

List of Publications of Dmitrii Karp

1. D. Karp, A. Vishnyakova, Y. Zhang, Unimodality preservation by ratios of functional series and integral transforms, Results in Mathematics 80:112, Online First, 2025.
2. D.Karp and A.Kuznetsov, Extending the Meijer G-function, Constructive Approximation, published online, 2024.
3. A. Çetinkaya and D. Karp, On digamma series convertible into hypergeometric series, in print in Proceedings on hypergeometric functions, q -series and generalizations, AMS Contemporary Mathematics series, Volume 818, Classical hypergeometric functions and generalizations (edited by H.S.Cohl, R.S.Costas-Santos and R.S.Maier), 2025, pp.3-23.
4. D.B.Karp and E.G.Prilepkina, A Look at Generalized Trigonometric Functions as Functions of Their Two Parameters and Further New Properties, Mathematics 2024, 12, 3383.
5. D. Karp and Y. Zhang, Log-concavity and log-convexity of series containing multiple Pochhammer symbols, Fractional Calculus and Applied Analysis, Volume 27:1(2024), 458–486.
6. D. Karp and Y. Zhang, Convergent expansions and bounds for the incomplete elliptic integral of the second kind near the logarithmic singularity, Mathematics of Computation, Volume 92, Number 344, 2023, 2769–2794.
7. A. Dyachenko and D. Karp, Trigonometric identities: from Hermite via Meijer, Nørlund and Braaksma to Chu and Johnson and beyond, Boletín de la Sociedad Matemática Mexicana, volume 29, Article 55 (2023).
8. S.I. Kalmykov, D. Karp and A. Kuznetsov, A new identity for the sum of products of generalized basic hypergeometric functions, Ramanujan Journal 61 (2023), 391–414.
9. A. Dyachenko and D. Karp, Integral representations of ratios of the Gauss hypergeometric functions with parameters shifted by integers, Mathematics 2022, 10(20), 3903.
10. D.B. Karp and E.G. Prilepkina, Hypergeometric ${}_4F_3(1)$ with integral parameter differences, Lobachevsky Journal of Mathematics, 2022, Vol. 43, No. 6, pp. 1326–1336.
11. D.B. Karp and E.G. Prilepkina, On Meijer's G function $G_{p,p}^{m,n}$ for $m+n=p$, Integral Transforms and Special Functions, Volume 34, Issue 1, 2023, 88–104.

12. D.B. Karp and E.G. Prilepkina, *Beyond the beta integral method: transformation formulas for hypergeometric functions via Meijer's G function*, Symmetry 2022, 14(8), 1541.
13. A. Çetinkaya, D.B. Karp and E.G. Prilepkina, *Hypergeometric functions at unit argument: simple derivation of old and new identities*, SIGMA 17(2021), 098.
14. A.Dyachenko and D.Karp, *Ratios of the Gauss hypergeometric functions with parameters shifted by integers: more on integral representations*, Lobachevsky Journal of Mathematics, volume 42 (2021), 2764–2776.
15. D. Karp and A. Kuznetsov, *A new identity for a sum of products of the generalized hypergeometric functions*, Proceedings of AMS, Volume 149, Number 7, 2021, 2861–2870.
16. D.B. Karp, *A note on Fox's H function in the light of Braaksma's results*, Chapter 12 in *Special Functions and Analysis of Differential Equations* (edited by P.Agarwal, R.P. Agarwal and M.Ruzhansky), CRC Press, Chapman & Hall Book, 2020, pp.243-254. DOI:10.1201/9780429320026
17. D.B. Karp and E.G. Prilepkina, *Transformations of the hypergeometric ${}_4F_3$ with one unit shift: a group theoretic study*, Mathematics 2020, 8(11), 1966.
18. Ch.Berg, A.Çetinkaya and D.Karp, *Completely monotonic ratios of basic and ordinary gamma functions*, Aequationes Mathematicae, 95 (2021), 569–588., 2021. DOI: 10.1007/s00010-020-00767-6
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20. D.B.Karp and E.G.Prilepkina, *The Fox-Wright function near the singularity and branch cut*, Journal of Mathematical Analysis and Applications, 484 (2020), 123664.
21. A.Filatov, D.Karp and Y.Makolskaya, *Excessive entry in industrial markets: Mankiw-Whinston revisited with heterogeneous firms and collusion*, International Journal of Public Administration, Volume 42, 2019, Issue 15-16, 1370-1380. DOI:10.1080/01900692.2019.1672728
22. D.B.Karp and E.G.Prilepkina, *Alternative approach to Miller-Paris transformations and their extensions*, pp.117-140 in Transmutation Operators and Applications (edited by V.V.Kravchenko and S.M.Sitnik), Springer Trends in Mathematics Series, Birkhäuser, 2020.

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