K.V.Mitov, S.A. Grishechkin).
75. Limit theorems for branching processes with random migration stopped at zero. In: K. Athreya and P. Jagers (Editors). *Classical and Modern Branching Processes. The IMA volumes in Mathematics and its Applications*, v.84, Springer, New York, 1997, 323-336. (CA:G.P.Yanev).
76. Two-Stage Renewal Processes. *C. R. Acad. Bulg. Sci.*, 50, No.1, 1997, 13-16. (CA: K.V.Mitov, S.A. Grishechkin).
77. Age-dependent branching processes with emigration and population dynamics. *Bulletin of the ISI, 51 Session, Contributed Papers, Tome LVII, Book 2*, 557- 558 (1997). (CA:M.N.Slavchova-Bojkova).
78. Limit theorems and estimation theory for branching processes with an increasing random number of ancestors. *J. Appl. Probab*, 34, 309 -327 (1997). (CA:J.-P. Dion).
79. Branching Processes with Random Migration as Mathematical Models of Population Dynamics. *Bulletin of the ISI, 51 Session, Invited Papers Meetings, Tome LVII, Book 1*, 177-180 (1997).
80. One dimensional analogue of the global optimization, *Compt. Rend. de l'Acad. Bulg. de Sci.*, 2000, v. 53, no. 5, (CA: E. Galperin).
81. Limit theorems for branching processes with random migration components. *Pliska - Stud. Math. Bulgar.*, Vol. 13 (2000), 199-205. (CA: G.Yanev)
82. Extremal problems on probability distributions. *Mathematical and Computer Modelling*, 32, (2000), 877-886 (CA: E. Galperin).
83. A system for simulation and estimation of branching processes. *Pliska - Stud. Math. Bulgar.*, Vol. 13 (2000), 173-178. (CA:D. Nitcheva)
84. One dimensional analogue of the global optimality criterion, *Nonlinear Analysis - Theory, Methods and Applications, Series A: Theory and Methods*. 44, (2001), 759-766. (CA: E. Galperin).
85. Regenerative processes in the infinite mean cycle case, (2001), *J. Appl. Prob.*, 38, 65-179. (CA:K.V.Mitov)
86. Limit theorems for renewal, regeneration and branching processes. *Proc. 30th Spring Conf. of the Union of Bulgarian Mathematicians*, 32-41, 2001. (CA:K.V.Mitov)
87. Limit theorems for alternating renewal processes in the infinite mean case, (2001), *Advances in Appl. Prob.* 33, 896-911, (CA: K.V.Mitov)

88. Critical Bellman-Harris branching processes with infinite variance allowing state-dependent immigration, *Stochastic Models*, 18 (2), 281-300 (2002). (CA: K.V.Mitov)
89. Continuous time bisexual branching processes. *C. R. Acad. Bul. Sci, T.* 56, No. 8, 2003, 5-10. (CA: M.Molina)
90. Critical Branching Regenerative Processes with Migration. *J. Appl. Stat. Sci.*, v. 12, No. 1, 41-54, 2003. (CA: G.P.Yanev, K.V.Mitov)
91. Robust estimation and simulation of branching processes. *C.R.Acad.Bul.Sci, T.* 57, No. 5, 2004, 19-23. (CA: V.Stoimenova, D.Atanasov)
92. A Critical Branching Process with Stationary-Limiting Distribution. *Stochastic Analysis and Applications*, v.22, no.3, 2004, 721-738. (CA: G.P.Yanev)
93. Simulation and Robust Modifications of Estimates in Branching Processes. *Pliska - Stud. Math. Bulgar.*, v.16, 259-271, 2004. (CA: V.Stoimenova, D.Atanasov).
94. Limiting Distributions for Lifetimes in Alternating Renewal Processes. *Pliska - Stud. Math. Bulgar.*, 2004, v.16, 137-145. (CA: K.V.Mitov).
95. Branching Processes with Multi-Type Random Control Functions. *C. R. Acad. Bul.Sci*, 2004, 57, No. 6, 29-36.(CA: Ines M. Del Puerto).
96. Renewal, Regenerative, and Branching Processes with Stable Distributions. *Journal of Mathematical Sciences*, August 2004, Vol. 122, no. 4, pp. 3438-3448(11), Kluwer Academic Publishers. (CA: Mitov K.V.; Yanev G.P.).
97. Two-type Markov branching processes with immigrations as a model of leukemia cell kinetics. *C. R. Acad. Bulg. Sci.* 58 (9), 2005, 1025-1032. (CA: C. Jordan, S. Catlin, A. Yu. Yakovlev)
98. Algorithms for generation and robust estimation of branching processes with random number of ancestors. *Proceedings of the 34th Spring Conference of the UBM: Mathematics and Education in Math.*, Sofia, 2005, 196 - 201. (CA: V. Stoimenova, D. Atanasov)
99. Parametric estimation in branching processes with an increasing random number of ancestors. *Pliska-Studia Mathematica Bulgarica*, 2005, v. 17, 295 - 312. (CA: V. Stoimenova)
100. Statistical inference for processes depending on environments and application in regenerative processes. *Pliska - Studia Mathematica Bulgarica*, 2005, v. 17, 109-136. (CA: Ch. Jacob, N. Lalam)
101. Superpositions of renewal processes with heavy-tailed interarrival times. *Statistics & Probability Letters*, 2006, v. 76, no.6, 555-561. (CA: K. Mitov)
102. Distributions of continuous labels in branching stochastic processes. *C.R. Acad. Bulg. Sci.*, 2006, v. 60, 1123-1130. (CA: A. Yu. Yakovlev)
103. Analysis of a Recurrence Related to Critical Nonhomogeneous Branching Processes. *Stochastic Analysis and Applications*, 2006, v. 24, no. 1, 37-59. (CA: Michael Drmota, Guy Louchard).
104. Branching stochastic processes with immigration in analysis of renewing cell populations. *Mathematical Biosciences* 203, 2006, 37-63. (CA: A. Yu. Yakovlev)
105. Branching populations of cells bearing a continuous label. *Pliska - Stud. Math. Bulg.* 18, 2007, 387-400. (CA: A. Yu. Yakovlev)

106. Age and residual lifetime distributions for branching processes. *C.R.Acad.Bulg.Sci.* 77, 2007, 503-513. (CA: A. Yu. Yakovlev)
107. Estimators in branching processes with immigration. *Pliska - Studia Mathematica Bulgarica*, 2007, v. 18, 19-40 (CA: D. Atanasov, V. Stoimenova)
108. Stationary distributions for branching processes with multi-type random control functions. *J. Appl. Stat. Sci.*, 2008, v. 16, No.1, 91-102. (CA: I.M. Del Puerto)
109. Branching processes as models of progenitor cell populations and estimation of the offspring distributions. *JASA (J.Amer.Stat.Assoc.)*, 2008, v. 103, no. 484, 1357-1366. (CA: A. Yu. Yakovlev, V. K. Stoimenova)
110. Offspring mean estimators in branching processes with immigration. *Pliska - Stud. Math. Bulg.*, 2009, v. 19, 69-83. (CA: D. Atanasov, V. Stoimenova)
111. Relative frequencies in multitype branching processes. *Ann. Appl. Probab.*, 2009, v.19, No.1, 1-14. (CA: A. Yu. Yakovlev)
112. Critical randomly indexed branching processes. *Statistics and Probability Letters*, 2009, v.79, 1512-1521. (CA: G.K.Mitov, K.V.Mitov)
113. Limiting distributions in multitype branching processes. *Stochastic Analysis and Applications*, 2010, v.28, 1040-1060. (CA: A. Yu. Yakovlev)
114. Branching Processes in Cell Proliferation Kinetics. In: M. G. Velasko et al. (Eds.), *Lecture Notes in Statistics 197*, 2010, 159-179.
115. Limit Theorems for Critical Randomly Indexed Branching Processes. In: M. G. Velasko et al. (Eds.), *Lecture Notes in Statistics 197*, 2010, 95-109. (CA: K. V. Mitov, G. K. Mitov)
116. Modeling Cell Kinetics Using Branching Processes with Nonhomogeneous Poisson Immigration. *Compt.Rend.Acad.Bulg.Sci.*, Tome 63, No. 10, 2010, 1405-1414. (CA: O. Hyrien)
117. Two-Type Age-Dependent Branching Processes with Inhomogeneous Immigration as Models of Renewing Cell Populations. *Pliska – Studia Mathematica Bulgarica*, Vol. 20, 2011, 81-108. (CA: O. Hyrien)
118. Two-Type Reducible Age-Dependent Branching Processes with Non-Homogeneous Poisson Immigration. *CRABS*, Tome 64, n. 4, 2011, 469-478. (CA:O. Hyrien)
119. Asymptotic behaviour of cell populations described by two-type reducible age-dependent branching processes with non-homogeneous immigration, *Mathematical Population Studies*, 19:164-176, 2012. (CA: O. Hyrien)
120. Supercritical Markov Branching Processes with Non-Homogeneous Poisson Immigration. *Pliska – Stidia Math. Bulg.* 22 (2013), 57-70. (CA: Ollivier Hyrien, Kosto V. Mitov)
121. Sevastyanov branching processes with non-homogeneous Poisson immigration. *Proceedings of the Steklov Institute of Mathematics*, 2013, Vol.282, pp. 172-185. (K.V. Mitov)
122. Limit theorems for supercritical Markov branching processes with non-homogeneous Poisson immigration. *CRABS*, T. 66, No. 4, 2013, 485-492. (Ollivier Hyrien, Kosto V. Mitov)

123. CLT for Sevastyanov Branching Processes with Non-Homogeneous Immigration. *J. Appl.Stat.Sciences*, Volume 21, Number 3, 2013, pp. 229–237. (CA: Ollivier Hyrien, Kosto V. Mitov)
124. Limit Theorems for Subcritical Markov Branching Processes with Non-Homogeneous Poisson Immigration. *Compt.Acad.Bulg.Sci.* Tome 68, No 3, 2015, 313-320. (CA: Ollivier Hyrien, Kosto V. Mitov)
125. Stochastic modeling of stress erythropoiesis using a two-type age-dependent branching process with immigration. *J. Math. Biol.* (2015) 70:1485–1521. (CA: O. Hyrien • S. A. Peslak • J. Palis)
126. A test of homogeneity for age-dependent branching processes with immigration. *Electronic Journal of Statistics.* Vol. 9 (2015) 898–925.(CA: Ollivier Hyrien, Craig T. Jordan)
127. Subcritical Markov Branching Processes with Non-Homogeneous Poisson Immigration. *Pliska – Stidia Math. Bulg.* 24 (2015), 35-54. (CA: Ollivier Hyrien, Kosto V. Mitov)
128. Supercritical Sevastyanov branching processes with non-homogeneous Poisson immigration. In: I.M. del Puerto et al. (eds.), *Branching Processes and Their Applications*, Lecture Notes in Statistics 219, DOI 10.1007/978-3-319-31641-3_9 © Springer 2016, 151-166. (CA: O. Hyrien, K. V. Mitov)
129. Limiting Distributions for Alternating Regenerative Branching Processes. *Comptes rendus de l'Academie bulgare des Sciences*, Tome 69, No 10, 2016, 1251-1262. (CA: K.V.Mitov).
130. Subcritical Sevastyanov Branching Processes with Non-Homogeneous Poisson Immigration. *J. Appl. Prob.* 54, 2, 569-587, 2017. (CA: Ollivier Hyrien, Kosto V. Mitov)
131. Critical Markov branching processes with non-homogeneous Poisson immigration. *Pliska - Studia Mathematica*, 27, 55-72, 2017. (CA: Kosto V. Mitov).
132. Limit Theorems for Some Classes of Alternating Regenerative Branching Processes. *Pliska – Stidia Mathematica*, *Pliska – Stidia Mathematica*, 27, 73-90, 2017. (CA: Kosto V. Mitov).
133. Limiting Distributions for Multitype Markov Branching Processes with Non-homogeneous Poisson Immigration. *C. R. Acad. Bulg. Sci.* Tom 54, no. 2,1627-1634, 2017. (CA: Hyrien, O., Mitov, K. M.).
134. Multitype branching processes with inhomogeneous Poisson immigration. *Adv.App.Probability*, Vol. 50, Issue A (Branching and Applied Probability), 2018 , 211-228. (CA: Ollivier Hyrien, Kosto V. Mitov)
135. Poisson random measures and critical Sevastyanov branching processes. *Stochastic Models*, 35, 2,197-208, 2019. (CA:Maroussia Slavtchova-Bojkova)
136. Branching Stochastic Evolutionary Models of Cell Populations. *J. Biomath. Communications*, Vol. 6, No 2 (2019), 78-95. (CA: O. Hyrien)
137. Age-Dependent Branching Processes with Non-Homogeneous Poisson Immigration as Models of Cell Kinetics. In: A. Almudevar et al. (eds.), *Statistical Modeling for Biological Systems*, © Springer Nature Switzerland AG 2020, 21-46. (CA: O. Hyrien).

138. Stochastic Models of Cell Proliferation Kinetics Applying Branching Processes. In: A. Almudevar et al. (eds.), *Statistical Modeling for Biological Systems*, © Springer Nature Switzerland AG 2020, 3-20.
139. Stochastic Modeling and Estimation of Covid-19 Population Dynamics. *C.R. Acad. Bulg. Sci.*, V. 73, 4, 2020, 451-460. (CA: Vessela K. Stoimenova, Dimitar V. Atanasov)
140. Branching Stochastic Processes with Immigration as Models of Covid-19 Pandemic Development. *C.R. Acad. Bulg. Sci.*, V. 73, 11, 2020, 1489-1498. (CA: Vessela K. Stoimenova, Dimitar V. Atanasov)
141. Continuous-time controlled branching processes. *C.R. Acad. Bulg. Sci.*, V. 74, 3, 2021, 332-342. (CA: Ines M. del Puerto, George P. Yanev, Manuel Molina, Miguel Gonzalez)
142. Poisson Random Measures and Noncritical Multitype Markov Branching Processes. *C.R. Acad. Bulg. Sci.*, V. 74, 5, 2021, 658-668. (CA: Maroussia N. Slavtchova-Bojkova, Ollivier Hyrien)
143. Controlled branching processes with continuous time. *J. Appl. Prob.* 58, 2021.830-848. (CA: Miguel Gonzalez, Manuel Molina, Ines M. del Puerto, George P. Yanev)
144. Branching Process Modelling of COVID-19 Pandemic Including Immunity and Vaccination. *Stochastics and Quality Control*, De Gruyter, 2021, ISSN: 2367-2404, DOI:<https://doi.org/10.1515/eqc-2021-0040>, SJR (Scopus):0.191 (CA: Dimitar Atanasov, Vessela Stoimenova)
145. Statistical modelling of COVID-19 pandemic development applying branching processes. *Journal of Applied Statistics*, Taylor and Francis Online, 2021, DOI:<https://doi.org/10.1080/02664763.2021.2006154>, SJR (Scopus):0.509, JCR-IF (Web of Science):1.404 (Dimitar Atanasov, Vessela Stoimenova)
146. Poisson random measures and supercritical multitype Markov branching processes. *Stochastic Models*, 39, 1, 141-160 (2023), (M. Slavtchova-Bojkova, O. Hyrien) <https://doi.org/10.1080/15326349.2021.201644>
147. Subcritical multitype Markov branching processes with immigration generated by Poisson random measures. *Communications in Statistics - Theory and Methods*. Volume 53, 2024, Issue 14, Pages 5076-5091. Received 27 Jun 2022, Accepted 07 Apr 2023, Published online: 04 May 2023. <https://doi.org/10.1080/03610926.2023.2205972> (M. Slavtchova-Bojkova, O. Hyrien)
148. A branching stochastic evolutionary model of the B-cell repertoire. *Journal of Mathematical Biology* (2024) 89:10. <https://doi.org/10.1007/s00285-024-02102-y> . (CA: O. Hyrien).
149. Critical Markov branching process with infinite variance allowing Poisson immigration with increasing intensity. *Stochastic Analysis and Applications*, 2024, Vol. 42, Issue 4 , 828-841. (CA: K.V.Mitov).
150. On a class of critical Markov branching process with non-homogeneous Poisson immigration. *Stochastic Models*, 2025, 41(4), 610-623. (CA: K.V.Mitov)
151. Markov branching process with infinite variance and non-homogeneous immigration with infinite mean. *arXiv:2501.03270v1 [math.PR]* 4 Jan 2025 (CA: K.V.Mitov) <https://doi.org/10.48550/arXiv.2501.03270>

BOOKS and CHAPTERS

1. Transient Processes in Cell Proliferation Kinetics. Lecture Notes in Biomathematics, v. 82, Springer, New York, 1989. (CA: A.Yakovlev)
2. Exercise Manual in Mathematical Statistics. Sofia University Press, Sofia, 1989. (CA: M.S.Tanoushev; in Bulgarian)
3. Probability and Statistics. Sofia University Press, Sofia, 1990. Second edition 1998. Third edition 2007. (CA: B.Dimitrov; in Bulgarian)
4. Branching Stochastic Processes. University Publ. "St. Kl.Ohridski", Sofia, 2007. Second edition 2018 (CA: M. Slavtchova-Bojkova; in Bulgarian)
5. Regenerative branching processes, Ch.3 (37-62) in: Records and Branching processes, Ed. M.Ahsanullah, G.P.Yanev, Nova Science Publishers, Inc., New York, 2008. (CA: K.V.Mitov)
6. Statistical inference for branching processes, Ch.7 (143-168) in: Records and Branching processes, Ed. M.Ahsanullah, G.P.Yanev, Nova Science Publishers, Inc., New York, 2008.
7. Branching processes with multi-type random control functions: Subcritical case, Ch. 11 (363-374) in: Leading-Edge Applied Mathematical Modeling Research. Editor: M.P.Alvarez, Nova Science Publishers, Inc., New York, 2008. (CA: I.M. Del Puerto)