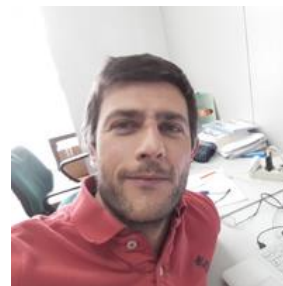


Davide Ballabio

davide.ballabio@gmail.com



Education

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|--------------------|---|
| 2003 - 2006 | University of Milano
PhD project in food biotechnology |
| 1996 - 2002 | University of Milano - Bicocca
Degree in Environmental Sciences (final grade: 110/110 cum laude) |
| 1990 - 1995 | High School: Liceo Classico Zucchi, Monza |

Professional experiences

- | | |
|----------------------------|---|
| Sep 2015 - Now | Researcher in chemometrics, QSAR and analytical chemistry at the Milano Chemometrics and QSAR Research Group (Department of Earth and Environmental Sciences, University of Milano - Bicocca). |
| Mar 2014 - Feb 2015 | Funding by Reach and Colour Italia srl at the Milano Chemometrics and QSAR Research Group (University of Milano - Bicocca) for the quantitative analysis of relationships between molecular structures and toxicological and chemical-physical properties of dyes.
Scientific consultant for Talete: chemometric consulting and collaboration in the realization of software of multivariate analysis. |
| Jan 2011 - Feb 2014 | EC funding at the Milano Chemometrics and QSAR Research Group (University of Milano - Bicocca) under the FP7 framework to develop a new, safe, multifunctional accelerator curative molecule which can replace thiourea-based accelerators in the vulcanisation process (http://www.saferubber.eu/).
Scientific consultant for Talete: chemometric consulting and collaboration in the realization of software of multivariate analysis. |
| Jan 2007 - Dec 2010 | Post-doc grant (Milano Chemometrics and QSAR Research Group, University of Milano - Bicocca) for the development of an on-line database of molecular structures, available at: http://michem.disat.unimib.it/mole_db |
| Jan 2004 - Oct 2006 | PhD project in food biotechnology (University of Milano): Chemometric characterisation of physical-chemical fingerprints of food products.
Consultant for Tecnogalenica: calibration of NIR instruments by means of chemometrics.
Scientific consultant for Talete: chemometric consulting and collaboration in the realization of software of multivariate analysis.
Visiting PhD student for 8 months (Jan-May 2005 and Jul-Sep 2006) at the Spectroscopy and Chemometrics Group (The Royal Veterinary and Agricultural University, Copenhagen), world leader in multi-way analysis and chemometrics.
Ongoing collaboration with Milano Chemometrics and QSAR Research Group (University of Milano - Bicocca) on researches related to multivariate statistical analysis and statistical software |

development.

- Jan 2003 - Dec 2003** Scholarship (University of Milano - Bicocca) for the analysis of quality indices applicable on soils in Lombardia by means of multivariate analysis.
- Oct 2002 - Dec 2002** Stage at Synergia S.r.l., consulting company specializing in workplace safety and environmental protection.
- Apr 2002 - Sep 2002** Scholarship (University of Milano - Bicocca) for the evaluation, selection and development of softwares concerning university didactical tests.

Teaching experiences

- 31 May - 1 June 2017** Lecturer in the PhD course (14 hours) on Classification methods in chemometrics at Department of Food Science, Faculty of Life Sciences, University of Copenhagen (Denmark).
- Apr - May 2017** Teaching assistant at the course of Analytical Chemistry (20 hours), Department of Chemistry, University of Milano - Bicocca.
- Jan 2017** Teaching assistant at the course of Chemometrics (12 hours), Department of Chemistry, University of Milano - Bicocca.
- Nov 2016** Teaching assistant at the course of Analytical Chemistry (20 hours), Department of Environmental Sciences, University of Milano - Bicocca.
- Oct - Dec 2016** Laboratory of Instrumental Analytical Chemistry (36 hours) and lecturer at the course of Instrumental Analytical Chemistry (14 hours), Department of Chemistry, University of Milano - Bicocca.
- 21-24 June 2016** Seminar "Chemometric analysis for the evaluation of analytical data" at the State General Laboratory (Nicosia, Cyprus) and lecturer in the course "SIMCA for isotopic and analytical data regarding food and drink authenticity" at the NMR laboratory of the State General Laboratory (Nicosia, Cyprus).
- Apr - May 2016** Teaching assistant at the course of Analytical Chemistry (20 hours), Department of Chemistry, University of Milano - Bicocca.
- 25 Jan - 10 Feb 2016** Lecturer in the course (80 hours) on Chemometrics and QSAR applied to molecules of biological interest at the University of Azuay (Cuenca, Ecuador).
- Dec 2015** Teaching assistant at the course of Chemometrics (12 hours), Department of Chemistry, University of Milano - Bicocca.
- Dec 2015** Teaching assistant at the course of Instrumental Analytical Chemistry (36 hours), Department of Chemistry, University of Milano - Bicocca.
- Nov 2015** Teaching assistant at the course of Analytical Chemistry (20 hours), Department of Environmental Sciences, University of Milano - Bicocca.
- 15-16 June 2015** Lecturer in the PhD course (14 hours) on Classification methods in chemometrics at Department of Food Science, Faculty of Life Sciences, University of Copenhagen (Denmark).
- May 2015** Lecturer in the PhD course (module of Principal Component Analysis, 6 hours) at the Department of Pharmaceutical Sciences, University of Milan (Italy).

Apr 2015 - May 2015	Teaching assistant at the course of Analytical Chemistry (20 hours), Department of Chemistry, University of Milano - Bicocca.
Dec 2014	Lecturer in the MSc course of Multivariate Analysis (module on multivariate classification, 4 hours) at the Department of Biotechnology, University of Milano - Bicocca (Italy).
7-10 July 2014	Lecturer in the PhD course (28 hours) on Classification methods in chemometrics at Department of Food Science, Faculty of Life Sciences, University of Copenhagen (Denmark).
May 2014	Lecturer in the course of Basics of Statistical Analysis and Multivariate Analysis (16 hours) at the Department of Material Science, University of Milano - Bicocca (Italy).
5 May 2014	Seminar on multivariate analysis of isotopic data at the Department of Science and Technology, University of Bolzano (Italy).
Oct 2013 - Jan 2014	Teaching assistant at the course of Analytical Chemistry (20 hours) and Chemometrics (10 hours), Department of Chemistry, University of Milano - Bicocca (Italy).
Nov 2013	Lecturer in the MSc course of Multivariate Analysis (module on multivariate classification, 8 hours) at the Department of Biotechnology, University of Milano - Bicocca (Italy).
October 2013	Lecturer in the course of Multivariate Analysis applied to Electronic Nose data (10 hours) at Demetra.
26-27 Sept 2013	Lecturer in the PhD course (16 hours) on Classification methods in chemometrics at Department of Food Science, Faculty of Life Sciences, University of Copenhagen (Denmark).
9 May 2013	Seminar on Multivariate Analysis as a tool for the development and control of bioprocesses at the Pontificia Universidad Javeriana in Bogota (Colombia).
6-7 May 2013	Lecturer in the course of Multivariate Analysis applied to Microbiological data (12 hours) at the Pontificia Universidad Javeriana in Bogota (Colombia).
Apr 2013	Lecturer in the course of Basics of Statistical Analysis and Multivariate Analysis (18 hours) at the Department of Material Science, University of Milano - Bicocca (Italy).
Nov 2012	Lecturer in the MSc course of Multivariate Analysis (module on multivariate classification, 8 hours) at the Department of Biotechnology, University of Milano - Bicocca (Italy).
Oct 2012 - Jan 2013	Teaching assistant at the course of Analytical Chemistry (24 hours) and Chemometrics (24 hours), Department of Chemistry, University of Milano - Bicocca.
27 Mar - 5 Apr 2012	Lecturer in the Chemometrics and Experimental Design course (16 hours) at the Master in Materials for Energy and Environment, Università degli Studi del Piemonte Orientale (Italy).
13 - 15 Dec 2011	Lecturer in the Advanced Chemometrics MSc course (module on multivariate classification) at the Department of Food Science, Faculty of Life Sciences, University of Copenhagen (Denmark).
14 Dec 2011	Seminar on Classification methods in chemometrics at Department of Food Science, Faculty of Life Sciences, University of Copenhagen (Denmark).

22 Feb - 4 Mar 2011	Consulting on data analysis and course on chemometrics (12 hours) at the National University of Colombia in Bogota (Colombia).
23-24 Nov 2010	Lecturer in the course on multivariate classification for PhD students and industry partners (12 hours) at the Quality & Technology Research Group, Department of Food Science, Faculty of Life Sciences, University of Copenhagen (Denmark).
Sep - Oct 2010	Assistant in the training course on Experimental Design (32 hours) in the project Formulation and developing of new products in cosmetic companies.
4-19 Feb 2010	Consulting on the data analysis and course on chemometrics (20 hours) in the project Selection of physical chemical indicators for cataloguing Colombian apicultural products at the National University of Colombia in Bogota (Colombia).
Oct - Dec 2009	Teaching assistant at the course on Analytical Chemistry (56 hours), department of Chemistry, University of Milano - Bicocca.
11-12 Nov 2008	Lecturer in the course (16 hours) on chemometrics and basic multivariate modelling, University of Loja (Ecuador)
20-31 Oct 2008	Lecturer in the full course (30 hours) of advanced modelling and applications on environmental and technological problems (modelistica superior aplicada a problemas tecnologicos y gestion ambiental) for the Master of technological management, University of Cuenca (Ecuador)
Oct 2007	Lecturer in the on-line course (4 hours) of chemometrics for the master: Diplomado Superior en Analisis de Datos y Sistemas Complejos, Universidad del Azuay, Cuenca (Ecuador)
04-11 Nov 2006	Lecturer in the course on chemometrics (20 hours) at the National University of Colombia in Bogota, during the cooperation program between IILA (Institute Italo - Latino Americano) and the National University of Colombia.
03-05 Mar 2004	Teaching assistant during the Second Italian School on Molecular Descriptors (University of Milano - Bicocca).
Jan 2003 - Dec 2003	Teaching assistant during the Master level sessions of: <ul style="list-style-type: none"> - Environmental Management and Sustainability (University of Milano - Bicocca) - Cultural Goods management (University of Milano) - Quality and Safety of alimentary Products: analytical, statistical and managerial aspects (University of Milano).
Mar 2003 - Jun 2003	Lecturer in the course on Operative Research, Probability and Statistics (Department of Computer Sciences, University of Milano - Bicocca)

Languages and Informatic Skills

Languages	Excellent spoken and written English Basic spoken and written Spanish
Informatic skills	Excellent knowledge of Microsoft Office, Macromedia Flash 5, Macromedia DreamWeaver, Photoshop, FrontPage. Good skills in WEB sites development Excellent knowledge of the main statistical softwares: Statistica, SPSS, Unscramble and MATLAB. Excellent programming skills in MATLAB and Visual Basic.

Software developed

Author of several MATLAB toolboxes, available at:
<http://michem.disat.unimib.it/chm>
- Kohonen and CPANN toolbox
- Classification toolbox for MATLAB
- PCA toolbox for MATLAB

Referee activity

Continuative activity as referee for the following peer reviewed international journals:

African Journal of Agricultural Research
Algorithms for Molecular Biology
Analyst
Analytica Chimica Acta (top referee 2008)
Analytical Chemistry
Analytical & Bioanalytical Chemistry
Atmospheric Environment
Central European Journal of Chemistry
Chemical Reviews
Chemometrics and Intelligent Laboratory Systems
Environmental Pollution
European Food Research and Technology
Food and Bioprocess Technology: An International Journal
IEEE Transactions on Systems, Man, and Cybernetics--Part C: Applications & Reviews
International Journal of Molecular Sciences
International Journal of Pharmaceutics
Iranian Journal of Mathematical Chemistry
Journal of Agricultural and Food Chemistry
Journal of Biomedical Science and Engineering
Journal of Chemical Information and Modeling
Journal of Chemometrics
Journal of Chromatography A
Journal of Computational Chemistry
Journal of Computer-Aided Molecular Design
Journal of Pharmaceutical and Biomedical Analysis (top referee 2006)
Journal of the Iranian Chemical Society
Mechanical Systems and Signal Processing
Molecular informatics
SAR and QSAR in Environmental Research
Science of the Total Environment
Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy
Talanta
Trends in Analytical Chemistry

Supervision MSc

Simona Cappellini, Studio di nuovi algoritmi per la valutazione del dominio di applicabilità di modelli QSAR (New algorithms for the applicability domain evaluation in QSAR models), University of Milano - Bicocca (Italy), July 2010

Matteo Cassotti, Evaluation of performance and toxicological relevance of accelerators used in the vulcanization process of polychloroprene rubbers, University of Milano - Bicocca (Italy), October 2011

Advisor for: Mohammad Shahbazy, Exploratory analysis of excitation-emission fluorescence data from colorectal cancer with oblique rotation of factors and self-organizing maps, Institute for Advanced Studies in Basic Sciences (Iran), September 2013

Filippo Gravino, Design of chemometric and QSAR solutions to develop inhibitors of trehalase as insecticides, University of Milano - Bicocca (Italy), October 2015

Fabrizio Biganzoli, Comparison of recent advances in consensus modelling of environmental and toxicological QSAR predictions, University of Milano - Bicocca (Italy), November 2016

Supervision PhD

Faizan Sahigara, Tools for prediction of environmental properties of chemicals by QSAR/QSPR within REACH. An applicability domain perspective. University of Milano-Bicocca, June 2013, Marie Curie ITN Environmental Chemoinformatics (ECO) project

Kamel Mansouri, New molecular descriptors for estimating degradation and fate of organic pollutants by QSAR/QSPR models within REACH. University of Milano-Bicocca, June 2013, Marie Curie ITN Environmental Chemoinformatics (ECO) project

Matteo Cassotti, QSAR study of aquatic toxicity by chemometrics methods in the framework of REACH regulation. University of Milano-Bicocca, March 2015

External reviewer for Ainara Lopez, Near-infrared spectroscopy and hyperspectral imaging for non-destructive quality inspection of potatoes. University of Navarre (Spain), 2016

Publications

PhD Thesis

Chemometric characterisation of physical-chemical fingerprints of food products
D. Ballabio
PhD thesis, University of Milano (2006), discussed on 22/01/2007

Papers on peer reviewed international journals:

66. Qualitative consensus of QSAR ready biodegradability predictions
D. Ballabio, F. Biganzoli, R. Todeschini, V. Consonni
Toxicological & Environmental Chemistry, in press
65. Principal Component Analysis to interpret changes in chromatic parameters on paint dosimeters exposed long-term to urban air
A. Herrera, D. Ballabio, N. Navas, R. Todeschini, C. Cardell
Chemometrics and Intelligent Laboratory Systems (2017), 167, 113-122
64. Valorization of side streams from a SSF biorefinery plant: Wheat straw lignin purification study
L. Zoia, A. Salanti, E.L. Tolppa, D. Ballabio, M. Orlandi
Bioresources (2017), 12, 1680-1696
63. Beware of unreliable Q^2 ! A comparative study of regression metrics for predictivity assessment of QSAR models.
R. Todeschini, D. Ballabio, F. Grisoni
Journal of Chemical Information and Modeling (2016), 56, 1905-1913
62. Mixtures, metabolites, ionic liquids: a new measure to evaluate similarity between complex chemical systems
A. Mauri, D. Ballabio, R. Todeschini, V. Consonni
Journal of Cheminformatics (2016), 8:49, 1-3
61. A new concept of higher-order similarity and the role of distance/similarity measures in local classification methods
R. Todeschini, D. Ballabio, F. Grisoni, V. Consonni
Chemometrics and Intelligent Laboratory Systems (2016), 157, 50-57
60. Oblique rotation of factors: A novel pattern recognition strategy to classify fluorescence excitation-emission matrices of human blood plasma for early diagnosis of colorectal cancer
M. Shahbazy, M. Vasighi, M. Kompany-Zareh, D. Ballabio
Molecular BioSystems (2016), 12, 1963-1975
59. Multimethod approach to trace the geographical origin of alpine milk: a case study of Tyrol region
M. Scampicchio, D. Eisenstecken, L. De Benedictis, C. Capici, D. Ballabio, T. Mimmo, P. Robatscher, L. Kerschbaumer, M. Oberhuber, A. Kaser, C. Huck, S. Cesco
Food Analytical Methods (2016), 9, 1262-1273
58. Quantitative structure-activity relationships to predict sweet and non-sweet tastes
C. Rojas, D. Ballabio, V. Consonni, P. Tripaldi, A. Mauri, R. Todeschini
Theoretical Chemistry Accounts (2016), 135, 66

57. N3 and BNN: Two new similarity based classification methods in comparison with other classifiers.
R. Todeschini, D. Ballabio, M. Cassotti, V. Consonni
Journal of Chemical Information and Modeling (2015), 55, 2365-2374
56. A MATLAB toolbox for Principal Component Analysis and unsupervised exploration of data structure
D. Ballabio
Chemometrics and Intelligent Laboratory Systems (2015), 149 Part B, 1-9
55. The use of diagnostic ratios, biomarkers and 3-way Kohonen Neural Networks to monitor the temporal evolution of oil spills
R. Fernández-Varela, M.P. Gómez-Carracedo, D. Ballabio, J.M. Andrade
Marine Pollution Bulletin (2015), 96, 313-320
54. A similarity-based QSAR model for predicting acute toxicity towards the fathead minnow (*Pimephales promelas*)
M. Cassotti, D. Ballabio, R. Todeschini, V. Consonni
SAR and QSAR in Environmental Research (2015), 26, 217-243
53. Impact of medium-distance pollution sources in a Galician suburban site (NW Iberian peninsula)
M.P. Gómez-Carracedo, J.M. Andrade, D. Ballabio, D. Prada-Rodríguez, S. Muniategui-Lorenzo, V. Consonni, M. Piñeiro-Iglesias, P. López-Mahía
Science of the Total Environment (2015), 512-513, 114-124
52. Towards global QSAR model building for acute toxicity: Munro database case study
S. Chavan, I. Nicholls, B. Karlsson, A. Rosengren, D. Ballabio, V. Consonni, R. Todeschini
International Journal of Molecular Sciences (2014), 15, 18162-18174
51. Validation and extension of a similarity-based approach for prediction of acute aquatic toxicity towards *Daphnia Magna*
M. Cassotti, V. Consonni, A. Mauri, D. Ballabio
SAR and QSAR in Environmental Research (2014), 25, 1013-1036
50. K-CM: a new artificial neural network. Application to supervised pattern recognition
M. Buscema, V. Consonni, D. Ballabio, A. Mauri, G. Massini, M. Breda, R. Todeschini
Chemometrics and Intelligent Laboratory Systems (2014), 138, 110-119
49. A novel variable reduction method adapted from space-filling designs
D. Ballabio, V. Consonni, A. Mauri, M. Claeys-Bruno, M. Sergent, R. Todeschini
Chemometrics and Intelligent Laboratory Systems (2014), 136, 147-154
48. Prediction of acute aquatic toxicity towards *daphnia magna* by using the GA-kNN method
M. Cassotti, D. Ballabio, V. Consonni, A. Mauri, I. Tetko, R. Todeschini
Alternatives to Laboratory Animals (2014), 42, 31-41
47. Assessing the validity of QSARs for ready biodegradability of chemicals: an Applicability Domain perspective
F. Sahigara, D. Ballabio, R. Todeschini, V. Consonni
Current Computer-Aided Drug Design (2014), 10, 137-147
46. QSPR study of rheological and mechanical properties of Chloroprene rubber accelerators
R. Todeschini, V. Consonni, D. Ballabio, A. Mauri, M. Cassotti, S. Lee, A. West, D. Cartlidge
Rubber Chemistry and Technology (2014), 87, 219-238
45. Oxygen consumption in South African Sauvignon blanc wines: role of glutathione, sulphur dioxide and certain phenolics
D. Fracassetti, C. Coetzee, A. Vanzo, D. Ballabio, W.J. du Toit
South African Journal of Enology and Viticulture (2013), 34, 156-169
44. Classification tools in chemistry. Part 1: Linear models. PLS-DA
D. Ballabio, V. Consonni
Analytical methods (2013), 5, 3790-3798
43. Locally-centred Mahalanobis distance: a new distance measure with salient features towards outlier detection

- R. Todeschini, D. Ballabio, V. Consonni, F. Sahigara, P. Filzmoser
Analytica Chimica Acta (2013), 787, 1-9
42. Defining a novel k-Nearest Neighbours approach to assess the applicability domain of a QSAR model for reliable predictions
F. Sahigara, D. Ballabio, R. Todeschini, V. Consonni
Journal of Cheminformatics (2013), 5:27, 1-9
41. Quantitative Structure - Activity Relationship models for ready biodegradability of chemicals
K. Mansouri, T. Ringsted, D. Ballabio, R. Todeschini, V. Consonni
Journal of Chemical Information and Modeling (2013), 53, 867-878
40. Particle size, chemical composition, seasons of the year and urban, rural or remote site origins as determinants of biological effects of particulate matter on pulmonary cells
M.G. Perrone, M. Gualtieri, V. Consonni, L. Ferrero, G. Sangiorgi, E. Longhin, D. Ballabio, E. Bolzacchini, M. Camatini
Environmental Pollution (2013), 176, 215-227
39. Effects of supervised Self Organising Maps parameters on classification performance
D. Ballabio, M. Vasighi, P. Filzmoser
Analytica Chimica Acta (2013), 765, 45-53
38. A MATLAB Toolbox for Self Organizing Maps and supervised neural network learning strategies
D. Ballabio, M. Vasighi
Chemometrics and Intelligent Laboratory Systems (2012), 118, 24-32
37. Screening oil spills by mid-IR spectroscopy and supervised pattern recognition techniques
M.P. Gomez-Carracedo, R. Fernandez-Varela, D. Ballabio, J.M. Andrade
Chemometrics and Intelligent Laboratory Systems (2012), 114, 132-142
36. Comparison of different approaches to define the Applicability Domain of QSAR models
F. Sahigara, K. Mansouri, D. Ballabio, A. Mauri, V. Consonni, R. Todeschini
Molecules (2012), 17, 4791-4810
35. Chemometric analysis of gas chromatography with flame ionisation detection chromatograms: A novel method for classification of petroleum products
N.J. Nielsen, D. Ballabio, G. Tomasi, R. Todeschini, J.H. Christensen
Journal of Chromatography A (2012), 1238, 121-127
34. Relationships between apple texture and rheological parameters by means of multivariate analysis
D. Ballabio, V. Consonni, F. Costa
Chemometrics and Intelligent Laboratory Systems (2012), 111, 28-33
33. Monitoring of Alcoholic Fermentation using NIR and MIR Spectroscopy combined with Electronic Nose and Electronic Tongue
S. Buratti, D. Ballabio, G. Giovanelli, C.M. Zuluaga Dominguez, A. Moles, S. Benedetti, N. Sinelli
Analytica Chimica Acta (2011), 697, 67-74
32. Genetic Algorithms for architecture optimisation of Counter-Propagation Artificial Neural Networks
D. Ballabio, M. Vasighi, V. Consonni, M. Kompany-Zareh
Chemometrics and Intelligent Laboratory Systems (2011), 105, 56-64
31. Comparing roadsoils pollution patterns extracted by MOLMAP and classical 3-way decomposition methods
M.P. Gomez-Carracedo, D. Ballabio, J.M. Andrade, J. Aires-de-Sousa, V. Consonni
Analytica Chimica Acta (2010), 677, 64-71
30. Self Organizing Maps For Analysis Of Polycyclic Aromatic Hydrocarbons 3-Way Data From Spilled Oils
R. Fernandez-Varela, M.P. Gomez-Carracedo, D. Ballabio, J.M. Andrade, V. Consonni, R. Todeschini
Analytical Chemistry (2010), 82, 4264-4271
29. A chemometric approach to the environmental problem of predicting toxicity in contaminated sediments
M. Alvarez-Guerra, D. Ballabio, J. M. Amigo, J. R. Viguri, R. Bro

Journal of Chemometrics (2010), 24, 379-386

28. Canonical Measure of Correlation (CMC) and Canonical Measure of Distance (CMD) between sets of data. Part 3. Variable selection in classification.

D. Ballabio, V. Consonni, A. Mauri, R. Todeschini
Analytica Chimica Acta (2010), 657, 116-122

27. Evaluation of model predictive ability by external validation techniques

V. Consonni, D. Ballabio, R. Todeschini
Journal of Chemometrics (2010), 24, 104-201

26. Development of models for predicting toxicity from sediment chemistry by partial least squares-discriminant analysis and counter-propagation artificial neural networks

M. Alvarez-Guerra, D. Ballabio, J. M. Amigo, R. Bro, J. R. Viguri
Environmental Pollution (2010), 158, 607-614

25. Canonical Measure of Correlation (CMC) and Canonical Measure of Distance (CMD) between sets of data. Part 2. Variable reduction.

V. Consonni, D. Ballabio, A. Manganaro, A. Mauri, R. Todeschini
Analytica Chimica Acta (2009), 648, 45-51

24. Canonical Measure of Correlation (CMC) and Canonical Measure of Distance (CMD) between sets of data. Part 1. Theory and simple chemometric applications.

R. Todeschini, D. Ballabio, V. Consonni, A. Manganaro, A. Mauri
Analytica Chimica Acta (2009), 648, 52-59

23. The Kohonen and CP-ANN toolbox: a collection of MATLAB modules for Self Organising Maps and Counterpropagation Artificial Neural Networks

D. Ballabio, V. Consonni, R. Todeschini
Chemometrics and Intelligent Laboratory Systems (2009), 98, 115-122

22. Comments on the definition of the Q^2 parameter for QSAR validation.

V. Consonni, D. Ballabio, R. Todeschini
Journal of Chemical Information and Modeling (2009), 49, 1669-1678

21. Dairy cream response in instrumental texture evaluation processed by multivariate analysis

L. Piazza, J. Gigli, C. Rojas, D. Ballabio, R. Todeschini, P. Tripaldi
Chemometrics and Intelligent Laboratory Systems (2009), 96, 258-263

20. Introduction to MOLE DB - on-line Molecular Descriptors Database

D. Ballabio, A. Manganaro, V. Consonni, A. Mauri, R. Todeschini
MATCH, communications in mathematical and in computer chemistry (2009), 62, 199-207

19. Fatty acid composition of lipid classes in commercial breast muscle of capons as a marker of the dietary fat source

F. Carcione, L.M. Chiesa, D. Ballabio, S. Soncin, P.A. Biondi, P. Cattaneo, C. Cantoni
Italian Journal of Food Science (2009), 21, 149-156

18. A new similarity/diversity measure for the characterization of DNA sequences

R. Todeschini, D. Ballabio, V. Consonni, A. Mauri
Croatica Chemica Acta (2008), 81, 657-664

17. Classification of GC-MS measurements of wines by combining data dimension reduction and variable selection techniques

D. Ballabio, T. Skov, R. Leardi, R. Bro
Journal of Chemometrics (2008), 22, 457-463

16. Peptides multivariate characterisation using a molecular descriptor based approach

A. Mauri, D. Ballabio, V. Consonni, A. Manganaro, R. Todeschini
MATCH, communications in mathematical and in computer chemistry (2008), 60, 671-690

15. Multiblock Variance Partitioning. A new approach for comparing variation in multiple data blocks.

T. Skov, D. Ballabio, R. Bro
Analytica Chimica Acta (2008), 615, 18-29

14. Amperometric Electronic Tongue for Food Analysis

M. Scampicchio, D. Ballabio, A. Arecchi, M.S. Cosio, S. Mannino

Microchimica Acta (2008), 163, 11-21

13. Classification of multiway analytical data based on MOLMAP approach

D. Ballabio, V. Consonni, R. Todeschini
Analytica Chimica Acta (2007), 605, 134-146

12. Interactions between oral burn, meat flavour and texture in chili spiced pork patties evaluated by Time-Intensity

H. C. Reinbach, L. Meinert, D. Ballabio, M. D. Aaslyng, W.L.P. Bredie, K. Olsen, P. Moller
Food Quality and Preference (2007), 18, 909-919

11. Characterization of the traditional Cypriot spirit Zivania by means of Counterpropagation Artificial Neural Networks

D. Ballabio, R. Kokkinofa, R. Todeschini, C. R. Theocharis
Chemometrics and Intelligent Laboratory Systems (2007), 87, 78-84

10. On the Application of Chemometrics for the study of Acoustic-Mechanical properties of Crispy Bakery products

L. Piazza, J. Gigli, D. Ballabio
Chemometrics and Intelligent Laboratory Systems (2007), 86, 52-59

9. A new similarity/diversity measure for sequential data

R. Todeschini, D. Ballabio, V. Consonni, A. Mauri
MATCH, communications in mathematical and in computer chemistry (2007), 57, 51-67

8. CAIMAN (Classification And Influence Matrix Analysis): a new approach to the classification based on leverage-scaled functions

R. Todeschini, D. Ballabio, V. Consonni, A. Mauri, M. Pavan
Chemometrics and Intelligent Laboratory Systems (2007), 87, 3-17

7. Evaluation of different storage conditions of extra virgin olive oils with a innovative recognition tool built by means of electronic nose and electronic tongue

M.S. Cosio, D. Ballabio, S. Benedetti, C. Gigliotti
Food Chemistry (2007), 101, 485-491

6. Prediction of Italian red wine sensorial descriptors from electronic nose, electronic tongue and spectrophotometric measurements by means of Genetic Algorithms regression models

S. Buratti, D. Ballabio, S. Benedetti, M.S. Cosio
Food chemistry (2007), 100, 211-218

5. Characterization of DNA primary sequences by a new similarity/diversity measure based on the partial ordering

R. Todeschini, V. Consonni, A. Mauri, D. Ballabio
Journal of Chemical Information and Modeling (2006), 46, 1905-1911

4. A chemometric approach based on a novel similarity/diversity measure for the characterization and selection of electronic nose sensors

D. Ballabio, M.S. Cosio, S. Mannino, R. Todeschini
Analytica Chimica Acta (2006), 578, 170-177

3. Geographical classification of wine and olive oil by means of classification and influence matrix analysis (CAIMAN)

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