# References for Research in Quantum Distinguishability and State Disturbance 

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#### Abstract

This document contains 578 references that may be useful in answering the following questions in all their varied contexts: "How statistically distinguishable are quantum states?" and "What is the best tradeoff between disturbance and inference in quantum measurement?"

References are grouped under three major headings: Progress Toward the Quantum Problem; Information Theory and Classical Distinguishability; and Matrix Inequalities, Operator Relations, and Mathematical Techniques.

This is an expanded version of the bibliography appearing in my Ph. D. Dissertation Distinguishability and Accessible Information in Quantum Theory. Even now, the list is far from complete: relevant additions to the list are welcome. Eventually, this bibliography will be annotated and published elsewhere.


## 1 Progress Toward the Quantum Problem

1. P. M. Alberti, "A note on the transition probability over $C^{*}$-algebras," Letters in Mathematical Physics, vol. 7, pp. 25-32, 1983.
2. P. M. Alberti and A. Uhlmann, "Stochastic linear maps and transition probability," Letters in Mathematical Physics, vol. 7, pp. 107-112, 1983.
3. A. Albrecht, "Locating relative information in quantum systems," Imperial College preprint, April 1994.
4. H. Araki and G. Raggio, "A remark on transition probability," Letters in Mathematical Physics, vol. 6, p. 237, 1982.
5. H. Araki, "Recent progress on entropy and relative entropy," in VIII'th International Congress on Mathematical Physics (M. Melokhout and R. Sénéor, eds.), (Singapore), pp. 354-365, World Scientific, 1987.
6. R. Balian, Y. Alhassid, and H. Reinhardt, "Dissipation in many-body systems: A geometric approach based on information theory," Physics Reports, vol. 131(1,2), pp. 1-146, 1986.
7. L. E. Ballentine, "Can the statistical postulate of quantum theory be derived?-A critique of the many-universes interpretation," Foundations of Physics, vol. 3(2), pp. 229-240, 1973.
8. L. E. Ballentine, "Probability theory in quantum mechanics," American Journal of Physics, vol. 54(10), pp. 883-889, 1986.
9. W. Band and J. L. Park, "The empirical determination of quantum states," Foundations of Physics, vol. 1(2), pp. 133-144, 1970.
10. W. Band and J. L. Park, "A general method of empirical state determination in quantum physics: Part II," Foundations of Physics, vol. 1(4), pp. 339-357, 1971.
11. W. Band and J. L. Park, "Quantum state determination: Quorum for a particle in one dimension," American Journal of Physics, vol. 47(2), pp. 188-191, 1979.
12. S. M. Barnett and S. J. D. Phoenix, "Information-theoretic limits to quantum cryptography," Physical Review A, vol. 48(1), pp. R5-R8, 1993.
13. S. M. Barnett, R. Loudon, D. T. Pegg, and S. J. D. Phoenix, "Communication using quantum states," Journal of Modern Optics, vol. 41(12), pp. 2351-2373, 1994.
14. H. Barnum, C. M. Caves, C. A. Fuchs, R. Jozsa, and B. Schumacher, "Noncommuting mixed states cannot be broadcast," Physical Review Letters, vol. 76, pp. 2818-2822, 1996. Also quant-ph/9511010.
15. H. Barnum, C. A. Fuchs, R. Jozsa, and B. Schumacher, "General fidelity limit for quantum channels," Preprint, pp. 1-6, 1996. Submitted to Physical Review A. Also quant-ph/9603014.
16. P. Benioff, "Possible strengthening of the interpretative rules of quantum mechanics," Physical Review $D$, vol. 7(12), pp. 3603-3609, 1973.
17. P. Benioff, "Some consequences of the strengthened interpretative rules of quantum mechanics," Journal of Mathematical Physics, vol. 15(5), pp. 552-559, 1974.
18. P. A. Benioff and H. Ekstein, "States and state-preparing procedures in quantum mechanics," Il Nuovo Cimento, vol. 40B(1), pp. 9-26, 1977.
19. P. A. Benioff, "Finite and infinite measurement sequences in quantum mechanics and randomness: The Everett interpretation," Journal of Mathematical Physics, vol. 18(12), pp. 2289-2295, 1977.
20. P. Benioff, "A note on the Everett interpretation of quantum mechanics," Foundations of Physics, vol. 8(9/10), pp. 709-720, 1978.
21. C. H. Bennett, G. Brassard, S. Breidbart, and S. Wiesner, "Quantum cryptography, or unforgeable subway tokens," in Advances in Cryptology: Proceedings of Crypto 82 (D. Chaum, R. L. Rivest, and A. T. Sherman, eds.), (New York), pp. 267-275, Plenum Press, 1982.
22. C. H. Bennett and G. Brassard, "Quantum cryptography: Public key distribution and coin tossing," in Proceedings of IEEE International Conference on Computers, Systems and Signal Processing, (New York), pp. 175-179, IEEE, 1984. Bangalore, India, December 1984.
23. C. H. Bennett and G. Brassard, "Quantum public key distribution reinvented," Sigact News, vol. 18(4), pp. 51-53, 1987.
24. C. H. Bennett, G. Brassard, and N. D. Mermin, "Quantum cryptography without Bell's theorem," Physical Review Letters, vol. 68(5), pp. 557-559, 1992.
25. C. H. Bennett, "Quantum cryptography using any two nonorthogonal states," Physical Review Letters, vol. 68(21), pp. 3121-3124, 1992.
26. C. H. Bennett and S. J. Wiesner, "Communication via one- and two-particle operators on Einstein-Podolsky-Rosen states," Physical Review Letters, vol. 69(20), pp. 2881-2884, 1992.
27. C. H. Bennett, G. Brassard, C. Crépeau, R. Jozsa, A. Peres, and W. K. Wootters, "Teleporting an unknown quantum state via dual classical and Einstein-Podolsky-Rosen channels," Physical Review Letters, vol. 70(13), pp. 1895-1899, 1993.
28. C. H. Bennett, G. Brassard, R. Jozsa, D. Mayers, A. Peres, B. Schumacher, and W. K. Wootters, "Reduction of quantum entropy by reversible extraction of classical information," Journal of Modern Optics, vol. 41(12), pp. 2307-2314, 1994.
29. C. H. Bennett, "Quantum information and computation," Physics Today, vol. 48(10), pp. 24-30, 1995.
30. G. Brassard, "The dawn of a new era for quantum cryptography: The experimental prototype is working!," Sigact News, vol. 20(4), pp. 78-82, 1989.
31. G. Brassard, "A bibliography of quantum cryptography," Université de Montréal preprint, pp. 1-10, 3 December 1993. A preliminary version of this appeared in Sigact News, vol. 24(3), 1993, pp. 16-20.
32. G. Brassard, "Cryptology column - 25 years of quantum cryptography," Sigact News, vol. 27(3), pp. 13-24, 1996.
33. S. L. Braunstein and C. M. Caves, "Quantum rules: An effect can have more than one operation," Foundations of Physics Letters, vol. 1, pp. 3-12, 1988.
34. S. L. Braunstein and C. M. Caves, "Information-theoretic Bell inequalities," Physical Review Letters, vol. 61(6), pp. 662-665, 1988.
35. S. L. Braunstein, Novel Quantum States and Measurements. PhD thesis, California Institute of Technology, Pasadena, California, 1988.
36. S. L. Braunstein and C. M. Caves, "Wringing out better Bell inequalities," Annals of Physics, vol. 202, pp. 22-56, 1990.
37. S. L. Braunstein, "Fundamental limits to precision measurements," in Symposium on the Foundation of Modern Physics 1993 (P. Busch, P. Lahti, and P. Mittelstaedt, eds.), (Singapore), pp. 106-117, World Scientific, 1993.
38. S. L. Braunstein, "Uncertainty relations as Hilbert space geometry," in Third International Workshop on Squeezed States and Uncertainty Relations (D. Han, Y. S. Kim, N. H. Rubin, Y. Shih, and W. W. Zachary, eds.), (Maryland), pp. 117-122, NASA, 1994. NASA Conference Publication 3270.
39. S. L. Braunstein and C. M. Caves, "Statistical distance and the geometry of quantum states," Physical Review Letters, vol. 72, pp. 3439-3443, 1994.
40. S. L. Braunstein and C. M. Caves, "Geometry of quantum states," in Quantum Communications and Measurement (V. P. Belavkin, O. Hirota, and R. L. Hudson, eds.), (New York), pp. 21-30, Plenum Press, 1995.
41. S. L. Braunstein and C. M. Caves, "Geometry of quantum states," in Fundamental Problems in Quantum Theory: A Conference Held in Honor of John A. Wheeler (D. M. Greenberger and A. Zeilinger, eds.), (New York), pp. 786-797, New York Academy of Sciences, 1995. [Annals of the New York Academy of Sciences, vol. 755].
42. S. L. Braunstein and G. J. Milburn, "Dynamics of statistical distance: Quantum limits for two level clocks," Physical Review A, vol. 51, pp. 1820-1826, 1995.
43. S. L. Braunstein, C. M. Caves, and G. J. Milburn, "Generalized uncertainty relations: Theory, examples, and Lorentz invariance," Annals of Physics, vol. 247, pp. 135-173, 1996.
44. S. L. Braunstein, "Geometry of quantum inference," in Sixty Years of $E P R$ (A. Mann and M. Revzen, eds.), (Israel), Ann. Phys. Soc., 1995. To be published.
45. S. L. Braunstein, "Geometry of quantum inference," Physics Letters A, 1996. To appear.
46. D. Brody and B. Meister, "Minimum decision cost for quantum ensembles," Physical Review Letters, vol. 76(1), pp. 1-5, 1996.
47. J. Bub, "von Neumann's projection postulate as a probability conditionalization rule in quantum mechanics," Journal of Philosophical Logic, vol. 6, pp. 381-390, 1977.
48. D. Bures, "An extension of Kakutani's theorem on infinite product measures to the tensor product of semifinite $w^{*}$-algebras," Transactions of the American Mathematical Society, vol. 135, pp. 199-212, 1969.
49. P. Busch, "Is the quantum state (an) observable?," in Experimental Metaphysics-Quantum Mechanical Studies in Honor of Abner Shimony (R. S. Cohen and J. Stachel, eds.), (Dordrecht), D. Reidel, 1996. To appear. Also quant-ph/9604014.
50. V. Cantoni, "Generalized 'transition probability'," Communications in Mathematical Physics, vol. 44, pp. 125-128, 1975.
51. C. M. Caves, "Entropy and information: How much information is needed to assign a probability?," in Complexity, Entropy and the Physics of Information (W. H. Zurek, ed.), (Redwood City, CA), pp. 91-115, Addison-Wesley, 1990. Santa Fe Institute Studies in the Sciences of Complexity, vol. VIII.
52. C. M. Caves, "Information and entropy," Physical Review E, vol. 47(6), pp. 4010-4017, 1993.
53. C. M. Caves and P. D. Drummond, "Quantum limits on bosonic communication rates," Reviews of Modern Physics, vol. 66(2), pp. 481-537, 1994.
54. C. M. Caves, "Information, entropy, and chaos," in Physical Origins of Time Asymmetry (J. J. Halliwell, J. Pérez-Mercader, and W. H. Zurek, eds.), (Cambridge), pp. 47-89, Cambridge University Press, 1994.
55. C. M. Caves and C. A. Fuchs, "Quantum information: How much information in a state vector?," to appear in Sixty Years of EPR (A. Mann and M. Revzen, eds.), (Ann. Phys. Soc., Israel) 1996. Also quant-ph/9601025.
56. J. F. Clauser, "von Neumann's informal hidden-variable argument," American Journal of Physics, vol. 39, pp. 1095-1096, 1971.
57. E. B. Davies and J. T. Lewis, "An operational approach to quantum probability," Communications in Mathematical Physics, vol. 17, pp. 239-260, 1970.
58. E. B. Davies, Quantum Theory of Open Systems. London: Academic Press, 1976.
59. E. B. Davies, "Information and quantum measurement," IEEE Transactions on Information Theory, vol. IT-24(5), pp. 596-599, 1978.
60. B. S. DeWitt and N. Graham, eds., The Many-Worlds Interpretation of Quantum Mechanics. Princeton Series in Physics, Princeton, NJ: Princeton University Press, 1973.
61. D. Dieks, "Communication by EPR devices," Physics Letters A, vol. 92(6), pp. 271-272, 1982.
62. D. Dieks and P. Veltkamp, "Distance between quantum states, statistical inference and the projection postulate," Physics Letters A, vol. 97(1,2), pp. 24-28, 1983.
63. J. Dittmann and G. Rudolph, "On a connection governing parallel transport along $2 \times 2$ density matrices," Journal of Geometry and Physics, vol. 10, pp. 93-106, 1992.
64. J. Dittmann, "Some properties of the Riemannian Bures metric on mixed states," Journal of Geometry and Physics, vol. 13, pp. 203-206, 1994.
65. M. J. Donald, "On the relative entropy," Communications in Mathematical Physics, vol. 105, pp. 13-34, 1986.
66. M. J. Donald, "Free energy and the relative entropy," Journal of Statistical Physics, vol. 49(1/2), pp. 81-87, 1987.
67. M. J. Donald, "Further results on the relative entropy," Mathematical Proceedings of the Cambridge Philosophical Society, vol. 101, pp. 363-373, 1987.
68. M. J. Donald, "A priori probability and localized observers," Foundations of Physics, vol. 22(9), pp. 1111-1172, 1992.
69. M. J. Donald, "Probabilities for observing mixed quantum states given limited prior information," in Quantum Communications and Measurement (V. P. Belavkin, O. Hirota, and R. L. Hudson, eds.), (New York), pp. 411-418, Plenum Press, 1995.
70. C. M. Edwards, "The operational approach to algebraic quantum theory I," Communications in Mathematical Physics, vol. 16(3), pp. 207-230, 1970.
71. C. M. Edwards, "Classes of operations in quantum theory," Communications in Mathematical Physics, vol. 20(1), pp. 26-56, 1971.
72. A. Einstein, B. Podolsky, and N. Rosen, "Can quantum-mechanical description of physical reality be considered complete?," Physical Review, vol. 47, pp. 777-780, 1935.
73. A. K. Ekert, "Quantum cryptography based on Bell's theorem," Physical Review Letters, vol. 67(6), pp. 661-663, 1991.
74. A. K. Ekert, B. Huttner, G. M. Palma, and A. Peres, "Eavesdropping on quantum-cryptographical systems," Physical Review A, vol. 50(2), pp. 1047-1056, 1994.
75. E. Farhi, J. Goldstone, and S. Gutman, "How probability arises in quantum mechanics," Annals of Physics, vol. 192, pp. 368-382, 1989.
76. R. P. Feynman, "The concept of probability in quantum mechanics," in Proceedings of the Second Berkeley Symposium on Mathematical Statistics and Probability (J. Neyman, ed.), (Berkeley, CA), pp. 533-541, University of California Press, 1951.
77. S. K. Foong and S. Kanno, "Proof of Page's conjecture on the average entropy of a subsystem," Physical Review Letters, vol. 72(8), pp. 1148-1151, 1994.
78. G. D. Forney, Jr., "Upper bound to the capacity of a linear time-varying channel with additive Gaussian noise," Master's thesis, Massachusetts Institute of Technology, Lincoln Laboratory, Cambridge, MA, September 261962.
79. C. A. Fuchs and C. M. Caves, "Ensemble-dependent bounds for accessible information in quantum mechanics," Physical Review Letters, vol. 73(23), pp. 3047-3050, 1994.
80. C. A. Fuchs and C. M. Caves, "Bounds for accessible information in quantum mechanics," in Fundamental Problems in Quantum Theory: A Conference Held in Honor of John A. Wheeler (D. M. Greenberger and A. Zeilinger, eds.), (New York), pp. 706-715, New York Academy of Sciences, 1995. [Annals of the New York Academy of Sciences, vol. 755].
81. C. A. Fuchs and C. M. Caves, "Mathematical techniques for quantum communication theory," Open Systems and Information Dynamics, vol. 3(3), pp. 345-356, 1995. Also quant-ph/9604001.
82. C. A. Fuchs, Distinguishability and Accessible Information in Quantum Theory. PhD thesis, The University of New Mexico, Albuquerque, NM, 1996. Also quant-ph/9601020.
83. C. A. Fuchs and A. Peres, "Quantum state disturbance vs. information gain: Uncertainty relations for quantum information," Physical Review A, vol. 53, pp. 2038-2045, 1996. Also quant-ph/9512023.
84. W. Gale, E. Guth, and G. T. Trammell, "Determination of the quantum state by measurements," Physical Review, vol. 165(6), pp. 1434-1436, 1968.
85. G. W. Gibbons, "Typical states and density matrices," Journal of Geometry and Physics, vol. 8, pp. 147-162, 1992.
86. R. Giles, "Foundations for quantum mechanics," Journal of Mathematical Physics, vol. 11(7), pp. 21392160, 1970.
87. N. Gisin, "Irreversible quantum dynamics and the Hilbert space structure of quantum kinematics," Journal of Mathematical Physics, vol. 24(7), pp. 1779-1782, 1983.
88. N. Gisin, "Comments on "Assumptions implying the Schrödinger equation," by Thomas F. Jordan [Am. J. Phys. 59, 606-608 (1991)]," American Journal of Physics, vol. 61(1), pp. 86-87, 1993.
89. A. M. Gleason, "Measures on the closed subspaces of a Hilbert space," Journal of Mathematics and Mechanics, vol. 6(6), pp. 885-893, 1957.
90. J. P. Gordon, "Noise at optical frequencies; information theory," in Quantum Electronics and Coherent Light; Proceedings of the International School of Physics "Enrico Fermi," Course XXXI (P. A. Miles, ed.), (New York), pp. 156-181, Academic Press, 1964.
91. N. Graham, The Everett Interpretation of Quantum Mechanics. PhD thesis, University of North Carolina at Chapel Hill, Chapel Hill, NC, 1970.
92. S. Gudder, J.-P. Marchand, and W. Wyss, "Bures distance and relative entropy," Journal of Mathematical Physics, vol. 20(9), pp. 1963-1966, 1979.
93. S. P. Gudder, "Expectation and transition probability," International Journal of Theoretical Physics, vol. 20(5), pp. 383-395, 1981.
94. R. Haag and D. Kastler, "An algebraic approach to quantum field theory," Journal of Mathematical Physics, vol. 5(7), pp. 848-861, 1964.
95. N. Hadjisavvas, "Distance between states and statistical inference in quantum theory," Annales de l'Institut Henri Poincaré-Section A, vol. 35(4), pp. 287-309, 1981.
96. N. Hadjisavvas, "On Cantoni's generalized transition probability," Communications in Mathematical Physics, vol. 83, pp. 43-48, 1982.
97. N. Hadjisavvas, "Metrics on the set of states of a $W^{*}$-algebra," Linear Algebra and Its Applications, vol. 84, pp. 281-287, 1986.
98. M. J. W. Hall and M. J. O'Rourke, "Realistic performance of the maximum information channel," Quantum Optics, vol. 5, pp. 161-180, 1993.
99. M. J. W. Hall, "Information exclusion principle for complementary observables," Physical Review Letters, vol. 74(17), pp. 3307-3311, 1995.
100. J. E. Harriman, "Geometry of density matrices. I. Definitions $N$ and 1 matrices," Physical Review A, vol. 17(4), pp. 1249-1256, 1978.
101. J. E. Harriman, "Geometry of density matrices. II. Reduced density matrices and $N$ representability," Physical Review A, vol. 17(4), pp. 1257-1268, 1978.
102. J. B. Hartle, "Quantum mechanics of individual systems," American Journal of Physics, vol. 36(8), pp. 704-712, 1968.
103. H. Hasegawa, " $\alpha$-divergence of the non-commutative information geometry," Reports on Mathematical Physics, vol. 33(1/2), pp. 87-93, 1993.
104. H. Hasegawa, "Non-commutative extension of the information geometry," in Quantum Communications and Measurement (V. P. Belavkin, O. Hirota, and R. L. Hudson, eds.), (New York), pp. 327-337, Plenum Press, 1995.
105. P. Hausladen and W. K. Wootters, "A 'pretty good' measurement for distinguishing quantum states," Journal of Modern Optics, vol. 41(12), pp. 2385-2390, 1994.
106. P. Hausladen, B. Schumacher, M. Westmoreland, and W. K. Wootters, "Sending classical bits via quantum its," in Fundamental Problems in Quantum Theory: A Conference Held in Honor of John A. Wheeler (D. M. Greenberger and A. Zeilinger, eds.), (New York), pp. 698-705, New York Academy of Sciences, 1995. [Annals of the New York Academy of Sciences, vol. 755].
107. P. Hausladen, R. Jozsa, B. Schumacher, M. Westmoreland, and W. K. Wootters, "Classical information capacity of a quantum channel," Physical Review A, vol. 54(3), pp. ??-??, 1996.
108. W. Heisenberg, "The physical content of quantum kinematics and mechanics," in Quantum Theory and Measurement (J. A. Wheeler and W. H. Zurek, eds.), (Princeton, NJ), pp. 62-84, Princeton University Press, 1983.
109. K. Hellwig and K. Kraus, "Pure operations and measurements," Communications in Mathematical Physics, vol. 11(3), pp. 214-220, 1969.
110. K. Hellwig and K. Kraus, "Operations and measurements. II," Communications in Mathematical Physics, vol. 16(2), pp. 142-147, 1970.
111. K. Hellwig and W. Stulpe, "A classical reformulation of finite-dimensional quantum mechanics," in Symposium on the Foundation of Modern Physics 1993 (P. Busch, P. Lahti, and P. Mittelstaedt, eds.), (Singapore), pp. 209-214, World Scientific, 1993.
112. C. W. Helstrom, "Detection theory and quantum mechanics," Information and Control, vol. 10, pp. 254-291, 1967.
113. C. W. Helstrom and R. S. Kennedy, "Noncommuting observables in quantum detection and estimation theory," IEEE Transactions on Information Theory, vol. IT-20(1), pp. 16-24, 1974.
114. C. W. Helstrom, Quantum Detection and Estimation Theory. Mathematics in Science and Engineering, vol. 123, New York: Academic Press, 1976.
115. F. Hiai and D. Petz, "The proper formula for relative entropy and its asymptotics in quantum probability," Communications in Mathematical Physics, vol. 143, pp. 99-114, 1991.
116. A. S. Holevo, "Statistical problems in quantum physics," in Proceedings of the Second Japan-USSR Symposium on Probability Theory (G. Maruyama and J. V. Prokhorov, eds.), (Berlin), pp. 104-119, Springer-Verlag, 1973. Lecture Notes in Mathematics, vol. 330.
117. A. S. Holevo, "Statistical decisions in quantum theory," Theory of Probability and Its Applications, vol. 18, pp. 418-420, 1973.
118. A. S. Holevo, "Information-theoretical aspects of quantum measurement," Problemy Peredachi Informatsii, vol. 9(2), pp. 31-42, 1973. [A. S. Kholevo, Problems of Information Transmission, vol. 9, pp. 110-118 (1973)].
119. A. S. Holevo, "Bounds for the quantity of information transmitted by a quantum communication channel," Problemy Peredachi Informatsii, vol. 9(3), pp. 3-11, 1973. [A. S. Kholevo, Problems of Information Transmission, vol. 9, pp. 177-183 (1973)].
120. A. S. Holevo, "Statistical decision theory for quantum systems," Journal of Multivariate Analysis, vol. 3, pp. 337-394, 1973.
121. A. S. Holevo, "Some statistical problems for quantum Gaussian states," IEEE Transactions on Information Theory, vol. IT-21(5), pp. 533-543, 1975.
122. A. S. Holevo, "Noncommutative analogues of the Cramér-Rao inequality in the quantum theory of measurement," in Proceedings of the Third Japan-USSR Symposium on Probability Theory (G. Maruyama and J. V. Prokhorov, eds.), (Berlin), pp. 194-222, Springer-Verlag, 1976. Lecture Notes in Mathematics, vol. 550.
123. A. S. Holevo, "Commutation superoperator of a state and its applications to the noncommutative statistics," Reports on Mathematical Physics, vol. 12(2), pp. 251-271, 1977.
124. A. S. Holevo, "Problems in the mathematical theory of quantum communication channels," Reports on Mathematical Physics, vol. 12(2), pp. 273-278, 1977.
125. A. S. Holevo, Probabilistic and Statistical Aspects of Quantum Theory. North-Holland Series in Statistics and Probability, vol. 1, Amsterdam: North-Holland, 1982.
126. M. Hübner, "Explicit computation of the Bures distance for density matrices," Physics Letters A, vol. 163, pp. 239-242, 1992.
127. M. Hübner, "Computation of Uhlmann's parallel transport for density matrices and the Bures metric on three-dimensional Hilbert space," Physics Letters A, vol. 179, pp. 226-230, 1993.
128. R. I. G. Hughes, The Structure and Interpretation of Quantum Mechanics. Cambridge, MA: Harvard University Press, 1989.
129. L. P. Hughston, R. Jozsa, and W. K. Wootters, "A complete classification of quantum ensembles having a given density matrix," Physics Letters A, vol. 183, pp. 14-18, 1993.
130. L. P. Hughston, "Geometric aspects of quantum mechanics," Merrill Lynch International Limited preprint, pp. 1-21, 1994.
131. B. Huttner and A. Peres, "Quantum cryptography with photon pairs," Journal of Modern Optics, vol. 41(12), pp. 2397-2403, 1994.
132. B. Huttner and A. K. Ekert, "Information gain in quantum eavesdropping," Journal of Modern Optics, vol. 41(12), pp. 2455-2466, 1994.
133. R. S. Ingarden, "Information geometry in functional spaces of classical and quantum finite statistical systems," International Journal of Engineering Science, vol. 19(12), pp. 1609-1633, 1981.
134. I. D. Ivanović, "Geometrical description of quantal state determination," Journal of Physics A, vol. 14(1), pp. 3241-3245, 1981.
135. I. D. Ivanović, "Formal state determination," Journal of Mathematical Physics, vol. 24(5), pp. 11991205, 1983.
136. G. Jaeger and A. Shimony, "Optimal distinction between two non-orthogonal quantum states," Physics Letters A, vol. 197, pp. 83-87, 1995.
137. M. Jammer, "The EPR problem in its historical development," in Symposium on the Foundations of Modern Physics: 50 years of the Einstein-Podolsky-Rosen Gedankenexperiment (P. Lahti and P. Mittelstaedt, eds.), (Singapore), pp. 129-149, World Scientific, 1985.
138. J. M. Jauch and C. Piron, "Generalized localizability," Helvetica Physica Acta, vol. 40, pp. 559-570, 1967.
139. K. R. W. Jones, Quantum Inference and the Optimal Determination of Quantum States. PhD thesis, University of Bristol, Bristol, England, 1989.
140. K. R. W. Jones, "Entropy of random quantum states," Journal of Physics A, vol. 23(23), pp. L1247L1250, 1990.
141. K. R. W. Jones, "Principles of quantum inference," Annals of Physics, vol. 207(1), pp. 140-170, 1991.
142. K. R. W. Jones, "Quantum limits to information about states for finite dimensional Hilbert space," Journal of Physics A, vol. 24, pp. 121-130, 1991.
143. K. R. W. Jones, "Towards a proof of two conjectures from quantum inference concerning quantum limits to knowledge of states," Journal of Physics A, vol. 24(8), pp. L415-L419, 1991.
144. K. R. W. Jones, "Riemann-Liouville fractional integration and reduced distributions on hyperspheres," Journal of Physics A, vol. 24, pp. 1237-1244, 1991.
145. K. R. W. Jones, "Fractional integration and uniform densities in quantum mechanics," in Recent Advances in Fractional Calculus (R. N. Kalia, ed.), (Sauk Rapids, MN), pp. 203-218, Global Publishing, 1993.
146. K. R. W. Jones, "Fundamental limits upon the measurement of state vectors," Physical Review A, vol. 50(5), pp. 3682-3699, 1994.
147. T. F. Jordan, "Assumptions implying the Schrödinger equation," American Journal of Physics, vol. 59(7), pp. 606-608, 1991.
148. R. Jozsa, "Fidelity for mixed quantum states," Journal of Modern Optics, vol. 41(12), pp. 2315-2323, 1994.
149. R. Jozsa, D. Robb, and W. K. Wootters, "Lower bound for accessible information in quantum mechanics," Physical Review A, vol. 49, pp. 668-677, 1994.
150. R. Jozsa and B. Schumacher, "A new proof of the quantum noiseless coding theorem," Journal of Modern Optics, vol. 41(12), pp. 2343-2349, 1994.
151. R. V. Kadison, "Isometries of operator algebras," Annals of Mathematics, vol. 54(2), pp. 325-338, 1951.
152. R. V. Kadison, "Transformations of states in operator theory and dynamics," Topology, vol. 3, suppl. 2, pp. 177-198, 1965.
153. H. Kosaki, "On the Bures distance and the Uhlmann transition probability of states on a von Neumann algebra," Proceedings of the American Mathematical Society, vol. 89(2), pp. 285-288, 1983.
154. K. Kraus, "General state changes in quantum theory," Annals of Physics, vol. 64, pp. 311-335, 1971.
155. K. Kraus, States, Effects, and Operations: Fundamental Notions of Quantum Theory. Lecture Notes in Physics, vol. 190, Berlin: Springer-Verlag, 1983.
156. L. B. Levitin, "On the quantum measure of information," in Proceedings of the Fourth All-Union Conference on Information and Coding Theory, Sec. II, Tashkent, 1969. Translation by A. Bezinger and S. L. Braunstein available.
157. L. B. Levitin, "Physical information theory part II: Quantum systems," in Workshop on Physics and Computation: PhysComp '92 (D. Matzke, ed.), (Los Alamitos, CA), pp. 215-219, IEEE Computer Society, 1993.
158. L. B. Levitin, "Optimal quantum measurements for two pure and mixed states," in Quantum Communications and Measurement (V. P. Belavkin, O. Hirota, and R. L. Hudson, eds.), (New York), pp. 439-448, Plenum Press, 1995.
159. G. Lindblad, "An entropy inequality for quantum measurements," Communications in Mathematical Physics, vol. 28, pp. 245-249, 1972.
160. G. Lindblad, "Entropy, information and quantum measurements," Communications in Mathematical Physics, vol. 33, pp. 305-322, 1973.
161. G. Lindblad, "Expectations and entropy inequalities for finite quantum systems," Communications in Mathematical Physics, vol. 39, pp. 111-119, 1974.
162. G. Lindblad, "On the generators of quantum dynamical semigroups," Communications in Mathematical Physics, vol. 48, pp. 119-130, 1976.
163. G. Lindblad, Non-Equilibrium Entropy and Irreversibility. Mathematical Physics Studies, vol. 5, Dordrecht: D. Reidel, 1983.
164. G. Lindblad, "Quantum entropy and quantum measurements," in Quantum Aspects of Optical Communications (C. Bendjaballah, O. Hirota, and S. Reynaud, eds.), Lecture Notes in Physics, vol. 378, (Berlin), pp. 71-80, Springer-Verlag, 1991.
165. H.-K. Lo, "Quantum coding theorem for mixed states," Optics Communications, vol. 119, pp. 552-556, 1995.
166. J. D. Malley and J. Hornstein, "Quantum statistical inference," Statistical Sciences, vol. 8(4), pp. 433457, 1993.
167. S. Massar and S. Popescu, "Optimal extraction of information from finite quantum ensembles," Physical Review Letters, vol. 74(8), pp. 1259-1263, 1995.
168. D. Mayers, "Generalized measurements and quantum transformations," Université de Montréal preprint, pp. 1-13, 1994.
169. H. Nagaoka, "On Fisher information of quantum statistical models," in The 10th Symposium on Information Theory and Its Applications (??, ed.), (??), pp. 241-246, ??, 1987. Enoshima Island, Japan, Nov. 19-21, 1987. In Japanese.
170. H. Nagaoka, "On the parameter estimation problem for quantum statistical models," in The 12th Symposium on Information Theory and Its Applications (SITA '89) (??, ed.), (??), pp. 577-582, ??, 1989. Inuyama, Japan, Dec. 6-9, 1989.
171. H. Nagaoka, "Differential geometrical aspects of quantum state estimation and relative entropy," University of Tokyo preprint, September 1994.
172. H. Nagaoka, "Differential geometrical aspects of quantum state estimation and relative entropy," in Quantum Communications and Measurement (V. P. Belavkin, O. Hirota, and R. L. Hudson, eds.), (New York), pp. 449-452, Plenum Press, 1995.
173. M. Nakamura and T. Turumaru, "Expectations in an operator algebra," Tohoku Mathematics Journal, vol. 6, pp. 182-188, 1954.
174. W. Ochs, "On the strong law of large numbers in quantum probability theory," Journal of Philosophical Logic, vol. 6, pp. 473-480, 1977.
175. M. Ohya, "On compound state and mutual information in quantum information theory," IEEE Transactions on Information Theory, vol. IT-29(5), pp. 770-774, 1983.
176. M. Ohya and D. Petz, Quantum Entropy and Its Use. Texts and Monographs in Physics, Berlin: Springer-Verlag, 1993.
177. M. Ohya, "State change, complexity and fractal in quantum systems," in Quantum Communications and Measurement (V. P. Belavkin, O. Hirota, and R. L. Hudson, eds.), (New York), pp. 309-320, Plenum Press, 1995.
178. M. Ohya and N. Watanabe, "A mathematical study of information transmission in quantum communication processes," in Quantum Communications and Measurement (V. P. Belavkin, O. Hirota, and R. L. Hudson, eds.), (New York), pp. 371-378, Plenum Press, 1995.
179. M. Osaki and O. Hirota, "On an effectiveness of quantum mini-max formula in quantum communication," in Quantum Communications and Measurement (V. P. Belavkin, O. Hirota, and R. L. Hudson, eds.), (New York), pp. 401-409, Plenum Press, 1995.
180. M. Ozawa, "Mathematical characterization of measurement statistics," in Quantum Communications and Measurement (V. P. Belavkin, O. Hirota, and R. L. Hudson, eds.), (New York), pp. 109-117, Plenum Press, 1995.
181. D. N. Page, "Average entropy of a subsystem," Physical Review Letters, vol. 71(9), pp. 1291-1294, 1993.
182. J. L. Park and W. Band, "A general method of empirical state determination in quantum physics: Part I," Foundations of Physics, vol. 1(3), pp. 211-226, 1971.
183. M. Pavičić, "Bibliography on quantum logics and related structures," International Journal of Theoretical Physics, vol. 31(3), pp. 373-460, 1992. This bibliography contains more than 1600 items.
184. A. Peres, "What is a state vector?," American Journal of Physics, vol. 52(7), pp. 644-650, 1984.
185. A. Peres, "How to differentiate between non-orthogonal states," Physics Letters A, vol. 128, p. 19, 1988.
186. A. Peres, "Nonlinear variants of Schrödinger's equation violate the second law of thermodynamics," Physical Review Letters, vol. 63, p. 1114, 1989.
187. A. Peres, "Neumark's theorem and quantum inseparability," Foundations of Physics, vol. 20(12), pp. 1441-1453, 1990.
188. A. Peres, "Thermodynamic constraints on quantum axioms," in Complexity, Entropy and the Physics of Information (W. H. Zurek, ed.), (Redwood City, CA), pp. 345-356, Addison-Wesley, 1990. Santa Fe Institute Studies in the Sciences of Complexity, vol. VIII.
189. A. Peres and W. K. Wootters, "Optimal detection of quantum information," Physical Review Letters, vol. 66, pp. 1119-1122, 1991.
190. A. Peres, "Storage and retrieval of quantum information," in Workshop on Physics and Computation: PhysComp '92 (D. Matzke, ed.), (Los Alamitos, CA), pp. 155-158, IEEE Computer Society, 1993.
191. A. Peres, Quantum Theory: Concepts and Methods. Fundamental Theories of Physics, Dordrecht: Kluwer Academic Publishers, 1993.
192. D. Petz and G. Toth, "The Bogoliubov inner product in quantum statistics," Letters in Mathematical Physics, vol. 27, pp. 205-216, 1993.
193. D. Petz, "Geometry of canonical correlation on the state space of a quantum system," Journal of Mathematical Physics, vol. 35(2), pp. 780-795, 1994.
194. S. Popescu, "Bell's inequalities versus teleportation: What is nonlocality?," Physical Review Letters, vol. 72(6), pp. 797-799, 1994.
195. S. Popescu, "Bell's inequalities and density matrices: Revealing 'hidden' nonlocality," Physical Review Letters, vol. 74(14), pp. 2619-2622, 1995.
196. J. P. Provost and G. Vallee, "Riemannian structure on manifolds of quantum states," Communications in Mathematical Physics, vol. 76, pp. 289-301, 1980.
197. S. Pulmannová and B. Stehlíková, "Strong law of large numbers and central limit theorem on a Hilbert space logic," Reports on Mathematical Physics, vol. 23(1), pp. 99-107, 1986.
198. M. Redhead, Incompleteness, Nonlocality and Realism: A Prolegomenon to the Philosophy of Quantum Mechanics. Oxford: Clarendon Press, 1987.
199. H. P. Robertson, "The uncertainty principle," Physical Review, vol. 34, pp. 163-164, 1929.
200. R. Schack, G. M. D'Ariano, and C. M. Caves, "Hypersensitivity to perturbation in the quantum kicked top," Physical Review E, vol. 50(2), pp. 972-987, 1994.
201. E. Schrödinger, "Die gegenwärtage Situation in der Quantenmechanik," Die Naturwissenschaften, vol. 23, pp. 807-812, 824-828, 844-849, 1935.
202. E. Schrödinger, "Probability relations between separated systems," Proceedings of the Cambridge Philosophical Society, vol. 32, pp. 446-452, 1936.
203. B. Schumacher, "Information from quantum measurements," in Complexity, Entropy and the Physics of Information (W. H. Zurek, ed.), (Redwood City, CA), pp. 29-37, Addison-Wesley, 1990. Santa Fe Institute Studies in the Sciences of Complexity, vol. VIII.
204. B. W. Schumacher, Communication, Correlation and Complementarity. PhD thesis, The University of Texas at Austin, Austin, TX, 1990.
205. B. W. Schumacher, "Information and quantum nonseparability," Physical Review A, vol. 44, pp. 70747079, 1991.
206. B. Schumacher, "Quantum coding," Physical Review A, vol. 51(4), pp. 2738-2747, 1995.
207. B. Schumacher, M. Westmoreland, and W. K. Wootters, "Limitation on the amount of accessible information in a quantum channel," Physical Review Letters, vol. 76(18), pp. 3452-3455, 1996.
208. H. Scutaru, "Lower bound for mutual information of a quantum channel," Physical Review Letters, vol. 75(5), pp. 773-776, 1995.
209. M. D. Srinivas, "Foundations of a quantum probability theory," Journal of Mathematical Physics, vol. 16(8), pp. 1672-1685, 1975.
210. H. P. Stapp, "The Copenhagen interpretation," American Journal of Physics, vol. 60, pp. 1098-1116, 1972.
211. O. Steuernagel and J. A. Vaccaro, "Reconstructing the density operator via simple projectors," Physical Review Letters, vol. 75(18), pp. 3201-3205, 1995.
212. W. F. Stinespring, "Positive functions on $C^{*}$-algebras," Proceedings of the American Mathematical Society, vol. 6, pp. 211-216, 1955.
213. E. Størmer, "Positive linear maps of operator algebras," Acta Mathematica, vol. 110, pp. 233-278, 1963.
214. E. Størmer, "On projection maps on von Neumann algebras," Mathematica Scandinavica, vol. 30(1), pp. 46-50, 1972.
215. M. Strauss, Modern Physics and Its Philosophy: Selected Papers in the Logic, History and Philosophy of Science. Synthese Library, Dordrecht: D. Reidel, 1972.
216. S. Sýkora, "Quantum theory and the Bayesian inference problems," Journal of Statistical Physics, vol. 11(1), pp. 17-27, 1974.
217. Y. Tikochinsky, "On the generalized multiplication and addition of complex numbers," Journal of Mathematical Physics, vol. 29(2), pp. 398-399, 1988.
218. Y. Tikochinsky, "Feynman rules for probability amplitudes," International Journal of Theoretical Physics, vol. 27(5), pp. 543-549, 1988.
219. A. Uhlmann, "The 'transition probability' in the state space of a *-algebra," Reports on Mathematical Physics, vol. 9, pp. 273-279, 1976.
220. A. Uhlmann, "Parallel transport and 'quantum holonomy' along density operators," Reports on Mathematical Physics, vol. 24(2), pp. 229-240, 1986.
221. A. Uhlmann, "Density operators as an arena for differential geometry," Reports on Mathematical Physics, vol. 33, pp. 253-263, 1993.
222. A. Uhlmann, "The n-sphere as a quantal states space," in Symposium on the Foundation of Modern Physics 1993 (P. Busch, P. Lahti, and P. Mittelstaedt, eds.), (Singapore), pp. 390-397, World Scientific, 1993.
223. H. Umegaki, "Conditional expectations in an operator algebra," Tohoku Mathematics Journal, vol. 6, pp. 177-181, 1954.
224. H. Umegaki, "Conditional expectations in an operator algebra IV (entropy and information)," Kōdai Mathematical Seminar Reports, vol. 14, pp. 59-85, 1962.
225. R. Urigu, "On the physical meaning of the Shannon information entropy," in Symposium on the Foundation of Modern Physics 1993 (P. Busch, P. Lahti, and P. Mittelstaedt, eds.), (Singapore), pp. 398-405, World Scientific, 1993.
226. V. S. Varadarajan, Geometry of Quantum Theory, vol. 1. Princeton, NJ: van Nostrand, 1968.
227. V. S. Varadarajan, Geometry of Quantum Theory, vol. 2. Princeton, NJ: van Nostrand, 1970.
228. J. von Neumann, Mathematische Grundlagen der Quantenmechanik. Berlin: Springer, 1932. Translated by E. T. Beyer, Mathematical Foundations of Quantum Mechanics (Princeton University Press, Princeton, NJ, 1955).
229. A. Wehrl, "General properties of entropy," Reviews of Modern Physics, vol. 50(2), pp. 221-260, 1978.
230. D. Wiedemann, "Quantum cryptography," Sigact News, vol. 18(2), pp. 48-51, 1987.
231. E. P. Wigner, Group Theory and Its Application to the Quantum Mechanics of Atomic Spectra. Pure and Applied Physics, Vol. 5, New York: Academic Press, 1959.
232. E. P. Wigner, "On hidden variables and quantum mechanical probabilities," American Journal of Physics, vol. 38(8), pp. 1005-1009, 1970.
233. W. K. Wootters and W. H. Zurek, "Complementarity in the double-slit experiment: Quantum nonseparability and a quantitative statement of Bohr's principle," Physical Review D, vol. 19, pp. 473-484, 1979.
234. W. K. Wootters, "Information is maximized in photon polarization measurements," in Quantum Theory and Gravitation (A. R. Marlow, ed.), (Boston), pp. 13-26, Academic Press, 1980.
235. W. K. Wootters, The Acquisition of Information from Quantum Measurements. PhD thesis, The University of Texas at Austin,, Austin, TX, 1980.
236. W. K. Wootters, "Statistical distance and Hilbert space," Physical Review D, vol. 23, pp. 357-362, 1981.
237. W. K. Wootters and W. H. Zurek, "A single quantum cannot be cloned," Nature, vol. 299, pp. 802-803, 1982.
238. W. Wootters, "A measure of the distinguishability of quantum states," in Quantum Optics, General Relativity, and Measurement Theory (M. O. Scully and P. Meystre, eds.), (New York), pp. 145-154, Plenum Press, 1983. NATO Advanced Science Institute Series.
239. W. K. Wootters, "Quantum mechanics without probability amplitudes," Foundations of Physics, vol. 16(4), pp. 391-405, 1986.
240. W. K. Wootters, "A Wigner-function formulation of finite-state quantum mechanics," Annals of Physics, vol. 176(1), pp. 1-21, 1987.
241. W. K. Wootters and B. D. Fields, "Optimal state-determination by mutually unbiased measurements," Annals of Physics, vol. 191(2), pp. 363-381, 1989.
242. W. K. Wootters and B. D. Fields, "Searching for mutually unbiased observables," in Bell's Theorem, Quantum Theory and Conceptions of the Universe (M. C. Kafatos, ed.), (Dordrecht), pp. 65-67, Kluwer Academic Publishers, 1989.
243. W. K. Wootters, "Local accessibility of quantum states," in Complexity, Entropy and the Physics of Information (W. H. Zurek, ed.), (Redwood City, CA), pp. 39-46, Addison-Wesley, 1990. Santa Fe Institute Studies in the Sciences of Complexity, vol. VIII.
244. W. K. Wootters, "Random quantum states," Foundations of Physics, vol. 20(11), pp. 1365-1378, 1990.
245. W. K. Wootters, "Two extremes of information in quantum mechanics," in Workshop on Physics and Computation: PhysComp '92 (D. Matzke, ed.), (Los Alamitos, CA), pp. 181-183, IEEE Computer Society, 1993.
246. T. Y. Young, "Asymptotically efficient approaches to quantum-mechanical parameter estimation," Information Sciences, vol. 9, pp. 25-42, 1975.
247. H. P. Yuen, R. S. Kennedy, and M. Lax, "Optimum testing of multiple hypotheses in quantum detection theory," IEEE Transactions on Information Theory, vol. IT-21(2), pp. 125-134, 1975.
248. H. P. Yuen and M. Ozawa, "Ultimate information carrying limit of quantum systems," Physical Review Letters, vol. 70(4), pp. 363-366, 1993.
249. S. Zanzinger, "Coherent superposability of states," in Symposium on the Foundation of Modern Physics 1993 (P. Busch, P. Lahti, and P. Mittelstaedt, eds.), (Singapore), pp. 450-457, World Scientific, 1993.

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250. J. Aczél, "A solution of some problems of K. Borsuk and L. Jánossy," Acta Physica Academiae Scientiarum Hungaricae, vol. 4, pp. 351-362, 1955.
251. J. Aczél and J. Pfanzagl, "Remarks on the measurement of subjective probability and information," Metrika, vol. 11, pp. 91-105, 1966.
252. J. Aczél and M. Ostrowski, "On the characterization of Shannon's entropy by Shannon's inequality," The Journal of the Australian Mathematical Society, vol. 16, pp. 368-374, 1973.
253. J. Aczél, B. Forte, and C. T. Ng, "Why the Shannon and Hartley entropies are 'natural'," Advances in Applied Probability, vol. 6, pp. 131-146, 1974.
254. J. Aczél and Z. Daróczy, On Measures of Information and Their Characterizations. Mathematics in Science and Engineering, vol. 115, New York: Academic Press, 1975.
255. J. Aczél, "Some recent results on characterizations of measures of information related to coding," IEEE Transactions on Information Theory, vol. IT-24(5), pp. 592-595, 1978.
256. J. Aczél, "A mixed theory of information. V. How to keep the (inset) expert honest," Journal of Mathematical Analysis and Applications, vol. 75, pp. 447-453, 1980.
257. J. Aczél, "Derivations and information functions (A tale of two surprises and a half)," in Contributions to Probability: A Collection of Papers Dedicated to Eugene Lukacs (J. M. Gani and V. K. Rohatgi, eds.), (New York), pp. 191-200, Academic Press, 1981.
258. J. Aczél, "Some recent results on information measures, a new generalization and some 'real life' interpretations of the 'old' and new measures," in Functional Equations: History, Applications and Theory (J. Aczél, ed.), (Dordrecht), pp. 175-189, D. Reidel, 1984.
259. S.-I. Amari, "Differential geometry of curved exponential families-curvatures and information loss," The Annals of Statistics, vol. 10(2), pp. 357-385, 1982.
260. S.-I. Amari and T. S. Han, "Statistical inference under multiterminal rate restrictions: A differential geometric approach," IEEE Transactions on Information Theory, vol. 35(2), pp. 217-227, 1989.
261. R. B. Ash, Information Theory. New York: Dover Publications, 1965.
262. C. Atkinson and A. F. S. Mitchell, "Rao's distance measure," Sankhyā, The Indian Journal of Statistics, vol. 43, pp. 345-365, 1981. Series A, Pt. 3.
263. M. Ben-Bassat and J. Raviv, "Rényi's entropy and the probability of error," IEEE Transactions on Information Theory, vol. IT-24(3), pp. 324-331, 1978.
264. M. Ben-Bassat, "Use of distance measures, information measures and error bounds in feature evaluation," in Classification, Pattern Recognition, and Reduction of Dimensionality (P. R. Krishnaiah and L. N. Kanal, eds.), Handbook of Statistics, vol. 2, (Amsterdam), pp. 773-791, North-Holland, 1982.
265. J. O. Berger, Statistical Decision Theory and Bayesian Analysis. Springer Series in Statistics, New York: Springer-Verlag, Second ed., 1985.
266. J. M. Bernardo and A. F. Smith, Bayesian Theory. Wiley Series in Probability and Mathematical Statistics, Chichester: Wiley, 1994.
267. A. Bhattacharyya, "On a measure of divergence between two statistical populations defined by their probability distributions," Bulletin of the Calcutta Mathematical Society, vol. 35, pp. 99-109, 1943.
268. A. Bhattacharyya, "On a measure of divergence between two multinomial populations," Sankhyā, The Indian Journal of Statistics, vol. 7, pp. 401-406, 1946.
269. S. L. Braunstein, "How large a sample is needed for the maximum likelihood estimator to be approximately Gaussian," Journal of Physics A, vol. 25, pp. 3813-3826, 1992.
270. R. J. Buehler, "Measuring information and uncertainty," in Foundations of Statistical Inference (V. P. Godambe and D. A. Sprott, eds.), (Toronto), pp. 330-341, Holt, Rinehart and Winston of Canada, 1971.
271. J. Burbea and C. R. Rao, "On the convexity of some divergence measures based on entropy functions," IEEE Transactions on Information Theory, vol. IT-28(3), pp. 489-495, 1982.
272. J. Burbea and C. R. Rao, "Entropy differential metric, distance and divergence measures in probability spaces: A unified approach," Journal of Multivariate Analysis, vol. 12, pp. 575-596, 1982.
273. L. L. Campbell, "A coding theorem and Rényi's entropy," Information and Control, vol. 8(4), pp. 423429, 1965.
274. L. L. Campbell, "Definition of entropy by means of a coding problem," Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete, vol. 6, pp. 113-118, 1966.
275. L. L. Campbell, "The relation between information theory and the differential geometry approach to statistics," Information Sciences, vol. 35, pp. 199-210, 1985.
276. L. L. Campbell, "An extended Cencov characterization of the information metric," Proceedings of the American Mathematical Society, vol. 98(1), pp. 135-141, 1986.
277. R. M. Capocelli and A. De Santis, "New bounds on the redundancy of Huffman codes," IEEE Transactions on Information Theory, vol. 37(4), pp. 1095-1104, 1991.
278. N. N. Čencov, Statistical Decision Rules and Optimal Inference. Translations of Mathematical Monographs, vol. 53, Providence, RI: American Mathematical Society, 1982. Translation edited by Lev J. Leifman.
279. C. H. Chen, "Theoretical comparison of a class of feature selection criteria in pattern recognition," IEEE Transactions on Computers, vol. 20, pp. 1054-1056, 1971.
280. C. H. Chen, "On information and distance measures, error bounds, and feature selection," Information Sciences, vol. 10, pp. 159-173, 1976.
281. H. Chernoff, "A measure of asymptotic efficiency for tests of a hypothesis based on the sum of observations," The Annals of Mathematical Statistics, vol. 23, pp. 493-507, 1952.
282. H. Chernoff and L. E. Moses, Elementary Decision Theory. New York: Dover, 1959.
283. K. L. Chung, "On the probability of the occurrence of at least $m$ events among $n$ arbitrary events," The Annals of Mathematical Statistics, vol. 12, pp. 328-338, 1941.
284. W. S. Cleveland and P. A. Lachenbruch, "A measure of divergence among several populations," Communications in Statistics, vol. 3(3), pp. 201-211, 1974.
285. T. M. Cover and P. E. Hart, "Nearest neighbor pattern classification," IEEE Transactions on Information Theory, vol. IT-13(1), pp. 278-284, 1967.
286. T. M. Cover, "The best two independent measurements are not the two best," IEEE Transactions on Systems, Man, and Cybernetics, vol. SMC-4(1), pp. 116-117, 1974.
287. T. M. Cover and J. A. Thomas, Elements of Information Theory. Wiley Series in Telecommunications, New York: John Wiley \& Sons, 1991.
288. R. T. Cox, "Probability, frequency, and reasonable expectation," American Journal of Physics, vol. 14, pp. 1-13, 1946.
289. R. T. Cox, The Algebra of Probable Inference. Baltimore, MD: Johns Hopkins Press, 1961.
290. H. Cramér, Mathematical Methods of Statistics. Princeton Mathematical Series, vol. 9, Princeton, NJ: Princeton University Press, 1946.
291. I. Csiszár and J. Fischer, "Informationsentfernungen im Raum der Wahrscheinlichkeitsverteilungen," A Magyar Tudományos Akadémia Matematikai Kutató Intézetének Közleményei, vol. 7, pp. 159-179, 1962. Pub. of the Mathematical Inst. of the Hungarian Acad. of Sciences.
292. I. Csiszár, "Über topologische und metrische Eigenschaften der relativen Information der Ordnung $\alpha$," in Transactions of the Third Prague Conference on Information Theory, Statistical Decision Functions and Random Processes, (Prague), pp. 63-73, Academia, 1964. (Translation by R. Schack and C. A. Fuchs in preparation).
293. I. Csiszár, "Information-type measures of difference of probability distributions and indirect observations," Studia Scientiarum Mathematicarum Hungarica, vol. 2, pp. 299-318, 1967.
294. I. Csiszár, "On topological properties of $f$-divergences," Studia Scientiarum Mathematicarum Hungar$i c a$, vol. 2, pp. 329-339, 1967.
295. I. Csiszár, "I-divergence geometry of probability distributions and minimization problems," The Annals of Probability, vol. 3(1), pp. 146-158, 1975.
296. I. Csiszár, "Information measures: A critical survey," in Transactions of the Seventh Prague Conference on Information Theory, Statistical Decision Functions, and Random Processes and the 1974 European Meeting of Statisticians, vol. B, (Boston), pp. 73-86, D. Reidel, 1978.
297. I. Csiszár and J. Körner, Information Theory: Coding Theorems for Discrete Memoryless Systems. Probability and Mathematical Statistics, New York: Academic Press, 1981.
298. Z. Daróczy, "Generalized information functions," Information and Control, vol. 16, pp. 36-51, 1970.
299. Z. Daróczy and G. Maksa, "Nonnegative information functions," in Analytic Function Methods in Probability Theory (B. Gyires, ed.), Colloquia Mathematica Societatis János Bolyai, vol. 21, (Amsterdam), pp. 67-78, North Holland, 1980.
300. A. P. Dawid, "Further comments on some comments on a paper by Bradley Efron," The Annals of Statistics, vol. 5(6), p. 1249, 1977.
301. A. Dembo, T. M. Cover, and J. A. Thomas, "Information theoretic inequalities," IEEE Transactions on Information Theory, vol. 37(6), pp. 1501-1518, 1991.
302. P. A. Devijver, "On a new class of bounds on Bayes risk in multihypothesis pattern recognition," IEEE Transactions on Computers, vol. C-23(1), pp. 70-80, 1974.
303. G. T. Diderrich, "The role of boundedness in characterizing Shannon entropy," Information and Control, vol. 29, pp. 149-161, 1975.
304. G. T. Diderrich, "Local boundedness and the Shannon entropy," Information and Control, vol. 36, pp. 292-308, 1978.
305. J. Earman, Bayes or Bust? A Critical Examination of Bayesian Confirmation Theory. Cambridge, MA: MIT Pess, 1992.
306. B. Efron, "Defining the curvature of a statistical problem (with applications to second order efficiency)," The Annals of Statistics, vol. 3(6), pp. 1189-1242, 1975.
307. W. Feller, An Introduction to Probability Theory and Its Applications, vol. 1. Wiley Series in Probability and Mathematical Statistics, New York: John Wiley \& Sons, Third ed., 1968.
308. P. Fischer, "On the inequality $\sum p_{i} f\left(p_{i}\right) \geq \sum p_{i} f\left(q_{i}\right), " M e t r i k a$, vol. 18, pp. 199-208, 1972.
309. R. A. Fisher, "On the dominance ratio," Proceedings of the Royal Society of Edinburgh, vol. 42, pp. 321341, 1922.
310. B. Forte and C. T. Ng, "On a characterization of the entropies of degree $\beta$," Utilitas Mathematica, vol. 4, pp. 193-205, 1973.
311. B. Forte and C. T. Ng, "Derivation of a class of entropies including those of degree $\beta$," Information and Control, vol. 28, pp. 335-351, 1975.
312. R. G. Gallager, Information Theory and Reliable Communication. New York: John Wiley and Sons, 1968.
313. R. G. Gallager, "Variations on a theme by Huffman," IEEE Transactions on Information Theory, vol. IT-24(6), pp. 668-674, 1978.
314. F. E. Glave, "A new look at the Barankin lower bound," IEEE Transactions on Information Theory, vol. IT-18(3), pp. 349-356, 1972.
315. N. Glick, "Separation and probability of correct classification among two or more distributions," Annals of the Institute of Statistical Mathematics, vol. 25, pp. 373-382, 1973.
316. I. J. Good, "Rational decisions," Journal of the Royal Statistical Society, Series B, vol. 14, pp. 107-114, 1952.
317. T. L. Grettenberg, "Signal selection in communication and radar systems," IEEE Transactions on Information Theory, vol. 9, pp. 265-275, 1963.
318. T. S. Han and S. Verdú, "Generalizing the Fano inequality," IEEE Transactions on Information Theory, vol. 40(4), pp. 1247-1248, 1994.
319. M. E. Hellman and J. Raviv, "Probability of error, equivocation, and the Chernoff bound," IEEE Transactions on Information Theory, vol. IT-16(4), pp. 368-372, 1970.
320. H. Heyer, Theory of Statistical Experiments. Springer Series in Statistics, New York: Springer-Verlag, 1982.
321. A. Hobson, "A new theorem of information theory," Journal of Statistical Physics, vol. 1(3), pp. 383391, 1969.
322. A. Hobson, Concepts in Statistical Physics. New York: Gordon and Breach, 1971.
323. A. Hobson and B.-K. Cheng, "A comparison of the Shannon and Kullback information measures," Journal of Statistical Physics, vol. 7(4), pp. 301-310, 1973.
324. Y. Horibe, "A note on entropy metrics," Information and Control, vol. 22, pp. 403-404, 1973.
325. Y. Horibe, "Entropy and correlation," IEEE Transactions on Systems, Man, and Cybernetics, vol. SMC-15(5), pp. 641-642, 1985.
326. H. Hudimoto, "A note on the probability of correct classification when the distributions are not specified," Annals of the Institute of Statistical Mathematics, vol. 9(1), pp. 31-36, 1957.
327. D. A. Huffman, "A method for the construction of minimum redundancy codes," Proceedings of the Institute of Radio Engineers, vol. 40(2), pp. 1098-1101, 1952.
328. L. Jánossy, "Remarks on the foundation of probability calculus," Acta Physica Academiae Scientiarum Hungaricae, vol. 4, pp. 333-349, 1955.
329. E. T. Jaynes, Probability Theory: The Logic of Science. Electronic-mail preprint, 1993. Book in preparation-fragmentary edition of September 1993. 30 Chapters, 9 Appendices.
330. H. Jeffreys, "An invariant form for the prior probability in estimation problems," Proceedings of the Royal Society of London, Series A, vol. 186, pp. 453-461, 1946.
331. T. Kailath, "The divergence and Bhattacharyya distance measures in signal selection," IEEE Transactions on Communication Technology, vol. COM-15(1), pp. 52-60, 1967.
332. P. Kannappan and P. N. Rathie, "On various characterizations of directed-divergence," in Transactions of the Sixth Prague Conference on Information Theory, Statistical Decision Functions, Random Processes, (Prague), pp. 331-339, Academia, 1973.
333. H. Kaufman and A. M. Mathai, "An axiomatic foundation for a multivariate measure of affinity among a number of distributions," Journal of Multivariate Analysis, vol. 3(2), pp. 236-242, 1973.
334. S. N. U. A. Kirmani, "Some limiting properties of Matusita's measure of distance," Annals of the Institute of Statistical Mathematics, vol. 23, pp. 157-162, 1971.
335. L. G. Kraft, "A device for quantizing, grouping and coding amplitude modulated pulses," Master's thesis, Massachusetts Institute of Technology, Cambridge, MA, 1949.
336. S. Kullback and R. A. Leibler, "On information and sufficiency," The Annals of Mathematical Statistics, vol. 22, pp. 79-86, 1951.
337. S. Kullback, Information Theory and Statistics. Wiley Publication in Mathematical Statistics, New York: John Wiley \& Sons, 1959.
338. S. Kullback, "A lower bound for discrimination information in terms of variation," IEEE Transactions on Information Theory, vol. IT-13, pp. 126-127, 1967.
339. S. Kullback, "Correction to a lower bound for discrimination information in terms of variation," IEEE Transactions on Information Theory, vol. IT-16, p. 652, 1970.
340. D. G. Lainiotis, "A class of upper bounds on probability of error for multihypothesis pattern recognition," IEEE Transactions on Information Theory, vol. 15, pp. 730-731, 1969.
341. P. M. Lee, "On the axioms of information theory," The Annals of Mathematical Statistics, vol. 35, pp. 415-418, 1964.
342. D. V. Lindley, "On a measure of the information provided by an experiment," The Annals of Mathematical Statistics, vol. 27, pp. 986-1005, 1956.
343. A. M. Mathai, "Characterization of some statistical concepts," in Conference on Measures of Information and Their Applications (P. N. Rathie, ed.), (Bombay), pp. 1-10, Indian Institute of Technology, 1974.
344. K. Matusita, "On the estimation by the minimum distance method," Annals of the Institute of Statistical Mathematics, vol. 5, pp. 59-65, 1954.
345. K. Matusita, "Decision rules, based on the distance, for problems of fit, two samples, and estimation," The Annals of Mathematical Statistics, vol. 26, pp. 631-640, 1955.
346. K. Matusita and H. Akaike, "Decision rules, based on the distance, for the problems of independence, invariance and two samples," Annals of the Institute of Statistical Mathematics, vol. 7(2), pp. 67-80, 1956.
347. K. Matusita, "Decision rule, based on the distance, for the classification problem," Annals of the Institute of Statistical Mathematics, vol. 7(3), pp. 67-77, 1956.
348. K. Matusita and M. Motoo, "On the fundamental theorem for the decision rule based on distance || ||," Annals of the Institute of Statistical Mathematics, vol. 8(2), pp. 137-142, 1956.
349. K. Matusita, "Some properties of affinity and applications," Annals of the Institute of Statistical Mathematics, vol. 23, pp. 137-155, 1971.
350. K. Matusita, "Discrimination and the affinity of distributions," in Discriminant Analysis and Applications (T. Cacoullos, ed.), Academic Press Rapid Manuscript Reproduction, (New York), pp. 213-223, Academic Press, 1973.
351. G. Muszély, "On continuous solutions of a functional inequality," Metrika, vol. 20, pp. 65-69, 1973.
352. P. Nath, "On a coding theorem connected with Rényi's entropy," Information and Control, vol. 29, pp. 234-242, 1975.
353. T. Nemetz, "Information theory and the testing of a hypothesis," in Proceedings of the Colloquium on Information Theory, vol. II (A. Rényi, ed.), (Budapest), pp. 283-294, János Bolyai Mathematical Society, 1968.
354. E. J. G. Pitman, Some Basic Theory for Statistical Inference. Monographs on Applied Probability and Statistics, London: Chapman and Hall, 1979.
355. C. Rajski, "A metric space of discrete probability distributions," Information and Control, vol. 4, pp. 371-377, 1961.
356. C. Rajski, "Entropy and metric spaces," in Information Theory: Fourth London Symposium (C. Cherry, ed.), (Washington), pp. 41-45, Butterworths, 1961.
357. C. Rajski, "On the normed information rate of discrete random variables," Zastosowania Matematyki, vol. 6, pp. 459-461, 1963.
358. C. R. Rao, "The problem of classification and distance between two populations," Nature, vol. 159, pp. 30-31, 1947.
359. C. R. Rao, "On the distance between two populations," Sankhyā, The Indian Journal of Statistics, vol. 9, pp. 246-248, 1949.
360. C. R. Rao, "Efficient estimates and optimum inference procedures in large samples," Journal of the Royal Statistical Society, Series B, vol. 24(1), pp. 46-72, 1962.
361. P. N. Rathie and P. Kannappan, "A directed-divergence function of type $\beta$," Information and Control, vol. 20, pp. 28-45, 1972.
362. P. N. Rathie and P. Kannappan, "On a new characterization of directed-divergence in information theory," in Transactions of the Sixth Prague Conference on Information Theory, Statistical Decision Functions, Random Processes, (Prague), pp. 733-745, Academia, 1973.
363. P. N. Rathie, "Characterizations of the harmonic mean and the associated distance measure useful in pattern recognition," in Conference on Measures of Information and Their Applications (P. N. Rathie, ed.), (Bombay), pp. 81-88, Indian Institute of Technology, 1974.
364. A. Rényi, "On measures of entropy and information," in Proceedings of the Fourth Berkeley Symposium on Mathematical Statistics and Probability, vol. 1 (J. Neyman, ed.), (Berkeley, CA), pp. 547-561, University of California Press, 1961.
365. A. Rényi, "On the amount of information concerning an unknown parameter in a sequence of observations," A Magyar Tudományos Akadémia Matematikai Kutató Intézetének Közleményei, vol. 9, pp. 617-624, 1965. Publications of the Mathematical Institute of the Hungarian Academy of Sciences.
366. A. Rényi, "On the amount of missing information and the Neyman-Pearson lemma," in Research Papers in Statistics: Festschrift for J. Neyman (F. N. David, ed.), (New York), pp. 281-288, Wiley, 1966.
367. A. Rényi, "On some basic problems of statistics from the point of view of information theory," in Proceedings of the Fifth Berkeley Symposium on Mathematical Statistics and Probability, vol. 1 (L. M. LeCam and J. Neyman, eds.), (Berkeley, CA), pp. 531-543, University of California Press, 1967.
368. A. Rényi, "Statistics and information theory," Studia Scientiarum Mathematicarum Hungarica, vol. 2, pp. 249-256, 1967.
369. A. Rényi, "On some problems of statistics from the point of view of information theory," in Proceedings of the Colloquium on Information Theory, vol. II (A. Rényi, ed.), (Budapest), pp. 343-357, János Bolyai Mathematical Society, 1968.
370. A. Rényi, Probability Theory. North-Holland Series in Applied Mathematics and Mechanics, vol. 10, Amsterdam: North-Holland and Akadémiai Kiadó, 1970. translated by L. Vekerdi from Wahrscheinlichkeitsrechnung. Mit einem Anhang über Informationstheorie (VEB Deutscher Verlag der Wissenschaften, Berlin, 1962).
371. E. Schrödinger, "The foundation of the theory of probability-I," Proceedings of the Royal Irish Academy, Section A, vol. 51, pp. 51-66, 1947.
372. E. Schrödinger, "The foundation of the theory of probability-II," Proceedings of the Royal Irish Academy, Section A, vol. 51, pp. 141-146, 1947.
373. C. E. Shannon, "A mathematical theory of communication," The Bell System Technical Journal, vol. 27, pp. 379-423, 623-656, 1948. Reprinted in book form, with postscript by Warren Weaver: C. E. Shannon and W. Weaver, The Mathematical Theory of Communication, (University of Illinois Press, Urbana, IL, 1949).
374. C. E. Shannon, "The lattice theory of information," in Symposium on Information Theory (Report of Proceedings) (W. Jackson, ed.), (London), pp. 105-107, The Ministry of Supply, 1950. Held in the Lecture Theatre of the Royal Society, Burlington House, September 1950.
375. B. D. Sharma, "On amount of information of type- $\beta$ and other measures," Metrika, vol. 19, pp. 1-10, 1972.
376. B. D. Sharma and R. Autar, "On characterization of a generalized inaccuracy measure in information theory," Journal of Applied Probability, vol. 10, pp. 464-468, 1973.
377. J. E. Shore and R. W. Johnson, "Axiomatic derivation of the principle of maximum entropy and the principle of minimum cross-entropy," IEEE Transactions on Information Theory, vol. IT-26(1), pp. 26-37, 1980.
378. J. E. Shore and R. W. Johnson, "Properties of cross-entropy minimization," IEEE Transactions on Information Theory, vol. IT-27(4), pp. 472-482, 1981.
379. D. Slepian, ed., Key Papers in the Development of Information Theory. IEEE Press Selected Reprint Series, New York: IEEE Press, 1974.
380. C. R. Smith and G. J. Erickson, "From rationality and consistency to Bayesian probability," in Maximum Entropy and Bayesian Methods, Cambridge, England, 1988 (J. Skilling, ed.), Fundamental Theories of Physics, (Dordrecht), pp. 29-44, Kluwer Academic Publishers, 1989.
381. C. R. Smith and G. J. Erickson, "Probability theory and the associativity equation," in Maximum Entropy and Bayesian Methods, Dartmouth, U.S.A., 1989 (P. F. Fougère, ed.), Fundamental Theories of Physics, (Dordrecht), pp. 17-29, Kluwer Academic Publishers, 1990.
382. G. T. Toussaint, "Note on optimal selection of independent binary-valued features for pattern recognition," IEEE Transactions on Information Theory, vol. IT-17(5), p. 618, 1971.
383. G. T. Toussaint, "Some upper bounds on error probability for multiclass pattern recognition," IEEE Transactions on Computers, vol. C-20, pp. 943-944, 1971.
384. G. T. Toussaint, "Some functional lower bounds on the expected divergence for multihypothesis pattern recognition, communication, and radar systems," IEEE Transactions on Systems, Man, and Cybernet$i c s$, vol. SMC-1, pp. 384-385, 1971.
385. G. T. Toussaint, "Feature evaluation with quadratic mutual information," Information Processing Letters, vol. 1, pp. 153-156, 1972.
386. G. T. Toussaint, "Some inequalities between distance measures for feature evaluation," IEEE Transactions on Computers, vol. C-21(4), pp. 409-410, 1972.
387. G. T. Toussaint, "Comments on 'The divergence and Bhattacharyya distance measures in signal selection'," IEEE Transactions on Communication Technology, vol. COM-20, p. 485, 1972.
388. G. T. Toussaint, "Some properties of Matusita's measure of affinity of several distributions," Annals of the Institute of Statistical Mathematics, vol. 26, pp. 389-394, 1974.
389. G. T. Toussaint, "On some measures of information and their application to pattern recognition," in Conference on Measures of Information and Their Applications (P. N. Rathie, ed.), (Bombay), pp. 21-28, Indian Institute of Technology, 1974.
390. G. T. Toussaint, "Sharper lower bounds for discrimination information in terms of variation," IEEE Transactions on Information Theory, vol. IT-21(1), pp. 99-100, 1975.
391. G. T. Toussaint, "Comments on 'On a new class of bounds on Bayes' risk in multihypothesis pattern recognition'," IEEE Transactions on Computers, vol. C-24(8), pp. 855-856, 1975.
392. G. T. Toussaint, "An upper bound on the probability of misclassification in terms of affinity," Proceedings of the IEEE, vol. 65, pp. 275-276, 1977.
393. G. T. Toussaint, "Probability of error, expected divergence, and the affinity of several distributions," IEEE Transactions on Systems, Man, and Cybernetics, vol. SMC-8(6), pp. 482-485, 1978.
394. I. Vajda, "On the convergence of information contained in a sequence of observations," in Proceedings of the Colloquium on Information Theory, vol. II (A. Rényi, ed.), (Budapest), pp. 489-501, János Bolyai Mathematical Society, 1968.
395. I. Vajda, " $\chi^{\alpha}$-divergence and generalized Fisher's information," in Transactions of the Sixth Prague Conference on Information Theory, Statistical Decision Functions, Random Processes, (Prague), pp. 873-886, Academia, 1973.
396. I. Vajda, Theory of Statistical Inference and Information. Theory and Decision Library, Series B: Mathematical and Statistical Methods, Dordrecht: Kluwer Academic Publishers, 1989.
397. T. R. Vilmansen, "On dependence and discrimination in pattern recognition," IEEE Transactions on Computers, vol. C-21(9), pp. 1029-1031, 1972.
398. T. R. Vilmansen, "Feature evaluation with measures of probabilistic dependence," IEEE Transactions on Computers, vol. C-22(4), pp. 381-388, 1973.
399. P. M. Woodward, Probability and Information Theory, with Applications to Radar. International Series of Monographs on Electronics and Instrumentation, vol. 3, Oxford: Pergamon Press, Second ed., 1953.
400. J. Zvárová, "On asymptotic behavior of a sample estimator of Rényi's information of order $\alpha$," in Transactions of the Sixth Prague Conference on Information Theory, Statistical Decision Functions, Random Processes, (Prague), pp. 919-924, Academia, 1973.

## 3 Matrix Inequalities, Operator Relations, and Mathematical Techniques

401. J. Aczél, Lectures on Functional Equations and Their Applications. Mathematics in Science and Engineering, vol. 19, New York: Academic Press, 1966.
402. K. Aizu, "Parameter differentiation of quantum-mechanical linear operators," Journal of Mathematical Physics, vol. 4(6), pp. 762-775, 1963.
403. A. R. Amir-Moez, Singular Values of Linear Transformations. Mathematics Series, vol. 11, Lubbock, TX: Texas Technological College, 1968.
404. T. Ando, "Concavity of certain maps on positive definite matrices and applications to Hadamard products," Linear Algebra and Its Applications, vol. 26, pp. 203-241, 1979.
405. T. Ando, "Hua-Marcus inequalities," Linear and Multilinear Algebra, vol. 8, pp. 347-352, 1979.
406. T. Ando, "On some operator inequalities," Mathematische Annalen, vol. 279, pp. 157-159, 1987.
407. T. Ando, R. A. Horn, and C. R. Johnson, "The singular values of a Hadamard product: A basic inequality," Linear and Multilinear Algebra, vol. 21, pp. 345-365, 1987.
408. T. Ando, "Comparison of norms $\|f(\mathrm{~A})-f(\mathrm{~B})\|$ and $\|f(|\mathrm{~A}-\mathrm{B}|)\| \|, "$ Mathematische Zeitschrift, vol. 197, pp. 403-409, 1988.
409. T. Ando, "Majorization, doubly stochastic matrices, and comparison of eigenvalues," Linear Algebra and Its Applications, vol. 118, pp. 163-248, 1989.
410. T. Ando, "Parameterization of minimal points of some convex sets of matrices," Acta Scientiarum Mathematicarum (Szeged), vol. 57, pp. 3-10, 1993.
411. T. Ando and F. Hiai, "Log majorization and complementary Golden-Thompson type inequalities," Linear Algebra and Its Applications, vol. 197,198, pp. 113-131, 1994.
412. T. Ando, "Majorizations and inequalities in matrix theory," Linear Algebra and Its Applications, vol. 199, pp. 17-67, 1994.
413. T. Ando and F. Hiai, "Inequality between powers of positive semidefinite matrices," Linear Algebra and Its Applications, vol. 208/209, pp. 65-71, 1994.
414. H. Araki and S. Yamagami, "An inequality for the Hilbert-Schmidt norm," Communications in Mathematical Physics, vol. 81, pp. 89-91, 1981.
415. H. Araki, "On an inequality of Lieb and Thirring," Letters in Mathematical Physics, vol. 19, pp. 167170, 1990.
416. R. B. Bapat, "Majorization and singular values," Linear and Multilinear Algebra, vol. 21, pp. 211-214, 1987.
417. R. B. Bapat, "Majorization and singular values II," SIAM Journal on Matrix Analysis and Applications, vol. 10(4), pp. 429-434, 1989.
418. R. B. Bapat, "Majorization and singular values. III," Linear Algebra and Its Applications, vol. 145, pp. 59-70, 1991.
419. G. P. Barker, R. D. Hill, and R. D. Haertel, "On the completely positive and positive-semidefinitepreserving cones," Linear Algebra and Its Applications, vol. 56, pp. 221-229, 1984.
420. E. R. Barnes and A. J. Hoffman, "Bounds for the spectrum of normal matrices," Linear Algebra and Its Applications, vol. 201, pp. 79-90, 1994.
421. S. Barnett and C. Storey, "Analysis and synthesis of stability matrices," Journal of Differential Equations, vol. 3, pp. 414-422, 1967.
422. S. Barnett and C. Storey, Matrix Methods in Stability Theory. Applications of Mathematics Series, New York: Barnes \& Noble, Inc., 1970.
423. S. Barnett, "Matrix differential equations and Kronecker products," SIAM Journal on Applied Mathematics, vol. 24(1), pp. 1-5, 1973.
424. N. Bebiano and M. E. Miranda, "On a recent determinantal inequality," Linear Algebra and Its Applications, vol. 201, pp. 99-102, 1994.
425. E. F. Beckenbach and R. Bellman, Inequalities. Ergebnisse der Mathematik und ihrer Grenzgebiete, Heft 30, Berlin: Springer-Verlag, 1961.
426. R. Bellman, Introduction to Matrix Analysis. New York: McGraw-Hill, Second ed., 1970.
427. R. Bellman, "Some inequalities for positive definite matrices," in General Inequalities 2: Proceedings of the Second International Conference on General Inequalities (E. F. Beckenbach, ed.), International Series on Numerical Mathematics, vol. 47, (Basel, Switzerland), pp. 89-90, Birkhäuser Verlag, 1980. Held in the Mathematical Institute at Oberwolfach, Black Forest, July 30-August 5, 1978.
428. D. S. Bernstein, "Inequalities for the trace of matrix exponentials," SIAM Journal on Matrix Analysis and Applications, vol. 9(2), pp. 156-158, 1988.
429. J. H. Bevis, F. J. Hall, and R. E. Hartwig, "The matrix equation $A \bar{X}-X B=C$ and its special cases," SIAM Journal on Matrix Analysis and Applications, vol. 9(3), pp. 348-359, 1988.
430. K. V. Bhagwat and R. Subramanian, "Inequalities between means of positive operators," Mathematical Proceedings of the Cambridge Philosophical Society, vol. 83, pp. 393-401, 1978.
431. R. Bhatia, "Some inequalities for norm ideals," Communications in Mathematical Physics, vol. 111, pp. 33-39, 1987.
432. R. Bhatia, "Perturbation inequalities for the absolute value map in norm ideals of operator," Journal of Operator Theory, vol. 19, pp. 129-136, 1988.
433. R. Bhatia and J. A. Holbrook, "A softer, stronger Lidskii theorem," Proceedings of the Indian Academy of Sciences (Mathematical Sciences), vol. 99, pp. 75-83, 1989.
434. R. Bhatia and F. Kittaneh, "On the singular values of a product of operators," SIAM Journal on Matrix Analysis and Applications, vol. 11(2), pp. 272-277, 1990.
435. R. Bhatia and C. Davis, "More matrix forms of the arithmetic-geometric mean inequality," SIAM Journal on Matrix Analysis and Applications, vol. 14(1), pp. 132-136, 1993.
436. R. Bhatia and C. Davis, "A Cauchy-Schwarz inequality for operators with applications," Linear Algebra and Its Applications, vol. 223/224, pp. 119-129, 1995.
437. P. S. Bullen, D. S. Mitrinović, and P. M. Vasić, Means and Their Inequalities. Mathematics and Its Applications (East European Series), Dordrecht: D. Reidel, 1988.
438. E. A. Carlen and E. H. Lieb, "Optimal hypercontractivity for Fermi fields and related non-commutative integration inequalities," Communications in Mathematical Physics, vol. 155, pp. 27-46, 1993.
439. D. H. Carlson and B. N. Datta, "The Lyapunov matrix equation $S A+A^{*} S=S^{*} B S^{*} B$," Linear Algebra and Its Applications, vol. 28, pp. 43-52, 1979.
440. M.-D. Choi, "Completely positive linear maps on complex matrices," Linear Algebra and Its Applications, vol. 10, pp. 285-290, 1975.
441. J. E. Cohen, "Spectral inequalities for matrix exponentials," Linear Algebra and Its Applications, vol. 111, pp. 25-28, 1988.
442. W. A. Coppel, "Matrix quadratic equations," Bulletin of the Australian Mathematical Society, vol. 10, pp. 377-401, 1974.
443. G. Corach, H. Porta, and L. Recht, "An operator inequality," Linear Algebra and Its Applications, vol. 142, pp. 153-158, 1990.
444. J. L. Daleckı̆ and S. G. Kreı̆n, "Integration and differentiation of functions of Hermitian operators and applications to the theory of perturbations," American Mathematical Society Translations, Series 2, vol. 47, pp. 1-30, 1965.
445. J. L. Daleckı̆ "Differentiation of non-Hermitian matrix functions depending on a parameter," American Mathematical Society Translations, Series 2, vol. 47, pp. 73-87, 1965.
446. E. B. Davies, "Lipschitz continuity of functions of operators in the Schatten classes," Journal of the London Mathematical Society, vol. 37, pp. 148-157, 1988.
447. C. Davis, "All convex invariant functions of Hermitian matrices," Archiv der Mathematik, vol. 8, pp. 276-278, 1957.
448. C. Davis, "Operator-valued entropy of a quantum mechanical measurement," Proceedings of the Japan Academy, vol. 37(9), pp. 533-538, 1961.
449. C. Davis, "Notions generalizing convexity for functions defined on spaces of matrices," in Convexity, Proceedings of Symposia in Pure Mathematics, vol. VII (V. L. Klee, ed.), (Providence, RI), pp. 187201, American Mathematical Society, 1963. held at University of Washington, Seattle, June 13-15, 1961.
450. A. S. Deif, Advanced Matrix Theory for Scientists and Engineers. Kent, England: Abacus Press, 1982.
451. W. F. Donoghue, Jr., Monotone Matrix Functions and Analytic Continuation. Die Grundlehren der mathematischen Wissenschaften in Einzeldarstellungen, Band 207, New York: Springer-Verlag, 1974.
452. L. E. Faibusovich, "Algebraic Riccati equation and symplectic algebra," International Journal of Control, vol. 43(3), pp. 781-792, 1986.
453. H. Falk, "Inequalities of J. W. Gibbs," American Journal of Physics, vol. 38(7), pp. 858-869, 1970.
454. K. Fan, "On a theorem of Weyl concerning eigenvalues of linear transformations. I," Proceedings of the National Academy of Sciences (U.S.A.), vol. 35, pp. 652-655, 1949.
455. K. Fan, "Maximum properties and inequalities for the eigenvalues of completely continuous operators," Proceedings of the National Academy of Sciences (U.S.A.), vol. 37, pp. 760-766, 1951.
456. R. P. Feynman, "An operator calculus having applications in quantum electrodynamics," Physical Review, vol. 84(1), pp. 108-128, 1951.
457. J. I. Fujii and M. Fujii, "A norm inequality for operator monotone functions," Mathematica Japonica, vol. 35(2), pp. 249-252, 1990.
458. M. Fujii, T. Furuta, and E. Kamei, "Operator functions associated with Furuta's inequality," Linear Algebra and Its Applications, vol. 149, pp. 91-96, 1991.
459. M. Fujii, T. Furuta, and E. Kamei, "Furuta's inequality and its applications to Ando's theorem," Linear Algebra and Its Applications, vol. 179, pp. 161-169, 1993.
460. M. Fujii and R. Nakamoto, "Rota's theorem and Heinz inequalities," Linear Algebra and Its Applications, vol. 214, pp. 271-275, 1995.
461. T. Furuta, "A proof via operator means of an order preserving inequality," Linear Algebra and Its Applications, vol. 113, pp. 129-130, 1989.
462. T. Furuta, "Two operator functions with monotone property," Proceedings of the American Mathematical Society, vol. 111(2), pp. 511-516, 1991.
463. T. Furuta, "A note on the arithmetic-geometric mean inequality for every unitarily invariant matrix norm," Linear Algebra and Its Applications, vol. 208/209, pp. 223-228, 1994.
464. T. Furuta, "Extension of the Furuta inequality and Ando-Hiai log-majorization," Linear Algebra and Its Applications, vol. 219, pp. 139-155, 1995.
465. M. I. Gil, "On inequalities for eigenvalues of matrices," Linear Algebra and Its Applications, vol. 184, pp. 201-206, 1993.
466. I. C. Gohberg and M. G. Kreı̆n, Introduction to the Theory of Linear Nonselfadjoint Operators. Translations of Mathematical Monographs, vol. 18, Providence, RI: American Mathematical Society, 1969. Translated by A. Feinstein.
467. I. Gohberg, P. Lancaster, and L. Rodman, "On Hermitian solutions of the symmetric algebraic Riccati equation," SIAM Journal on Control and Optimization, vol. 24(6), pp. 1323-1334, 1986.
468. A. Graham, Kronecker Products and Matrix Calculus: with Applications. Ellis Horwood Series in Mathematics and Its Applications, Chichester, England: Ellis Horwood Limited, 1981.
469. P. R. Halmos, "Finite dimensional vector spaces," Annals of Mathematics Studies, vol. 7, pp. 1-196, 1942.
470. F. Hansen, "An operator inequality," Mathematische Annalen, vol. 246, pp. 249-250, 1980.
471. F. Hansen and G. K. Pedersen, "Jensen's inequality for operators and Loewner's theorem," Mathematische Annalen, vol. 258, pp. 229-241, 1981/1982.
472. G. H. Hardy, J. E. Littlewood, and G. Pólya, Inequalities. Cambridge: Cambridge University Press, Second ed., 1952.
473. E. Heinz, "Beiträge zur Störungstheorie der Spektralzerlegung," Mathematische Annalen, vol. 123, pp. 415-438, 1951.
474. F. Hiai and D. Petz, "The Golden-Thompson trace inequality is complemented," Linear Algebra and Its Applications, vol. 181, pp. 153-185, 1993.
475. F. Hiai, "Trace norm convergence of exponential product formula," Letters in Mathematical Physics, vol. 33, pp. 147-158, 1995.
476. A. S. Hodel and K. Poolla, "Parallel solution of large Lyapunov equations," SIAM Journal on Matrix Analysis and Applications, vol. 13(4), pp. 1189-1203, 1992.
477. R. A. Horn and C. R. Johnson, Matrix Analysis. Cambridge: Cambridge University Press, 1985.
478. R. A. Horn and R. Mathias, "An analog of the Cauchy-Schwarz inequality for Hadamard products and unitarily invariant norms," SIAM Journal on Matrix Analysis and Applications, vol. 11(4), pp. 481-498, 1990.
479. R. A. Horn and C. R. Johnson, Topics in Matrix Analysis. Cambridge: Cambridge University Press, 1994.
480. K. D. Ikramov, "A simple proof of the generalized Schur inequality," Linear Algebra and Its Applications, vol. 199, pp. 143-149, 1994.
481. R. Jackiw, "Minimum uncertainty product, number-phase uncertainty product, and coherent states," Journal of Mathematical Physics, vol. 9(3), pp. 339-346, 1968.
482. G. W. Johnson and M. L. Lapidus, "Generalized Dyson series, generalized Feynman diagrams, the Feynman integral and Feynman's operational calculus," Memoirs of the American Mathematical Society, vol. 62(351), pp. 1-78, 1986.
483. G. W. Johnson and M. L. Lapidus, "Noncommutative operations on Wiener functionals and Feynman's operational calculus," Journal of Functional Analysis, vol. 81, pp. 74-99, 1988.
484. C. R. Johnson and F. Zhang, "An operator inequality and matrix normality," Linear Algebra and Its Applications, vol. 240, pp. 105-110, 1996.
485. R. V. Kadison, "A generalized Schwarz inequality and algebraic invariants for operator algebras," Annals of Mathematics, vol. 56(3), pp. 494-503, 1952.
486. T. Kato, "Continuity of the map $S \rightarrow|S|$ for linear operators," Proceedings of the Japan Academy, vol. 49, pp. 157-160, 1973.
487. F. Kittaneh, "Inequalities for the Schatten p-norm," Glasgow Mathematical Journal, vol. 26, pp. 141143, 1985.
488. F. Kittaneh, "Inequalities for the Schatten p-norm. III," Communications in Mathematical Physics, vol. 104, pp. 307-310, 1986.
489. F. Kittaneh, "Inequalities for the Schatten p-norm. IV," Communications in Mathematical Physics, vol. 106, pp. 581-585, 1986.
490. F. Kittaneh, "Inequalities for the Schatten p-norm. II," Glasgow Mathematical Journal, vol. 29, pp. 99104, 1987.
491. F. Kittaneh, "On the continuity of the absolute value map in the Schatten classes," Linear Algebra and Its Applications, vol. 118, pp. 61-68, 1989.
492. F. Kittaneh, "Norm inequalities for fractional powers of positive operators," Letters in Mathematical Physics, vol. 27, pp. 279-285, 1993.
493. F. Kittaneh, "On some operator inequalities," Linear Algebra and Its Applications, vol. 208/ 209, pp. 19-28, 1994.
494. H. Kosaki, "An inequality of Araki-Lieb-Thirring (von Neumnann algebra case)," Proceedings of the American Mathematical Society, vol. 114(2), pp. 477-481, 1992.
495. C. Kourkoumelis and S. Nettel, "Operator functionals and path integrals," American Journal of Physics, vol. 45(1), pp. 26-30, 1977.
496. F. Kubo and T. Ando, "Means of positive linear operators," Mathematische Annalen, vol. 246, pp. 205224, 1980.
497. M. K. Kwong, "Some results on matrix monotone functions," Linear Algebra and Its Applications, vol. 118, pp. 129-153, 1989.
498. P. Lancaster, "Explicit solutions of linear matrix equations," SIAM Review, vol. 12(4), pp. 544-566, 1970.
499. L. J. Landau and R. F. Streater, "On Birkhoff's theorem for doubly stochastic completely positive maps of matrix algebras," Linear Algebra and Its Applications, vol. 193, pp. 107-127, 1993.
500. O. E. Lanford III and D. W. Robinson, "Mean entropy of states in quantum-statistical mechanics," Journal of Mathematical Physics, vol. 9(7), pp. 1120-1125, 1968.
501. M. L. Lapidus, "Quantification, calcul opérationnel de Feynman axiomatique et intégrale fonctionnelle généralisée," Comptes Rendus de l'Académie des Sciences, Série I, vol. 308, pp. 133-138, 1989.
502. L. L. Lee, "Continuum calculus and Feynman's path integrals," Journal of Mathematical Physics, vol. 17(11), pp. 1988-1997, 1976.
503. A. Lenard, "Generalization of the Golden-Thompson inequality $\operatorname{Tr}\left(e^{A} e^{B}\right) \geq \operatorname{Tr} e^{A+B}$," Indiana University Mathematics Journal, vol. 21(5), pp. 457-467, 1971.
504. C. K. Li, "A generalization of spectral radius, numerical radius, and spectral norm," Linear Algebra and Its Applications, vol. 90, pp. 105-118, 1987.
505. C. K. Li and N. K. Tsing, "Distance to the convex hull of unitary orbits," Linear and Multilinear Algebra, vol. 25, pp. 93-103, 1989.
506. E. H. Lieb, "Convex trace functions and the Wigner-Yanase-Dyson conjecture," Advances in Mathematics, vol. 11, pp. 267-288, 1973.
507. E. H. Lieb and M. B. Ruskai, "Some operator inequalities of the Schwarz type," Advances in Mathematics, vol. 12, pp. 269-273, 1974.
508. E. H. Lieb, "Inequalities for some operator and matrix functions," Advances in Mathematics, vol. 20, pp. 174-178, 1976.
509. E. R. Ma, "A finite series solution of the matrix equation $A X-X B=C$, "SIAM Journal on Applied Mathematics, vol. 14(3), pp. 490-495, 1966.
510. J. H. Maclagan-Wedderburn, "Note on the linear matrix equation," Proceedings of the Edinburgh Mathematical Society, vol. 22, pp. 49-53, 1904.
511. M. Marcus and B. N. Moyls, "On the maximum principle of Ky Fan," Canadian Journal of Mathematics, vol. 9, pp. 313-320, 1957.
512. M. Marcus, "Convex functions of quadratic forms," Duke Mathematical Journal, vol. 24, pp. 321-326, 1957.
513. M. Marcus and H. Minc, A Survey of Matrix Theory and Matrix Inequalities. New York: Dover Publications, 1992.
514. A. S. Markus, "The eigen- and singular values of the sum and product of linear operators," Russian Mathematical Surveys, vol. 19(4), pp. 91-120, 1964.
515. A. W. Marshall and I. Olkin, Inequalities: Theory of Majorization and Its Applications. Mathematics in Science and Engineering, vol. 143, New York: Academic Press, 1979.
516. V. P. Maslov, Operational Methods. Moscow: Mir Publishers, 1976. Translated by V. Golo, N. Kulman, and G. Voropaeva.
517. R. Mathias, "Concavity of monotone matrix function of finite order," Linear and Multilinear Algebra, vol. 27, pp. 129-138, 1990.
518. R. Mathias, "Matrices with positive definite Hermitian part: Inequalities and linear systems," SIAM Journal on Matrix Analysis and Applications, vol. 13(2), pp. 640-654, 1992.
519. R. Mathias, "Perturbation bounds for the polar decomposition," SIAM Journal on Matrix Analysis and Applications, vol. 14(2), pp. 588-597, 1993.
520. R. Mathias, "Approximation of matrix-valued functions," SIAM Journal on Matrix Analysis and Applications, vol. 14(4), pp. 1061-1063, 1993.
521. R. Mathias, "The Hadamard operator norm of a circulant and applications," SIAM Journal on Matrix Analysis and Applications, vol. 14(4), pp. 1152-1167, 1993.
522. R. Mathias, "A chain rule for matrix functions and applications," SIAM Journal on Matrix Analysis and Applications, vol. 17(3), pp. 610-620, 1996.
523. R. McEachin, "Analyzing specific cases of an operator inequality," Linear Algebra and Its Applications, vol. 208/209, pp. 343-365, 1994.
524. C. L. Mehta, "Some inequalities involving traces of operators," Journal of Mathematical Physics, vol. 9(5), pp. 693-697, 1968.
525. A. D. Michal, Matrix and Tensor Calculus, with Applications to Mechanics, Elasticity, and Aeronautics. Galcit Aeronautical Series, New York: John Wiley \& Sons, 1947.
526. L. Mirsky, "Maximum principles in matrix theory," Proceedings of the Glasgow Mathematical Association, vol. 4, pp. 34-37, 1959-60.
527. L. Mirsky, "On the trace of matrix products," Mathematische Nachrichten, vol. 20, pp. 171-174, 1959.
528. L. Mirsky, "A trace inequality of John von Neumann," Monatshefte für Mathematik, vol. 79, pp. 303306, 1975.
529. D. S. Mitrinović, Elementary Inequalities. Groningen: ??, 1964.
530. D. S. Mitrinović, Analytic Inequalities. Die Grundlehren der mathematischen Wissenschaften in Einzeldarstellungen, Band 165, Berlin: Springer-Verlag, 1970. In cooperation with Petar M. Vasić.
531. B. Mond and J. E. Pečarić, "Inequalities involving powers of generalized inverses," Linear Algebra and Its Applications, vol. 199, pp. 293-303, 1994.
532. P. C. Müller, "Solution of the matrix equations $A X+X B=-Q$ and $S^{T} X+X S=-Q$," SIAM Journal on Applied Mathematics, vol. 18(3), pp. 682-687, 1970.
533. M. Nakamura and H. Umegaki, "A note on the entropy for operator algebras," Proceedings of the Japan Academy, vol. 37(3), pp. 149-154, 1961.
534. E. Nelson, "Operants: A functional calculus for non-commuting operators," in Functional Analysis and Related Fields: Proceedings of a Conference in Honor of Professor Marshall Stone (F. E. Browder, ed.), (Berlin), pp. 172-187, Springer-Verlag, 1970.
535. H. Neudecker, "Some theorems on matrix differentiation with special reference to Kronecker matrix products," Journal of the American Statistical Association, vol. 64, pp. 953-963, 1969.
536. M. L. Overton and R. S. Womersley, "On the sum of the largest eigenvalues of a symmetric matrix," SIAM Journal on Matrix Analysis and Applications, vol. 13(1), pp. 41-45, 1992.
537. P. A. Pearce and C. J. Thompson, "The anisotropic Heisenberg model in the long-range interaction limit," Communications in Mathematical Physics, vol. 41, pp. 191-201, 1975.
538. D. Petz, "Monotone metrics on matrix spaces," in Quantum Communications and Measurement (R. Hudson, V. P. Belavkin, and O. Hirota, eds.), (New York), Plenum Press, 1995. to appear.
539. J. A. Poluikis and R. D. Hill, "Completely positive and Hermitian-preserving linear transformations," Linear Algebra and Its Applications, vol. 35, pp. 1-10, 1981.
540. H. Poincaré, "Sur les groupes continus," Transactions. Cambridge Philosophical Society, vol. 18, p. 220, 1899.
541. J. E. Potter, "Matrix quadratic solutions," SIAM Journal on Applied Mathematics, vol. 14(3), pp. 496501, 1966.
542. W. Pusz and S. L. Woronowicz, "Functional calculus for sesquilinear forms and the purification map," Reports on Mathematical Physics, vol. 8(2), pp. 159-170, 1975.
543. G. S. Rogers, Matrix Derivatives. Lecture Notes in Statistics, vol. 2, New York: Marcel Dekker, Inc., 1980.
544. M. Rosenblum, "On the operator equation $B X-X A=Q$," Duke Mathematical Journal, vol. 23, pp. 263-269, 1956.
545. H. L. Royden, Real Analysis. New York: Macmillan, Second ed., 1963.
546. D. Ruelle, Statistical Mechanics: Rigorous Results. The Mathematical Physics Monograph Series, Reading, MA: W. A. Benjamin, Inc., 1969.
547. M. B. Ruskai, "Inequalities for traces on von Neumann algebras," Communications in Mathematical Physics, vol. 26, pp. 280-289, 1972.
548. D. E. Rutherford, "On the solution of the matrix equation $A X+X B=C$," Koninklijke Nederlandse Akademie van Wetenschappen, Proceedings Series A, vol. 35, pp. 54-59, 1932.
549. R. Schatten, "A theory of cross-spaces," Annals of Mathematics Studies, vol. 26, pp. 1-153, 1950.
550. R. Schatten, Norm Ideals of Completely Continuous Operators. Ergebnisse der Mathematik und ihrer Grenzgebiete, Heft 27, Berlin: Springer-Verlag, 1960.
551. P. Sebastiani, "On the derivatives of matrix powers," SIAM Journal on Matrix Analysis and Applications, vol. 17(3), pp. 640-648, 1996.
552. B. Simon, Trace Ideals and Their Applications. London Mathematical Society Lecture Note Series, vol. 35, Cambridge: Cambridge University Press, 11979.
553. M. F. Smiley, "Inequalities related to Lidskii's," Proceedings of the American Mathematical Society, vol. 19, pp. 1029-1034, 1968.
554. R. A. Smith, "Bounds for quadratic Lyapunov functions," Journal of Mathematical Analysis and Applications, vol. 12, pp. 425-435, 1965.
555. R. A. Smith, "Matrix calculations for Liapunov quadratic forms," Journal of Differential Equations, vol. 2, pp. 208-217, 1966.
556. R. A. Smith, "Matrix equation $X A+B X=C, " S I A M$ Journal on Applied Mathematics, vol. 16(1), pp. 198-201, 1968.
557. W. So, "Equality cases in matrix exponential inequalities," SIAM Journal on Matrix Analysis and Applications, vol. 13(4), pp. 1154-1158, 1992.
558. W. H. Steeb, "A lower bound for the free energy of the Hubbard model," Journal of Physics C, vol. 8, pp. L103-L106, 1975.
559. W.-S. Tang, "On positive linear maps between matrix algebras," Linear Algebra and Its Applications, vol. 79, pp. 33-44, 1986.
560. C. M. Theobald, "An inequality for the trace of the product of two symmetric matrices," Mathematical Proceedings of the Cambridge Philosophical Society, vol. 77, pp. 265-267, 1975.
561. C. J. Thompson, "Inequality with applications in statistical mechanics," Journal of Mathematical Physics, vol. 6(11), pp. 1812-1813, 1965.
562. C. J. Thompson, "Inequalities and partial orders on matrix spaces," Indiana University Mathematics Journal, vol. 21(5), pp. 469-479, 1971.
563. R. C. Thompson, "Matrix type metric inequalities," Linear and Multilinear Algebra, vol. 5, pp. 303-319, 1978.
564. R. C. Thompson, "The case of equality in the matrix valued triangle inequality," Pacific Journal of Mathematics, vol. 82, pp. 279-280, 1979.
565. P. A. J. Tindemans and H. W. Capel, "On the free energy in systems with separable interactions. III," Physica, vol. 79A, pp. 478-502, 1975.
566. J. Tomiyama, "On the geometry of positive maps in matrix algebras. II," Linear Algebra and Its Applications, vol. 69, pp. 169-177, 1985.
567. R. Vaidyanathaswamy, Set Topology. New York: Chelsea Publishing Company, Second ed., 1960.
568. J. L. van Hemmen and T. Ando, "An inequality for trace ideals," Communications in Mathematical Physics, vol. 76, pp. 143-148, 1980.
569. W. J. Vetter, "Vector structures and solutions of linear matrix equations," Linear Algebra and Its Applications, vol. 10, pp. 181-188, 1975.
570. J. von Neumann, "Some matrix-inequalities and metrization of matrix-space," Tomsk Univ. Rev., vol. 1, pp. 286-300, 1937. Reprinted in John von Neumann: Collected Works, vol. IV, (Macmillan, New York, 1962), edited by A. H. Taub.
571. B.-Y. Wang and M.-P. Gong, "Some eigenvalue inequalities for positive semidefinite matrix power products," Linear Algebra and Its Applications, vol. 184, pp. 249-260, 1993.
572. B.-Y. Wang and F. Zhang, "Trace and eigenvalue inequalities for ordinary and Hadamard products of positive semidefinite Hermitian matrices," SIAM Journal on Matrix Analysis and Applications, vol. 16(4), pp. 1173-1183, 1995.
573. R. M. Wilcox, "Exponential operators and parameter differentiation in quantum physics," Journal of Mathematical Physics, vol. 8(4), pp. 962-982, 1967.
574. H. K. Wimmer, "Extremal problems for Hölder norms of matrices and realizations of linear systems," SIAM Journal on Matrix Analysis and Applications, vol. 9(3), pp. 314-322, 1988.
575. H. K. Wimmer, "Linear matrix equations, controllability and observability, and the rank of solutions," SIAM Journal on Matrix Analysis and Applications, vol. 9(4), pp. 570-578, 1988.
576. H. K. Wimmer, "Explicit solutions of the matrix equation $\sum A^{i} X D_{i}=C$," SIAM Journal on Matrix Analysis and Applications, vol. 13(4), pp. 1123-1130, 1992.
577. F. J. Yeadon and P. E. Kopp, "Inequalities for non-commutative $L^{p}$-spaces and an application," Journal of the London Mathematical Society, vol. 19, pp. 123-128, 1979.
578. N. J. Young, "Formulae for the solution of Lyapunov matrix equations," International Journal of Control, vol. 31(1), pp. 159-179, 1980.
