

## Publications of Nicholas Young

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### Books

1. *An Introduction to Hilbert Space*, 240pp, Cambridge University Press, 1988.
2. *Surveys in Geometry and Number Theory*, 318 pp, Editor, LMS Lecture Notes **338**, Cambridge University Press, 2007.
3. *Surveys in Contemporary Mathematics*, 361 pp, Edited by Y. Choi and N. J. Young, LMS Lecture Notes **347**, Cambridge University Press, 2008.

### Papers

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2. Admixtures of two-person games, *Proc. London Math. Soc.* (3) **25** (1972) 736–750.
3. Separate continuity and multilinear operations, *Proc. London Math. Soc.* (3) **26** (1973) 289–319.
4. The irregularity of multiplication in group algebras, *Quarterly J. Math.* (2) **24** (1973) 59–62.
5. Compactness in function spaces: another proof of a theorem of J.D. Pryce, *J. London Math. Soc.* (2) **6** (1973) 739–740.
6. Semigroup algebras having regular multiplication, *Studia Math.* **47** (1973) 191–196.
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8. Periodicity of functionals and representations of normed algebras on reflexive spaces, *Proc. Edinburgh Math. Soc.* **20** (1976) 99–120.
9. Analytic programmes in matrix algebras, *Proc. London Math. Soc.* (3) **36** (1978) 226–242.
10. Norms of matrix powers, *Comment. Math. Univ. Carolinae* **19** (1978) 415–430.
11. Norms of certain rational functions of a matrix and Schur's criterion for polynomials, *Comment. Math. Univ. Carolinae* **19** (1978) 673–688.
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13. An identity which implies Cohn's theorem on the zeros of a polynomial, *J. Math. Analysis and its Applications* **70** (1979) 240–248.
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16. (with V. Pták) Functions of operators and the spectral radius, *Linear Algebra and its Applications* **29** (1980) 357–392.

17. Matrices which maximise any analytic function, *Acta Math. Acad. Sci. Hungaricae* **34** (1979) 239–247.
18. Norm and spectral radius for algebraic elements of a Banach algebra, *Math. Proc. Cambridge Phil. Soc.* **88** (1980) 129–133.
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20. (with V. Pták) A generalization of the zero location theorem of Schur and Cohn, *Trans. Inst. Electrical and Electronic Engineers on Automatic Control* **25** (1980) 978–980.
21. Functions of canonical matrices, *Linear and Multilinear Algebra* **9** (1980) 141–149.
22. Functions of contractions, Möbius transformations and classical interpolation problems, *Proc. 4th Rumanian Operator Theory Conference*, University of Timisoara Press 1980, pp.330–334.
23. The rate of convergence of a matrix power series, *Linear Algebra and its Applications* **35** (1981) 261–278.
24. A bound for norms of functions of matrices, *Linear Algebra and its Applications* **37** (1981) 181–186.
25. A maximum principle for interpolation in  $H^\infty$ , *Acta Sci. Math. (Szeged)* **43** (1981) 147–152.
26. (with V. Pták) Zero location by Hermitian forms: the singular case, *Linear Algebra and its Applications* **43** (1982) 181–196.
27. A simple proof of Hermite’s theorem on the zeros of a polynomial, *Glasgow Math. J.* **24** (1983) 125–128.
28. The singular-value decomposition of an infinite Hankel matrix, *Linear Algebra and its Applications* **50** (1983) 639–656.
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30. Linear fractional transformations in rings and modules, *Linear Algebra and its Applications* **56** (1984) 251–290.
31. Maximum principles for quotient norms in  $H^\infty$ , pp. 53–54 in *Linear and Complex Analysis Problem Book*, Lecture Notes in Mathematics 1043, Springer Verlag, Heidelberg, 1984.
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33. Orbits of the unit sphere of  $L(H, K)$  under symplectic transformations, *J. of Operator Theory* **11** (1984) 171–191.
34.  $J$ -unitary equivalence of positive subspaces of a Krein space, *Acta Sci. Math.* **47** (1984) 107–111.
35. Interpolation by analytic matrix functions, in “Operators and Function Theory”, edited by S.C. Power, NATO ASI Series C Vol. **153**, D. Reidel Publishing Co., 1985, pages 351–383.
36. Balanced realizations via model operators, *International J. Control* **42** (1985) 369–389.
37. The Nevanlinna-Pick problem for matrix-valued functions, *J. Operator Theory* **15** (1986) 239–265.

38. Balanced, normal and intermediate realizations of non-rational transfer functions, *IMA J. Mathematical Control and Information* **3** (1986) 43–58.
39. Balanced realizations in infinite dimensions, in “Operator Theory and Systems: Proceedings Workshop Amsterdam, June 4–7, 1985”, edited by H. Bart, I. Gohberg and M.A. Kaashoek, Birkhäuser Verlag, 1986.
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47. (with H. Dym) Factorization and the Schur-Cohn matrix of a matrix polynomial, *Integral Equations and Operator Theory*, **15** (1992) 1–15.
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50. (with V. V. Peller) Superoptimal analytic approximations of matrix functions, *J. Functional Analysis* **120** (1994) 300–343.
51. (with V. V. Peller) Superoptimal singular values and indices of matrix functions, *Integral Equations and Operator Theory* **20** (1994) 350–363.
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60. (with J. Agler) Operators having the symmetrized bidisc as a spectral set, *Proc Edinburgh Math. Soc.* **43** (2000) 195–210.

61. (with J. A. Ball) Problems on the realization of functions, *Fields Inst. Communications* **25** (2000) 179–185 (the Proceedings of a conference on applied operator theory, Winnipeg, 1998).

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