Full list of publications

1. Articles on Journals listed on Thomson ISI Journal Citation Reports

[69] Using web-data to estimate spatial regression models, (with V. Nardelli), *International Regional Science Review*, 2023 Class A (IF =2.858).

[68] A spatial sampling design to improve the efficiency of the estimation of the critical parameters of the SARS-CoV-2 epidemic (with Alleva, G., Falorsi, P., Nardelli, V. and Zuliani, A.). *Statistical methods and Applications* (IF = 0.92), 2023, Class A.

[67] Effects of confidentiality-preserving geo-masking on the estimation of semivariogram and of the kriging variance, (with Vincenzo Nardelli and Chiara Ghiringhelli), *Geographical Analysis*, (IF 4.268). 2023, Class A

[66] Estimating spatial regression models observed on sample individual data points: a Gibbs sample solution (with Yasumasa Matsuda and Junyue Wu) *Spatial Statistics,* 47, (IF = 1.656) 2022. https://doi.org/10.1016/j.spasta.2021.100568Class A

[65] Recursive estimation of the spatial error model (with Chiara Ghiringhelli, Gianfranco Piras and Antonietta Mira) *Geographical Analysis,* (IF = 4.268) 2022 Class A

[64] Locational error in the estimation of regional discrete choice models using distance as a regressor (with P. Berta and C. Dolan), *Annals of Regional Science,* (IF = 2.646). 2022.

[63] Modelling Nonstationary Spatial Lag Models with Hidden Markov Random Fields (with Chiara Ghiringhelli, Francesco Bartolucci and Antonietta Mira) *Spatial Statistics,* 2021, (IF = 1.656) Class A

[62] A sample approach to the estimation of the critical parameters of the SARS-CoV2 epidemics: an operational design (with G. Alleva, P. Falorsi ,V. Nardelli and A. Zuliani), *Journal of Official Statistics*, 2021 (IF=0.837) Class A.

[61] Advances in Spatial Economic Data Analysis: Methods and Applications (with Davide Piacentino and Giuseppe Espa), *Spatial Economic Analysis*, 2021, IF = 1.628. class A.

[60] Reduced-bias estimation of spatial econometric models with incompletely geocoded data (with Flavio Santi, Maria Michela Dickson, Giuseppe Espa and Diego Giuliani) *Computational Statistics*, 2021 IF = 0.744, class A.

[59] Observed and estimated prevalence of Covid-19 in Italy: Is it possible to estimate the total cases from medical swabs data? (with Francesca Bassi and Piero Demetrio Falorsi), *Science of the total environment,* Volume 764, 10 April 2021, IF = 6.551, https://doi.org/10.1016/j.scitotenv.2020.142799

[58] Impact measures in spatial autoregressive models (with A. Bera, O. Dogan and S. Taspinar) *International Regional Science Review*, 43, 1-2, 2020, 40-75, IF = 2.160 https://doi.org/10.1177/0160017619826264, class A.

[57] Spatial discrete choice models: A review focused on specification, estimation and health economics applications (with A. G. Billé), *Journal of Economic Surveys*, 33, 5, 1531-1554, 2019, IF = 3.126. https://doi.org/10.1111/joes.12333, class A.

[56] Evaluation health facilities access using using Bayesian spatial models and location analysis methods (with, A. Auricchio, R. Krause, A. Mira, Moccetti, G., Reinhold, J., and Thierney, N.), *PlosOne*, 2019, IF = 2.740, First published August 7, 2019, https://doi.org/10.1371/journal.pone.0218310

[55] Estimation of spatial econometric linear models with large datasets: How big can spatial Big Data be? (with C. Ghiringhelli and A. Mira), *Regional science and Urban Economics,* 76, 67-73, *2019,* IF =1.667, class A

[54] Modelling Inter-country Spatial Financial Interaction with Graphical Lasso: An application to Sovereign co-risk Evaluation (with R. Bramante, S. Facchinetti and D. Zappa) *Regional Science and Urban Economics*, 70, 72-79, https://doi.org/10.1016/j.regsciurbeco.2018.02.006, 2018, IF = 1.667, Class A.

[53] Testing inequality of opportunity in Italy within the ANOVA framework (with M. L. Pace), *Empirical Economics, 55, 1, 297-322,* 2018, IF = 1.308

[52] A frequency domain test for isotropy in spatial data models, (with F. Santi, M. Bee and G. Espa) *Spatial Statistics*, 21, A, 262-278, 2018, IF = 1.656. Class A

[51] Fitting spatial regressions to large datasets using unilateral approximations (with M. Bee, G. Espa and F. Santi), *Communications in Statistics, Theory and Methods*, 47, 1, 222238, https://doi.org/10.1080/03610926.2017.1301476, 2018, IF 0.612.

[50] Effects of missing data and locational errors on spatial concentration measures based on Ripley's K-function, (with G. Espa, D. Giuliani and M. Dickson), *Spatial Economic Analysis*, 12, 2-3, 326-346, 2017 http://dx.doi.org/10.1080/17421772.2017.1297479, IF = 1.628. class A.

[49] Spatial Analysis of Start-up Health and Pharmaceutical Firm Survival (with G. Espa, D. Giuliani and R. Micciolo), *Journal of Applied Statistics*, http://dx.doi.org/10.1080/02664763.2016.1214249, 44, 9, 2017, IF = 1.031

[48] Spatial Econometrics: a broad view, *Foundations and trends in Econometrics*, 8, 3-4, 2016. IF :1.5.

[47] Dirty Spatial Econometrics, (with G. Espa and D. Giuliani) *The Annals of Regional Science*, January, 56, 1, 177-189, 2016, IF = 1.750, 19 citations

[46] A micro spatial analysis of firm demography: the case of food stores in the area of Trento (Italy) (with R. Cella, G. Espa and D. Giuliani), *Empirical Economics*, 48, 3, 2015, 923-937. IF = 1.308.

[45] Spatio-temporal Clustering of Pharmaceutical and Medical Device Manufacturing Industry: A Geographical Micro-level Analysis. (with G. Espa, D. Giuliani and M. Dickson), *Regional Science and Urban Economics),* 49, 298-304, 2014. IF = 1.667, Class A.

[44] Weighting Ripley's K-function to account for the firm dimension in the analysis of spatial concentration, (with G. Espa and D. Giuliani), *International Regional Science Review*, 3, 247-268, 2014. IF = 2.160. Class A

[43] Advances in Cross-Sectional and Panel Data Spatial Econometric Modeling, (with Christine Thomas), *Geographical Analysis*, 46, 2, 101-103, 2014, IF = 1.690. Class A

[42] Pairwise likelihood inference for spatial regressions estimated on very large datasets, *Spatial Statistics*, 7, 21–39, 2014. IF = 1.656. Class A

[41] A Gaussian Markov random field approach to convergence analysis (with Luigi Ippoliti and Luca Romagnoli), *Spatial Statistics*, 6, 78-90, 2013. IF = 1.656. Class A

[40] Advances in the Statistical Modeling of Spatial Interaction Data (with Roberto Patuelli) *Journal of Geographical Systems*,15, 3, 229-231, 2013. IF = 2.417.

[39] Effects of scale in spatial interaction models (with Francesca Petrarca) *Journal of Geographical Systems*, 15, 3, 249-264, 2013. IF = 2.417

[38] Testing isotropy in spatial econometric models, (with G. Espa and M. Bee) *Spatial Economic Analysis*, 8, 3, 228-240, 2013. IF = 1.628, Class A.

[37] Conditional vs. unconditional industrial agglomeration: disentangling spatial dependence and spatial heterogeneity in the analysis of ICT firms distribution in Milan (Italy) (with G. Espa and D. Giuliani), *Journal of Geographical Systems*, 15, 31-50, 2013. IF = 2.417, 21 citations.

[36] Frontiers in spatial econometrics modelling (with Enrique Lopez Bazo and Francesco Moscone), *Economic Modelling*, 29, 1, 1-2. 2012. IF = 1.930 Class A

[35] Clusters of firms on an inhomogeneous space: the case of high-tech industries in Milan in 2001 (with G. Espa, D. Giuliani and A. Mazzitelli), *Economic Modelling*, 29, 1, 3-11, 2012. IF 1.930 , 42 citations. Class A

[34] A lustrum of SEA: Recent trends following the creation of the Spatial Econometrics Association (2007-2011), *Spatial Economic Analysis,6,4*, 377-395, 2011. IF = 1.628,Class A. 41 citations.

[33] Concentration of manufacturing and service sectors in Italy: Accounting for spatial dependence and firm size distribution (with Laura De Dominicis and Henri De Groot) *Regional Studies*, 47, 3, 405-418, 2011. IF = 3.312, Class A. 25 citations.

[32] Aggregation of regional economic time series with different spatial correlation structures (with G. Espa and M. Bee), *Geographical Analysis*, 43, 78-103. 2011, IF 1.690. Class A

[31] Advances in spatial econometrics (with Harry Kelejian), *Regional Science and Urban Economics*, 40, 5, 253-254, 2010, IF 1.667, Class A.

[30] Detecting the existence of space-time clusters of firms (with Giuseppe Espa, Diego Giuliani and Andrea Mazzitelli), *Regional Science and Urban Economics*, 40, 5, 311323, 2010, IF 1.667, Class A. 47 citations.

[29] Detecting negative spatial autocorrelation in georeferenced random variables (with Dan Griffith), *International Journal of Geographical Information Sciences*, 24, 3, 417437, 2010, IF 3.733. *64 citations*

[28] Growth and convergence in a multi-regional model with space-time dynamics (with Elhorst JP and Piras G), *Geographical Analysis*, 42, 3, 338–355, 2010, IF 1.690, Class A 105 citations.

[27] A new class of spatial Concentration measures (with G. Piras) *Computational Statistics and Data Analysis, 53, 4471-4481,* 2009, IF 1.186. 31 citations. Class A

[26] Institutions and geography: empirical test of spatial growth models in European regions (with M. Battisti and G. Di Vaio), *Economic Modelling*, 27, 12-21, 2009, IF 1.930, *119 citations.* Class A

[25] Spatial dependence in the tails of air pollutant distributions: alternatives to the spatial correlogram (with Copetti, M. and Lafratta, G.), *Environmetrics*, 20, 3, 221 – 345, May 2009. IF 1,039. Class A

[24] New spatial econometric techniques and applications in regional science (with Bernard Fingleton), *Papers in Regional Sciences*, 87, 3, 311-317, 2008. IF 2.220, Class A.

[23]. Does evidence on regional convergence depend on the estimation strategy ? Results from a sample of NUTS-2 European regions, 1977-2000. (with Le Gallo, J. and Piras, G), *Spatial Economic Analysis*, 3, 2, 209-224, June, 2008. IF 1.628, Class A. 59 citations.

[22] A class of spatial econometric methods in the empirical analysis of clusters of firms in space, (with Espa, G. e Quah, D.), *Empirical Economics, 34, 1, 81-103, 2008. IF 1.308, 104 citations*.

[21] Introduction to the special issue on spatial econometrics, Empirical Economics, 2008 34:1–4 (with B. Baltagi) IF 1.308

[20] Nonlinear Regional Economic Dynamics: Continuous-Time Specification, Estimation and Stability Analysis (with Piras G. and Donaghy K.), *Journal of Geographical Systems*, 9, 4, 311-344, 2007. IF 2.417.

[19]. Spatial Sampling Plans to Monitor the 3-D Spatial Distribution of Extremes in Soil Pollution Surveys (with Lafratta G., Simeoni C), *Computational Statistics and Data Analysis*, 51 ,8, 4069-4082, 2007 IF 1.186. Class A

[18] Testing the Stochastic Convergence of Italian Regions using panel data, (with M. Costantini) *Applied Economics Letters*, 2006, 13, 775–783. IF 0.752

[17] "Exploring non linear dependence in the tails of bivariate marginals of a random field" (with G. Lafratta) *Geographical analysis*, 37, (4), 423-437. 2005 IF: 1.690. Class A

[16] Economic convergence or divergence? Modeling the interregional dynamics of EU regions, 1985-1999, (with J. H. P. Paelinck) *Journal of Geographical Systems,* 5, 291314, 2004. IF 2.417 citations

[15]. Spatial econometrics modelling of regional convergence in continuous time, (with J. H. P. Paelinck), *International Regional Science Review*, 26, 3, 342-362, 2003. IF: 2.160, Class A. 65 citations.

[14] "Error propagation computing vegetation indices based on Landsat imagery" (with R. Haining and D. Griffith, *Environmental and Ecological Statistics,*. Vol. 10, 2, 375396, 2003. IF 0,981, Class A. 29 citations.

[13] "Anisotropic spatial sampling designs for urban pollution" (with G. Lafratta) *Journal of the Royal Statistical Society series c – Applied Statistics*, 51, 2, 2002, 223234, IF: 1.590, Class A. 30 citations.

[12] "The role of spatial effects in the empirical analysis of regional concentration" *International Journal of Geographical Systems,* 3, 3, 271-281, 2001. IF 2.417, *221* citations.

[11] "Modelling the geography of economic activities on a continuous space" *Papers in Regional Sciences*, 80, 411-424, 2001; IF: 2.220, 148 citations. Class A

[10] "Error propagation in raster GIS: adding and ratioing operations " (con Haining R. P. e Griffith D. A.), *Cartography & Geographical Information Science,* Vol. 26, pp. 297-315, 1999. IF =2.429.

[9] "Contextual classification in image analysis: an assessment of accuracy of ICM" (with R. Benedetti and G. Espa), C*omputational Statistics Data Analysis, 30,* 443-455, 1999. IF: 1.186, 26 citations. Class A

[8] "Error propagation modeling in raster GIS: overlay operations" (with R. Haining and D. Griffith*) International Journal of Geographical Information Sciences*, Vol. 12, n. 2, 1998. IF: 3.733. *151* citations.

[7]   "Evaluating and updating the sample design: the case of the concentration of SO$_2$ in Padua" (with   Lafratta G.) *Journal of Agricultural, Biological and Environmental Statistics*, 2, 4, 1997, 451-466, IF 1,650. 24 citations.

[6]. "Effects of MAUP on image classification" (with R.Benedetti e G. Espa) Journal of *Geographical Systems*, 3, 1996, 123-141, IF 2.417, 76 citations.

[5] "Heterogeneity of attribute sampling error in spatial data sets" (with D. Griffith e R. Haining), *Geographical Analysis*, vol.26, 4, October 1994, 300-320. IF: 1.690. 28 citations. Class A

[4] "The use of GIS in spatial surveys", *International Statistical Review,* 61, 2, 1993, 339-359. IF: 2.740, *74 citations*. Class A

[3] "Error propagation through map operations" (with R. P. Haining), *Technometric*s, 35, 3, August, 1993, 293-305. IF: 2.091, 63 citations. Class A

[2]   "Integrating GIS and spatial data analysis: problems and possibilities", (with Goodchild, Haining, Wise and 11 more authors), *International Journal of Geographical Information Sciences*, 6, 5, 407-423, 1993. IF 3.733

[1] "On second order non-stationarity in two-dimensional lattice processes", *Computational Statistics and Data Analysis*, 9, 147-160, North Holland, 1990. IF: 1.186 Class A

2. Books with international publishers

[8]   *Spatial microeconometrics*, (with Espa, G. and Giuliani, D.), Routledge ISBN 9781138833753 (expected March 26th, 2021)

[7] *Statistics, new empiricism and society in the era of Big Data*, Springerbrief in statistics, Springer Verlag (expected 2021)

[6] *Income Inequality, Redistribution and Economic Growth : Statistical Measures and Empirical Evidences*, Springerbrief in economics, Springer-Verlag (expected 2021)

[5] *Spatial Econometric Interaction Modelling* (with R. Patuelli eds.) Springer-Verlag, Switzerland, ISBN 978-3-319-30196-9, 2016

[4] *A primer for Spatial Econometrics: with applications in R*, texts in Econometrics, Palgrave Macmillan, ISBN 978-1-403-90172-9, 2014. *153* citations.

[3] *Spatial Econometrics: Models and Applications*, (with B. Baltagi, eds.), SpringerVerlag, Heidelberg, ISBN 978-3-7908-2070-6, 2009. 51 citations.

[2]   *Spatial Econometrics: Statistical foundations and applications to regional convergence*, Springer-Verlag, Berlin, ISBN 10-3-540- 32304-X, March, 2006. 8500 download (https://link.springer.com/book/10.1007%2F3-540-32305-8). *587 citations*.

[1] *Spatial data configuration in statistical analysis of regional economics and related problems*, Advanced Statistical Theory and Applied Econometrics, Kluwer Academic Publisher: Dordrecht, The Netherlands, 1989, ISBN 0792302842, pp. xiv+ 256. *482 citations*.

[3]   **Articles on other peer-reviewed journals without impact factor**

[24] From mobile crowdsourcing to crowd-trusted food price in Nigeria: statistical preprocessing and post-sampling (with Gloria Solano-Hermosilla, Vincenzo Nardelli, Fabio Micale, Giampiero Genovese, Ilaria LucreziaAmerise and Julius Adewopo, *Nature Scientific Data*,10-446, 2023, https://doi.org/10.1038/s41597-023-02211-1

[23] Stochastic epidemic modeling with application to the Sars-Cov-2 pandemic in Italy, *Rivista Internationale di Scienze Sociali, 1, 2021*

[22] Rate of clinically significant prostate cancer on repeat saturation biopsy after a diagnosis of atypical small acinar proliferation**,** with Angelo Totaro, Luca Di Gianfrancesco, Francesco Pinto,Marco Racioppi, Giuseppe Palermo, Marco Campetella, Agostino Antonio Santoro, Giuseppe Arbia, Emilio Sacco**,** *Urologia Journal*, 12 February 2021**,** https://doi.org/10.1177/039156032199359

[21] Least Quartic Regression Criterion to Evaluate Systematic Risk in the Presence of Co-skewness and Co-kurtosis (with Riccardo Bramante and Silvia Facchinetti), *Risks*. 2020, *8*, 3, 95; https://doi.org/10.3390/risks8030095

[20] The analysis of commodity flows in San-En-Nanshin region (Japan) with heteroskedastic spatial interaction models (with Ha Thi Thu Trang and Yuzuru Miyata), *Studies in Regional Science*, 2016. (H index=10).

[19] Spatial Econometrics: A rapidly evolving discipline, *Econometrics,* 2016.

[18] Forecasting interest rate using geostatistical techniques (with Michele Di Marcantonio)
Econometrics, 2015, *3*, 4, 733-760; doi:10.3390/econometrics3040733,

[17] Measurement Errors arising when using distances in spatial microeconometric modelling and the individuals' position is geo-masked for confidentiality, (with G. Espa and D. Giuliani) *Econometrics* 2015, *3,* 4, 709-718; doi:10.3390/econometrics3040709

[16] Special Issue on Spatial Econometrics: An Editorial Note (with Gianfranco Piras and Ingmar Prucha, *The Review of Regional Studies*, 44, 221–222, 2014. RG journal impact = 0.35.

[15] A spatially explicit approach to the study of socio-demographic inequality in the spatial distribution of trees across Boston neighborhoods, (with Duncan, Kawachi, Kum, Aldstadt, Piras, Matthews, Castro, White and Williams), *Spatial Demography*, 2013, 1, 4.

[14] Effects of MAUP on spatial econometrics models (with Francesca Petrarca), *Letters in Spatial and Resource Sciences*, 4, 173-185, 2011. Impact Factor REPEC 0.974, 41 citations.

[13] Convergence in per-capita GDP across EU-NUTS2 regions using panel data models extended to spatial autocorrelation effects", (with G. Piras); *Statistica*, 2007. 43 citations

[12] Alternative approaches to regional convergence exploiting both spatial and temporal information, *Estudios de Economia Aplicada,* 22(2): 429-448, 2005.

[11] Spatial Dependence and Non-linearities in Regional Growth Behaviour in Italy, (with R. Basile), *Statistica, LXV, 145-167,* Bologna. *2005*

[10] Spatial correlation estimates based on satellite observations corrected with the prior knowledge on sensor devices' technical characteristics, (with G. Lafratta) *Statistica*, LXIII, 2, 249-263, 2003, Bologna.

[9] Bivariate Value-at-risk, *Statistica*, 2003, anno LXII, 2, 231-247.

[8] Two critiques to the statistical measures of spatial concentration and regional convergence, I*nternational Advances in Economic Research*, Volume 6, Number 3, August 2000.

[7] Statistical modelling of archaeological sites as non-stationary Cox processes and its use in forecasting, (with G. Espa), *Archeologia e Calcolatori*, Roma, 1996.

[6] Forecasting statistical modelling of archeological site location, (with G. Espa), *Archeologia e Calcolatori*, Roma, 1996.

[5] The use of GIS in spatial and spatio-temporal surveys, (with M. Coli), *Bullettin of the International Statistical Institute*, Vol. 50, 3, 24, pagg. 1-28, Il Cairo, 1991.

[4] The dampening effect on high order spatial autocorrelation in irregular lattices, *Metron,* Volume XLVI, 1-4, pagg. 459-488, Roma, 1989. IF : 0.51.

[3] Sull'analisi di serie spaziali non stazionarie: un metodo basato sul ricampionamento*, Statistica,* 4, pagg. 553-562, 1989.

[2] Diseguaglianze territoriali, *Rassegna Economica*, 3, Anno LIII, pagg. 569-596, Ufficio Studi, Banco di Napoli, Napoli, Luglio-Settembre, 1989.

[1] The modifiable areal unit problem and the spatial autocorrelation problem: towards a joint approach, *Metron,* Volume XLIV, 1-4, pagg. 391-407, Dicembre 1986, Roma. (RG Journal impact = 0.63), IF: 0.51. 26 citations.

4. Contributions to refereed books (international publishers)
[14] Estimating uncertainty in epidemic models: an application to Covid19 pandemic in Italy, Econ Covid-19, B. Baltagi, F. Moscone and E. Tosetti Editors, Emerald Publisher

(with C. Ghiringhelli and V. Nardone)

[13] On the spatial determinants of firm growth: a micro-level analysis of the Italian SMEs (with M. M. Dickson, R. Gabriele, D. Giuliani and F. Santi), *Spatial Economics*, S. Colombo editor, Palgrave. Spatial Economics Volume II, 89-120, 2021

[12] *The spatial dimension of health systems*, entry of the *Encyclopedia of big data* (with Moscone, Santos and Tosetti) Laurie A. Schintler and Connie L. McNeely (eds.) Springer Verlag, 2018

[11] *Spatial Econometrics*, entry of the *Encyclopedia of big data*, Laurie A. Schintler and Connie L. McNeely (eds.) Springer Verlag, 2018

[10] Spatial Econometric Interaction Modelling: Where Spatial Econometrics and Spatial Interaction Modelling Meet (with R. Patuelli) in Spatial Econometric Interaction Modelling (Arbia, G. and R. Patuelli eds.) Springer-Verlag, Switzerland, 2016, ISBN 978-3-319-301969.

[9] The Future of Spatial Interaction Modelling, in *Spatial Econometric Interaction Modelling* (Arbia, G. and R. Patuelli eds.) Springer-Verlag, Switzerland, 2016, ISBN 978-3-319-301969.

[8] Spatial concentration and dispersion of economic activities: microeconomic versus mesoeconomic approach (with G. Espa and D. Giuliani), in *Handbook of Research Methods and Applications in Economic Geography*, Charlie Karlsson, Martin Andersson and Therese Norman eds., Edward Elgar Publisher, Cheltenham, 135-157, 2015, ISBN 978 0 85793 266 2 (cased).

[7] A class of spatial statistical methods in the empirical analysis of spatial clusters, (with G. Espa, G. e Quah, D.), in *Spatial Econometrics: methods and applications, Arbia, G. and Baltagi, B. eds.,* reprint of the paper appeared on *Empirical Economics*, Springer-Verlag, ISBN 978-3-7908-2070-6, Heidelberg, 2009.

[6] "Modelling individual behaviour of firms in the study of spatial concentration" (with Copetti M. and Diggle P.J.), in U. Fratesi L. and Senn (*eds.*) *Growth in Interconnected Territories: Innovation Dynamics, Local Factors and Agents*, Springer-Verlag, 297328, ISBN: 978-3-540-70923-7, 2008.

[5] "Uncertainty and error propagation in map analyses involving arithmetic and overlay operations: inventory and porspect" (with R. Haining e D. Griffith) in *Spatial accuracy assessment,* Kim Lowell and Annick Jaton (eds.), Ann Arbor Press, Chelsea, Michigan, ISBN 1-57504-119-7, 11-25, 1999.

[4] "Aggregation over time space and individuals in economic modelling: a generating mechanism approach", Capitolo 6 del volume *Continuous time econometrics*, G. Gandolfo ed., Chapman and Hall editori, 1992, ISBN 0-412-45020-8, London.

[3] "Statistical effects of spatial data transformations: a proposed general framework", in *Accuracy of spatial databases*, M. Goodchild e S. Gopal (eds.), Taylor & Francis, 249-259, ISBN 0-85066-847-6, London, 1989.

[2] "On the simulation of two-dimensional stationary stochastic processes: a comparison of different approaches", *Proceedings of the Seventh Symposium in Computational Statistics, Short Communications and posters,* De Antoni, Lauro and Rizzi (eds), PhysicaVerlag editor, 17 - 18, Roma, 1986.

[1] "Problems in the estimation of the spatial autocorrelation function arising from the form of the weights matrix" in *Transformations through space and time,* D.Griffith and R.P. Haining (eds), Martinus Nijhoff Editore, 294-308, Dordrecht, ISBN 9024733626, 1986.

[5]   **Other publications**
a) articles

[14] Modelling COVID-19 evolution in Italy with an augmented SIRD model using open data (with V. Nardelli, A. Palladino and L. G. Atzeni), medRxiv preprint doi: https://doi.org/10.1101/2021.04.14.21255500, April 2021.

[13] Spatial sampling design to improve the efficiency of the estimation of the critical parameters of the SARS-CoV-2 epidemic (with Giorgio Alleva, Piero Demetrio Falorsi, Vincenzo Nardelli, Alberto Zuliani,] arXiv:2103.01254, 1 March 2021

[12]   Observed and estimated prevalence of Covid-19 in Italy: Is it possible to estimate the total cases from medical swabs data?, (with F. Bassi and P. Falorsi), arXiv:2004.06068v1, 8 May 2020.

[11] A sample approach to the estimation of the critical parameters of the SARS-CoV2 epidemics: an operational design with a focus on the Italian health system (with G. Alleva, P. Falorsi and A. Zuliani), arXiv:2004.06068v1, 8 April 2020.

[10] Post-sampling crowdsourced data to allow reliable statistical inference: the case of food price indices in Nigeria, arXiv:2003.12542, 27 March 2020.

[9] A note on early epidemiological analysis of coronavirus disease 2019 outbreak using crowdsourced data, ArXiv, arXiv:2003.06207, 13 March 2020.

[8] Measurement error induced by locational uncertainty when estimating discrete choice models with a distance as a regressor (with Berta, P. and Dolan, C.), arXiv:1906.11720 April 2019.

[7] L'irresistibile ascesa del Sesto Potere: i Big Data", *Statistica & Societa'*, Societa' Italiana di Statistica. http://www.rivista.sis-statistica.org/cms/?p=659, 30, December 2018.

[6] "Big Data: Il sesto potere", *La Rivista Vita e Pensiero*, Milano, 2018,

[5] "Verso un'approccio statistico al geomarketing: alcune linee guida ed un caso di studio" (with G. Espa), *Quaderni di statistica e matematica applicata alle scienze economico sociali*, Volume XVII, n. 1, Marzo 1995, pagg. 55-81., Marzo, 1995.

[4]   "Introduction: a bird's eye view of spatial data and applications", *Quaderni di statistica e matematica applicata alle scienze economico-sociali*, Volume XVI, n. 1-2, Novembre, 1994. pagg. 1-16

[3] "Selection techniques in sampling spatial untis", *Quaderni di statistica e matematica applicata alle scienze economico-sociali*, Volume XVI, n. 1-2, Novembre 1994. pagg. 81-91.

[2] "Metodi di ricampionamento nella analisi di immagini aeree e da satellite", (with R. Benedetti*), Quaderni di Statistica e Econometria,* Vol. XII, pagg. 143-152, Napoli, 1990.

[1] "Sulla verifica empirica di teorie economiche: serie storiche o serie spaziali", *Rassegna Di Statistiche del Lavoro*, Centro Studi Confindustria, **3**, Anno 40, pagg. 97105, Roma, Settembre, 1989.

b) books on Italian publishers
[6] *Statistica, società e nuovo empirismo nell'era dei Big Data*, Nuova Cultura, Roma, 2018.

[5] *Diseguaglianza, redistribuzione e crescita economica*, Le Nuove Bussole, Vita e Pensiero, Milano, 2016

[4]. *Statistica economica territoriale*, (with G. Espa), Cedam, Padova, Novembre 1996. pp. 250. *86 citations.*

[3] *Analisi econometrica di dati spaziali*, Quaderni di Statistica n. 3/96, Dipartimento metodi quantitativi e teoria economica, Università G. D'Annunzio di Pescara, Maggio 1996.pp. 100.

[2] *Appunti di Analisi Statistico-Economica Territoriale: Parte I* (with G. Espa e N. Bartoli), CUSL Editrice, Padova, Gennaio 1996, pp. 184.

[1] *Esercizi di Statistica Economica,* CUSL Editrice, Padova, Luglio 1995, pp. 81.

c) Contributions to refereed books (Italian publishers)
[8] Aspetti statistico-metodologici nella costruzione di indicatori di corruzione e nella valutazione della loro efficacia, in *Misurare la corruzione oggi: obiettivi, metodi, esperienze*, Gnaldi M. and Ponti, B. (eds), Franco Angeli, ISBNe 9788891767707, 2018.

[7] "Le relazioni degli aggregati economici nel tempo e nello spazio", Capitolo 19 del Volume *Contabilita' Nazionale e Statistica economica*, (G. Alvaro), 883-958, Cacucci editore, Seconda edizione riveduta ed ampliata, Bari, 1995.

[6] "Recenti sviluppi nella modellistica spaziale", in *Metodi statistici per le analisi territoriali*', S. Zani (ed.), Franco Angeli Editore, 193-217, Milano, 1993.

[5] Appendix to *Integrazione e regionalizzazione nella CEE*, (G. Lizza), 98-105 Franco Angeli editore, Milano, 1992.

[4] "Le relazioni degli aggregati economici nel tempo e nello spazio", Chapter 18 of the book *Contabilita' Nazionale e Statistica economica*, (G. Alvaro), 803-873, Cacucci editore, Bari, 1992.

[3] "L'uso e l'interpretazione di regressioni basate su dati territoriali nella modellistica economica", in *Sistemi spaziali approcci e metodologie*, M. Bielli ed A. Reggiani (eds.), 57-72, Franco Angeli, Milano, 1991.

[2] "Sul metodo dei sottocampioni mobili per l'analisi di serie spaziali non stazionarie", with R.Benedetti, Proceedings of the *Giornate di Studio Su Analisi di dati territoriali: metodi tecnologie, applicazioni*, 11-21, Cacucci Editore, Bari, 1989.

[1]. "Un approccio statistico alla misura dell'accuratezza nei sistemi geografici informativi", Proceedings of the *Giornate di Studio Su Analisi di dati territoriali: metodi tecnologie, applicazioni*, 1-10, Cacucci Editore, Bari, 1989.

d) Book reviews
[2] Review of the book: "Econometrics of panel data", by Erik Biörn, Oxford University Press, *Statistica Applicata*, *Italian Journal of Applied Statistics*, 2019.

[1] Review of the book: "Continuous time econometric models » by R. A. Bergstrom, *Journal of Applied Econometrics*, 1993.

e) edited special issues
[13] *Spatial Economic Analysis,* "Advances in Spatial Economic Data Analysis, Methods and Applications", (Co-edited with G. Espa and D. Piacentino), expected 2020.

[12] *Empirical Economics,* in honour of Ingmar Prucha, Co-edited with Badi Baltagi and Harry Kelejian, 2018.

[11] *Econometrics,* "Recent developments in Spatial Econometrics", associated with the 10th Annual Conference of the Spatial Econometrics Association, Rome 13-15 June 2016, 2018.

[10] *Econometrics*, "Spatial Econometrics", 2015.

[9] *Review of regional studies*, Co-edited with G. Piras and I. Prucha, 44, 3, 2014.

[8] *Geographical Systems*, "Advances in spatial interaction modelling", Co-edited with Roberto Patuelli, 15, 3, 2014.

[7] *Geographical Analysis* on "Spatial Econometrics", Co-edited with Christine Thomas, 46, 1, 2014.

[6] *Economic modelling* on "Spatial Econometrics", Co-edited with Francesco Moscone and Enrique Lopez-Bazo, 2013.

[5] *Spatial Economic Analysis,* in honour of Harry Kelejian, Co-edited with Ingmar Prucha, 2013.

[4] *Regional Studies and Urban Economics* on "Spatial Econometrics", Co-edited with Harry Kelejian, 40, 5, 2010.

[3] *Papers in Regional Science*, "Spatial Econometrics", Co-edited with Bernard Fingleton, Vol. 87, 3, 2008.

[2] *Empirical Economics*, "Spatial Econometrics", Co-edited with Badi Baltagi, Vol. 34, 1, 2008.

[1] Proceedings of the 1st International Workshop "Advances in spatial statistics: Methods and Applications to economic and environmental analysis", *Quaderni di statistica e matematica applicata alle scienze economico-sociali*, Co-edited with G. Espa, Novembre 1994.

f) Press coverage

[32] EFFETTO OMICRON/ Più positivi e decessi in calo, prudenza per scongiurare il rimbalzo Con Omicron prevalente nel 99% dei casi, dal 2 marzo il tasso di positività ha ricominciato a salire, ma i decessi giornalieri scendono. Stessi trend all'estero
22 marzo 2022

[31] SCENARIO COVID/ Tasso di positività, ricoverati, decessi: i motivi per essere ottimisti Tasso di positività, ricoverati in terapia intensiva, ricoverati con sintomi, decessi: 4 grandezze che inducono ad essere ottimisti
7 febbraio 2022

[30] NUMERI COVID/ Perché sui dati Draghi ascolta i medici e non gli statistici?
Per combattere il Covid non bisogna fornire meno dati, ma di più e di più dettagliati. Occorre rendere sistematica una indagine sulla sieroprevalenza
7 gennaio 2022

[29] MORTALITÀ COVID/ Vaccinati e non vaccinati, 2 epidemie a velocità diverse I tassi di mortalità per vaccinati da meno di 5 mesi e vaccinati protetti da dose booster sono molto vicini a quelli delle ultime due influenze stagionali in periodi "normali" 20 dicembre 2021

[28] SCENARIO COVID/ Positivi e ricoveri accelerano ma un anno fa erano 6-7 volte di più
        30 novembre 2021

[27] I non vaccinati costano 657 mln, per immunizzare tutti bastano 420 mln
https://www.ilsussidiario.net/news/numeri-covid-i-non-vaccinati-costano-657-mln-perimmunizzare-tutti-bastano-420-mln/2250604/, 15 novembre 2021

[26] "Una vaccinazione iniziata tardi ci protegge dalla nuova ondata", https://www.ilsussidiario.net/news/numeri-covid-italia-una-vaccinazione-iniziatatardi-ci-protegge-dalla-nuova-ondata/2242083/, 28 ottobre 2021

[25] SCENARIO VACCINI/ Ecco di quanto riducono il rischio di ricoveri e decessi https://www.ilsussidiario.net/news/scenario-vaccini-ricoveri-e-decessi-ecco-di-quantoriducono-il-rischio/2231059/, 6 Ottobre 2021

[24] Casi, ricoveri, decessi: la quarta (più debole) ondata è già finita, 21 september, 2021, https://www.ilsussidiario.net/news/numeri-covid-casi-ricoveri-decessi-la-quarta-piudebole-ondata-e-gia-finita/2224326/
[23] Perché le vaccinazioni non ci hanno "salvato" dai contagi di agosto?, 6 september, 2021 https://www.ilsussidiario.net/news/scenario-covid-perche-le-vaccinazioni-non-cihanno-salvato-dai-contagi-di-agosto/2217513/
[22] Così il 60% di vaccinati ferma la quarta ondata, 3 august 2021, https://www.ilsussidiario.net/news/scenario-covid-cosi-il-60-di-vaccinati-ferma-la-quartaondata/2204548/
[21] Contagi su ma terapie vuote: i dati che smontano il nuovo allarme, 14 july 2021, https://www.ilsussidiario.net/news/variante-delta-contagi-su-ma-terapie-vuote-i-dati-chesmontano-il-nuovo-allarme/2195339/
[20] Variante Delta, ecco perché l'Italia non è come il Regno Unito, 22 june 2021, https://www.ilsussidiario.net/news/dietro-i-numeri-covid-variante-delta-ecco-perchelitalia-non-e-come-il-regno-unito/2185573/
[19] In Italia c'è una diseguaglianza "cattiva" che frena il Pil, 8 june 2021, https://www.ilsussidiario.net/news/dietro-i-numeri-in-italia-ce-una-diseguaglianza-cattivache-frena-il-pil/2180312/
[18] La differenza tra il maggio di Draghi e quello di Conte 2020, 24 may 2021, https://www.ilsussidiario.net/news/numeri-covid-la-differenza-tra-il-maggio-di-draghi-equello-di-conte-2020/2174271/

[17] 4 obiezioni che smontano l'Rt, ecco l'indicatore giusto da seguire, 10 may 2021 https://www.ilsussidiario.net/news/numeri-covid-4-obiezioni-che-smontano-lrt-eccolindicatore-giusto-da-seguire/2167950/
[16] "Sono quelli di aprile 2020, la differenza viene dai vaccini di Draghi", 28 April, 2021 https://www.ilsussidiario.net/news/numeri-covid-sono-quelli-di-aprile-2020-ladifferenza-viene-dai-vaccini-di-draghi/2162447/
[15] « Numero infetti, zone rosse e riaperture: ecco gli errori da evitare », ilsussidiario, 15 aprile 2021 https://www.ilsussidiario.net/news/scenario-covid-numero-infetti-zone-rosse-e-riaperture-ecco-gli-errori-da-evitare/2155797
[14] « Luglio 2021 o gennaio 2022: i 2 scenari della nostra immunità di gregge, ilsussidiario », 29 marzo 2021, https://www.ilsussidiario.net/news/numeri-covid-luglio2021-o-gennaio-2022-i-2-scenari-della-nostra-immunita-di-gregge/2149583/

[13] "Cosa dicono i numeri del Covid/ Ecco perché la terza ondata potrebbe essere l'ultima », il sussidiario.net, 16 marzo 2021. https://www.ilsussidiario.net/news/leggere-inumeri-del-covid-ecco-perche-la-terza-ondata-sara-lultima/2143235/
[12] « Leggere i numeri del Covid/ Pandemia e disuguaglianza: cosa rischia l'economia? », il sussidiario.net, 27 febbraio 2021. https://www.ilsussidiario.net/news/leggere-i-numeridel-covid-pandemia-e-disuguaglianza-cosa-rischia-leconomia/2135247/

[11] » Covid, svolta ad Aprile. L'errore di chi pretende 0 contagi per riaprire tutto", il sussidiario.net, 31 gennaio 2021, https://www.ilsussidiario.net/news/covid-svolta-adaprile-lerrore-di-chi-pretende-0-contagi-per-riaprire-tutto/2123731/

[10] « Indice Rt e chiusure/Criterio sbagliato, i tamponi non sono un campione statistico », il sussidiario.net 27 gennaio 2021. https://www.ilsussidiario.net/news/indice-rt-e-chiusurecriterio-sbagliato-i-tamponi-non-sono-un-campione-statistico/2122097/

---

[9] «Italia, 30mila morti in eccesso,"Colpa del Covid, molte altre malattie trascurate", ilsussidiario.net 22 gennaio.2021, https://www.ilsussidiario.net/news/italia-30mila-mortiin-eccesso-colpa-del-covid-molte-altre-malattie-trascurate/2120128/

[8] « I dati non ci danno grandi speranze, il vaccino sì », il sussidiario.net, 3 gennaio 2021. https://www.ilsussidiario.net/news/numeri-covid-e-vaccino-di-questo-passo-tre-mesi-perarrivare-a-zero-decessi/2111166/

[7] « Gli effetti della pandemia su disegugulianza e crescita economica, *Interviewed by Franco Caroleo, Giustizia Insieme, 28 dicembre 2020. https://www.giustiziainsieme.it/it/leinterviste-di-giustizia-insieme/1470-gli-effetti-della-pandemia-su-disegugulianza-ecrescita-economica*

[6] « Il peggio arriva tra l'Epifania e fine gennaio, ok lockdown tedesco », il sussidiario.net, 16 dicembre 2020 https://www.ilsussidiario.net/news/scenario-covid-il-peggio-arriva-tralepifania-e-fine-gennaio-ok-lockdown-tedesco/2105482/

[5] "9 milioni di contagiati, ma il flusso sta rallentando, ecco perché", il sussidiario.net, 16 novembre 2020, https://www.ilsussidiario.net/news/scenario-covid-9-milioni-dicontagiati-ma-il-flusso-sta-rallentando-ecco-perche/2093158/

[4] « Quando inizierà la fase 2 : perchè i numeri non bastano », *Il sussidiario.net*, 13 April, 2020, https://www.ilsussidiario.net/news/fase-2-quando-iniziera-ecco-perche-i-numerinon-bastano-a-rispondere/2008955/

[3] « Lo spostamento del picco con due buone notizie" *Il sussidiario.net*, 30 March 2020 https://www.ilsussidiario.net/news/previsioni-coronavirus-lo-spostamento-del-picco-condue-buone-notizie/2003221/,

[2] «Previsioni sul coronavirus: quando finisce l'emergenza », *Ilsussidiario.net*, 23 March 2020
https://www.ilsussidiario.net/news/previsioni-sul-coronavirus-quando-finisce-lemergenzae-quante-vittime-fara/2000613/

[1] "I dati non parlano da soli: l'epoca del Coronavirus smaschera l'inganno dell'algoritmoonnipotente e rivaluta il metodo statistico", *Giustizia Insieme, 17 March, 2020.* https://www.giustiziainsieme.it/it/diritto-dell-emergenza-covid-19/923-i-dati-non-parlano-da-soli-l-epoca-del-coronavirus-smaschera-l-inganno-dell-algoritmoonnipotente-e-rivaluta-il-metodo-statistico

6. Work in progress and other publications
a) papers currently submitted to peer-reviewed journals

[4] Concentrated Partial ML estimation for Dynamic Spatial Panel Data Probit Models with Fixed Effects (with A. G. Billè and S. Leorato) submitted to *Journal of Econometrics*. (IF = 3.04) Class A.

[3] Bias in the estimation Moran's coefficient when using web-collected data points: theoretical results and empirical evidence**,** (with Vincenzo Nardelli, Yasumasa Matsuda

and Junyue Wu), submitted to *Journal of Computational and Graphical Statistics*, (IF = 1.884). May 2021 Class A.

[2] New accessibility measures based on unconventional big data sources (with V. Nardelli, N. Salvini and I. Valentini) submitted to *Journal of Urban Economics* (IF = 5.456) Class A

[1] From mobile crowdsourcing to crowd-trusted food price in Nigeria: statistical preprocessing and post-sampling" (with G. Solano-Hermosilla, V. Nardelli, F. Micale, G. Genovese, I. Amerise, and J. Adewopo (Paper #SDATA-22-01485), Submitted to *Nature Scientific Data* (IF = 8.501) (second round of review).

b) work in progress

[6] Fake News and Covid-19 in Italy: a Google Trend analysis (with Altamura Gerardo; Nurchis Mario Cesare; Salvini Niccolò; Osti Tommaso and Damiani Gianfranco), in preparation for *Health Policy* (IF 3.255)

[5] The impact of socio-economic conditions on individuals' health: development of an index and examination of its association with chronic diseases in Lazio region of Italy (with Valentini Ilaria; Nurchis Mario Cesare; Altamura Gerardo; Cicchetti Americo and Damiani Gianfranco), in preparation for *Health Policy* (IF 3.255)

[4] Estimation and Outlier Detection with Spatial Correlation Coefficients (with D. Griffith and V. Nardelli).

[3] Post-sampling crowdsourced data for reliable statistical inference: the case of food prices in Nigeria (with Gloria Solano-Hermosilla, Fabio Micale, Vincenzo Nardelli and Giampiero Genovese),

[2] A GMM two-step procedure for the estimation of spatial error quantile models (with Elena Semerikova)

[1] On the efficiency of the estimators of a Spatial Error Model parameters (with C. Ghiringhelli, G. Piras and A. Mira)

c) Book translations edited
[1] "Statistica", 7th edition, Joseph Levine - Kathryn A. Szabat - David F. Stephan, Pearson-Italia publisher (translation co-edited with Giancarlo Ragozzini and H. J. Reinhold)

d) Professional Reports
[22] "Analisi preliminare dell'impatto di un nuovo modello di dispensazione dei farmaci per le patologie di ambito pneumologico" (con Cicchetti, A., Taranto, C., Pinna, Corona, L. M. e Messina, R.), <u>Federanziani Senior</u>, Italia, Working paper Altems, 2017.

[21] "Analisi istruttoria per l'individuazione di indicatori di rischio corruzione e di prevenzione e contrasto nelle amministrazioni pubbliche coinvolte nella politica di coesione, (con Carloni, E., Galli, E. Monteduro, e Vannucci, A.", ANAC, National Anticorruption Agency, Final Report of the Working for the program on "Azione e Coesione Complementare al PON. Governance e Assistenza Tecnica 2007-2013" Obiettivo Operativo I.2, Progetto "Attività esterne di valutazione del PON GAT 2007/2013", 2016.

[20] "Analisi longitudinale dello sviluppo internazionale delle imprese laziali", Banca Intesa. Scientific responsibility: Matteo Caroli, 2008.

[19] "Misura della *environmental justice* nella distribuzione nel territorio di attività industriali a rischio: analisi congiunta dei fattori ambientali ed economici", ISPESL, (Institute for prevention and job security), Roma, 2006.

[18] Studio e sperimentazione di tecniche per l'ottimizzazione di piani di campionamento spaziale per la valutazione dell'interazione tra insediamenti produttivi ed ambiente", ISPESL, (Institute for prevention and job security), Roma, 2004.

[17] Assessing the accuracy of existing sample surveys, World Food Program-VAM to measure food insecurity, World Food Program-VAM, Roma, 2004.

[16] Resource Allocation Model (RAM) for Development Activities, World Food Program-ODP, Roma, 2003.

[15] A note on the effect of sampling design on the reliability of the sample variance in the estimation of food inadequacy. A simulation study based on Mauritius food survey, Food and Agricultural Organization, Roma, 2002.

[14] Costruzione di un GIS per il monitoraggio dell'efficacia nel territorio degli incentivi alle assunzioni e alla creazione di impresa, Abruzzo-Lavoro, Pescara, 2002

[13] "Costruzione di un modello per il monitoraggio e la previsione della diffusione della Blue Tongue in Italia, Istituto Zooprofilattico Sperimentale dell'Abruzzo e del Molise, Teramo, 2002.

[12] Stima della Tavola input-output Abruzzo 1995; Linea 1.1 "Analisi del sistema industriale Abruzzo", Parco Scientifico e Tecnologico d'Abruzzo, 2000

[11] Le tavole input-output: Teorie, metodi di costruzione ed esperienze di impiego in ambito regionale, Progetto: "Adeguamento tecnologico e gestionale delle PMI", Linea 1.1 "Analisi del sistema industriale Abruzzo", Parco Scientifico e Tecnologico d'Abruzzo, 1999

[10] Metodi di spazializzazione dei dati per la stima delle rese agricole nelle celle AGROMET, Telespazio, Roma , 1998

[9] Sviluppo di un modello statistico per la previsione delle precipitazioni su base locale Progetto di ricerca nell'ambito del prodotto "Previsioni metereologiche a Breve-Medio termine" del Progetto T.E.R.R.A. del Sud. Telespazio, Roma, March 1994

[8] "Rapporto metodologico sulla costruzione e scenari integrati per il sistema di valutazione della domanda di traffico merci e passeggeri", Finsiel-Consorzio SESIT, Roma, 1995.

[7] "Note al margine del rapporto metodologico sulle procedure di calcolo per la stima della domanda merci", Finsiel-Consorzio SESIT, Roma, 1995

[6] "OIL-Optimal Investment Locator: ARC-INFO per il Geomarketing" ESRI-Italia and Telespazio for the spatial and environmental information S.p.a., Roma, 1994.

[5] "Metodologie statistiche a supporto della attivita' relative al prodotto Cartografia Tematica a Grande Scala", Telespazio, Roma, 1994.

[4] "La previsione del traffico telefonico intercontinentale da e verso l'Italia per i paesi del G7", Italcable, Roma, 1990.

[3] "Studio sulle metodologie di raccordo tra archivi INPS e Cerved" Unioncamere Union of the Chambers of Commerce and Artisanship, Roma, 1987.

[2] "Note metodologiche sull'Osservatorio dei prezzi", Unioncamere, Union of the Chambers of Commerce, Industry, Artisanship and Agriculture, Roma, 1985.

[1] "Analisi aggregata dei bilanci delle imprese commerciali in Italia", Unioncamere, Union of the Chambers of Commerce, Industry, Artisanship and Agriculture, Roma, 1985

e) conference proceedings, working papers and other publications not described above: about 160