

List of selected publications by Vasyl Gorkavyy

1. Gorkavyy V., *Elementary differential geometry*. – Kharkiv: B.I. Verkin Institute for Low Temperature Physics and Engineering of the National Academy of Sciences of Ukraine (2024), 1193 pp, (in Ukrainian).
2. Gorkavyy V., *Circular tractrices and circular Dini surfaces in semi-Euclidean spaces* // *Geometry, Integrability and Quantization*, v.27 (2024), p.1-24.
3. Gorkavyy V., Petrov Y., *Riemannian geometry. Elementary problems and methods*. – Kharkiv: V.N. Karazin Kharkiv National University (2024), 92 pp, (in Ukrainian).
4. Gashurenko D., Gorkavyy V., *Circular Dini surfaces in E^4* // *Results in Mathematics*, v.79 (2024), No.1, Paper No.20, 14 p.
5. Gorkavyy V., Sirosh A., *On circular tractrices in R^3* // *Journal of mathematical physics, analysis, geometry*, v.19 (2023), №4, p.766-780.
6. Borisenko A., Gorkavyy V., *Degenerate Bianchi transformations for three-dimensional pseudo-spherical submanifolds in R^5* // *Mediterranean journal of mathematics*, v.18 (2021), p.1-20.
7. Gorkavyy V., Posylaieva R., *On the sharpness of one integral inequality for closed curves in R^4* // *Journal of mathematical physics, analysis, geometry*, v.15 (2019), №4, p.502-509.
8. Gorkavyy V., Fesenko I., *On the flexibility of Siamese dipyramids* // *Journal of Geometry*, v.110 (2019), № 1:7, p.1-19.
9. Gorkavyy V., Milka A. D., *Birosettes are model flexors* // *Ukrainian Mathematical Journal*, v.70 (2018), № 7, p.885-904.
10. Gorkavyy V., Kalinin D., *On model flexibility of the Jessen orthogonal icosahedron* // *Contributions to Algebra and Geometry*, v.57 (2016), № 3, p.607-622.
11. Gorkavyy V., Nevmerzhytska O., *Degenerate Backlund transformation* // *Ukrainian Mathematical Journal*, v. 68 (2016), № 1, p.41-56.
12. Boyko V.V., Gorkavyy V., et al., *The possibility of combined treatment and prevention of complications of subfascial burns in patients of elderly and senile ages* // *Kharkiv surgical school*, № 1 (2015), p.89-95.
13. Gorkavyy V., Nevmerzhytska O., *A two-dimensional surface in R^4 does not admit two different Bianchi transformations* // *Proceedings of the international geometry center*, v.8 (2015), № 1, p.34-46.
14. Gorkavyy V., Kalinin D., *Barker-Larman problem for convex polygons in the hyperbolic plane* // *Results in mathematics* v. 68 (2015), p.519-525.

15. Borisenko A., Gorkavyy V., *To the memory of Diskant Valentin Ivanovich* // Journal of mathematical physics, analysis, geometry, v.11 (2015), № 2, p.187-196.
16. Gorkavyy V., *Generalization of the Bianchi-Backlund transformation of pseudo-spherical surfaces* // Journal of mathematical sciences, v.207 (2015), p.467-484
17. Logachov V., Kravtsov O., Gorkavyy V., et al., *The possibility of auto-transplantation for treatment of subfascial burns in patients of elderly and senile ages* // Clinical surgery, № 11.3 (2014), p.54.
18. Borisenko A., Gorkavyy V. et al., *The seventieth birthday of Yuriy Akhmetovich Aminov* // Journal of mathematical physics, analysis, geometry, v.9 (2013), № 2, p.267-272.
19. Gorkavyy V., *An example of Bianchi transformation in E^4* // Journal of mathematical physics, analysis, geometry, v.8 (2012), № 3, p. 240-247.
20. Gorkavyy V., Nevmerzhytska O., *An analogue of the Bianchi transformation for two-dimensional surfaces in the space $S^3 \times R^1$* // Mathematical notes, v.89 (2011), №6, p.833-845.
21. Gorkavyy V., Nevmerzhytska O., *Pseudo-spherical submanifolds with degenerate Bianchi transformation* // Results in Mathematics, v.60 (2011), №1, p.103-116.
22. Gorkavyy V., Nevmerzhytska O., *On two-dimensional pseudo-spherical surfaces with degenerate Bianchi transformation* // Ukrainian mathematical journal, v.63 (2011), №11, p.1460-1468.
23. Gorkavyy V., *On the volume increasing for closed surfaces of revolution* // Modern problems of mathematics and mechanics, v.6 (2011), №2, p.195-205.
24. Gorkavyy V., *On strongly isotropic surfaces in the Minkowski space* // Proc. Intern. Geom. Center $d\omega$, v.4 (2011), №1, p.6-18.
25. Gorkavyy V., Nevmerzhytska O., *An analogue of the Bianchi transformation for two-dimensional surfaces in the space $S^3 \times R^1$* // Mathematical Notes, v.89 (2011), №6, p.833-845.
26. Gorkavyy V., *On inflating closed mylar shells* // Comptes Rendus. Mecanique, v.338 (2010), №12, p.656-662
27. Gorkavyy V., Nevmerzhytska O., *An analogue of the Bianchi transformation for two-dimensional surfaces in the space $S^3 \times R^1$* // In «Proceedings of the International conference "Geometry "in large", topology and applications", Kharkiv: Acta, 2010, p.186-195.
28. Gorkavyy V., Nevmerzhytska O., *On two-dimensional pseudo-spherical surfaces in E^4 with degenerate Bianchi transformation* // Annals on the National Academy of Sciences of Ukraine (2010), №6, p.13-18.

29. Gorkavyy V., Nevmerzhytska O., *Ruled surfaces as pseudo-spherical congruencies* // Proc. Intern. Geom. Center $d\omega$, v.2 (2009), №2, p.21-38.
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31. Gorkavyy V., Milka A.D., *Volume increasing linear bendings of right polyhedra* // Proceedings of Institute of mathematics of NAS of Ukraine, v.6 (2009), №2, p.152-182.
32. Gorkavyy V., Nevmerzhytska O., *Ruled surfaces as pseudo-spherical congruencies* // Journal of mathematical physics, analysis, geometry, v.5 (2009), №4, p.359-374.
33. Gorkavyy V., *On pseudo-spherical congruencies in spaces of constant curvature* // Annals on the National Academy of Sciences of Ukraine (2008), №6, p.13-18.
34. Gorkavyy V., *On minimal lightlike surfaces in Minkowski space-time.* // Differential Geometry and its Applications, v.26 (2008), №2, p.133-139.
35. Gorkavyy V., *On minimal lightlike surfaces in Minkowski space* // Proceedings of the Conference "Contemporary Geometry and Related Topics", Cigoja Publishing Company, Belgrade (2006), p.247-260
36. Gorkavyy V., *On pseudospherical surfaces in E^4 with Grassmann image of prescribed type* // Journal of mathematical physics, analysis, geometry, v.2 (2006), №2, p.138-148.
37. Gorkavyy V., *On conformal transformations of surfaces in Minkowski space with preservation of the Gauss image* // Rus. Math. (Iz. VUZ), v.50 (2006), №7, p.11-21.
38. Gorkavyy V., *Bianchi congruencies for two-dimensional surfaces in E^4* // Sbornik: Mathematics, v.196 (2005), №9-10, p.1473-1493.
39. Bolotov D., Gorkavyy V., Makarov V., Yatsenko A., *New type of topological electronic transitions in metals with a change in the Fermi surface* // Low temperature physics, v.31 (2005), №3-4, p.321-325.
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41. Gorkavyy V., *On pseudo-spherical congruencies in E^4* // Matematicheskaya Fizika, Analiz, Geometria, v.10 (2003), №4, p.498-504.
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45. Gorkavyy V., *Deformations of two-dimensional surfaces that preserve parabolic Grassmann image* // Notices of Kharkov University, v.475 (2000), p.313-322.
46. Gorkavyy V., *Reconstruction of particular submanifolds of Euclidean space from a given Grassmann image* // Matematicheskaya Fizika, Analiz, Geometria, v.7 (2000), №2, p.131-152.
47. Gorkavyy V., *Theorem of reduction in the problem of reconstruction of submanifolds in Euclidean space from a given Grassmannian image* // Matematicheskaya Fizika, Analiz, Geometria, v.4 (1997), №3, p.309-333.
48. Gorkavyy V., *Reconstruction of three-dimensional submanifolds of Euclidean space with large codimension from its Grassmannian image* // Mathematical Notes, v.62 (1997), №5-6, p.581-585.
49. Gorkavyy V., *Volumes of Schubert cells of Grassmann manifolds* // Matematicheskaya Fizika, Analiz, Geometria, v.3 (1996), №1-2, p.34-45.
50. Gorkavyy V., *An analogue of the Grassmannian image for submanifolds of a sphere* // Sbornik: Mathematics, v.187 (1996), №9, p.1283-1300.
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