

Bibliografia

Aberg, G.; Fosse, G.; Stray, H. Man, nutrition and mobility: A comparison of teeth and bone from the Medieval era and the present from Pb and Sr isotopes. *Science of The Total Environment*, 1998, Volume 224, 1–3, 109–119.

Almeida C.M.R., Vasconcelos M.T.S.D. ICP-MS of Sr-isotopes ratios in wine in order to be used as a fingerprint of its regional origin. *J. Anal. At. Spectrom.*, 2001, Volume 16, 607-611.

Almeida, C.M.R.; Vasconcelos, M.T.S.D. Multielement Composition of Wines and Their Precursors Including Provenance Soil and Their Potentialities As Fingerprints of Wine Origin *Journal of Agriculture and Food Chemistry*, 2003, Volume 51, 4788–4798.

Almeida, C.M.R.; Vasconcelos, M.T.S.D. Does the winemaking process influence the wine $^{87}\text{Sr}/^{86}\text{Sr}$? A case study. *Food Chem.* 2004, Volume 85, 7-12.

Avanzinelli, R.; Elliot., T.E.; Tommasini, S.; Conticelli, S. Constraints on the genesis of the potassium-rich Italian volcanics from U/Th disequilibrium. *J. Petrol.* 2008, 49, 195-223.

Avanzinelli, R.; Lustrino, M.; Mattei, M.; Melluso, L.; Conticelli, S. Potassic and ultrapotassic magmatism in the circum-Tyrrhenian region: the role of carbonated pelitic vs. pelitic sediment recycling at destructive plate margin. *Lithos* 2009, 113, 213-227.

Avanzinelli, R.; Sapienza, G.T.; Conticelli, S. The Cretaceous to Paleogene within-plate magmatism of Pachino-Capo Passero (southeastern Sicily) and Adria (La Queglia and Pietre Nere, southern Italy): geochemical and isotopic evidence against a plume-related origin of circum-Mediterranean magmas. *Eur. J. Mineral.* 2012, 24, 73–96.

Banner, J.L.; Musgrove¹, M.; Capo, R.C. Tracing ground-water evolution in a limestone aquifer using Sr isotopes: Effects of multiple sources of dissolved ions and mineral-solution reactions *Geology* 22, 1994, Volume 8, 687-690.

Barbaste, M.; Robinson, K.; Guilfoyle, S.; Medina, B.; Lobinsky, R.; A precise determination of the Strontium isotope ratios in wine by inductively coupled plasma sector field multicollector mass spectrometry (ICP-SF-MC-MS). *J. Anal. At. Spectrom.* 2002, Volume 17, 135-137.

Baxter, M.J.; Crews, H.M.; Dennis, M.J.; Goodall, I.; Anderson, D.; The determination of the authenticity of wine from its trace element composition. *Food Chemistry*, 1997, Volume 60, 443-450.

Beard, B.L.; Johnson, C.M. Strontium isotope composition of skeletal material can determine the birth place and geographic mobility of humans and animals. *J. Forensic Sci.*, 2000, Volume 45, 1049-1061.

Bentley, R.A. Strontium Isotopes from the Earth to the Archaeological Skeleton: A Review. *Journal of Archaeological Method and Theory*, 2006, Volume 13, 135-187.

Blum, J. D.; Erel, Y.; Brown, K. $^{87}\text{Sr}/^{86}\text{Sr}$ ratios of Sierra Nevada stream waters: Implications for relative mineral weathering rates. *Geochimica et Cosmochimica Acta*, 1993, Volume 57, 5019–5025.

Blum, J.D.; Erel, Y. A silicate weathering mechanism linking increases in marine $^{87}\text{Sr}/^{86}\text{Sr}$ with global glaciations. *Nature*, 1995, Volume 373, 415 – 418.

Blum, J.D.; Erel, Y. Rb-Sr isotope systematics of a granitic soil chronosequence: The importance of biotite weathering. *Geochimica et Cosmochimica Acta*, 1997, Volume 61, 3193-3204.

Boari, E.; Tommasini, S.; Mercurio, M.; Morra, V.; Mattei, M.; Mulinacci, N.; Conticelli, S. $^{87}\text{Sr}/^{86}\text{Sr}$ of some Central and Southern Italian wines and its use as fingerprints for Geographic Provenance. *Proceedings of 6th General Assembly of the OIV-2008, 31st World Congress of Vine and Wine*, 2008, 6.

Boari, E.; Avanzinelli, R.; Melluso, L.; Giordano, G.; Mattei, M.; De Benedetti, A.A.; Morra, V.; & Conticelli, S. Isotope geochemistry (Sr-Nd-Pb) and petrogenesis of leucite-bearing volcanic rocks from “Colli Albani” volcano, Roman Magmatic Province, Central Italy: inferences on volcano evolution and magma genesis. *Bulletin of Volcanology*, 2009a, Volume 71, 977-1005.

Boari, E.; Tommasini, S.; Laurenzi, M.A.; Conticelli, S. Transition from ultrapotassic kamafugitic to sub-alkaline magmas: Sr, Nd, and Pb isotope, trace element and ^{40}Ar - ^{39}Ar age data from the Middle Latin Valley volcanic field, Roman Magmatic Province, Central Italy. *Journal of Petrology*, 2009b, Volume 50, 1327-1357.

Bollati, A.. Zonazione viticola e tracciabilità geografica di vini di pregio attraverso analisi geochimiche: un caso di studio nell’area di produzione del vino Cesanese (Lazio)(in Italian). Ph.D. Thesis, Scuola Dottorale Geologia dell’Ambiente e delle Risorse (SDIGAR), 2011, 1-125.

Braschi, E.; Marchionni, S.; Bucelli, P.; Priori, S.; Costantini E.A.C.; Bollati, A.; Mattei, M.; Conticelli, S.; Tommasini, S. Analisi Isotopiche. In: “Oltre la zonazione (Beyond zonation) - tre anni di studio al Castello di Brolio” a cura di E.A.C. Costantini (edt.), 2013, 102-116. Edizioni Polistampa, Firenze, www.leonardolibri.com

Bréas, O.; Reniero, F.; Serrini, G. Isotope ratio mass spectrometry – analysis of wines from different european countries. *Rapid Comm. Mass Spectrom.* 1994, Volume 8, 967-970.

Capo, R.C.; Stewart, B.W.; Chadwick, O.A. Strontium isotopes as tracers of ecosystem processes: theory and methods. *Geoderma*, 1998, Volume 82, 197-225.

Capron, X.; Smeyers-Verbeke, J.; Massart, D.L. Multivariate determination of the geographical origin of wines from four different countries. *Food Chemistry*, 2007, Volume 100, 1585-1597.

Castiñeira-Gomez, M.M.; Brant, R.; Jakubowski, N.; Anderson, J. Changes of the metal composition in German white wines through the winemaking process. A study of 63 elements by inductively coupled plasma-mass spectrometry. *J. Agric. Food Chem.* 2004, Volume 52, 2953–2961.

Christoph, N.; Roßmann, A.; Voerkelius, S. Possibilities and limitations of wine authentication using stable isotope and meteorological data, data banks and statistical tests. Part 1: Wines from Franconia and Lake Constance 1992 to 2001. *Mitteilungen Klosterneuberg* 2003, Volume 53, 23-40.

Christoph, N.; Baratossy, G.; Kubanovic, V.; Kozina, B.; Roßmann, A.; Schlicht, C. Possibilities and limitations of wine authentication using stable isotope ratio analysis and traceability. Part 2: Wines from Hungary, Croatia and other European countries. *Mitteilungen Klosterneuberg* 2004, Volume 54, 155-169.

Cita M.B., Chiesa S., Colacicchi R., Crisci G.M., Massiotta P., Parotto M. Italian wines and geology, 2004. BEMA Editrice, Milano, 148.

Colacicchi, R.; Parotto, M. *Geologia dei Vini Italiani*, Italia Centrale, 2006, BE-MA Editrice, Milano, Volume I, 175.

Conticelli, S.; D'Antonio, M.; Pinarelli, L.; Civetta, L. Source contamination and mantle heterogeneity in the genesis of Italian potassic and ultrapotassic volcanic rocks: Sr–Nd–Pb isotope data from Roman Province and Southern Tuscany. *Mineralogy and Petrology*, 2002, Volume 74, 189-222.

Conticelli, S.; Carlson, R.W.; Widom, E.; Serri, G. Chemical and isotopic composition (Os, Pb, Nd, and Sr) of Neogene to Quaternary calc-alkalic, shoshonitic, and ultrapotassic mafic rocks from the Italian peninsula: Inferences on the nature of their mantle sources. *Special Paper of the Geological Society of America*, 2007, Volume 418, 171-202.

Conticelli, S.; Laurenzi, M.A.; Giordano, G.; Mattei, M.; Avanzinelli, R.; Melluso, L.; Tommasini, S.; Boari, E.; Cifelli, F.; Perini, G. Leucite-bearing (kamafugitic/leucititic) and -free (lamproitic) ultrapotassic rocks and associated shoshonites from Italy: Constraints on petrogenesis and geodynamics. *Journal of the Virtual Explorer* 2010, 36.

Conticelli, S.; Boari, E.; Avanzinelli, R.; De Benedetti, A. A.; Giordano, G.; Mattei, M.; Melluso, L.; Morra, V. Geochemistry, isotopes and mineral chemistry of the Colli Albani volcanic rocks: constraints on magma genesis and evolution. In: *Funiciello, R., Giordano, G. (Eds), The Colli Albani Volcano. Geological Society of London Special Publications of IAVCEI*, 2010, Volume 3, 107-139.

Costantini, E.A.C.; Bucelli, P. Suolo, vite ed altre colture di qualità: l'introduzione e la pratica dei concetti "terroir" e "zonazione", *Italian Journal of Agronomy*, 2008, 1 Suppl.: 23-33.

Craig, H. Isotopic Variations in ameteric Waters. *Science*, 1961, Volume 133, 1702-1703.

Day M.P., Zhang B.L., Martin G.J. The use of trace element data to complement stable isotope methods in the characterization of grape musts. *American Journal of Enology and Viticulture*, 1994, Volume 45, 79-85.

Day, M.; Zhang, B.; Martin, G. Determination of the geographical origin of wine using joint analysis of elemental and isotopic composition. II—Differentiation of the principal production zones in France for the 1990 vintage *Journal of the Science of Food and Agriculture*, 1995, Volume 67, 113–123.

Degryse, P.; Schneider, J.; Haack, U.; Lauwers, V.; Poblome, J.; Waelkens, M.; Muchez, Ph. Evidence for glass "recycling" using Pb and Sr isotopic ratios and Sr-mixing lines: the case of early Byzantine Sagalassos. *J. Archaeol. Sci.* 2006, Volume 31, 494-501.

Del Moro, A.; Fulignati, P.; Marianelli, P.; Sbrana A. Magma contamination by direct wall rock interaction: constraints from xenoliths from the walls of a carbonate-hosted magma chamber (Vesuvius 1944 eruption). *J. Volcanol. Geotherm. Res.* 2001, 112, 15-24.

Dickin, A.P. *Radiogenic Isotope Geology*. Cambridge University Press Cambridge (UK) 2003, 492.

Dickin, A.P. *Radiogenic Isotope Geology*. Cambridge University Press, 2005, Cambridge, UK, 490.

Di Paola-Naranjo, R.D.; Baroni, V.; Podio, N.S.; Rubinstein, H.R.; Fabiani, M.P.; Badini, R.G.; Inga, M.; Ostera, H.A.; Cagnoni, M.; Gallegos, E.; Gautier, E.; Peral-García, P.; Hoogewerff, J.; Wunderlin D.A.. Fingerprints for Main Varieties of Argentinean Wines: Terroir Differentiation by Inorganic, Organic, and Stable Isotopic Analyses Coupled to Chemometrics *J. Agric. Food Chem.* 2011, Volume 59, 7854–7865.

Etiévant, P.; Schlich, P.; Bouvier, J.C.; Symonds, P.; Bertrand, A. Varietal and geographic classification of French red wines in terms of elements, amino acids and aromatic alcohols. *Journal of the Science of Food and Agriculture*, 1988 Volume 45, 25–41.

Evans, J.A.; Chenery, C.A.; Fitzpatrick, A.P. Bronze age childhood migration of individuals near Stonehenge, revealed by Strontium and Oxygen isotope tooth enamel analyses. *Archaeometry* 2004, Volume 48, 309-321.

Faure, G.; Powell, J.L. Strontium isotope geology, Book, 1972. Faure G. Principles of isotope geology, Book, 1977.

Faure, G. Principles of isotope geology. John Wiley & Sons, New York (USA) 1986, 594.

Faure, G. Principles and applications of geochemistry: A comprehensive textbook for geology students. Prentice Hall (Upper Saddle River, N.J.), 1998, 600.

Ferrara, G.; Laurenzi, M.A.; Taylor Jr., H.P.; Tonarini, S.; Turi, B. Oxygen and strontium isotope studies of K-rich volcanic rocks from the Alban Hills, Italy. Earth and Planetary Science Letters, 1985, Volume 75, 13–28.

Fortunato, G.; Memic, K.; Wunderly, S.; Pillonell, L.; Bossett, J.O.; Gremaud, G. Application of Strontium isotope abundance ratios measured by MC-ICP-MS for food authentication. J. Anal. Atom. Spectrom. 2004, Volume 19, 227-234.

Gaeta, M.; Fredab, C.; Christensenc, J. N.; Dallaid, L.; Marrab, F.; Karnere, D. B.; Scarlato P. Time-dependent geochemistry of clinopyroxene from the Alban Hills (Central Italy): Clues to the source and evolution of ultrapotassic magmas. Lithos, 2006, Volume 86, 330–346.

Garofolo A. (1998) - Diversificazione e valorizzazione di produzioni tipiche sul territorio: i Cesanesi. Atti del Simposio Internazionale: Territorio e Vino. Siena 19-24 maggio, 753-764

Giordano G., Mattei M., Funiciello R. - The Geological Map of the Colli Albani Volcano. The Geological Society, London. Special Publication of IAVCEI, 2010, 3

Haynes S.J. Geology and Wine 1. Concept of Terroir and the Role of Geology. Geoscience Canada, Journal of the Geological Association of Canada, 1999, Volume 26.

Hölzl, S.; Hom, P.; Rossmann, A.; Rummel, S. Isotope-abundance ratios of light (bio) and heavy (geo) elements in biogenic tissues: methods and applications. Analytical and Bioanalytical Chemistry, 2004, Volume 378, 270-272.

Horn, P.; Schaaf, P.; Holbach, B.; Hölzl, S.; Eschnauer, H. $^{87}\text{Sr}/^{86}\text{Sr}$ from rock and soil into vine and wine. Zeitschrift für Lebensmittel Untersuchung und Forschung, 1993, Volume 196, 407-409.

Jager, E.; Hunziker, J. Lectures in Isotope Geology, Book. Springer 1979, 329 pp.
Caruso, M.; Galgano, F.; Castiglione Morelli, M.A.; Viggiani, L.; Lencioni, L.; Giussani, G.; Favati, F. Chemical Profile of White Wines Produced from ‘Greco bianco’ Grape Variety in Different Italian Areas by Nuclear Magnetic Resonance (NMR) and Conventional Physicochemical Analyses J. Agric. Food Chem. 2012, 60, 7–15

Jones G.V.; Snead N.; Nelson P. Geology and Wine 8. Modeling Viticultural Landscapes: A GIS Analysis of the Terroir Potential in the Umpqua Valley of Oregon. Geoscience Canada, Journal of the Geological Association of Canada, 2004, Volume 31.

Kelly, S.; Heaton, K.; Hoogewerff, J. Tracing the geographical origin of food: the application of multi-element and multi-isotope analyses. Trends Sci. Technol, 2005, Volume 16, 555-567.

Kennedy, B.P.; Klaue, A.; Blum, J.D.; Folt, C.L.; Nislow K.H. Reconstructing the lives of fish using Sr isotopes in otoliths. Canadian J. Fisheries and Aquatic Sciences. 2011, Volume 59, 925-929.

Kim K.W., Thornton I. Influence of uraniferous black shales on Cadmium, Molybdenum and Selenium in soils and crop plants in the Deog-Pyoung area of Korea. Environmental Geochemistry and Health, 1993, Volume 15, 119-133.

Kyser, T.K. Stable isotope variations in the mantle. Mineralogy and Geochemistry, 1986, Volume 16, 141-164.

Lancelot J., Herrerias J., Verdoux P., Lurton L. The use of strontium isotopes geochemistry for a high resolution identification of wines from the Rhone Valley. Proceedings del Fifth European Symposium on Food Authenticity, 1999, La Baule, France.

Malheiro, V.; Favas, P.; Gomes, M.; Ribeiro, S. Isotopic markers in wines from Douro region, Portugal. Geoch. Cosmoch. Acta Supplement 2009, Volume 73, 821.

Marchionni S., Braschi E., Tommasini S., Bollati A., Cifelli F., Mulinacci N., Mattei M., Conticelli S. High Precision $^{87}\text{Sr}/^{86}\text{Sr}$ analyses in wines and their use as geological fingerprint for tracing geographic provenance. Journal of Agricultural and Food Chemistry, 2013, Volume 61(28), 6822–6831.

Martì M.P.; Busto, O.; Guasch, J., Application of a headspace mass spectrometry system to the differentiation and classification of wines according to their origin, variety and ageing. Journal of Chromatography A, 2004, Volume 1057, 211–217.

Martin, G.J.; Guillon, C.; Maryvonne, L.M.; Cabanis, M.T.; Tep, Y.; Aerny, J. Natural factors of isotope fractionation and the characterization of wines Journal of Agriculture and Food Chemistry, 1988, Volume 36, 316–322.

Melluso, L.; Conticelli, S.; D'Antonio, M.; Mirco, N.; Saccani, E.; Petrology and mineralogy of wollastonite-melilite-bearing pyrometamorphic rocks from Colle Fabbri and Ricetto, Central Apennines, Italy. American Mineralogist 2003, 88, 1287-1299.

Mihaljevič, M.; Ettler, V.; Šebek, O.; Strnad, L.; Chrastný, V. Lead isotopic signatures of wine and vineyard soils-tracers of lead origin. *J. Geochem. Exploration* 2006, Volume 88, 130-133.

O'Neil, J. Theoretical and experimental aspects of isotopic fractionation. *Mineralogy and Geochemistry*, 1986, Theoretical and experimental aspects of isotopic fractionation *Reviews in Mineralogy and Geochemistry*, January 1986, Volume 16, 1-40.

Rapp, A.; Marais, J. Shelf life of wine: changes in aroma substances during storage and ageing of white wines. Food and Agriculture Organization of the United Nations, 1993.

Roßmann A., Schmidt H.-L., Reniero F., Versini G., Moussa I., Merle M.C. Stable carbon isotope content in ethanol of EC data bank wines from Italy, France and Germany. *Zeitschrift für Lebensmitteluntersuchung*, 1996, Volume 203, 293-301.

Roßmann, A. Determination of Stable Isotope Ratios in Food analysis. *Food Reviews International*, 2001, Volume 17, 347-381.

Rummel, S.; Hoelzl, S.; Horn, P.; Rossmann, A.; Schlicht, C. The combination of stable isotope abundance ratios of H, C, N and S with $^{87}\text{Sr}/^{86}\text{Sr}$ for geographical origin assignment of orange juices. *Food Chemistry*, 2010, 118, 890–900.

Salette J.; Asselin C.; Morlat R. The relationship between terroir and product : an analysis of the terroir-vine-wine system and its analogous application to other products. *Sciences des aliments*, 1998, vol. 18, 323-328.

Silvestri, M.; Bertacchini, L.; Durante, C.; Marchetti, A.; Salvatore, E.; Cocchi, M. Application of data fusion techniques to direct geographical traceability indicators. *Analytica Chimica Acta*, 2013, Volume 769, 1–9.

Stewart, B.W.; Capo, R.C.; Chadwick, O.A. Quantitative strontium isotope models for weathering, pedogenesis and biogeochemical cycling. *Geoderma* 1998, Volume 82, 173-195.

Stille, P.; Pierret, M.C.; Steinmann, M.; Chabaux, F.; Boutin, R.; Aubert, D.; Pourcelot, L.; Morvan, G. Impact of atmospheric deposition, biogeochemical cycling and water–mineral interaction on REE fractionation in acidic surface soils and soil water (the Strengbach case). *Chemical Geology*, 2009, Volume 264, 173–186.

Taylor H.P.; Sheppard, S.M.F. Igneous rocks; I, Processes of isotopic fractionation and isotope systematics. *Mineralogy and Geochemistry*, 1986, Volume. 16, 227-271.

Thirlwall M.F. Long-term reproducibility of multicollector Sr and Nd isotope ratio analysis. *Chem. Geol.*, 1991, Volume 94, 85-104.

Thirlwall M.F. Inter-laboratory and other errors in Pb isotope analyses investigated using a ^{207}Pb - ^{204}Pb double spike. *Chem. Geol.*, 2000, Volume 163, 299-322.

Thirlwall, M.F. Multicollector ICP-MS analysis of Pb isotopes using a ^{207}Pb - ^{204}Pb double spike demonstrates up to 400 ppm/amu systematic errors in Tl-normalization. *Chemical Geology*, 2002, Volume 184, 255-279

Tommasini, S.; Davies, G.R.; Elliott, T. Pb isotope composition of tree rings as bio-geochemical tracers of heavy metal pollution: a reconnaissance study from Firenze, Italy. *Applied Geochemistry* 2000, Volume 15, 891-900.

Tusseau, D.; Van Laer, S. Etude des macromolécules des vins de Champagne. Study of macromolecules in Champagne wines. *Sciences del aliments*, 1993, Volume 13, 463-482.

Van Leeuwen; Seguin G. The concept of terroir in viticulture. *Journal of Wine Research*, 2006, Volume 17, 1-10.

Versini, G.; Monetti, A.; Reniero, F. Monitoring authenticity and regional origin of wines by natural stable isotope ratios analysis. In: *Wine: nutritional and therapeutic benefits*, T.R. Watkins (ed), ACS Symposium Series 1997, Volume 661, 113-130.

Viggiani, L.; Castiglione Morelli, M.A. Characterization of Wines by Nuclear Magnetic Resonance: A Work Study on Wines from the Basilicata Region in Italy. *Journal of Agriculture and Food Chemistry*, 2008, Volume 56, 8273–8279.

Voerkelius, S.; Lorenz, G.D.; Rummel, S.; Quézel, C.R.; Heiss, G.; Baxter, M.; Brach-Papa, C.; Deters-Itzelsberger, P.; Hoelzl, S.; Hoogewerff, J.; Ponzeverac, E.; Van Bocxstaele, M.; Ueckermann, H. Strontium isotopic signatures of natural mineral waters, the reference to a simple geological map and its potential for authentication of food. *Food Chemistry*, 2010, Volume 118, 933–940.

Vorster, C.; Greeff, L.; Coetzee, P.P. The Determination of $^{11}\text{B}/^{10}\text{B}$ and $^{87}\text{Sr}/^{86}\text{Sr}$ Isotope Ratios by Quadrupole-Based ICP-MS for the Fingerprinting of South African Wine, *South African J. Chem.*, 2010, Volume 63, 207–214.

Wasserburg G.J.; Jacobsen S.B.; De Paolo D.J.; McCulloch M.T.; Wen T. Precise determination of Sm/Nd ratios, Sm and Nd isotopic abundances in standard solutions. *Geochim. Cosmochim. Acta*, 1981, Volume 45, 2311-2323.

Wilson R.C.L.; Manatschal G.; Wisw S. Rifting along non-volcanic passive margins: stratigraphic and seismic evidence from the Mesozoic successions of the Alps and western Iberia. Geological Society, London, Special Publications 2001, Volume 187, 429-452.

Zoppi, U., Skopec, Z., Skopec, J., Jones, G., Fink, D., Hua, Q., Jacobsen, G., Tuniz, C., and Williams, A. Forensic applications of ^{14}C bomb-pulse dating. Nucl. Inst. Meth. Phys. Res. B., 2004, 223–224, 770–775.

