List of Publications (August, 2023)

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Papers in progress:

46. *Harmonic reflection property and quasicircles*, in progress.

45. *Beltrami system and 1-quasiconformal embeddings in higher dimensions*, in progress.

Papers in preprint:

44. *Quasi-invariance of modulus and quasisymmetry of weakly (L,M)-quasisymmetric maps in metric spaces*, Submitted.

43. *Quasisymmetry and solidity of quasiconformal maps in metric spaces* (with Tao Cheng and Peng Jiang), Studia Math., Accepted.

Papers in print:

42. *Quasiconformality to quasisymmetry via weakly (L,M)-quasisymmetry* (with Tao Cheng), Ann. Fenn. Math., 47 (2022), pages 1-27.

41. *Algebraic, Hölder and quasisymmetric exponents of a homeomorphism* (with Tao Cheng and Cunji Yang), Acta Math. Sci., 40A(5) (2020), pages 1-9.

40. *Quasisymmetry of weakly quasisymmetric homeomorphisms* (with Tao Cheng), Complex Variables and Elliptic Equations, 64 (7) (2019), pages 1184-1199.

39. *Harmonic measure on quasicircles and symmetric quasicircles* (with Tao Cheng and Huiqiang Shi), J. Math. Anal. Appl., 462 (2018), pages 601-612.

38. *Sewing homeomorphisms and conformal invarants* (with Tao Cheng and Huiqiang Shi), Acta Math. Sinica, English Ser., 33 (2017), pages 1321-1338.

37. *Extremal function for capacity and estimates for QED constants in R^n* (With Tao Cheng), Advances in Math., 306 (2017), pages 929-957.

36. *Dilatations and exponents of quasisymmetric homeomorphisms* (With Tao Cheng), Ann. Acad. Sci. Fenn. Math., 41 (2016), pages 287-304.

35. *Decomposition of extremal length and a proof of Shen's conjecture on QED constant and boundary dilatation* (With Tao Cheng), Math. Z., 278 (2014), pages 1195-1211.

34. *Extremal length decomposition and domain constants for finitely connected domains* (With Tao Cheng and Wenfei Zou), Comput. Methods Funct. Theory, 14 (2014), pages 279-294.

33. *Duality, uniformity and linear local connectivity*, Illinois J. of Math., 53 (2009), pages 339-347.

32. *Regularity of the Beltrami equation and 1-quasiconformal embeddings of surfaces in R^3*, Conform. Geom. Dyn., 13 (2009), pages 232-246.

31. *Quasisymmetric structure and quasisymmetry on 1-manifolds* (with Lindsay E. Stovall), Proceedings of the International Conference on Geometric Function Theory, Special Functions and Applications (ICGFT), J. Analysis, 15 (2007), pages 263-271.

30. *A Sobolev extension domain that is not uniform*, Manuscripta Math., 120 (2006), pages 241-251.

29. *Boundedness and extension of asymptotically symmetric embeddings*, Proceedings of the 12th International Conference on Finite or Infinite Dimensional Complex Analysis and Applications, Tokyo, Japan, July-August 2004, pages 413-419; published December 2005.

28. *Asymptotically symmetric homeomorphisms and symmetric quasicircles* (with Abdelkrim Brania), Proc. Amer. Math. Soc., 132 (2004), pages 2671-2678.

27. *Quasiextremal distance sets* (with David Herron), Analysis: International Mathematical Journal of Analysis and Its Applications, 23 (2003), pages 27-50.

26. *Characterizations of symmetric quasicircles*, Proceedings of the 10th International Conference on Finite or Infinite Dimensional Complex Analysis and Applications, Pusan, South Korea, July-August 2002, pages 188-193.

25. *Domains with controlled modulus and quasiconformal mappings* (with Abdelkrim Brania), Journal of Nonlinear Studies, 9(1) (2002), pages 57-73.

24. *Slit domains and quasiconformal mappings in n-space* (with Manoucher Ghamsari), Complex Variables, 42 (2000), pages 309-322.

23. *On symmetric quasicircles* (with Shengjian Wu), J. Austral. Math. Soc. (Series A), 68 (2000), pages 131-145.

22. *A modulus inequality for condensers and conformal invariants of smooth Jordan domains*, J. d'Analyse Math., 75 (1998), Pages 172-183.

21. *Quasiconformal mappings and domain constants*, Proceedings of the Fifth International Colloquium on Finite or Infinite Dimensional Complex Analysis, Beijing, China, December, 1997, pages 349-354.

20. *On dilatations and substantial boundary points of homeomorphisms of Jordan curves*, Results in Math., 31 (1997), pages 180-188; MR 98a:30025.

19. *Conformal invariants of smooth domains and extremal quasiconformal mappings of ellipses*, Illinois J. Math., 41 (1997), pages 438-452; MR 98e:30024.

18. *Quasiconformally equivalent domains and quasiconformal extensions*, Complex Variables, 30 (1996), pages 279-288; MR 97e:30041

17. *Harmonic and extremal quasiconformal extensions*, J. of Hunan Univ., Vol.22, No.6 (1995), pages 42-51; MR 98c:30025.

16. *Strongly uniform domains and periodic quasiconformal maps* (with Juha Heinonen), Ann. Acad. Sci. Fenn., 20 (1995), pages 123-148; MR 96d:30023.

15. *Quasiextremal distance domains and integrability of derivatives of conformal mappings* (with John B. Garnett), Mich. Math. J., 41 (1994), pages 389-406; MR 95d: 30014.

14. *Estimates for coefficients of univalent functions from integral means and Grunsky's inequalities*, Israel J. of Math., 87 (1994), pages 129-142; MR 95g: 30018.

13. *Extremal distance and quasiconformal reflection constants of domains in $\bar{R}^n$*, J. d'Analyse Math., 62 (1994), pages 1-28; MR 95g: 30028

12. *QED domains and NED sets in $\bar{R}^n$*, Trans. Amer. Math. Soc., 334 (1992), pages 97-120; MR 93a: 30026.

11. *Quasiconformal reflection, uniform and quasiconformal extension domains*, Complex Variables, 17 (1992), pages 277-286; MR 93e: 30053.

10. *Monotone functions and extremal functions for condensers in $\bar{R}^n$*, Annals Acad. Sci. Fenn. Ser. A I Math., 16 (1991), pages 95-112; MR 93a: 30027.

9. *Asymptotic properties of extremal rings in space and a proof of G. D. Anderson's conjecture*, Acta Mathematics Sinica, Vol. 30, No. 4, (1987), pages 483-491; MR 89b: 30022.

8. *Distortion theorems of moduli of rings in space and asymptotic properties of the Grötzsch function*, Chinese Annals of Mathematics, Ser. A, Vol. 8, No. 6, (1987), pages 732-740; MR 89g: 30038.

7. *Quasidisk and the BMO_ρ extension property*, Journal of Hunan University, Vol. 14, No. 3, (1987), pages 17-23; MR 90c: 30061.

6. *On the asymptotic properties of extremal rings in space and a proof of the Anderson's conjecture* (Research Announcement), Chinese Math Advances, Vol. 15, No. 4, (1986), pages 443-444.

5. *Convexity, starlikeness and close-to-convexity of analytic functions defined by integral operators*, Hunan Annals of Mathematics, Vol. 5, No. 1, (1985), pages 111-115; MR 87m: 30031.

4. *On the Springer Conjecture for $N = 15$* (in Chinese), Kexue Tongbao, Academy of Sinica, (1985), pages 558-558.

3. *On the Springer's conjecture for $N = 16$* (English version), Kexue Tongbao, Academy of Sinica, Vol. 50, No. 4, (1984), pages 553-554.

2. *A proof of the G. Springer's conjecture for $N = 15$* (in Chinese), Journal of Hunan University, Vol. 11, No. 4 (1984), pages 122-131.

1. *On the Springer Conjecture for $N = 16$* (in Chinese), Kexue Tongbao, Academy of Sinica, No. 23, (1984), pages 1471-1472.