PUBLICATIONS AND INVITED LECTURES/PRESENTATIONS

I. BOOKS

***Time Series Analysis: Univariate and Multivariate Methods*, 1st Edition, 1990; 2nd Edition, 2006; Classic Version, 2019**
Pearson Addison-Wesley, Reading, Massachusetts. https://www.pearson.com/us/higher-education/program/Wei-Time-Series-Analysis-Univariate-and-Multivariate-Methods-Classic-Version-2nd-Edition/PGM2043181.html

The book was translated into Chinese by a group of faculty members of the School of Statistics at Renmin University of China (People's University of China) in Beijing, China, and published by People's University Press of China.
https://book.douban.com/subject/3704339/
The book was also translated into traditional Chinese and published by Best-Wise Publishing Co., LTD, in Taipei, Taiwan.
http://www.bestwise.com.tw/book/book.aspx?ib=5113
Although both people in China and Taiwan speak mandarin Chinese, their written languages are quite different especially in the use of academic terms and phrases. The book has also been translated into Spanish and Portuguese.

***Multivariate Time Series Analysis and Applications*, 1st Edition, 2019 John Wiley and Sons, Inc.**
https://www.wiley.com/en-us/Multivariate+Time+Series+Analysis+and+Applications-p-9781119502937

II. REFEREED ARTICLES

Effect of Temporal Aggregation on Dynamic Relationships of Two Time Series Variables (with G.C. Tiao), 1976, *Biometrika*, 63 (3), 513-523.

Effect of Temporal Aggregation on Parameter Estimation in the Distributed Lag Model, 1978, *Journal of Econometrics*, 8, 237-246.

Some Consequences of Temporal Aggregation in Seasonal Time Series Models, 1978, *Seasonal Analysis of Economic Time Series*, ed. A. Zellner, 433-444.
This is one of 12 papers selected by the Steering Committee for the special NBER-CENSUS Conference on Seasonal Economic Time Series Analysis. The attendants included 6 Nobel Price and National Medal of Science recipients and many endowed chair professors. In addition to the full travel support, the author received an award of $1,500, which was a big award in 1978.

Temporal Aggregation and Information Loss in a Distributed Lag Model (with J. Mehta), 1980, *Analyzing Time Series*, 391-400.

Forecasting Contemporal Time Series Aggregates (with Bovas Abraham), 1981, *Communications in Statistics*, A10 (13), 1335-1344.

Effect of Systematic Sampling on ARIMA Models, 1981, *Communications in Statistics*, A10 (23), 2389-2398.

The Effect of Systematic Sampling and Temporal Aggregation on Causality - A Cautionary Note, 1982, *Journal of the American Statistical Association*, 77 (378), 316-319.

Inferences about the Parameters of a Time Series Model with Changing Variance (with Bovas Abraham), 1984, *Metrika*, 31, 183-194.

The Effects of Time Aggregation on the AR(1) Process (with M. Ahsanullah), 1984, *Computational Statistics Quarterly*, 4, 343-352.

Modeling the Advertising-Sales Relationship Through Use of Multiple Time Series Techniques (with Joseph F. Heyse), 1985, *Journal of Forecasting*, 4, 165-181.

Temporal Aggregation in the ARIMA Process (with Daniel Stram), 1986, *Journal of Time Series Analysis*, 7, 279-292.

Seasonal Adjustment of Time Series Using One-Sided Filters (with Leonard Cupingood), 1986, *Journal of Business and Economic Statistics*, 4 (4), 473-484.

A Methodological Note on the Disaggregation of Time Series Totals (with Daniel Stram), 1986, *Journal of Time Series Analysis*, 7 (4), 293-302.

Forecasting Aggregated Vector ARMA Processes, 1988, *Journal of Economic literature*, XXVI, 1193-1195.
This is an invited review article by American Economic Association.

An Eigenvalue Approach to the Limiting Behavior of Time Series Aggregates (with D. Stram), 1988, *Annals of the Institute of Statistical Mathematics*, 40 (1), 101-110.

Comments on Shumway's Applied Statistical Time Series Analysis, 1990, *Journal of the American Statistical Association*, 85 (409), 258.
This is an invited review article by *Journal of the American Statistical Association.*

Disaggregation of Time Series Models (with D. Stram), 1990, *Journal of the Royal Statistical Society* B, 52 (3), 453-467.

Comments on Chatfield's *The Analysis of Time Series*, 1991, *Journal of the American Statistical Association*, 86 (413), 246-247.
This is an invited review article by *Journal of the American Statistical Association.*

A Comparison of Some Estimates of Time Series Autocorrelations (with W. Chan), 1992, *Computational Statistics and Data Analysis*, 14, 149-163.

A Model Independent Outlier Detection Procedure (with J.H. Lee), 1995, *Journal of*

Applied Statistical Science, **4, 311-318.**

A Note on the Representation of a Vector ARMA Model (with S.Y. Shen), 1995, ***Journal of Applied Statistical Science,*** **4, 345-359.**

On Likelihood Distance for Outlier Detection (with S. Chow and W. Wang), 1995, ***Journal of Biopharmaceutical Statistics,*** **5, 307-322.**

Temporal Disaggregation of Time Series (with E. Hodgess), 1996, ***Applied Statistical Science I, 33-44*****.**

Iterative Least-Squares Estimation and Identification of the Transfer Function Model (with D. Muller), 1997, ***Journal of Time Series Analysis*****, 18, 579-592.**

Comparison of Some Estimates of Autoregressive Parameters (with S. Wei), 1998, ***Journal of Applied Statistical Science*****, 8, 51-58.**

The Use of Aggregate Series in Testing for Long Memory (with P. Teles and N. Crato), 1999, ***Bulletin of the International Statistical Institute*****, 3, 341-342.**

Temporal Disaggregation of Stationary Bivariate Time Series (with E. Hodgess), 2000, ***Linear Algebra and Its Applications*****, 321, 175-196.**

The Effects of Temporal Aggregation on Tests of Linearity of a Time Series (with P. Teles), 2000, ***Computational Statistics & Data Analysis,*** **34, 91-103.**

An Autoregressive Disaggregation Method (with E. Hodgess), 2001, ***Applied Statistical Science V,*** **221-235.**

The Use of Aggregate Time Series in Testing for Gaussianity (with P. Teles), 2002, ***Journal of Time Series Analysis*****, 23, 95-116.**

Outline for Multivariate Time Series Analysis, 2007, ***Recent Advances in Statistics*****, ed. H. Oztas Ayhan and Inci Batmaz, 117-128.**

Spectral Analysis, 2008, ***Hand Book of Longitudinal Research,*** **ed. Scott Menard, Academic Press, 601-620.**

Testing a Unit Root Based on Aggregate Time Series (with P. Teles and E. Hodgess), 2008, ***Communications in Statistics-Theory and Methods*****, 37, 565-590.**

Representation of Multiplicative Seasonal Vector Autoregressive Moving Average Models (with C. Yozgatligil), 2009, ***The American Statistician*****,** ***63 (4), 328-334.***

Forecasting with ARIMA Processes, 2011, ***International Encyclopedia of Statistical Sciences*****, ed. Miodrag Lovric, Springer, New York, 534-536.**

Time Series Regression, 2011, ***International Encyclopedia of Statistical Sciences*****, ed. Miodrag Lovric, Springer, New York, 1607-1609.**

Weighted Scatter Estimation Method of the GO-GARCH Models (with L. Zheng), 2012, ***Journal of Time Series Analysis, 33,*** **82-95.**

Time Series Analysis, 2013, ***The Oxford Handbook of Quantitative Methods*****, ed. Todd D. Little, Oxford University Press, 458-485.**

Robust Estimation of the Linkage Matrix in O-GARCH Model (with L. Zheng), 2014, ***Journal of Applied Statistical Science*****, 21(1), 43-62.**

Multiplicative Spatio-Temporal Models for Remotely Sensed Normalized Difference Vegetation Index Data (with N. Clements and S. Sarkar), 2014, ***Journal of International Energy Policy*****, 3(1), 1-14.**

Issues Related to the Use of Time Series in Model Building and Analysis: Review Article. 2015, ***Communications for Statistical Applications and Methods*****, 22(3), 209- 222.**

The Use of Temporally Aggregated Data on Detecting a Mean Change of a Time Series Process (with B.Y. Lee), 2017, ***Communications in Statistics-Theory and Methods*****, 46(12), 5851-5871.**

Dimension Reduction in High Dimensional Multivariate Time Series Analysis, 2019. ***Contemporary Biostatistics with Biopharmaceutical Applications,*** **33-59.**

Optimal Spatial Aggregation of Space-Time Models and Applications (with A.J. Gehman), 2020, ***Computational Statistics and Data Analysis,*** **published in Vol. 145 (C), 2020.**

Testing for Poolability of the Space-Time Autoregressive Moving-Average Model (with A. J. Gehman), 2020, ***Communications in Statistics-Theory and Methods,*** **published online, 2020.**

The Use of Temporally Aggregated Data in Modeling and Testing a Variance Change in a Time Series (with B.Y. Lee), 2021, ***Communications in Statistics - Simulation and Computation*****, published online, 2021.**

Investigating Seasonality, Policy Intervention and Forecasting in the Indian Gold Futures Market: A Comparison Based on Modeling Non-constant Variance Using Two Different Methods (with R. Nargunam and N. Anuradha), ***Financial Innovation,*** **2021, Volume 7, Article number: 62 (2021), published on August 16, 2021. https://doi.org/10.1186/s40854-021-00283-9.**

Analyses of the Impact of Country Specific Macro Risk Variables on Gold Futures Contract and its Position as an Asset Class: Evidence from India (with Rupel Nargunam and N. Anuradha), 2021, to appear in ***Statistics and Its Interface*****.**

III. PUBLISHED PROCEEDINGS

The Effect of Temporal Aggregation on Forecasting in the Dynamic Model (with G.C. Tiao), 1975, *Business and Economic Statistics Proceedings of the American Statistical Association*, 613-617.

Contemporal Aggregation of Time Series, 1978, *Business and Economic Statistics Proceedings of the American Statistical Association*, 815-819.

The Census X-11 Program and Quarterly Seasonal Adjustment (with Ralph Lee), 1979, *Business and Economic Statistics Proceedings of the American Statistical Association*, 427-431.

Model Based Seasonal Adjustment and Temporal Aggregation (with Ralph Lee), 1980, B*usiness and Economic Statistics Proceedings of the American Statistical Association*, 427-431.

Change of Model Form under Temporal Aggregation in the ARIMA Process (with Daniel Stram), 1981, *Business and Economic Statistics Proceedings of the American Statistical Association*, 313-317.

Disaggregation of a Time Series, 1982, *Business and Economic Statistics Proceedings of the American Statistical Association*, 468-473.

Effect of Temporal Aggregation on Forecasts in an ARMA (1, 1) Process (with M. Ahsanullah), 1984, *Business and Economic Statistics Proceedings of the American Statistical Association,* 297-302.

Inverse and Partial Lag Autocorrelation for Vector Time Series (with Joseph F. Heyse), 1986, *Business and Economic Statistics Proceedings of the American Statistical Association*, 233-237.

The Measurement of Time Delay between Input and Output Processes (with L. Cupingood), 1987, *Business and Economic Statistics Proceedings of the American Statistical Association,* 706-711.

A Robust Procedure for Detecting Outliers in Time Series, (with J.H. Lee), 1988, Bu*siness and Economic Statistics Proceedings of the American Statistical Association*, 522-526.

ARIMA Estimates of the Stock Option Prices, (with L. Cupingood), 1991, *Business and Economic Statistics Proceedings of the American Statistical Association*, 213 - 217.

On Vector Autoregressive Moving Average Representations (with S.Y. Shen), 1991, *Business and Economic Statistics Proceedings of the American Statistical Association*, 161-166.

Effect of Data Disaggregation (with Erin Hodgess), 1992, *Business and Economic Statistics Proceedings of the American Statistical Association*, 78-81.

Graphical Representation of Molecular Modeling Simulation Data (with S. Wei and G. Famini), 1992, *Business and Economic Statistics Proceedings of the American Statistical Association*, 83-88.

A Dynamic View of a Distribution (with S. Wei and G. Famini), 1992, *Statistical Graphics Proceedings of the American Statistical Association*, 77-79.

The Use of Aggregate Series in Time Series Testing (with P. Teles), 1999, *NBER/NSF Time Series Conference Proceedings*, 1-29.

Representation of Multiplicative Vector Autoregressive Moving Average Processes (with Ceylan Yozgatligil), 2004, *Business and Economic Statistics Proceedings of the American Statistical Association*.

Effects of Temporal Aggregation on Cointegration Tests (with Ceylan Yozgatligil), 2005, *Business and Economic Statistics Proceedings of the American Statistical Association*, 1382-1387.

Temporal Aggregation and Causality Tests in Cointegrated System (with Ceylan Yozgatligil), 2006, *Business and Economic Statistics Proceedings of the American Statistical Association*, 1162-1167.

Outline for Multivariate Time Series Analysis, 2007, Recent Advances in Statistics, ed. H. Oztas Ayhan and Inci Batmaz, 117-128.

Estimating Missing Observation of the Antarctic Ozone Hole (with B. H. Lee), 2012, 84 – Environmental Monitoring, sponsored by Section on Statistics and the Environment, 2012 JSM Proceeding, 3014-3024.

Temporal Aggregation Effects on a Mean-Change in Time Series (with B.H. Lee), JSM-2013 Proceeding, *Business and Economic Statistics of the American Statistical Association*, 1940-1946.

Temporal Aggregation Effects on a Structural Mean-Change of Time Series (with B.H. Lee), JSM-2014 Proceeding, Business and Economic Statistics of the American Statistical Association, 3990-4004.

IV. OTHER RESEARCH ARTICLES

Los Angeles Aerometric Ozone Data (with G.C. Tiao, G.E.P. Box, M. Grupe, S.T. Liu, and S. Hillmer), 1973, Tech. Report No. 346, Department of Statistics,

University of Wisconsin.

Forecasting Method by Box-Jenkins Time Series Approach, 1975, Executive Seminar Series, Center for Executive Development.

An Optimal Approach for Forecasting Time Series Aggregates, (with John L. Stanton and Jeffrey A. Lowenhar), 1977.

Application of the Spectral Analysis in Editing Electric Power Data (with K. Dinh), 1985.

Recursive Algorithms for M-Estimates of Autoregressive Coefficients and Scaler Parameters in AR (p) Models (with Y. Chen and Z. Bai), 1994.

V. INVITED LECTURES AND PRESENTATIONS

(Contributed papers at other professional meetings omitted)

Box-Jenkins Time Series Approach and Its Applications in Forecasting. The Center for Executive Development, 1975.

Temporal Aggregation Effect on the Dynamic Time Series Model. The Econometrics and Statistics Colloquium, Graduate School of Business, University of Chicago, 1975.

Some Consequences of Temporal Aggregation in Seasonal Time Series Models. The Special NBER-CENSUS Conference on Seasonal Analysis of Economic Time Series, Washington, DC, 1976.

Aggregation and Sampling Interval Problems in Time Series Analysis. Department of Statistics, University of Waterloo, Canada, 1978.

Forecasting Contemporal Aggregates. NBER-NSF Seminar on Time Series, Sponsored by the Bureau of the Census, May 4-5, 1979.

Temporal Aggregation and Information Loss in a Distributed Lag Model. The International Time Series Meeting, Guernsey, United Kingdom, Oct. 22-26, 1979.

Comments on the Measurement of Linear Dependence and Feedback between Multiple Time Series. Invited discussant on the special selected paper of J.A.S.A. Theory and Methods Section at the American Statistical Association Annual Meeting, Detroit, Michigan, August, 1981.

Modeling the Advertising-Sales Relationship Through the Use of Multiple Time Series Techniques. The Third International Symposium of Forecasting, Philadelphia, PA, June 6-7, 1983.

Temporal Aggregation in the ARIMA Process. NBER-NSF Seminar on Time

Series, University of Chicago Graduate School of Business, Oct. 7-8, 1983.

On the Disaggregation of Time Series Totals. NBER-NSF Seminar on Time Series, Carnegie-Mellon University, Nov. 1-2, 1985.

Recent Advances of Time Series analysis. Department of Mathematics, University of Virginia, April 12, 1986.

Aggregation and Related Problems in Time Series. The Fourth Korea and Japan Joint Statistical Conference, Seoul, Korea, July 10-12, 1986.

Time Series Analysis and Forecasting. Department of Statistics, Korea University, Seoul, Korea, July 14-15, 1986.

Time Series, Kalman Filter, and Transfer Functions. Institute of Statistics, Academia Sinica, Taipei, Taiwan, July 28-August 1, 1986.

Box-Jenkins Approach to Time Series Analysis. The Annual Joint National Meetings of the Operations Research Society of America and the Institute of Management Science, October, 25-28, 1987.

Time Series Analysis and Its Applications. Department of Mathematics, Nankai University, Tianjin, China, Sept. 13-Oct. 7, 1988.

Recent Advances in Time Series Analysis. Department of Probability and Statistics, Peking University, Beijing, China, Oct. 10, 1988.

Statistics Education in the U.S. Department of Management Science, Beijing University of Science and Technology, Beijing, China, Oct. 11, 1988.

Applications of Statistics. Department of Mathematical Statistics, East China Normal University, Shanghai, China, Oct. 13-14, 1988.

Time Series Analysis. Institute of Applied Mathematics, National Sun Yat-Sen University, Taiwan, July 1-31, 1990.

Time Series Analysis and Forecasting. Institute of Statistics, Academia Sinica, Taipei, Taiwan, July 8-12, 1991.

Vector Time Series, Cointegration, and State Space Models. Department of Mathematics, National University of Colombia, Bogota, Colombia, July 25-29, 1994.

Representations of Time Series Models. National Bank of Colombia, Bogota, Colombia, July 29, 1994.

Statistics and Statistics Professions. Department of Mathematics, Nankai University, Tianjin, China, August 18, 1995.

The Effects of Temporal Aggregation on the Bispectral Tests. NBER-NSF Seminar on Time Series, Duke University, NC, Oct. 10-11, 1997.
The Use of Aggregate Series in Time Series Testing. NBER/NSF Time Series Conference, Academia Sinica, Taipei, Taiwan, August 23-25, 1999.

Aggregation Problems in Time Series Analysis. Department of Mathematics and Statistics, University of Maryland- Baltimore County, September 5, 2003.

The Use of Aggregate Series in Time Series Analysis, Department of Biostatistics, University of Pennsylvania, September 26, 2005.

Time Series Regression and GARCH Models. Department of Statistics, Middle East Technical University, Ankara, Turkey, August 20, 2007.

Recent Advances in Multivariate Time Series Analysis. Department of Statistics, Middle East Technical University, Ankara, Turkey, August 21, 2007.

Aggregation and Disaggregation Problems in Time Series Analysis. Turkish Statistical Association, Ankara, Turkey, August 22, 2007.

Use of Time Series in Building Models and Making Inferences, Institute of Statistical Science, Academia Sinica, Taipei, Taiwan, November 18, 2010.

Issues in Vector Time Series Modeling and Analysis, Center of Mathematical Modeling and Scientific Computing, National Chiao Tung University, Hsinchu, Taiwan, November 25, 2010.

The Use of Aggregate Series in Time Series Analysis, the joint seminar of the Institute of Statistics, National Chiao Tung University, and the Institute of Statistics, National Tsing Hua University, Hsinchu, Taiwan, November 26, 2010.

Time Series Models and Their Applications, Department of Applied Mathematics with MA Program, National Hsinchu University of Education, Hsinchu, Taiwan, December 10, 2010.

Time Series Models and Their Applications, Department of Statistics and Actuarial Science, Aletheia University, Danshui, New Taipei City, Taiwan, December 16, 2010.

Issues Related to Time Series Modeling and Analysis, Department of Statistics, National Cheng Kung University, Tainan, Taiwan, December 30, 2010.

Estimation of Multivariate GARCH Models, a joint seminar of National Chiao Tung University and National Tsing Hua University in Hsinchu, Taiwan, which have the two most established statistics Ph.D. programs in Taiwan, January 4, 2013.

Issues Related to the Use of Time Series in Model Building and Analysis, an invited presentation at the 2014 Joint Chinese International Statistical Association/Korea International Statistical Association, held in Portland, Oregon, between June 15 and 18, 2014.

The Effect of Spatial Aggregation on STARMA Models, the joint seminar of the Institute of Statistics, National Chiao Tung University, and the Institute of Statistics, National Tsing Hua University, Hsinchu, Taiwan, December 26, 2014.

Dimension Reduction in High Dimensional Multivariate Time Series Analysis, 2017 ICSA (International Chinese Statistical Association) Symposium, Chicago, June 25-28, 2017.

The Study Life of a Statistician, the Institute of Statistics, National Chiao Tung University, Hsinchu, Taiwan, May 23, 2018.

The Use of Contemporal Aggregation for Dimension Reduction in High Dimensional Time Series, Department of Statistics, National Cheng Kung University, Tainan, Taiwan, May 30, 2018.

Issues Related to Time Series Analysis and Applications, the TEQIP III, MHRD sponsored webinar on "Reliability and Applied Time Series Analysis (RATSA-2021)" scheduled during March 19 - 20, 2021 in the Department of Mathematics, National Institute of Technology Calicut as part of the Golden Jubilee year celebrations of NIT Calicut.