

ALAN M^CINTOSH'S PUBLICATIONS

- [1] Representation of bilinear forms in Hilbert space by linear operators. *Trans. Amer. Math. Soc.*, 131:365–377, 1968.
- [2] On the closed graph theorem. *Proc. Amer. Math. Soc.*, 20:397–404, 1969.
- [3] Bilinear forms in Hilbert space. *J. Math. Mech.*, 19:1027–1045, 1969/1970.
- [4] Hermitian bilinear forms which are not semibounded. *Bull. Amer. Math. Soc.*, 76:732–737, 1970.
- [5] Counterexample to a question on commutators. *Proc. Amer. Math. Soc.*, 29:337–340, 1971.
- [6] On the comparability of $A^{1/2}$ and $A^{*1/2}$. *Proc. Amer. Math. Soc.*, 32:430–434, 1972.
- [7] Functions and derivations of C^* -algebras. *J. Funct. Anal.*, 30(2):264–275, 1978.
- [8] The Toeplitz-Hausdorff theorem and ellipticity conditions. *Amer. Math. Monthly*, 85(6):475–477, 1978.
- [9] Second-order properly elliptic boundary value problems on irregular plane domains. *J. Differential Equations*, 34(3):361–392, 1979.
- [10] On representing closed accretive sesquilinear forms as $(A^{1/2}u, A^{*1/2}v)$. In *Nonlinear partial differential equations and their applications. Collège de France Seminar, Vol. III (Paris, 1980/1981)*, volume 70 of *Res. Notes in Math.*, pages 252–267. Pitman, Boston, Mass., 1982.
- [11] with R. R. Coifman and Y. Meyer. L'intégrale de Cauchy définit un opérateur borné sur L^2 pour les courbes lipschitziennes. *Ann. of Math.* (2), 116(2):361–387, 1982.
- [12] with Ronald Coifman and Yves Meyer. The Hilbert transform on Lipschitz curves. In *Miniconference on partial differential equations (Canberra, 1981)*, volume 1 of *Proc. Centre Math. Anal. Austral. Nat. Univ.*, pages 26–69. Austral. Nat. Univ., Canberra, 1982.
- [13] with Rajendra Bhatia and Chandler Davis. Perturbation of spectral subspaces and solution of linear operator equations. *Linear Algebra Appl.*, 52/53:45–67, 1983.
- [14] with R. R. Coifman and Y. Meyer. Estimations L^2 pour les noyaux singuliers. In *Conference on harmonic analysis in honor of Antoni Zygmund, Vol. I, II (Chicago, Ill., 1981)*, Wadsworth Math. Ser., pages 287–294. Wadsworth, Belmont, CA, 1983.

- [15] with B. Jefferies, editors. *Miniconference on operator theory and partial differential equations*, volume 5 of *Proceedings of the Centre for Mathematical Analysis, Australian National University*, Canberra, 1984. Australian National University Centre for Mathematical Analysis.
- [16] Square roots of operators and applications to hyperbolic PDEs. In *Miniconference on operator theory and partial differential equations (Canberra, 1983)*, volume 5 of *Proc. Centre Math. Anal. Austral. Nat. Univ.*, pages 124–136. Austral. Nat. Univ., Canberra, 1984.
- [17] Square roots of elliptic operators. *J. Funct. Anal.*, 61(3):307–327, 1985.
- [18] with Yves Meyer. Algèbres d’opérateurs définis par des intégrales singulières. *C. R. Acad. Sci. Paris Sér. I Math.*, 301(8):395–397, 1985.
- [19] with Alan Pryde. The solution of systems of operator equations using Clifford algebras. In *Miniconference on linear analysis and function spaces (Canberra, 1984)*, volume 9 of *Proc. Centre Math. Anal. Austral. Nat. Univ.*, pages 212–222. Austral. Nat. Univ., Canberra, 1985.
- [20] with Alan J. Pryde, editors. *Miniconference on linear analysis and function spaces*, volume 9 of *Proceedings of the Centre for Mathematical Analysis, Australian National University*, Canberra, 1985. Australian National University Centre for Mathematical Analysis.
- [21] Clifford algebras and the double-layer potential operator. In *Nonlinear analysis, function spaces and applications, Vol. 3 (Litomyšl, 1986)*, volume 93 of *Teubner-Texte Math.*, pages 69–76. Teubner, Leipzig, 1986.
- [22] Operators which have an H_∞ functional calculus. In *Miniconference on operator theory and partial differential equations (North Ryde, 1986)*, volume 14 of *Proc. Centre Math. Anal. Austral. Nat. Univ.*, pages 210–231. Austral. Nat. Univ., Canberra, 1986.
- [23] When are singular integral operators bounded? In *Miniconference on geometry and partial differential equations (Canberra, 1985)*, volume 10 of *Proc. Centre Math. Anal. Austral. Nat. Univ.*, pages 141–149. Austral. Nat. Univ., Canberra, 1986.
- [24] with Brian Jefferies and Werner Ricker, editors. *Miniconference on operator theory and partial differential equations*, volume 14 of *Proceedings of the Centre for Mathematical Analysis, Australian National University*, Canberra, 1986. Australian National University Centre for Mathematical Analysis.
- [25] with Alan Pryde. A functional calculus for several commuting operators. *Indiana Univ. Math. J.*, 36(2):421–439, 1987.
- [26] with Tao Qian. Fourier theory on Lipschitz curves. In *Miniconference on harmonic analysis and operator algebras (Canberra, 1987)*, volume 15 of *Proc. Centre Math. Anal. Austral. Nat. Univ.*, pages 157–166. Austral. Nat. Univ., Canberra, 1987.
- [27] with A. Pryde and W. Ricker. Estimates for solutions of the operator equation $\sum_{j=1}^m A_j Q B_j = U$. In *Special classes of linear operators and other topics (Bucharest, 1986)*, volume 28 of *Oper. Theory Adv. Appl.*, pages 197–207. Birkhäuser, Basel, 1988.

- [28] with Alan Pryde and Werner Ricker. Comparison of joint spectra for certain classes of commuting operators. *Studia Math.*, 88(1):23–36, 1988.
- [29] with Alan Pryde and Werner Ricker. Systems of operator equations and perturbation of spectral subspaces of commuting operators. *Michigan Math. J.*, 35(1):43–65, 1988.
- [30] Clifford algebras and the higher-dimensional Cauchy integral. In *Approximation and function spaces (Warsaw, 1986)*, volume 22 of *Banach Center Publ.*, pages 253–267. PWN, Warsaw, 1989.
- [31] The square root problem for elliptic operators: a survey. In *Functional-analytic methods for partial differential equations (Tokyo, 1989)*, volume 1450 of *Lecture Notes in Math.*, pages 122–140. Springer, Berlin, 1990.
- [32] with Ian Doust, Brian Jefferies, and Chun Li, editors. *Miniconference on Operators in Analysis*, volume 24 of *Proceedings of the Centre for Mathematical Analysis, Australian National University*, Canberra, 1990. Australian National University Centre for Mathematical Analysis.
- [33] with T. Qian. Singular integrals along Lipschitz curves with holomorphic kernels. *Approx. Theory Appl.*, 6(4):40–57, 1990.
- [34] with Atsushi Yagi. Operators of type ω without a bounded H_∞ functional calculus. In *Miniconference on Operators in Analysis (Sydney, 1989)*, volume 24 of *Proc. Centre Math. Anal. Austral. Nat. Univ.*, pages 159–172. Austral. Nat. Univ., Canberra, 1990.
- [35] with Tao Qian. Convolution singular integral operators on Lipschitz curves. In *Harmonic analysis (Tianjin, 1988)*, volume 1494 of *Lecture Notes in Math.*, pages 142–162. Springer, Berlin, 1991.
- [36] with Chun Li and Stephen Semmes. Convolution singular integrals on Lipschitz surfaces. *J. Amer. Math. Soc.*, 5(3):455–481, 1992.
- [37] with Tao Qian. Fourier multipliers on Lipschitz curves. *Trans. Amer. Math. Soc.*, 333(1):157–176, 1992.
- [38] with Pascal Auscher and Philippe Tchamitchian. Noyau de la chaleur d’opérateurs elliptiques complexes. *Math. Res. Lett.*, 1(1):35–43, 1994.
- [39] with Chun Li and Tao Qian. Clifford algebras, Fourier transforms and singular convolution operators on Lipschitz surfaces. *Rev. Mat. Iberoamericana*, 10(3):665–721, 1994.
- [40] Review of *Clifford Algebra and Spinor-Valued Functions, a Function Theory for the Dirac Operator*, R. Delanghe, F. Sommen and V. Souček. *Bull. Amer. Math. Soc.*, 32:344–348, 1995.
- [41] Clifford algebras, Fourier theory, singular integrals, and harmonic functions on Lipschitz domains. In *Clifford algebras in analysis and related topics (Fayetteville, AR, 1993)*, Stud. Adv. Math., pages 33–87. CRC, Boca Raton, FL, 1996.
- [42] with David Albrecht and Xuan Duong. Operator theory and harmonic analysis. In *Instructional Workshop on Analysis and Geometry, Part III (Canberra, 1995)*, volume 34 of *Proc. Centre Math. Appl. Austral. Nat. Univ.*, pages 77–136. Austral. Nat. Univ., Canberra, 1996.

- [43] with Michael Cowling, Ian Doust, and Atsushi Yagi. Banach space operators with a bounded H^∞ functional calculus. *J. Austral. Math. Soc. Ser. A*, 60(1):51–89, 1996.
- [44] with Xuan Thinh Duong. Functional calculi of second-order elliptic partial differential operators with bounded measurable coefficients. *J. Geom. Anal.*, 6(2):181–205, 1996.
- [45] with Chun Li. Clifford algebras and H_∞ functional calculi of commuting operators. In *Clifford algebras in analysis and related topics (Fayetteville, AR, 1993)*, Stud. Adv. Math., pages 89–101. CRC, Boca Raton, FL, 1996.
- [46] with Dorina Mitrea and Marius Mitrea. Rellich type identities for one-sided monogenic functions in Lipschitz domains and applications. In *Proceedings of the Symposium on Analytical and Numerical Methods in Quaternionic and Clifford Analysis (Seiffen, Germany, 1996)*, pages 135–143. 1996.
- [47] with Pascal Auscher and Andrea Nahmod. Holomorphic functional calculi of operators, quadratic estimates and interpolation. *Indiana Univ. Math. J.*, 46(2):375–403, 1997.
- [48] with Pascal Auscher and Andrea Nahmod. The square root problem of Kato in one dimension, and first order elliptic systems. *Indiana Univ. Math. J.*, 46(3):659–695, 1997.
- [49] with C. Li, K. Zhang, and Z. Wu. Compensated compactness, paracommutators, and Hardy spaces. *J. Funct. Anal.*, 150(2):289–306, 1997.
- [50] with David Albrecht and Edwin Franks. Holomorphic functional calculi and sums of commuting operators. *Bull. Austral. Math. Soc.*, 58(2):291–305, 1998.
- [51] with Pascal Auscher and Philippe Tchamitchian. Heat kernels of second order complex elliptic operators and applications. *J. Funct. Anal.*, 152(1):22–73, 1998.
- [52] with Edwin Franks. Discrete quadratic estimates and holomorphic functional calculi in Banach spaces. *Bull. Austral. Math. Soc.*, 58(2):271–290, 1998.
- [53] with Brian Jefferies. The Weyl calculus and Clifford analysis. *Bull. Austral. Math. Soc.*, 57(2):329–341, 1998.
- [54] with Xuan Thinh Duong. Singular integral operators with non-smooth kernels on irregular domains. *Rev. Mat. Iberoamericana*, 15(2):233–265, 1999.
- [55] with Xuan Thinh Duong. The L^p boundedness of Riesz transforms associated with divergence form operators. In *Workshop on Analysis and Applications (Brisbane, 1997)*, volume 37 of *Proc. Centre. Math. Anal. Austral. Nat. Univ.*, pages 15–25. Austral. Nat. Univ., Canberra, 1999.
- [56] with Brian Jefferies and James Picton-Warlow. The monogenic functional calculus. *Studia Math.*, 136(2):99–119, 1999.
- [57] with Marius Mitrea. Clifford algebras and Maxwell’s equations in Lipschitz domains. *Math. Methods Appl. Sci.*, 22(18):1599–1620, 1999.

- [58] with Jeff Hogan, Chun Li, and Kewei Zhang. Global higher integrability of Jacobians on bounded domains. *Ann. Inst. H. Poincaré Anal. Non Linéaire*, 17(2):193–217, 2000.
- [59] with Andrea Nahmod. Heat kernel estimates and functional calculi of $-b\Delta$. *Math. Scand.*, 87(2):287–319, 2000.
- [60] with Pascal Auscher, Steve Hofmann, Michael Lacey, John Lewis, and Philippe Tchamitchian. The solution of Kato’s conjecture. *C. R. Acad. Sci. Paris Sér. I Math.*, 332(7):601–606, 2001.
- [61] with Pascal Auscher, Steve Hofmann, and Philippe Tchamitchian. The Kato square root problem for higher order elliptic operators and systems on \mathbb{R}^n . *J. Evol. Equ.*, 1(4):361–385, 2001. Dedicated to the memory of Tosio Kato.
- [62] with Andreas Axelsson, René Grognard, and Jeff Hogan. Harmonic analysis of Dirac operators on Lipschitz domains. In *Clifford analysis and its applications (Prague, 2000)*, volume 25 of *NATO Sci. Ser. II Math. Phys. Chem.*, pages 231–246. Kluwer Acad. Publ., Dordrecht, 2001.
- [63] with Alexander Isaev, Andrew Hassell, and Adam Sikora, editors. *Geometric analysis and applications*, volume 39 of *Proceedings of the Centre for Mathematics and its Applications, Australian National University*, Canberra, 2001. Australian National University Centre for Mathematics and its Applications.
- [64] with Steve Hofmann. The solution of the Kato problem in two dimensions. In *Proceedings of the 6th International Conference on Harmonic Analysis and Partial Differential Equations (El Escorial, Spain, 2000)*, pages 143–160, Publicacions Matemàtiques, Univ. Autònoma de Barcelona, 2002.
- [65] with Steve Hofmann and Michael Lacey. The solution of the Kato problem for divergence form elliptic operators with Gaussian heat kernel bounds. *Ann. of Math. (2)*, 156(2):623–631, 2002.
- [66] with Pascal Auscher, Steve Hofmann, Michael Lacey, and Ph. Tchamitchian. The solution of the Kato square root problem for second order elliptic operators on \mathbb{R}^n . *Ann. of Math. (2)*, 156(2):633–654, 2002.
- [67] with Zengjian Lou. Divergence-free Hardy space on \mathbb{R}_+^n . *Sci. China Ser. A*, to appear.