List of research papers

Journals

1. *On Edge-Length Ratios of Partial 2-Trees*  
   coauthored with Václav Blažej, Giuseppe Liotta,  
   (Also published in conference proceedings — see item 43.)

2. *Reconfiguration graph for vertex colourings of weakly chordal graphs*  
   coauthored with Carl Feghali,  
   (Also published in conference proceedings — see item 44.)

3. *Parameterized complexity of distance labeling and uniform channel assignment problems*  
   coauthored with Tomáš Gavenčík, Dušan Knop, Martin Koutecký and Jan Kratochvíl  
   (Also published in conference proceedings — see item 46.)

4. *3-connected reduction for regular graph covers*  
   coauthored with Pavel Klavík, Jan Kratochvíl and Roman Nedela:  
   (Also published in conference proceedings — see item 47.)

5. *Fractal property of the graph homomorphism order*  
   coauthored with Jan Hubička, Yangjing Long and Jaroslav Nešetřil  

6. *Gaps in full homomorphism order*  
   coauthored with Jan Hubička and Yangjing Long  

7. *An universality argument for graph homomorphisms*  
   coauthored with Jan Hubička and Yangjing Long  

8. *Locally constrained homomorphisms on graphs of bounded treewidth and bounded degree*  
   coauthored with Steven Chaplick, Pim van’t Hof, Daniël Paulusma and Marek Tesař  
   (Also published in conference proceedings — see item 49.)

9. *Linear-Time Algorithms for Scattering Number and Hamilton-Connectivity of Interval Graphs*  
   coauthored with Hajo Broersma, Peter A. Golovach, Tomáš Kaiser, Daniël Paulusma and Andrzej Proskurowski  
   (Also published in conference proceedings — see item 48.)

10. *Universality of intervals of line graph order*  
    coauthored with Jan Hubička and Yangjing Long  
11. A note on contracting claw-free graphs
   coauthored with Marcin Kamiński, and Daniël Paulusma,

12. Detecting induced star-like minors in polynomial time
   coauthored with Marcin Kamiński, and Daniël Paulusma,

13. Distance Three Labelings for Trees
   coauthored with Peter A. Golovach, Jan Kratochvíl, Bernard Lidický and Daniël Paulusma,
   (Also published in conference proceedings — see item 65.)

14. The k-in-a-path problem for claw-free graphs
   coauthored with Marcin Kamiński, Bernard Lidický and Daniël Paulusma,
   (Also published in conference proceedings — see item 51.)

15. Parameterized Complexity of Coloring Problems: Treewidth versus Vertex Cover
   coauthored with Peter A. Golovach and Jan Kratochvíl
   (Also published in conference proceedings — see item 52.)

16. Comparing universal covers in polynomial time,
   coauthored with Daniël Paulusma,
   (Also published in conference proceedings — see item 56.)

17. Complexity of the packing coloring problem of trees,
   coauthored with Peter A. Golovach,
   (Also published in conference proceedings — see item 53.)

18. The packing chromatic number of infinite product graphs,
   coauthored with Sandi Klavžar and Bernard Lidicky,

19. On the computational complexity of partial covers of Theta graphs,
   coauthored with Jan Kratochvíl, Attila Pór,
   (Also published in conference proceedings — see item 63.)

20. Locally Constrained Graph Homomorphisms — Structure, Complexity, and Applications,
   coauthored with Jan Kratochvíl,

21. Block transitivity and degree matrices,
   coauthored with José Soto,
   (Also published in conference proceedings — see item 57.)
22. **Locally constrained graph homomorphisms and equitable partitions**, coauthored with Daniël Paulusma, Jan Arne Telle, European Journal of Combinatorics, **29**.4 (2008), pp. 850–880. (Also published in conference proceedings — see items 60, 62.)


33. **Graph Subcolorings: Complexity and Algorithms**, coauthored with Klaus Jansen, Van Bang Le and Eike Seidel,


**Referred conference proceedings**

39. **List Covering of Regular Multigraphs**
coauthored with Jan Bok, Nikola Jedličková, Jan Kratochvíl, Paweł Rzążewski

40. **Extending Partial Representations of Circular-Arc Graphs**

41. **Computational Complexity of Covering Multigraphs with Semi-edges: Small Cases**
coauthored with Jan Bok, Petr Hliněný, Nikola Jedličková and Jan Kratochvíl

42. **Computational Complexity of Covering Disconnected Multigraphs**
coauthored with Jan Bok, Nikola Jedličková, Jan Kratochvíl and Michaela Seifrtová

43. **On the Edge-Length Ratio of 2-Trees**
coauthored with Václav Blažej and Giuseppe Liotta

44. **Reconfiguration graph for vertex colourings of weakly chordal graphs**
coauthored with Carl Feghali,
45. **On Vertex- and Empty-Ply Proximity Drawings**  
   coauthored with Patrizio Angelini, Steven Chaplick, Felice De Luca, Jaroslav Hančl Jr.,  
   Niklas Heinsohn, Michael Kaufmann, Stephen G. Kobourov, Jan Kratochvíl and Pavel Valtr:  
   Graph Drawing and Network Visualization, 25th GD’17, Boston, USA, (2018) LNCS 10692,  

46. **Fixed Parameter Complexity of Distance Constrained Labeling and Uniform Channel Assignment Problems - (Extended Abstract)**  
   coauthored with Tomáš Gavenčiak, Dušan Knop, Martin Koutecký and Jan Kratochvíl  
   Computing and Combinatorics, 22nd COCOON’16, Ho Chi Minh City, Vietnam, (2016)  

47. **Algorithmic Aspects of Regular Graph Covers with Applications to Planar Graphs**  
   coauthored with Pavel Klavík, Jan Kratochvíl and Roman Nedela  
   Automata, Languages, and Programming, 41st ICALP’14, Copenhagen, Denmark, (2014)  

48. **On Hamiltonian properties of interval graphs**  
   coauthored with Hajo Broersma, Peter A. Golovach, Tomáš Kaiser, Daniël Paulusma and  
   Andrzej Proskurowski  
   Graph-Theoretic Concepts in Computer Science, 39th WG’13, Lübeck, Germany, (2013),  

49. **Locally constrained homomorphisms on graphs of bounded degree and bounded treewidth**  
   coauthored with Steven Chaplick, Pim van’t Hof, Daniël Paulusma and Marek Tesař  
   Fundamentals of Computation Theory, 19th FCT ’13, Liverpool, United Kingdom, (2013),  

50. **Dichotomy of the $H$-quasi-cover problem**  
   coauthored with Marek Tesař  
   International Computer Science Symposium in Russia, 8rd CSR ’13, Ekaterinburg, Russia,  

51. **The $k$-in-a-path problem for claw-free graphs**  
   coauthored with Marcin Kamiński, Bernard Lidický, Daniël Paulusma,  
   Theoretical Aspects of Computer Science, 27th STACS ’10, Nancy, France (2010), LIPIcs  

52. **Parameterized Complexity of Coloring Problems: Treewidth versus Vertex Cover (Extended abstract)**  
   coauthored with Peter A. Golovach and Jan Kratochvil  
   Theory and Applications of Models of Computation, 6th TAMC ’09, Changsha, China (2009),  

53. **Complexity of the packing coloring problem of trees,**  
   coauthored with Peter A. Golovach,  
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54. **Computational complexity of the distance constrained labeling problem for trees,**  
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55. *Distance constrained labelings of trees*,
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63. *On the computational complexity of partial covers of Theta graphs*,
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64. *Distance constrained labelings of graphs of bounded treewidth*,
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65. *Elegant distance constrained labelings of trees,*
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**Other**

76. *Note on the computational complexity of covering regular graphs*,
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78. *Dichotomy theorems for distance constrained labeling problems for trees and graphs of bounded treewidth*
coauthored with Peter A. Golovach and Jan Kratochvíl

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79. Theory and Applications of Models of Computation: (TAMC’10),
(Kratochvíl, Li, Fiala, Kolman eds.), LNCS 6108, Springer (2010), 480 pages

80. Combinatorial Algorithms: (IWOCA’09),
(Fiala, Kratochvíl, Miller eds.), LNCS 5874, Springer (2009), 480 pages

81. Mathematical Foundations of Computer Science,
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(Fiala, Nešetřil eds.), Elsevier (2021)

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Research identifiers

- ResearcherID: I-5123-2016
- ORCID ID: 0000-0002-8108-567X
- Scopus Author ID: 35580076200
- Google Scholar: https://scholar.google.cz/citations?user=UD7oqQoAAAAJ

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