

# Bibliography

- [1] Albaseer, M., Lu, Y., and Shi, Y. Reducing subspaces for a class of Toeplitz operators on the Bergman space of the bidisk. *Bull. Korean Math. Soc.*, 52(5):1649-1660, 2015.
- [2] Beurling, A. On two problems concerning linear transformations in Hilbert spaces. *Acta Math.*, 81:239-255, 1949.
- [3] Bourhim, A. Spectrum of bilateral shifts with operator-valued weights. *Proc. Amer. Math. Soc.*, 134(7):2131-2137, 2006.
- [4] Conway, J. B. *A Course in Functional Analysis*, Springer-Verlag, New York, 2nd edition, 1990.
- [5] Conway, J. B. *A Course in Operator Theory*, Amer. Math. Soc., New York, 2nd edition, Providence, Rhode Island, 2000.
- [6] Conway, J. B., Prajitura, G., and Martinez-Avendino, R. A. Powers and direct sums. *J. Math. Anal. Appl.*, 413:880-889, 2014.
- [7] Deng, J., Lu, Y., Shi, Y., and Hu, Y. Reducing subspaces for a class of nonanalytic Toeplitz operators. *Banach J. Math. Anal.*, 12(2):456-480, 2018.
- [8] Ferguson, T. J. *Extremal problems in Bergman spaces*. PhD thesis, Department of Mathematics, University of Michigan, Ann Arbor, Michigan, U.S.A., 2011.

- [9] Ferguson, T. J. Extremal problems in Bergman spaces and an extension of Ryabykh's theorem. *Illinois J. Math*, 55(2):555-573, 2011.
- [10] Fillmore, P. A. *Notes on Operator Theory*, (Vol. 30), Van Nostrand Reinhold Co., 1970.
- [11] Gellar, R. Operators commuting with a weighted shift. *Proc. Amer. Math. Soc.*, 23(3):538-545, 1969.
- [12] Gross-Erdmann, K. G. Hypercyclic and chaotic weighted shifts. *Studia Math.*, 139(1):47-68, 2000.
- [13] Gu, C. Common reducing subspaces of several weighted shifts with operator weights. *To appear in J. Math. Soc. Japan*, 2017. <http://mathsoc.jp/publication/JMSJ/pdf/JMSJ7467.pdf>
- [14] Gu, C. Reducing subspaces of weighted shifts with operator weights. *Bull. Korean Math. Soc.*, 53(5):1471-1481, 2016.
- [15] Guo, K., and Huang, H. *Multiplication Operators on the Bergman Space, Lecture notes in Mathematics*, 2145, Springer, Berlin, 2015.
- [16] Guo, K. Y., and Wang, X. D. Reducing subspaces of tensor products of weighted shifts. *Sci. China Math.*, 59(4):715-730, 2016.
- [17] Guyker, J. On reducing subspaces of normally weighted bilateral shifts. *Houston J. Math.*, 11(4):515-521, 1985.
- [18] Halmos, P. R. Shifts on Hilbert spaces. *J. Reine Angew. Math.*, 208:102-112, 1961.
- [19] Halmos, P. R. *A Hilbert Space Problem Book*. Springer-Verlag, New York, U.S.A., 2nd edition, 1982.

- [20] Hazarika, M., and Arora, S. C. Minimal reducing subspaces of the unilateral shift operator on an operator weighted sequence space. *Indian J. Pure Appl. Math.*, 35(6):747-757, 2004.
- [21] Hazarika, M., and Gogoi, P. S. Minimal reducing subspaces of an operator-weighted shift. *Ann. Funct. Anal.*, 8(4):531-546, 2017.
- [22] Hazarika, M., and Gogoi, P. S. Minimal reducing subspaces of the unilateral shift. *East-West J. of Mathematics*, 19(1):43-51, 2017.
- [23] Hazarika, M., and Gogoi, P.S. Minimal reducing subspaces of weighted pseudo shifts, communicated.
- [24] Hou, B., and Geng, T. Square root for backward operator weighted shifts with multiplicity 2. *Banach J. Math. Anal.*, 6(2):192-203, 2012.
- [25] Herrero, D. Spectral pictures of hyponormal bilateral operator weighted shifts. *Proc. Amer. Math. Soc.*, 109(3):753–763, 1990.
- [26] Hu, J., Sun, S., Xu, X., and Yu, D. Reducing subspace of analytic Toeplitz operators on the Bergman space. *Integr. Equ. Oper. Th.*, 49(3):387–395, 2004.
- [27] Jabłoński, Z. J. Hyperexpansive operator valued unilateral weighted shifts. *Glasg. Math. J.*, 46(2):405–416, 2004.
- [28] Jabłoński, Z. J., Jung, I. B., and Stochel, J. Weighted shifts on directed trees. *Mem. Amer. Math. Soc.*, 216(1017), 2012.
- [29] Jewell, N.P., and Lubin, A. R. Commuting weighted shifts and analytic function theory in several variables. *J. Operator Theory*, 1(2):207–223, 1979.
- [30] Jiang, C. L., Jin, Y. F., and Wang, Z. Y. About operator weighted shift. *Acta. Math. Sin.-English Ser.*, 23(8):1385–1390, 2007.

- [31] Kubrusly, C. S., and Levan, N. Shift reducing subspaces and irreducible-invariant subspaces generated by wandering vectors and applications. *Math. Comput. Simulat.*, 65(6):607–627, 2004.
- [32] Kuwahara, S. Reducing subspaces of weighted Hardy spaces on polydisks. *Nihonkai Math. J.*, 25(2):77–83, 2014.
- [33] Kuwahara, S. Reducing subspaces for a class of Toeplitz operators on weighted Hardy spaces over bidisk. *Bull. Korean Math. Soc.*, 54(4):1221–1228, 2017.
- [34] Lambert, A. Unitary equivalence and reducibility of invertibly weighted shifts. *Bull. Austral. Math. Soc.*, 5:157–173, 1971.
- [35] Liang, Y. X., and Zhou, Z. H. Hereditarily hypercyclicity and supercyclicity of weighted shifts. *J. Korean Math. Soc.*, 51(2):363–382, 2014.
- [36] Li, J. X., Ji, Y. Q., and Sun, S. L. The essential spectrum and Banach reducibility of operator weighted shifts. *Acta. Math. Sin.-English Ser.*, 17(3):413–424, 2001.
- [37] Lin, H. A note on reducing subspaces of Toeplitz operator on the weighted analytic function spaces of the bidisk  $H_w^2(\mathbb{D}^2)$ , *J. Funct. Space.*, 2017, <https://doi.org/10.1155/2017/5807909>.
- [38] Lin, H. Reducing subspaces of Toeplitz operators on Dirichlet type spaces of the bidisk, *Turk. J. Math.*, 42:227–242, 2018.
- [39] Martinez-Avendino, R. A., and Rosenthal, P. *An Introduction to Operators on the Hardy-Hilbert Space*, Springer-Verlag, New York, 2007.
- [40] Nikol'skii, N. K. Invariant subspaces of weighted shift operators. *Math. USSR. Sbornik*, 3(2):159–176, 1967.

- [41] Nikol'skii, N. K. *Treatise on the Shift Operator: spectral function theory*, Springer-Verlag, Berlin, 1985.
- [42] Nordgren, E. A. Invariant subspaces of a direct sum of weighted shifts. *Pacific J. Math.*, 27(3):587–598, 1968.
- [43] Pearcy, C. M., and Petrovic, S. On polynomially bounded weighted shifts. *Houston J. Math.*, 20(1):27–45, 1994.
- [44] Pilidi, V. S. On invariant subspaces of multiple weighted shift operators. *Math. USSR Izvestija*, 14(2):345–365, 1980.
- [45] Sarason, D. Invariant Subspaces. *Topics in Operator Theory, Math surveys*, 13:1-47, 1974.
- [46] Shi, Y., and Lu, Y. Reducing subspaces for Toeplitz operators on the polydisk. *Bull. Korean Math. Soc.*, 50(2):687-696, 2013.
- [47] Shi, Y., and Zhou, N. Reducing subspaces of some multiplication operators on the Bergman space over polydisk. *Abstract and Applied Analysis*, 2015. <http://dx.doi.org/10.1155/2015/209307>.
- [48] Shields, A. L. Weighted shift operators and analytic function theory. *Topics in operator theory, Math surveys*, 13:49–128, 1974.
- [49] Singh, V. P., and Komal, B. S. Invariant and reducing subspaces of multiplication and composition operators. *Eur. J. Math. Sci.*, 2(3):311–319, 2013.
- [50] Stessin, M., and Zhu, K. Reducing subspaces of weighted shift operators. *Proc. Amer. Math. Soc.*, 130(9):2631–2639, 2002.
- [51] Sun, S., Zheng, D., and Zhong, C. Multiplication operators on the Bergman space and weighted shifts. *J. Operator Theory*, 59:435–454, 2008.

- [52] Wang, Y., and Zhou, Z. Disjoint hypercyclic powers of weighted pseudo-shifts. *Bull. Malays. Math. Sci. Soc.*, 1–20, 2017, <https://doi.org/10.1007/s40840-017-0584-7>.
- [53] Wang, Y., and Zhou, Z. Disjoint hypercyclic weighted pseudo-shifts on Banach sequence spaces. *Collect. Math.*, 1–13, 2018, <https://doi.org/10.1007/s13348-018-0216-z>.
- [54] Wang, Y., and Zhou, Z. Disjoint hypercyclic weighted pseudo-shift operators generated by different shifts. arXiv preprint arXiv:1804.02194.
- [55] Zhu, K. Reducing subspaces for a class of multiplication operators. *J. London Math. Soc.*, 62(2):553–568, 2000.