

PROJECT 174033: GRAPH THEORY AND MATHEMATICAL PROGRAMMING WITH APPLICATIONS TO CHEMISTRY AND COMPUTER SCIENCE

Publications in 2014.

MONOGRAPHS AND CHAPTERS IN MONOGRAPHS

1. D. Stevanovi ,
Spectral Radius of Graphs,
Academic Press (Elsevier imprint), Waltham, 2014.
2. D. Stevanovi ,
Mathematical Properties of Zagreb Indices, (in Serbian)
Akademska misao, Beograd, 2014.
3. T. G. Crainic, T. Davidovi , D. Ramljak,
Designing Parallel Meta-Heuristic Methods,
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edited by Despotovi -Zraki , M., Milutinovi , V., Beli , A., IGI-Global (2014), 260-280.

JOURNAL PAPERS

Subproject 1: Spectral graph theory

1. N.M.M. de Abreu, K.T. Balnska, S.K. Simi , K.T. Zwierzynski,
More on non-regular bipartite graphs with maximum degree four not having $+1$ as
eigenvalues,
Appl. Anal. Discrete Math. 8 (2014), 123-154.
2. I.M. Jovanovi , Z. Stani ,
Spectral distances of graphs based on their different matrix representations,
Filomat, 28 (2014), 723-734.
3. H. Abdo, D. Dimitrov, T. Reti, D. Stevanovi ,
Estimating the Spectral Radius of a Graph by the Second Zagreb Index,
MATCH Commun. Math. Comput. Chem. 72 (2014), 741-751.
4. C. da Fonseca, D. Stevanovi ,

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5. A. Vasilyev, R. Darda, D. Stevanovi ,

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6. C. da Fonseca, M. Ghebleh, A. Kalso, D. Stevanovi ,

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7. T. Koledin, Z. Stani ,

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8. S.K. Simi , M. Andjeli , C.M. da Fonseca, D. fiivkovi ,

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9. S. Majstorovi , D. Stevanovi ,

Graphs with the largest eigenvalue of modularity matrix equal to zero,

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10. M. Andjeli , D. M. Cardoso,

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Graphs and Combinatorics, DOI: 10.1007/s00373-013-1387-8.

11. I. Barbedo, D. M. Cardoso, D. Cvetkovi , P. Rama, S. K. Simi ,

A recursive construction of regular exceptional graphs with least eigenvalue -2,

Portugal. Math. 71 (2) (2014), 79-96.

12. Z. Stani ,

Further results on controllable graphs,

Discrete Applied Mathematics, 166 (2014), 215-221.

13. G. Caporossi, D. Cvetkovi , P. Rowlinson,

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Subproject 2: Chemical graph theory

1. S. Radenkovi , J. To-ovi , R. W. A. Havenith, P. Bultinck,

Ring currents in benzo- and benzocyclobutadieno-annelated biphenylene derivatives,

ChemPhysChem, DOI:10.1002/cphc.201402468.

2. K. Xu, M. Liu, K. C. Das, I. Gutman, B. Furtula,
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3. I. Gutman, B. Furtula, C. Elphick,
Three new/old vertex-degree-based topological indices,
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4. I. Gutman, B. Furtula, S. B. Bozkurt,
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5. S. Radenković, J. Kojić, J. Petronijević, M. Antić,
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6. S. Radenković, I. Gutman, M. Antić,
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7. B. Furtula, G. Lekishvili, I. Gutman,
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Journal of the Serbian Chemical Society, 79 (2014), 805-813.
8. B. Furtula, I. Gutman, S. Ediz,
On difference of Zagreb indices,
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9. I. Gutman, B. Furtula, V. Katanić,
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10. A. Vasilyev, D. Stevanović,
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11. N. Milosavljević, D. Stevanović,
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Subproject 3: Mathematical programming

1. J. Kratica, J. Kojić, A. Savić,

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2. J. Kratica, . Dugo-ija, A. Savi ,

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3. T. Davidovi , D. Teodorovi , M. Tšmi ,

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4. D. Teodorovi , M. Tšmi , T. Davidovi ,

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5. J. Kratica, V. Kova evi -Vuj i , M. angalovi , N. Mladenovi ,

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6. N. Nikoli , M. angalovi , I. Grujici ,

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7. R. Jovanovi , V. Tosi , M. angalovi , M. Stanojevi ,

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Subproject 4: Structural graph theory and algorithms

1. P. Aboulker, M. Radovanovi , N. Trotignon, T. Trunck, K. Vu-kovi ,

Linear balanceable and subcubic balanceable graphs,

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2. T. Divni , Lj. Pavlovi , B. Liu,

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3. T. Divni , M. Milivojevi , Lj. Pavlovi ,

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Subproject 5: Graph spectra in computer science

1. D. Stevanovi ,
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2. M. G. Yoon, P. Rowlinson, D. Cvetkovi , Z. Stani ,
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3. F. Comellas, R. Elsasser, D. Stevanovi ,
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4. V. Cvjetkovi , M. oki , B. Arsi , M. ur i ,
The ontology supported intelligent system for experiment search in the scientific research center,
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Papers in conference proceedings

1. B. Arsi , M. oki , V. Cvjetkovi , P. Spalevi , M. fiivanovi , M. Mladenovi ,
Integration of bioactive substances data for preclinical testing with cheminformatics and bioinformatics resources,
23rd International Electrotechnical and Computer Science Conference ERK 2014, IEEE, Slovenia, September 22-24, 2014
2. T. Jak-i Kruger, T. Davidovi ,
Model Convergence Properties of the Constructive Bee Colony Optimization Algorithm,
In Proc. *XLI Symp. Operat. Res. SYM-OP-IS 2014*, Div ibare, Sept. 16-19 (2014), 340-345.
3. M. Milojevic Jevri , T. Davidovi ,
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In Proc. *XLI Symp. Operat. Res. SYM-OP-IS 2014*, Div ibare, Sept. 16-19 (2014), 753-758.

Papers accepted for publication

1. M. Andjeli , C.M. da Fonseca, S.K. Simi , D. fiivkovi ,
On the multiplicities of eigenvalues of graphs and their vertex deleted subgraphs: old and new results,

2. T. Jakšić Kruger, T. Davidović, D. Teodorović, M. Trimić,
The Bee Colony Optimization Algorithm and its Convergence,
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3. I. M. Jovanović,
Self-returning walks and graphlets,
Utilitas Mathematica
4. P. Aboulker, P. Charbit, M. Chudnovsky, N. Trotignon, K. Vučković,
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5. M. Lepović,
On strongly regular graphs of order $3(2p+1)$ and $4(2p+1)$, where $2p+1$ is a prime number,
Vietnam J. Math.
6. S. Thomassé, N. Trotignon, K. Vučković,
A polynomial Turing-kernel for weighted independent set in bull-free graphs,
Proceedings of WG 2014, Lecture Notes in Computer Science, Springer-Verlag.
7. B. Arsić, M. Čokić, N. Stefanović,
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Proceedings of ICIST2014, 4th International Conference on Information Society and Technology, Serbia