

Research

Recent Research Publications

Publications in the Proceedings of National / International

1. Nilanjan De, "Narumi-Katayama index of total transformation", **Discrete Mathematics, Algorithms and Applications** (2017). DOI: <https://doi.org/10.1142/S1793830917500331>
2. Nilanjan De, "Computing certain topological indices of generalised Mycielskian graphs", **International Journal of Discrete Mathematics**, 2 (3), 112--118 (2017).
3. Nilanjan De, "Narumi-Katayama index of some derived graphs", **Bulletin of the International Mathematical Virtual Institute**, (1), 117-128, (2017).
4. Nilanjan De, "The vertex Zagreb indices of some graph operations", 2016, **Carpathian Mathematical Publications**, 8 (2), 215-223, (2016).
5. Nilanjan De, "F-index of Bridge and chain graphs", **Malaysian Journal of Fundamental and Applied Sciences**, 12 (3), 109-113, (2016).
6. Nilanjan De, S.M.A. Nayeem, Anita Pal, "The F-coindex of some graph operations", **Springer Plus**, 5:221(1) (2016). DOI: <https://doi.org/10.1186/s40064-016-1864-7>
7. Nilanjan De, S.M.A. Nayeem, "Computing the F-index of nanostar dendrimers", **Pacific Science Review A: Natural Science and Engineering**, 18 (1), 14-21 (2016).
8. Nilanjan De, "On Molecular Topological Properties of TiO₂ Nanotubes", **International Journal of Nanoscience**, (1) (2016). DOI: <https://doi.org/10.1155/2016/1028031>
9. Nilanjan De, S.M.A. Nayeem and Anita Pal, "F-index of some graph operations", **Discrete Mathematics, Algorithms and Applications**, 8 (2), 1650025 (2015).
10. Nilanjan De, S.M.A. Nayeem and Anita Pal, "The reformulated first Zagreb index of some graph operations", **Mathematics**, 3(4), 945-960 (2015).
11. Nilanjan De, S.M.A. Nayeem and Anita Pal, "Modified Eccentric Connectivity Index and Polynomial of Corona product of Graphs", **International Journal of Computer Application**, 132(9), 1-5 (2015).

12. **Nilanjan De**, Anita Pal and S.M.A. Nayeem, 2015, "Total Eccentricity Index of Some Composite Graphs", **Malaya Journal of Matematik**, 3(4), 523–529 (2015).
13. **Nilanjan De**, Anita Pal and S.M.A. Nayeem, "The irregularity of some composite graphs", **International Journal of Applied and Computational Mathematics**, (2015).
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15. **Nilanjan De**, S.M.A. Nayeem and Anita Pal, 2014, "Connective Eccentricity Index of Some Thorny Graphs", **Annals of Pure and Applied Mathematics**, 7(1), 59–64 (2014).
16. **Nilanjan De**, S.M.A. Nayeem and Anita Pal, "Computing modified eccentric connectivity index and connective eccentric index of V-phenylenic nanotorus", **Studia Universitatis Babes-Bolyai Chemia**, 59(4), 129–137 (2014).
17. **Nilanjan De**, S.M.A. Nayeem and Anita Pal, "Bounds for modified eccentric connectivity index", **Advanced Modeling and Optimization**, 16(1), 133–142 (2014).
18. **Nilanjan De**, Anita Pal and S.M.A. Nayeem, "On some bounds and exact formulae for connective eccentric indices of graphs under some graph operations", **International Journal of Combinatorics**, (2014). DOI: <https://doi.org/10.1155/2014/579257>
19. **Nilanjan De**, Anita Pal and S.M.A. Nayeem, "Modified eccentric connectivity of generalized thorn graphs", **International Journal Computational Mathematics**, (2014).
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20. **Nilanjan De**, "Relationship between augmented eccentric connectivity index and some other graph invariants", **International Journal of Advanced Mathematical Sciences**, 1, 26–32 (2013).
21. **Nilanjan De**, "New bounds for Zagreb eccentricity indices", **Open Journal of Discrete Mathematics**, 3, 70–74 (2013).
22. **Nilanjan De**, "Reformulated Zagreb indices of Dendrimers", **Mathematica Aeterna**, 3(2), 133–138 (2013).
23. **Nilanjan De**, "On multiplicative Zagreb eccentricity indices", **South Asian Journal of Mathematics**, 2(6), 570-577 (2012).

24. Nilanjan De, "Bounds for the connective eccentric index", **International Journal of Contemporary Mathematical Sciences**, 7(44), 2161–2166 (2012).
25. Nilanjan De, "Some Bounds of Reformulated Zagreb Indices", **Applied Mathematical Sciences**, 6(101), 5005–5012 (2012).
26. Nilanjan De, "Augmented eccentric connectivity index of some thorn graphs", **International Journal of Applied Mathematical Research**, 1(4), 671–680 (2012).
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28. Sanjay K. Palit, N. A. A. Fataf, M. R. M. Said, S. Mukherjee and S. Banerjee, "Complexity in synchronized and non-synchronized states: A comparative analysis and application", **European Physics Journal – Special Topics** (2017)
DOI: <https://doi.org/10.1140/epjst/e2016-60399-8>
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101. **Sanjay Bhattacharya**, "A Structural Equation Model of the Factors Influencing the Drop-out at Primary Education: A Theoretical Approach at Micro-level", **Rabindra Bharati University Journal of Economics** 8, 126-136 (2014). (ISSN-0975-802X)
102. **Sanjay Bhattacharya** and Prakrishna Pal, "Enrolment and Dropout in Primary Education in West Bengal: A District-wise Analysis", **ARTHABEEKSHAN**, (Journal of Bengal Economic Association, Associate Member of The International Economic Association) 23, 135-159 (2014). (ISSN 0972-1185)
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Publications in the Proceedings of National / International Conferences / Seminars / Symposiums

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2. **Nilanjan De**, "On Forest of K m-ary Tress", **Proceedings of National Seminar on Emerging Areas in Mathematics and Applications (NSEAMA-2009)**, Organized by Department of Mathematics, The University of Burdwan, February, 2009.

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