
Monographs

- R. Hagen, S. Roch and B. Silbermann: Spectral Theory of Approximation Methods for Convolution Equations. – Birkhäuser Verlag, Basel, Boston, Berlin 1995. (Review in Bull. Amer. Math. Soc. **33**(1996), 2, 237–243)
- R. Hagen, S. Roch and B. Silbermann: C^* -Algebras and Numerical Analysis. – Marcel Dekker, New York 2001.
- V. S. Rabinovich, S. Roch and B. Silbermann: Limit Operators and Their Applications in Operator Theory. – Birkhäuser Verlag, Basel, Boston, Berlin 2004.
- S. Roch: Finite sections of band-dominated operators. – Memoirs AMS **191/895**, Providence, R. I., 2008.
- S. Roch, P. A. Santos and B. Silbermann: Non-commutative Gelfand Theories. A Tool-kit for Operator Theorists and Numerical Analysts. – Universitext, Springer, London 2011.

Journal articles

- S. Roch and B. Silbermann: Das Reduktionsverfahren für Potenzen von Toeplitz-operatoren mit unstetigem Symbol. – Wiss. Zeitschr. TH Karl-Marx-Stadt **24**(1982), 3, 289–294.
- S. Roch and B. Silbermann: Toeplitz-like operators, quasicommutator ideals, numerical analysis, I. – Math. Nachr. **120**(1985), 141–173.
- S. Roch: Das Reduktionsverfahren für Produktsummen von Toeplitzoperatoren mit stückweise stetigen Symbolen. – Wiss. Zeitschr. TH Karl-Marx-Stadt **26**(1984), 2, 274–282.
- S. Roch: Das Reduktionsverfahren für Operatoren aus einer Toeplitzalgebra. – Wiss. Zeitschr. TH Karl-Marx-Stadt **27**(1985), 1, 121–126.
- S. Roch and B. Silbermann: Toeplitz-like operators, quasicommutator ideals, numerical analysis, II. – Math. Nachr. **134**(1987), 245–255.
- S. Roch and B. Silbermann: A symbol calculus for finite sections of singular integral operators with flip and piecewise continuous coefficients. – Journ. Functional Anal. **78**(1988), 2, 365–389.
- A. Böttcher, S. Roch and B. Silbermann: Local constructions and Banach algebras associated with Toeplitz operators on H^p . – Seminar Analysis: Operator equations and numerical analysis (1985/1986), Berlin 1986, 23–30.
- S. Roch: Locally strongly elliptic singular integral operators. – Wiss. Zeitschr. TU Karl-Marx-Stadt **29**(1987), 2, 224–229.
- S. Roch and B. Silbermann: Functions of shifts on Banach spaces – invertibility, dilations, numerical analysis. – Preprint P-MATH-11/87 des Karl-Weierstraß-Instituts für Mathematik der AdW der DDR, Berlin 1987, 50 S.
- S. Roch and B. Silbermann: Algebras generated by idempotents and the symbol calculus for singular integral operators. – Integral Eq. Oper. Th. **11**(1988), 3, 385–419.

- S. Roch and B. Silbermann: Non-strongly converging approximation methods. – *Demonstratio Mathematica* **XXII**(1989), 3, 651–676.
- S. Roch and B. Silbermann: Finite sections of singular integral operators with Carleman shift. – *Seminar Analysis: Operator equations and numerical analysis (1986/1987)*, Berlin 1987, 149–180.
- S. Roch: Finite sections of operators belonging to the closed algebra of singular integral operators. – *Seminar Analysis: Operator equations and numerical analysis (1986/1987)*, Berlin 1987, 139–148.
- S. Roch and B. Silbermann: A symbol calculus for the algebra generated by shift operators. – *ZfAA* **8**(1989), 4, 293–306.
- S. Roch: Finite sections of singular integral operators with measurable coefficients. – *Wiss. Zeitschr. TU Karl-Marx-Stadt* **31**(1989), 2, 236–242.
- S. Roch: Finite sections of operators generated by convolutions. – *Seminar Analysis: Operator equations and numerical analysis (1987/1988)*, Berlin 1988, 118–138.
- S. Roch and B. Silbermann: The Calkin image of algebras of singular integral operators. – *Integral Eq. Oper. Th.* **12**(1989), 855–897.
- S. Roch and B. Silbermann: Algebras of convolution operators and their image in the Calkin algebra. – Report R-MATH-05/90 des Karl-Weierstraß-Instituts für Mathematik, Berlin 1990, 157 S.
- A. Böttcher, S. Roch, B. Silbermann and I. Spitkovsky: A Gohberg-Krupnik-Sarason symbol calculus for algebras of Toeplitz, Hankel, Cauchy and Carleman operators. – *Operator Theory: Advances and Applications*, Vol. 48, Birkhäuser Verlag Basel 1990, 189–234.
- S. Roch and B. Silbermann: On algebras with standard identities. – *Linear Algebra Appl.*, **137-138**(1990), 239–247.
- S. Roch: Local algebras of Toeplitz operators. – *Math. Nachr.* **152**(1991), 69–81.
- S. Roch and B. Silbermann: Representations of non-commutative Banach algebras by continuous functions. – *Algebra i analiz* **3**(1991), 4, 171–185, and *St. Petersburg Math. J.* **3**(1992), 4, 865–879.
- S. Roch and B. Silbermann: The structure of algebras of singular integral operators. – *Journ. Int. Eq. Appl.* **4**(1992), 3, 421–442.
- S. Roch and B. Silbermann: Limiting sets of eigenvalues and singular values of Toeplitz matrices. *Asymptotic Analysis* **8**(1994), 293–309.
- R. Hagen, S. Roch and B. Silbermann: Stability of spline approximation methods for multidimensional pseudodifferential operators. – *Integral Eq. Oper. Th.* **19**(1994), 25–64.
- T. Finck, S. Roch and B. Silbermann: Two projection theorems and symbol calculus for operators with massive local spectra. – *Math. Nachr.* **162**(1993), 167–185.
- V. Didenko, S. Roch and B. Silbermann: Approximation methods for singular integral equations with conjugation on curves with corners. – *SIAM Journal of Numerical Analysis* **32**(1995), 6, 1910–1939.
- S. Roch: Spline approximation methods cutting off singularities. – *ZfAA* **13**(1994), 2, 329–345.
- P. Junghanns, S. Roch and U. Weber: Finite sections of singular integral operators by weighted Chebyshev polynomials. – *Integral Eq. Oper. Th.* **21**(1995), 319–333.
- T. Finck and S. Roch: Banach algebras with matrix symbol of bounded order. – *Integral Eq. Oper. Th.* **18**(1994), 427–434.
- S. Roch: Spectral theory of approximation methods for convolution equations. – In: L. Jentsch, F. Tröltzsch (Eds.): *Problems and Methods in Mathematical Physics*, B. G. Teubner Verlagsgesellschaft Stuttgart - Leipzig, 1994, 175–184.
- N. Krupnik and S. Roch: On invertibility symbols in Banach algebras. – *Linear Algebra Appl.* **245**(1996), 77–81.

- N. Krupnik, S. Roch and B. Silbermann: On C^* -algebras generated by idempotents. – *Journ. Fctl. Analysis* **137**(1996), 303–319.
- S. Roch and B. Silbermann: C^* -Algebra techniques in numerical analysis. – *Journ. Operator Th.* **35**(1996), 241–280.
- S. Roch: Spline approximation methods for Wiener-Hopf operators. – *In: I. Gohberg, P. Lancaster, P. N. Shivakumar (Eds.), Recent Developments in Operator Theory and its Applications, Operator Theory: Advances and Applications, Vol. 87, Birkhäuser Verlag, Basel 1996, 282–308.*
- A. Böttcher, I. Gohberg, Yu. Karlovich, N. Krupnik, S. Roch, B. Silbermann and I. Spitkovsky: Banach algebras generated by N idempotents and applications. – *In: Singular Integral Operators and Related Topics, Oper. Theory: Adv. Appl., Vol. 90, Birkhäuser Verlag, Basel 1996, 19–54.*
- T. Ehrhardt, S. Roch and B. Silbermann: Symbol calculus for singular integrals with operator-valued PQC coefficients. – *In: Singular Integral Operators and Related Topics, Operator Theory: Advances and Applications, Vol. 90, Birkhäuser Verlag, Basel 1996, 182–203.*
- T. Ehrhardt, S. Roch and B. Silbermann: Finite section method for singular integrals with operator-valued PQC coefficients. – *In: Singular Integral Operators and Related Topics, Operator Theory: Advances and Applications, Vol. 90, Birkhäuser Verlag, Basel 1996, 204–243.*
- S. Roch and B. Silbermann: Asymptotic Moore-Penrose invertibility of singular integral operators. – *Integral Eq. Oper. Th.* **26**(1996), 1, 81–101.
- S. Roch and B. Silbermann: Index calculus for approximation methods, and singular value decomposition. – *Journ. Math. Analysis Appl.* **225**(1998), 401–426.
- V. S. Rabinovich, S. Roch and B. Silbermann: Fredholm theory and finite section method for band-dominated operators. – *Integral Eq. Oper. Th.* **30**(1998), 452–495.
- S. Roch and B. Silbermann: A note on singular values of Cauchy-Toeplitz matrices. – *Linear Algebra Appl.* **275-276**(1998), 531–536.
- S. Roch, P. A. Santos and B. Silbermann: Finite section method in some algebras of multiplication and convolution operators. – *ZfAA* **16**(1997), 3, 575–606.
- S. Roch and B. Silbermann: Continuity of generalized inverses in Banach algebras. – *Studia Mathematica* **136**(1999), 3, 197–227.
- T. Finck, S. Roch and B. Silbermann: Banach algebras generated by two idempotents and one flip. – *Math. Nachr.* **216**(2000), 73–94.
- S. Roch: Numerical ranges of large Toeplitz matrices. – *Linear Algebra Appl.* **282**(1998), 185–198.
- R. Hagen, S. Roch and B. Silbermann: C^* -algebra techniques – a powerful tool in numerical analysis. – *In: M. Bach, C. Constanda, G. C. Hsiao, A.-M. Sändig, P. Werner (Eds.), Analysis, Numerics and Applications of Differential and Integral Equations. Pitman Research Notes in Mathematics Series 379, Addison Wesley Longman, Harlow Essex 1998, 214–218.*
- V. Didenko, S. Roch and B. Silbermann: Some peculiarities of approximation methods for singular integral equations with conjugation. – *Meth. Appl. Anal.* **7**(2000), 4, 663–686.
- S. Roch: Spectral approximation of Wiener-Hopf operators with almost periodic generating function. – *Numer. Funct. Analysis and Optimization* **21**(2000), 241–253.
- S. Roch: Pseudospectra of operator polynomials. – *Operator Theory: Advances and Applications* **124**, Birkhäuser Verlag, Basel 2001, 545–558.
- S. Roch: Algebras of approximation sequences: Fractality. – *Operator Theory: Advances and Applications* **121**, Birkhäuser Verlag, Basel 2001, 471–497.
- S. Roch: Algebras of approximation sequences: Fredholmness. – *J. Oper. Theory* **48**(2002), 121–149.
- V. S. Rabinovich, S. Roch and B. Silbermann: Algebras of approximation sequences: Finite sections of band-dominated operators. – *Acta Appl. Math.* **65**(2001), 315–332.

- V. S. Rabinovich, S. Roch and B. Silbermann: Band-dominated operators with operator-valued coefficients, their Fredholm properties and finite sections. – *Integral Equations Oper. Theory* **40**(2001), 3, 342–381.
- S. Roch: Algebras of approximation sequences: Structure of fractal algebras. – *Operator Theory: Advances and Applications* **142**, Birkhäuser Verlag, Basel 2003, 287–310.
- P. Junghanns, S. Roch and B. Silbermann: Collocation methods for systems of Cauchy singular integral equations on an interval. – *Computational Technologies* **6**(2001), 1, 88–124.
- S. Roch: Algebras of approximation sequences: Fredholm theory in fractal algebras. – *Studia Math.* **150**(2002), 1, 53–77.
- V. S. Rabinovich and S. Roch: An axiomatic approach to the limit operators method. – *Operator Theory: Advances and Applications* **142**, Birkhäuser Verlag, Basel 2003, 263–285.
- V. S. Rabinovich and S. Roch: Local theory of the Fredholmness of band-dominated operators with slowly oscillating coefficients. – *Operator Theory: Advances and Applications* **135**, Birkhäuser Verlag, Basel 2002, S. 267–291.
- V. S. Rabinovich and S. Roch: Algebras of approximation sequences: Spectral and pseudospectral approximation of band-dominated operators. – In: S. H. Kulkarni, M. N. N. Namboodiri (Eds.), *Proc. Int. Workshop on Linear Algebra, Numerical Functional Analysis and Wavelet Analysis*, Cochin (India) 2001, Allied Publ. Private Limited, New Dehli 2003, 167–188.
- V. S. Rabinovich and S. Roch: Integral operators with shift on homogeneous groups. – In: *Factorization, Singular Operators and Related Topics*, Kluwer Acad. Publ., Dordrecht 2003, 255–271.
- V. S. Rabinovich and S. Roch: Fredholmness of convolution type operators. – *Operator Theory: Advances and Applications* **147**, Birkhäuser Verlag, Basel, Boston, Berlin 2004, 423–455.
- V. S. Rabinovich, S. Roch and J. Roe: Fredholm indices of band-dominated operators. – *Integral Equations Oper. Theory* **49**(2004), 2, 221–238.
- M. Lindner, V. S. Rabinovich and S. Roch: Finite sections of band operators with slowly oscillating coefficients. – *Linear Algebra Appl.* **390**(2004), 19–26.
- V. S. Rabinovich and S. Roch: Wiener algebras of operators, and applications to pseudodifferential operators. – *J. Anal. Appl.* **23**(2004), 3, 437–482.
- V. S. Rabinovich and S. Roch: Pseudodifference operators on weighted spaces, and applications to discrete Schrödinger operators. – *Acta Appl. Math.* **84**(2004), 1, 55–96.
- S. Roch: Band-dominated operators on l^p -spaces: Fredholm indices and finite sections. – *Acta Sci. Math. (Szeged)* **70**(2004), 3-4, 783–797.
- V. S. Rabinovich and S. Roch: Fredholm properties of pseudodifference operators in weighted spaces. – *Funkts. Analiz i Ego Prilozh.* **40**(2006), 1, 83–86 (Russian, Engl. transl.: *Funct. Anal. Appl.* **40**(2006), 1, 70–72).
- V. S. Rabinovich and S. Roch: The Fredholm property of pseudodifferential operators with non-smooth symbols on modulation spaces. – In: *The Extended Field of Operator Theory* (Ed. M. A. Dritschel), *Operator Theory: Adv. Appl.* **171**, Birkhäuser 2007, 259–280.
- V. S. Rabinovich, S. Roch and B. Silbermann: Finite sections of band-dominated operators with almost periodic coefficients. – In: *Modern Operator Theory and Applications* (Eds. Y. M. Erusalimsky et al), *Operator Theory: Adv. Appl.* **170**, Birkhäuser 2006, 205–228.
- V. Didenko, R. Lee, S. Roch and B. Silbermann: Approximate foveated images and reconstruction of their uniform pre-images. – *J. Approx. Th.* **147**(2007), 11–27.

- V. S. Rabinovich and S. Roch: The Fredholm index of locally compact band-dominated operators on $L^p(\mathbf{R})$. – *Integral Equations Oper. Theory* **57**(2007), 2, 263–281.
- V. S. Rabinovich and S. Roch: Reconstruction of input signals in time-varying filters. – *Numer. Fct. Anal. Optim.* **27**(2006), 5–6, 697–720.
- V. S. Rabinovich and S. Roch: Exact and numerical inversion of pseudodifferential operators and applications to signal processing. – In: *Modern Trends in Pseudo-differential Operators* (Eds. J. Toft et al), *Operator Theory: Adv. Appl.* **172**, Birkhäuser 2007, 259–277.
- V. S. Rabinovich and S. Roch: The essential spectrum of Schrödinger operators on lattices. – *Journ. Phys. Ser. A: Math. gen.* **39**(2006), 8377–8394.
- S. Roch and B. Silbermann: Szegő limit theorems for operators with almost periodic diagonals. – *Operators and Matrices* **1**(2007), 1, 1–19.
- V. S. Rabinovich, S. Roch and B. Silbermann: On finite sections of band-dominated operators. – In: *Operator Algebras, Operator Theory and Applications* (Eds. M. A. Bastos, I. Gohberg, A. B. Lebre, F.-O. Speck), *Oper. Theory: Adv. Appl.* **181**, Birkhäuser 2008, 385–391.
- V. S. Rabinovich, S. Roch and B. Silbermann: The finite sections approach to the index formula for band-dominated operators. – In: *Recent Advances in Operator Theory and Applications* (Eds. T. Ando, R. E. Curto, I. B. Jung, W. Y. Lee), *Oper. Theory: Adv. Appl.* **187**, Birkhäuser 2008, 185–194.
- V. S. Rabinovich and S. Roch: Essential spectra of pseudodifferential operators and exponential decay of their solutions. Applications to Schrödinger operators. – In: *Operator Algebras, Operator Theory and Applications* (Eds. M. A. Bastos, I. Gohberg, A. B. Lebre, F.-O. Speck), *Oper. Theory: Adv. Appl.* **181**, Birkhäuser 2008, 355–384.
- V. S. Rabinovich and S. Roch: Essential spectra of difference operators on \mathbf{Z}^n -periodic graphs. – *Journ. Phys. Ser. A: Math. Theor.* **40**(2007), 10109–10128.
- V. S. Rabinovich and S. Roch: Fredholm properties of band-dominated operators on periodic discrete structures. – *Complex Anal. Oper. Theory* **2**(2008), 4, 637–668.
- V. S. Rabinovich and S. Roch: Essential spectrum of difference operators on periodic metric spaces. – *Funkts. Analiz i Ego Prilozh.* **43**(2009), 2, 83–87 (Russian, Engl. transl.: *Functl. Anal. Appl.* **43**(2009), 2, 151–154).
- V. S. Rabinovich and S. Roch: Agmon's type estimates of exponential behavior of solutions of elliptic systems of partial differential equations. Applications to Schrödinger, Moisil-Theodorescu and Dirac operators. – Preprint 2543 TU Darmstadt, Februar 2008, 19 S.
Gekürzte Version: Exponential estimates of eigenfunctions of Matrix Schrödinger and Dirac operators. – In: *Recent Trends in Toeplitz and Pseudodifferential Operators. The Nikolai Vasilevskii Anniversary Volume*, *Oper. Theory: Adv. Appl.* **210**, Birkhäuser, Basel 2010, 203–216.
- S. Roch: Spatial discretizations of Cuntz algebras. – *Houston J. Math.* **36**(2010), 4, 1097–1132.
- V. S. Rabinovich and S. Roch: Exponential estimates for eigenfunctions of matrix elliptic differential operators and limit operators. – *Dokl. AN* **424**(2009), 3, 318–321 (Russian, Engl. transl.: *Doklady Mathematics* **79**(2009), 1, 66–69).
- V. S. Rabinovich and S. Roch: Essential spectrum and exponential decay estimates of solutions of elliptic systems of partial differential equations. Applications to Schrödinger and Dirac operators. – *Georgian Math. J.* **15**(2008), 2, 333–351.
- T. Ehrhardt, S. Roch and B. Silbermann: A strong Szegő-Widom limit theorem for operators with almost periodic diagonal. – *J. Fct. Anal.* **260**(2011), 30–75.
- V. S. Rabinovich and S. Roch: Essential spectra and exponential estimates of eigenfunctions of lattice operators of quantum mechanics. – *J. Phys. A: Math. Theor.* **42**(2009) 385207 (online publ.).

- S. Roch, P. A. Santos and B. Silbermann: A sequence algebra of finite sections, convolution and multiplication operators on $L^p(\mathbf{R})$. – Numer. Fctl. Anal. Optimization 31(2010), 1, 45–77.
- V. S. Rabinovich and S. Roch: Essential spectrum and exponential estimates of eigenfunctions of lattice Schrödinger and Dirac operators. – Dokl. AN 428(2009), 1, 25–29 (Russian, Engl. transl.: Doklady Mathematics 80(2009), 2, 655–659).
- S. Roch: Spatial discretization of restricted group C^* -algebras. – Operators and Matrices 5(2011), 1, 53–78.
- V. S. Rabinovich and S. Roch: Exponential estimates of solutions of pseudodifferential equations with operator-valued symbols. Applications to Schrödinger operators with operator-valued potentials. – In: Complex Analysis and Dynamical Systems IV: Part 2. General Relativity, Geometry and PDE (Eds. M. Agranovsky, M. Ben-Artzi, G. Galloway, L. Karp, S. Reich, D. Shoikhet, G. Weinstein, L. Zalcman), Contemp. Math. 554(2011), 147–163.
- V. S. Rabinovich and S. Roch: Finite sections of band-dominated operators on discrete groups. – In: Recent Progress in Operator Theory and Its Applications (Eds. J. A. Ball, R. E. Curto, S. M. Grudsky, J. W. Helton, R. Quiroga-Barranco, N. L. Vasilevski), Oper. Theory: Adv. Appl. 220, Birkhäuser, Basel 2012, 239–253.
- M. Lindner and S. Roch: On the integer points in a lattice polytope: n -fold Minkowski sums and boundaries. – Beitr. Alg. Geom. (Contr. Alg. Geom.) 52(2011), 395–404.
- M. Lindner and S. Roch: Finite sections of random Jacobi operators. – SIAM J. Numer. Anal. 50(2012), 1, 287–306.
- S. Roch: Arveson dichotomy and essential fractality. – In: Operator Theory, Pseudo-Differential Equations, and Mathematical Physics (Eds. Y. I. Karlovich, L. Rodino, B. Silbermann, I. M. Spitkovski), Oper. Theory: Adv. Appl. 228, Birkhäuser, Basel 2013, 325–342.
- V. S. Rabinovich and S. Roch: Pseudodifferential operators on periodic graphs. – IEOT 72(2012), 2, 197–217.
- S. Roch and P. A. Santos: Two points, one limit: Homogenization techniques for two-point local algebras. – J. Math. Analysis Appl. 391(2012), 2, 552–566.
- S. Roch and B. Silbermann: A handy formula for the Fredholm index of Toeplitz plus Hankel operators. – Indagationes Mathematicae 23(2012), 663–689.
- S. Roch and P. A. Santos: Finite section approximations in an algebra of convolution, multiplication and flip operators on $L^p(\mathbf{R})$. – J. Approx. Th. 186(2014), 64–97.
- S. Roch and P. A. Santos: A tour to compact type operators and sequences related to the finite sections projection. – In: Operator Theory, Operator Algebras and Applications (Eds. M. A. Bastos, A. Lebre, S. Samko, I. M. Spitkovsky), Oper. Theory: Adv. Appl. 242, Birkhäuser, Basel 2014, 311–323.
- S. Roch: On a question by M. Seidel and the answer by D. Dragičević et al. – In: Operator Theory, Operator Algebras and Applications (Eds. M. A. Bastos, A. Lebre, S. Samko, I. M. Spitkovsky), Oper. Theory: Adv. Appl. 242, Birkhäuser, Basel 2014, 307–310.
- S. Roch, P. A. Santos and B. Silbermann: Corrigendum to "A sequence algebra of finite sections, convolution and multiplication operators on $L^p(\mathbf{R})$ ". – Numer. Fctl. Anal. Optimization 34(2013), 1, 113–116.
- S. Roch: Finite sections of truncated Toeplitz operators. – Concrete Operators 2(2014), 1, 8–16.
- S. Roch: The universal algebra generated by a power partial isometry. – In: Large Truncated Toeplitz Matrices, Toeplitz Operators, and Related Topics (Eds. D. Bini, T. Ehrhardt, A. Y. Karlovich, I. Spitkovsky), Oper. Theory: Adv. Appl. 259, Birkhäuser, Basel 2017, 649–662.
- S. Roch: Extension-restriction theorems for algebras of approximation sequences. – In: Operator Theory, Operator Algebras, and Matrix Theory (Eds. C. Andre, M. A. Bastos, A. Y. Karlovich, B. Silbermann, I. Zaballa), Oper. Theory: Adv. Appl. 267, Birkhäuser, Basel 2018, 261–284.

- S. Roch and B. Silbermann: Toeplitz and Hankel algebras - axiomatic and asymptotic aspects. – In: Operator Theory, Operator Algebras, and Matrix Theory (Eds. C. Andre, M. A. Bastos, A. Y. Karlovich, B. Silbermann, I. Zaballa), Oper. Theory. Adv. Appl. **267**, Birkhäuser, Basel 2018, 285–315.
- S. Roch: Beyond fractality: piecewise fractal and quasifractal algebras. – In: The Diversity and Beauty of Applied Operator Theory (Eds. A. Böttcher, D. Potts, P. Stollmann, D. Wenzel), Oper. Theory. Adv. Appl. **268**, Birkhäuser, Basel 2018, 413–428.
- S. Roch: Compact sequences in quasifractal algebras. – In: Operator Theory, Functional Analysis and Applications (Eds. M. A. Bastos, L. Castro, A. Yu. Karlovich), Oper. Theory. Adv. Appl. **282**, Birkhäuser, Basel 2021, 529–550.
- S. Roch: Ideals of band-dominated operators. – Complex Variables and Elliptic Equations **67** (2022), 3, 701-715.

Lecture notes, preprints

- S. Roch: Finite sections of operators generated by singular integrals with Carleman shift. – Preprint 52 TU Karl-Marx-Stadt, 1987, 16 S.
 - S. Roch: Spatial discretization of C^* -algebras. – Summer School on Operator Algebras and Applications, IST Lisbon, June 2009, Preprint 2587 TU Darmstadt, Mai 2009, 81 pages.
 - S. Roch: Fractal algebras of discretization sequences. – Summer School on Applied Analysis, TU Chemnitz, September 2011, Preprint 2635 TU Darmstadt, August 2011, 62 pages.
 - S. Roch: On Moore-Penrose ideals. – Preprint 2704 TU Darmstadt, Januar 2016, 19 pages.
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