

Curriculum Vitae of Leoneed Mihaylov Kirilov, Ph.D.



Introduction

I work at the Inst. of Information and Communication Technologies (IICT) – Bulgarian Academy of Sciences, department “Information Processes and Decision Support Systems” since 1988.

I graduated MSc of mathematics – operations research at Sofia University “St. Kliment Ochriski” in 1984. From 1988 to 1992 I was PhD student at the Institute of Technical Cybernetics and Robotics (now Inst. of Information and Communication Technologies).

My research areas up to now are Optimization Methods and Applications, Multiple Criteria Decision Making, Decision Support Systems, Modelling, Multiple Objective Optimization, Decision Analysis, Decision Making, Hydrologic Modelling, Schedule Optimization, Monte Carlo Simulation, Materials Science, Nanotechnology. Up to now my research activity can be summarized in about 50 research and applied projects. The scientific results are described in about 100 articles, published in journals and proceedings of international conferences and two monographs (almost all in English).

Personal Information

Date and place of birth	July 9 th 1961; Pirdop, Bulgaria
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Education

Highest grade in Rep. of Bulgaria – Excellent (6.00), Lowest grade – Poor (2.00)

Doctor of Philosophy

Inst. of Information Technologies – Bulg. Academy of Sciences 1988-1991
Subject of doctoral thesis: Interactive Methods for Solving Multiple Objective Mathematical Programming Problems

Master of Science (Mathematics-Operations Research)

Sofia University 1979-1984
Subject of diploma work: Methods for solving differential inclusions

Specialization - Financial Management

Univ. of National and World Economy – Postgraduate studies Inst., Sofia – 1995-1997

Subject of diploma work: Credit Portfolio Management of a Trade Bank

Employment History

Docent (Assoc. Prof.) 1999 – Present

Research Associate I degree 1996-1998

Research Associate II degree 1992-1996

Programmer 1991-1992

Post graduate student 1988-1991

at the Inst. of Information and Communication Technologies (IICT) (former Inst. of Information Technologies from 1991 to 2010, former Inst. of Informatics from 1990 to 1991; a part of former Inst. of Technical Cybernetics and Robotics to 1990)

Bulgarian Acad. of Sciences,

Acad. G. Bonchev St., bl.2,

1113 Sofia, Bulgaria

Mathematician 1984-1987

at the Central Inst. of Computing Machinery,

Tzarigradsko shosse, 7th km, Sofia, Bulgaria

References

Here are the names of several people who can give references for me.

- Corr. Mem. Prof. D.Sc. Svetozar Margenov, director of IICT – BAS, Bulgaria
- Academician Vassil Sgurev, IICT – BAS, Bulgaria
- Academician Ivan Popchev, IICT – BAS, Bulgaria
- Prof. Kaisa Miettinen, University of Jyvaskyla, Finland
- Prof. Pekka Korhonen, Aalto University, Finland

Spoken Languages

- English – Very good (Medium, Good, Very good, Fluent)
- Russian – Very Good
- French - Medium
- Bulgarian – Native language

Membership

- International Society on Multiple Criteria Decision Making
- Bulgarian Society on Operational Research – a member of IFORS
- Union of Scientists in Bulgaria

End of CV (Résumé) of Leoneed M. Kirilov. Appendices follow (papers).

APPENDICES

Publications

Journal Articles

- V. Myasnichenko, N. Sdobnyakov, L. Kirilov, R. Mikhov, S. Fidanova (2019) Monte Carlo Approach for Modeling and Optimization of One-Dimensional Bimetallic Nanostructures, Numerical Methods and Applications – NMA 2018 (G. Nikolov, N. Kolkovska, K. Georgiev - Eds.), Lecture Notes in Computer Science book series (LNCS), vol. 11189, Springer, pp. 133-141. Print ISBN 978-3-030-10691-1 Online ISBN 978-3-030-10692-8, https://doi.org/10.1007/978-3-030-10692-8_15
- Kirilov L., V. Guliashki, B. Staykov (2019) Web Based Decision Support System for Solving Multiple Objective Decision Making Problems, book chapter 7 in Technological Innovations in Knowledge Management and Decision Support (Ed. Nilanjan Dey), IGI Global, 339 pages, pp. 150 – 175, ISBN13: 9781522561644, ISBN10: 1522561641, EISBN13: 9781522561651, DOI: 10.4018/978-1-5225-6164-4
- Myasnichenko V. S., L. Kirilov, R. Mikhov, St. Fidanova, N. Yu. Sdobnyakov (2018) Simulated Annealing Method for Metal Nanoparticle Structures Optimization, Advanced Computing in Industrial Mathematics (Krassimir Georgiev, Michail Todorov, Ivan Georgiev – Eds.), Springer Series - Studies in Computational Intelligence (SCI), vol. 793, Springer, pp. 277-289.
- Mitev Y., L. Kirilov (2018 under press) Key concepts of the deployment of the Information Technologies Infrastructure Library (ITIL) - structure, conceptions, deployment, The Journal of Information Technologies and Control, <https://www.degruyter.com/view/j/itc>, vol. 16, No1, under press.
- Kirilov L., V. Guliashki (2017) AN ALGORITHM FOR GENERATING A DISPERSED POPULATION OF FEASIBLE SCHEDULES FOR FLEXIBLE JOB SHOP PROBLEMS, The Journal of Information Technologies and Control, <https://www.degruyter.com/view/j/itc>, vol. 15, No3, pp. 16-19.
- Myasnichenko V. S., P. M. Ershov, N. Yu. Sdobnyakov, R. Mikhov, L. Kirilov (2017) ABOUT THERMAL STABILITY OF COPPER CLUSTERS WITH 100-150 ATOMS, PHYSICO-CHEMICAL ASPECTS OF STUDYING CLUSTERS, NANOSTRUCTURES AND NANOMATERIALS - INTER-UNIVERSITIES' BOOK OF RESEARCH PAPERS, VOL. 9, Tver State University, Tver, Russia, pp. 330-336, ISBN 978-5-7609-1275-6, ISSN 2226-4442, DOI: 10.26456/pcascnn/2017.9.330 (**in Russian**)
В.С. Мясниченко, П.М. Ершов, Н.Ю. Сдобняков, Р. Микхов, Л. Кирилов (2017) О ТЕРМИЧЕСКОЙ СТАБИЛЬНОСТИ КЛАСТЕРОВ МЕДИ С РАЗМЕРОМ 100 - 150 АТОМОВ, ФИЗИКО-ХИМИЧЕСКИЕ АСПЕКТЫ ИЗУЧЕНИЯ КЛАСТЕРОВ, НАНОСТРУКТУР И НАНОМАТЕРИАЛОВ - МЕЖВУЗОВСКИЙ СБОРНИК НАУЧНЫХ ТРУДОВ, в ы п у с к 9, «Тверской государственный университет», ТВЕРЬ 2017, Россия, ISBN 978-5-7609-1275-6, ISSN 2226-4442, DOI: 10.26456/pcascnn/2017.9.330, стр. 330 – 336.
- L. Kirilov, D. Keremedchiev (2017) A MULTIOBJECTIVE MODEL FOR TEST ASSEMBLING OPTIMISATION, Paper presented at the XV Jubilee Int. Scientific Conference “Knowledge in Practice”, Bansko, Bulgaria, 15 – 17 December 2017, Published in KNOWLEDGE - INTERNATIONAL JOURNAL SCIENTIFIC PAPERS, Institute of knowledge management – Skopje, vol. 20.5, ISSN 2545-4439 (printed), 1857-923X (e-version), pp. 2165 – 2169.
- Myasnichenko V. S., V. V. Kulagin, D. N. Sokolov, N. Yu. Sdobnyakov, L. M. Kirilov (2016) Effect of external pressure on the phase transition temperature in bimetallic argentic nanoparticles (**in Russian**) *Interuniversities' book of research papers*, vol. 8, pp. 259-265, Tver, Russia, ISBN 978-5-7609-1161-2, ISSN 2226-4442.
https://www.researchgate.net/publication/311586474_Effect_of_external_pressure_on_the_phase_transition_temperature_in_bimetallic_argentic_nanoparticles_in_Russian?enrichId=rgreq-2443a29a553edfb05652325746dcb691-
В.С. Мясниченко, В.В. Кулагин, Д.Н. Соколов, Н.Ю. Сдобняков, Л. М. Кирилов (2016) ВЛИЯНИЕ ВНЕШНЕГО ДАВЛЕНИЯ НА ТЕМПЕРАТУРУ ФАЗОВЫХ ПЕРЕХОДОВ В БИМЕТАЛЛИЧЕСКИХ СЕРЕБРОСОДЕРЖАЩИХ НАНОЧАСТИЦАХ, ФИЗИКО-ХИМИЧЕСКИЕ АСПЕКТЫ ИЗУЧЕНИЯ КЛАСТЕРОВ, НАНОСТРУКТУР И НАНОМАТЕРИАЛОВ - МЕЖВУЗОВСКИЙ СБОРНИК НАУЧНЫХ ТРУДОВ, выпуск 8, Тверь 2016, стр. 259-265, УДК 620.22:544+621.3.049.77+539.216.2:537.311.322: 530.145 ББК Ж36:Г5+В379, ISBN 978-5-7609-1161-2, ISSN 2226-4442, УДК 536.764:539.313.

- Kirilov L., V. Guliashki, K. Genova (2016) Multicriteria Decision Making in Manufacturing Scheduling (**in Bulgarian**), Publisher Obrazovanie/Education/ Ltd, Sofia, 281 pgs., ISBN 978-954-552-074-7
Кирилов Л., В. Гуляшки, К. Генова (2016) Многокритериално вземане на решения в задачи за производствени разписания, Издателство „Образование“, София, 281 стр., ISBN 978-954-552-074-7
- P. Tashev, P. Koprinkova-Hristova, T. Petrov, L. Kirilov, Y. Lukarski (2016) Mathematical Modelling and Optimization of Parameters of the Mode for Tungsten-Inert Gas Remelting with Nanomodification of the Surface Layer, *Journal of Material Sciences and Technology*, vol. 24, No 4, pp. 230-243.
- Kirilov L.; V. Guliashki; K. Genova; V. Angelova (2016) An Overview of Multiple Objective Job Shop Scheduling Techniques, *Jökull Journal*, vol. 66, no. 2, pp. 172- 206, ISSN: 0449-0576.
- П. Ташев, Л. Кирилов, Т. Петров, П. Копринкова-Христова, Я. Лукарски (2016) “ОПТИМИЗАЦИЯ НА ПАРАМЕТРИТЕ НА РЕЖИМА НА ИВИГ ПРЕТОПЯВАНЕ ПРИ НАНОМОДИФИЦИРАНЕ НА ПОВЪРХНОСТНИ СЛОЕВЕ НА ДЕТАЙЛИ ОТ КОНСТРУКЦИОННА СТОМАНА”, *Научни известия на НТСМ, Дни на безразрушителния контрол 2016*, юни 2016, брой 2 (165), стр. 118-121, 2016.
- П. Ташев, П. Копринкова-Христова, Т. Петров, Л. Кирилов, Я. Лукарски (2016) „МАТЕМАТИЧНО МОДЕЛИРАНЕ НА ВЛИЯНИЕТО НА ПАРАМЕТРИТЕ НА РЕЖИМА ВЪРХУ ГЕОМЕТРИЧНИТЕ РАЗМЕРИ НА ШЕВА ПРИ ИВИГ ПРЕТОПЯВАНЕ И НАНОМОДИФИЦИРАНЕ НА ПОВЪРХНОСТНИ СЛОЕВЕ НА ОБРАЗЦИ ОТ КОНСТРУКЦИОННА СТОМАНА“, *Научни известия на НТСМ, Дни на безразрушителния контрол 2016*, юни 2016, брой 2 (165), стр. 110-113, 2016.
- Kirilov L.; V. Guliashki; K. Genova; P. Zhivkov; B. Staykov; D. Vaton (2015) Interactive environment WebOptim for solving multiple-objective problems using scalarising and evolutionary approaches, *International Journal of Reasoning-based Intelligent Systems (Special Issue on Applied Formal Methods in Computer, Control, and Communications Systems, Guest Editors: Professor Pece J. Mitrevski and Professor Cvetko D. Mitrovski)*, 2015, vol. 7, No. 1/2, pp. 4-15, DOI: <http://dx.doi.org/10.1504/IJRIS.2015.070907>
- Genova K., Kirilov L., Guliashki V., (2015) “A Survey of Solving Approaches for Multiple Objective Flexible Job Shop Scheduling Problems”, *Cybernetics and Information Technologies*, 2015, vol. 2, pp. 3-22, ISSN: 1311-9702.
- Kirilov L., Guliashki V., Genova K., Vassileva M., Staykov B., (2013) “Generalized scalarizing model GENS in DSS WebOptim”, *International Journal of Decision Support System Technology*, ISSN: 1941-6296, Special Issue from the Decision Support Systems Stream on the EUROXXV Conference in Vilnius, Guest Editors: F. Dargam, S. Liu, I. Linden, vol. 5, No 3, pp. 1-11.
- Guliashki V., Kirilov L., Genova K., (2013) ”An Interactive Evolutionary Algorithm for Multiple Objective Integer Problems”, *International Journal on Information Technologies and Security*, ISSN: 1313-8251, No 2, 45-54.
- Genova K., Kirilov L., Guliashki V., (2013) “New Reference – Neighborhood Scalarization Problem for Multiobjective Integer Programming”, *Cybernetics and Information Technologies*, ISSN: 1311-9702, Vol. 13, No 1, 104-114.
- Bournaski E., L. Kirilov, R. Iliev (2012) Computer hydrologic modeling of the rainfall-runoff in the river basin (Application of the hydrological system HEC-HMS for modeling of a Mesta river catchment), Publisher "Nova zvezda", Sofia, ISBN 978-954-8933-63-6. (**in Bulgarian**)
Кирилов, Р. Илиев (2012) Компютърно хидроложко моделиране на процеса валеж-отток в речен басейн (Приложение на системата за хидроложко моделиране HEC-HMS за водосбора на река Места), Изд. „Нова звезда“, София, ISBN 978-954-8933-63-6.
- Kirilov L., V. Guliashki (2011) An Interactive Evolutionary method FIEM for Solving Integer Multiple Objective Problems, *Comptes Rendue de l'Academie Bulgare des Sciences*, vol. 64, No2, pp. 203-212, ISSN 1310-1331.
- Trenchev Iv., L. Kirilov (2010) GIS and Virtual Reality, *Scientific Research eJournal of SWU “Neofit Rilski”, Bulgaria, ISSN 1312-753, vol. 8.*
- Milanov K., L. Kirilov (2010) Necessary Condition for Optimal Portfolio Problem, *Comptes Rendue de l'Academie Bulgare des Sciences*, vol. 63, No4, pp. 487-496.
- Bournaski E., R. Iliev, L. Kirilov (2009) HEC-HMS Modeling of Rainstorm in a Catchment. The Mesta Case Study, *Comptes Rendue de l'Academie Bulgare des Sciences*, vol. 62, No9, pp. 1141-1146.
- Guliashki V., L. Kirilov (2009) SPEA - Based Method for MCDM Convex Integer Problems, *Cybernetics and Information Technologies – Journal of Bulg. Academy of Sciences*, vol.9, No4, pp.93-101.

- Kirilov L. Em. Bournaski, R. Iliev (2009) Modeling and Decision Analysis with Multiple Objectives of water quality management problems, *Problems of Technical Cybernetics and Robotics*, vol. 60, pp. 55-64.
- Tonchev N., L. Kirilov (2007) Two approaches for solving MCDM problems with an illustrative example, *Problems of Technical Cybernetics and Robotics*, vol.58, pp.53-63.
- Kirilov L. (2005) Multiple Criteria Decision Making (Theory and Methods), Lecture Course, University of Nis, Nis, Serbia. The work on this course was granted by the CEEPUS project “Advanced Mathematics” CII-SR-0073-01-0506.
- Miettinen K., L. Kirilov (2005) Interactive Reference Direction Approach Using Implicit Parametrization for Nonlinear Multiobjective Optimization, *Journal of Multi-Criteria Decision Analysis*, vol.13, pp. 115-123.
- Kirilov, L., Em. Bournaski, I. Ivanov, R. Iliev, I. Terziev (2005) Mathematical Models in the System for Hydrologic Modeling HEC-HMS, *Bulaqua*, No2, pp. 22-26 **(in Bulgarian)**.
- Milanov K., L. Kirilov (2004). Approximation of Portfolio Moment States, *Cybernetics and Information Technologies – Journal of Bulg. Academy of Sciences*, vol.4, No2, pp.69-81.
- Vassilev, V., K. Genova, L. Kirilov (1998) A Method for Solving a Class of Multiple – Criteria Analysis Problems, *PLISKA STUDIA MATHEMATICA BULGARICA* (Eds.: P. Kenderov, J. Revalski) vol. 12, pp.245-254, Bulg. Academy of Sciences, Sofia, Bulgaria.
- Gouljashki, V., L. Kirilov, V. Vassilev, S. Narula (1997) An interactive algorithm for solving multiple objective nonlinear integer programming problems, **Multiple Criteria Decision Making** (G. Fandel&T. Gal - Eds.), Springer-Verlag, Berlin, pp. 308-317.
- Kirilov, L., V. Vassilev (1996) An Approach for Solving Discrete Multiple Criteria Problems, *Problems of Engineering Cybernetics and Robotics - Journal of Bulg. Academy of Sciences*, No44, pp. 97-104.
- Vassilev, V., V. Gouljashki, L. Kirilov (1996) An Interactive Algorithm of the Multiple Objective Nonlinear Integer Programming, *Problems of Engineering Cybernetics and Robotics - Journal of Bulg. Academy of Sciences*, No44, pp. 8-14.
- Narula S.C., Kirilov L., Vassilev V. (1994) Reference Direction Approach for Solving Multiple Objective Nonlinear Programming Problems, *IEEE Transactions on Systems, Man, and Cybernetics*, vol.24, No5, pp.804-806.
- Kirilov, L. (1993) Interactive Methods for Solving Multiple Objective Mathematical Programming Problems, *Ph. D. Thesis*, Institute of Informatics - Bulgarian Academy of Sciences, Sofia, Bulgaria, Central Research and Technical Library, DC5577, inv. NoDC116/93 **(in Bulgarian)**.
- Vassilev, V., L. Kirilov, A. Atanasov, (1992) "Reference Direction Approach for Solving Multiple Objective Programming Problems", *Problems of Engineering Cybernetics and Robotics – Journal of Bulg. Academy of Sciences*, No38, pp. 17-23.
- Kirilov, L. (1991) "Methods for solving nonlinear multiobjective programming problems: an overview", *Technical Idea – Journal of Bulg. Academy of Sciences*, 2, pp. 25-31 **(in Bulgarian)**.
- Kirilov, L. (1991) "Method for solving linear multiobjective programming problems with continuous decision variables", *Technical Idea – Journal of Bulg. Academy of Sciences*, No4, pp. 38-43 **(in Bulgarian)**.
- Sgurev, V., V. Vassilev, A. Atanasov, M. Kichovich, L. Kirilov, P. Vladimirov, K. Genova, M. Nikolova, G. Vachkov *Program product for multicriteria linear programming MOLP-16*, Software Products and Systems Corporation – Bulgarian Academy of Sciences, Sofia, 1990 **(in English, also in Russian and Bulgarian)**.
- Vassilev, V., V. Sgurev, A. Atanasov, A. Deianov, M. Kichovich, L. Kirilov, V. Djambov, G. Vachkov *Program product for multicriteria nonlinear programming MONP-16*, User’s Guide, Software Products and Systems Corporation – Bulgarian Academy of Sciences, Sofia, 1990 **(in English, also in Russian and Bulgarian)**.

Refereed Articles in Books and Proceedings of International Conference, Reports

- Kirilov L., V. Guliashki, D. Keremedchiev (2017) A METHOD FOR SOLVING FLEXIBLE JOB SHOP PROBLEMS WITH MULTIPLE OBJECTIVES, *Proceedings of the International Conference AUTOMATICS AND INFORMATICS’2017*, 4-6 October 2017, Sofia, Bulgaria, *PROCEEDINGS: ISSN 1313-1850, CD: ISSN 1313-1869*, pp. 165 – 168.

- Keremedchiev D., L. Kirilov (2016) Multimedia classroom model for e-learning and content creation, Proceedings of the sixth national conference on e-learning in higher education (R. Peytcheva-Forsyth – Ed.), June 2016, Kiten, Bulgaria, pp. 187-191, Publisher SU “St. Kliment Ohridski”.
- Guliashki V., L. Kirilov, (2015) “A Promethee-based Approach to Multi-Criteria Flexible Job Shop Scheduling Problem”, In: Proceedings of Papers of the L International Scientific Conference on Information, Communication and Energy Systems and Technologies ICEST'2015, (Editor: Assoc. Prof. Kalin Dimitrov, PhD), June 24 – 26, 2015, Sofia, Bulgaria, ISBN: 978-619-167-182-3, pp. 113-116.
- Guliashki, V. and L. Kirilov, (2015) “A Reference Point Genetic Algorithm for Multi-Criteria Job Shop Scheduling Problems”, In: Proceedings of the International Conference Information Technologies (InfoTech 2015), 29-th issue, (Editor Prof. Radi Romanski), ISSN: 1314-1023, 17-18. September, 2015, Varna – St. St. Constantine and Elena resort, Bulgaria, pp. 10-18.
- Kirilov L., V. Guliashki, (2015) “Generating Feasible Schedules for Flexible Job Shop Problems”, In: Proceedings of Papers of the International Conference "Automatics and Informatics'2015", 04.-07. October 2015, Sofia, Bulgaria, ISSN: 1313-1850, CD-ISSN: 1313-1869, pp. 127 – 130.
- Kirilov, L., V. Guliashki (2014) An extension of flexible job shop problem (FJSP) and method for solving, Proceedings of CompSysTech '14 Proceedings of the 15th International Conference on Computer Systems and Technologies, ACM New York, NY, USA ©2014, ACM International Conference Proceeding Series, Vol. 883 , pp. 210-217, ISBN: 978-1-4503-2753-4, <http://www.compsystech.org/>
- Guliashki, V., L. Kirilov (2014) Hybrid Evolutionary Algorithm for Multiple Objective Convex Integer Problems, Proceedings of 28th International Conference on Information Technologies (InfoTech-2014), 18th – 19th September 2014, Varna – St. St. Constantine and Elena resort, Bulgaria, pp. 19 - 28, ISSN: 1314-1023.
- Mitev, Y., L. Kirilov (2014) IT Management Processes by Using Information Technologies Infrastructure Library (ITIL) and Decision Making, Proceedings of 28th International Conference on Information Technologies (InfoTech-2014), 18th – 19th September 2014, Varna – St. St. Constantine and Elena resort, Bulgaria, pp. 247 - 256, ISSN: 1314-1023.
- Guliashki, V., L. Kirilov (2014) An exact interactive method for solving multiple objective integer problems, Proceedings of ICEST 2014 - XLIX INTERNATIONAL SCIENTIFIC CONFERENCE ON INFORMATION, COMMUNICATION AND ENERGY SYSTEMS AND TECHNOLOGIES, Serbia, Niš, June 25 - 27, 2014, vol. 1, pp. 37 - 40, ISBN: 978-86-6125-108-5, <http://www.icestconf.org/>
- Mitev, Y., L. Kirilov (2014) Using IT Management Processes for Achieving Better Efficiency in the IT Service, Proceedings of ICEST 2014 - XLIX INTERNATIONAL SCIENTIFIC CONFERENCE ON INFORMATION, COMMUNICATION AND ENERGY SYSTEMS AND TECHNOLOGIES, Serbia, Niš, June 25 - 27, 2014, vol. 1, pp. 247 - 250, ISBN: 978-86-6125-108-5, <http://www.icestconf.org/>
- Mitev, Y., L. Kirilov (2014) Decision Making Solutions for Implementing the Information Technology Infrastructure Library (ITIL), Proceedings of the INTERNATIONAL CONFERENCE AUTOMATICS AND INFORMATICS'2014 (Ed. M. Petrov), October 1-3, 2014, Sofia, Bulgaria, pp. I_17-I_20, ISSN 1313-1850, CD:ISSN 1313-1869.
- Genova, K., L. Kirilov, V. Guliashki (2014) A brief survey of multiple objective flexible job shop scheduling solving techniques, PROCEEDINGS OF INTERNATIONAL CONFERENCE ROBOTICS, AUTOMATION AND MECHATRONICS ' 14 RAM 2014, 5-7 November, Sofia, pp. 12 - 15, ISSN 1314-4634.
- Kirilov, L., V. Guliashki, K. Genova (2014) Shifting Bottleneck (SB) Approach for Solving Job Shop Scheduling Problems (JSSP's), PROCEEDINGS OF INTERNATIONAL CONFERENCE ROBOTICS, AUTOMATION AND MECHATRONICS ' 14 RAM 2014, 5-7 November, Sofia, pp. 22-25, ISSN 1314-4634.
- Guliashki V., Genova K., Kirilov L.,(2013) “The Decision Support System WebOptim in an E-Learning Context”, In: Proceedings of Papers of the International Conference "Automatics and Informatics'2013", 03.-07. October 2013, Sofia, Bulgaria, ISSN: 1313-1850, I-117-I-120.
- Guliashki V., Genova K., Kirilov L., (2013) “Hybrid Evolutionary Algorithm for Integer Multiple-Objective Optimization Problems”, In: Proceedings of Papers of the XLVIII International Scientific Conference on Information, Communication and Energy Systems and Technologies ICEST2013, (Editor Prof. Dr. Mitrovski, C.), June 26 – 29, 2013, Ohrid, Macedonia, ISBN: 978-9989-786-90-7, vol. 1, 253-256.
- Guliashki V., Korsemov C., Toshev H., Kirilov L. and Genova K., (2013) “Optimal Design of Elements in Confirmation of Panel Buildings”, In: Proceedings of Papers of the XLVIII International Scientific Conference on Information, Communication and Energy Systems and Technologies ICEST2013,

(Editor Prof. Dr. Mitrovski, C.), June 26 – 29, 2013, Ohrid, Macedonia, ISBN: 978-9989-786-90-7, vol. 2, 555-558.

- Kirilov L., Genova K., Guliashki V., Zhivkov P., (2013) “Interactive Environment for Solving Multiple Objective Programming Problems GENS-IM”, In: Proceedings of Papers of the XLVIII International Scientific Conference on Information, Communication and Energy Systems and Technologies ICEST2013, (Editor Prof. Dr. Mitrovski, C.), June 26 – 29, 2013, Ohrid, Macedonia, ISBN: 978-9989-786-90-7, vol. 1, 179-182.
- Guliashki V., L Kirilov, (2012), “Accelerating Strategies in Evolutionary Algorithms”, In: *Proceedings of Papers of XLVII International Scientific Conference on Information, Communication and Energy Systems and Technologies ICEST2012*, Veliko Tarnovo, Bulgaria, 26-30. June, 2012.
- Guliashki V., L. Kirilov, K. Genova (2012), “An evolutionary algorithm for integer multicriteria optimization (EVALIMCO), In: In: World Scientific Proceedings Series on Computer engineering and Information science-vol.7, Uncertainty Modeling in Knowledge Engineering and Decision Making, Proceedings of the 10th International FLINS Conference, (Eds.: C. Kahraman, E. Kerre, F. Bozburan) Istanbul, Turkey, 26-29 August, 2012, ISBN 978-981-4417-73-0, pp. 118-123.
<http://www.worldscientific.com/series/wspceis>
<http://www.worldscientific.com/worldscibooks/10.1142/8564>
- Staykov B., L. Kirilov, K. Genova, V. Guliashki, D. Vatov (2012), “Modules and inter Modular Communication in a Web-Based System for Solving Decision Problems”, In: *Proceedings of the International Conference on Information Technologies (InfoTech-2012)*, Varna, Bulgaria, 20-21. September 2012..
- Genova K., L. Kirilov, V. Guliashki, B. Staykov, D. Vatov (2011) A Prototype of a Web-based Decision Support System for Building Models and Solving Optimization and Decision Making Problems, Proceedings of XII International Conference on Computer Systems and Technologies - CompSysTech'11 (Eds. B. Rachev, A. Smrikarov), Wien, Austria, 16-17 June, 2011, ACM ICPS vol. 578, pp. 167-172, ISBN 978-1-4503-0917-2;
- Guliashki V., L. Kirilov (2011) An Interactive Evolutionary Algorithm for Multiple Objective Convex Integer Problems, Proceedings of XII International Conference on Computer Systems and Technologies - CompSysTech'11 (Eds. B. Rachev, A. Smrikarov), Wien, Austria, 16-17 June, 2011, ACM ICPS vol. 578, pp. 82-87, ISBN 978-1-4503-0917-2;
- Kirilov L. V. Guliashki and K. Genova (2011) Interactive Evolutionary Algorithm for Multiple Objective Convex Integer Problems”, Proceedings of XLVI International Scientific Conference on Information, Communication and Energy Systems and Technologies - ICEST2011 (Ed. B. Milovanovic), Nis, Serbia, 29 June – 1 July 2011, vol.2, CS.2, pp. 421-424, ISBN 978-86-6125-032-3;
- Staykov B., F. Andonov, D. Vatov, K. Genova, L. Kirilov and V. Guliashki (2011) Architecture of a flexible web-based framework for building models and solving decision optimization problems, Proceedings of XLVI International Scientific Conference on Information, Communication and Energy Systems and Technologies - ICEST2011 (Ed. B. Milovanovic), Nis, Serbia, 29 June – 1 July 2011, vol.2, PO6.10, pp. 857-860, ISBN 978-86-6125-033-0;
- Iliev R., L. Kirilov, E. Bournaski (2010) Web-based DSS in regional water resources management, Proceedings of the Int. Conference on Computer Systems and Technologies – COMPSYSTEMS'2010, (Eds.: B. Rachev, A. Smrikarov), June, Sofia, Bulgaria, ACM International Conference Proceedings Series , pp. 323-328.
- Milanov K., L. Kirilov (2008) The Problem of Portfolio Optimal Control, IIT Working Papers, IIT Working Papers, IIT/WP-245, November 2008.
- Tontchev, N., L. Kirilov, K. Miettinen (2008) Modelling of Problems of Metal Building-Up by Welding with Multiple Criteria, IIT Working Papers, IIT/WP-247, November 2008.
- Bournaski E., R. Iliev, L. Kirilov (2007) HEC-HMS modelling of storm events in a catchment, Proceedings of NATO Advanced Research Workshop, October, Yerevan, Armenia, 2007.
- Bournaski E., R. Iliev and L. Kirilov (2007) Incorporation of Models for Integrated River Basin Management and Decision Making. Fifth International Symposium on Environmental Hydraulics (ISEH-V), December 4-7, 2007, Arizona State University, Tempe, AZ, USA, Proceedings of ISEH 2007 (Eds. Don Boyer and Olga Alexandrova), pp. 88_1-88_6.
- R. Iliev, Em. Bournaski, L. Kirilov, Iv. Terziev (2007) Computer Modelling of Watershed Runoff with Data for the Mesta River, ACM International Conference Proceedings Series (Eds. B. Rachev, A. Smrikarov, D. Dimov), vol. 285, pp. III.B.19.1-III.B.19.10, 2007.
- Bournaski E., L. Kirilov, R. Iliev, Iv. Diadovski (2006) Decision Support for Water Quality Management, Proceedings of the Int. Conference on Computer Systems and Technologies -

- CompSysTech'06 (Eds. A. Smrikarov, B. Zhechev, P. Vatchkov), Veliko Tarnovo, Bulgaria, pp. III.B.23.1-III.B.23.6.
- Tontchev, N., L. Kirilov (2005) Two methods for solving multiple criteria decision making (MCDM) problems, Proceedings of the Int. Conference on Advanced Manufacturing Technologies AMTECH-2005 (Ed. B. Tomov), Technical University, Russe, Bulgaria, vol. 44, series 2, pp. 18-23.
 - Kirilov, L., R. Iliev, Em. Bournaski, Iv. Terziev (2005) A Primary Hydrologic Model of Mesta River Watershed, IIT-Working Papers IIT/WP213B **(in Bulgarian)**.
 - Kirilov L., K. Miettinen (2005) Solutions' Properties and Numerical Testing of an Interactive Method REF-LEX, Proceedings of the Int. Conference on Computer Systems and Technologies - CompSysTech'05 (Eds.: B. Rachev, A. Smrikarov), June 2005, Varna, Bulgaria, pp. IIIA9.1-III A9.6, ISBN 954-9641-42-2.
 - Kirilov L., N. Tontchev, Al. Monov (2004) Multiple Criteria Approach to Solving Problems of Metal Building-up by Welding, Proceedings of the 4-th IFAC Workshop DECOM-TT 2004 – Automatic Systems for Building the Infrastructure in Developing Countries (Regional and Global Aspects), (Eds. V. Sgurev, G. Dimitrovski, M. Hadjiiski), Bansko - Bulgaria, October 2004, pp. 255-260.
 - Kirilov, L., H. Toshev, Ch. Korsemov, S. Koynov (2004) Multiple Criteria Decision Making Problems and Artificial Neural Networks, Proceedings of the 18th International Conference on *Systems for Automation of Engineering. and Research SAER-2004*, (Edited by R. Romansky), September 2004, Varna, St. Konstantin Resort, pp. 221-226.
 - L. Kirilov, K. Miettinen (2003) Reference Direction Approach Using Implicit Parametrization for Nonlinear Multiobjective Optimization, Publications of the University of Jyväskylä, Finland, Series B. Scientific Computing, No. B16/2003.
 - Marinchev I., Kirilov L. (2003) Interactive Computer System for Solving Problems with Multiple Criteria, Proceedings of the XXXVIII Int. Conf. on Information, Communication and Energy Systems and Technologies –ICEST'2003, Heron Press, Sofia, pp. 359-362.
 - Milanov K., L. Kirilov (2003). Portfolio Management, IIT Working Papers –161B, October, 2003 **(in Bulgarian)**.
 - Kirilov L., V. Vassilev, I. Marinchev (2003) A Program System for Solving Multiple Attribute Decision Making Problems, IIT Working Papers-164, November 2003.
 - Tonchev, T.N., L. Kirilov (2003) Methods for Control of Quality, Lecture Course, Higher School of Transport “Todor Kableshkov, Sofia, CD-ROM available. **(in Bulgarian)**.
 - Kirilov, L. (2002) The Actuary Profession in the Countries with Market Economy, *INSURER magazine* #17, 11-25 September **(in Bulgarian)**.
 - Kirilov, L. N. Dokev (2002) A Lexicographic ordering approach in multiple criteria decision support, Proceedings of 2002 First Int. IEEE Symposium Intelligent Systems (Eds. T. Samad, V. Sgurev), Varna, Bulgaria, September 10-12, vol. 1, pp. 314-319.
 - Kirilov, L., St. Koynov, H. Toshev (2002) Multiple Criteria Decision Making Problems and Neural Networks, Proceedings of the XXXVII Int. Scientific Conf. on Information, Communication and Energy Systems and Technologies-ICEST 2002, (Ed. B. Milovanovic), Nis, Yugoslavia, pp. 121-124.
 - Kirilov, L. N. Dokev (2002) Distance Learning and Information Technologies in Bulgarian Health Care, Proceedings of the Int. Conference on Basic Technologies for e-Business'2002, (Eds. G. Marinova, C. Fernandes, B. Beydoune), Albena, Bulgaria, pp. 244-249.
 - Koynov, St., Ch. Korsemov, Hr. Toshev, L. Kirilov (2002) Multi-Layer Models and Learning of The Artificial Neural Networks, Proceedings of the XXXVII Int. Scientific Conf. on Information, Communication and Energy Systems and Technologies-ICEST 2002, (Ed. B. Milovanovic), Nis, Yugoslavia, pp. 113-116.
 - Toshev, Hr., Ch. Korsemov, St. Koynov, L. Kirilov (2002) The Paradigm Model of The Artificial Neural Networks and Its Evolution up to The Expert Level Representation, Proceedings of the XXXVII Int. Scientific Conf. on Information, Communication and Energy Systems and Technologies-ICEST 2002, (Ed. B. Milovanovic), Nis, Yugoslavia, pp. 117-120.
 - Kirilov, L. (2001) Some appraisals of efficient set in multiple criteria problems, IIT Working papers – IIT/WP-118B, November – 2001 **(in Bulgarian)**.
 - Kirilov, L., V. Vassilev. S. Narila (2000) An Approach for Solving MultiCriteria Choice Problems, Proceeding of 4th Balkan Conference on Operational Research (Ed. B. Papathanassiou), vol. 1, pp. 289-300, Omirus-Graph, Thessaloniki, Greece.
 - Kirilov, L. (2000) A Method for Solving Nonlinear Multiple Objective Problems, proceedings of 35-th scientific conference “Communication, electronic and computer systems ‘2000”, Sofia, Bulgaria, May, 2000, vol. 2, pp. 143-147.

- Kirilov, L. (1999) A Method for Solving Nonlinear Multicriteria Problems, IIT Working Papers, IIT/WP-84B, December 1999 **(in Bulgarian)**.
- Kirilov, L. (1999) Reference Direction Method for Solving Nonlinear Multicriteria Problems – Some Results, Proceedings of the XXXIV-th scientific conference “Communication, electronic and computer systems ‘99”, Technical University, Sofia, Bulgaria, May, 1999, pp. 376-381.
- Kirilov, L., V. Vassilev (1997) A Method for Solving Multiple Objective Linear Programming Problems, **Multicriteria Analysis** (J. Climaco - Ed.), Springer-Verlag, Berlin, pp. 302-309.
- Vassilev, V., L. Kirilov, K. Genova (1997) An Interactive Algorithm for Solving Multiple Attribute Choice Problem, Proceedings of the Bulgarian-Russian seminar on Methods and Algorithms for Distributed Information Systems Design (Eds.: Vishnevsky, V., H. Daskalova), RAS, Moskow, pp. 7-24, **(in English)**.
- Tonchev, N., Kirilov, L. (1997) Multi-objective approach to technological processes optimization, report presented at the Int. Conference on Methods and Applications of Multiple Criteria Decision Making, FUCAM, Mons, Belgium, May 14-16 1997, pp. 116-118.
- Vassilev, V., K. Genova, L. Kirilov, N. Dokev (1996) An Algorithm to Solve a Discrete Multicriteria Choice Problem, IIT Working Papers - 14, October-1996, ISSN 1310-652X.
- Vassilev, V., L. Kirilov (1995) An Interactive Method for Solving Multiple Attribute Decision Making Problems, Proceedings of the International Conference "Automation and Informatics '95", November 7-9, Sofia, Bulgaria, pp. 456-459.
- Vassilev, V., V. Djambov, L. Kirilov, K. Genova (1995) A Decision Support Software Package for Multiple Objective Nonlinear Integer Programming, IIT Working Papers-2, October 1995, ISSN 1310-652X .
- Narula S.C., Kirilov L., Vassilev V. (1994) An Interactive Algorithm for Solving Multiple Objective Nonlinear Programming Problems, paper from the book *Multiple Criteria Decision Making* (G. Tzeng, H. Wang, U.Wen, P.L.Yu - eds.), Springer-Verlag, Berlin, pp. 119-128.
- Vassilev, V., A. Atanassov, V. Sgurev, M. Kichovich, A. Deianov, L. Kirilov (1993) "Software Tools for Multi-Criteria Programming", paper published in J. Wessels and A. Wierzbicki (Eds.) *User-Oriented Methodology and Techniques of Decision Analysis and Support*, Springer-Verlag, Berlin, pp. 247-257.
- Kirilov, L. (1993) An Interactive Method for Solving Multiple Objective Programming Problems, Proceedings of the International Conference on Mathematical Modelling and Scientific Computation MMSC'93, September 14-18, 1993, Sozopol, Bulgaria; S. Markov (ed.), DATECS Publishing, Sofia, 1993, pp. 129-132.
- Narula, S., L. Kirilov, V. Vassilev (1992) Reference Direction Approach for Solving Multiple Objective Nonlinear Programming Problems. Proceedings of the Xth International Conference on Multiple Criteria Decision Making, Taipei, Taiwan, July 19-24, 1992, vol. II, pp. 355-362.
- Kirilov, L., A. Deyanov, M. Kichovich, A. Atanassov, V. Djambov (1991) "Software system for researching nonlinear multi-objective programming problems", Report, presented at 26th scientific session "Communication, electronic and computer systems '91" VII section "Software systems", May 10, 1991, Sofia, Bulgaria. The report is available at the Central Institute for Scientific and Technical Information, II 14629 - ND 3047/91 **(in Bulgarian)**.
- Kirilov, L. (1991) "Combined method for solving nonlinear multiobjective programming problems", Report, presented at 26th scientific session "Communicative, electronic and computer systems '91" VII section "Software systems", May 10, 1991, Sofia The report is available at the Central Institute for Scientific and Technical Information, II 14629 - ND 3046/91, **(in Bulgarian)**.
- Markov S., D. Yaneva, D. Shishkov, D. Kirchev, S. Palikarev, V. Popov, A. Radeva, L. Kirilov (1985), "SOPRO – A program library for solving eigen-value problem with array processor MP ES 2706, Int. Symposium “Technical and Program Tools for ES Electronic Computers (mainframe) and SM Electronic Computers (mini computers) with application to national economy”, 3-5.10.1985г., Plovdiv, Bulgaria, Central Research and Technical Library, No Nd3447/85, Sofia.

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