

ELENCO DELLE PUBBLICAZIONI DI BERNARDO CESARE

(<http://www.eurispet.eu/bernardo/papers.html>)

Lavori Scientifici Pubblicati:

1. Cesare B., Martin S. e Zaggia L. (1989): "Mantle peridotites from the Austroalpine Mont Mary nappe (Western Alps)", *Schweizerische Mineralogische and Petrographische Mitteilungen*, vol. 69, pp. 61-69.
2. Canepa M., Castelletto M., Cesare B., Martin S. e Zaggia L. (1990): "The Austroalpine Mont Mary nappe (Italian Western Alps)", *Memorie di Scienze Geologiche*, vol. 42, pp. 1-17.
3. Cesare B. (1992) Metamorfismo di contatto di rocce pelitiche nell'aureola di Vedrette di Ries (Alpi Orientali, Italia). *Atti Ticinensi di Scienze della Terra*, 35; 1-7.
4. Cesare B. (1992) Contact metamorphism of pelitic rocks in the aureole of the Vedrette di Ries intrusion (eastern Alps - Italy) Riassunto Tesi di Dottorato, *Plinius* (Suppl. It. European Journal of Mineralogy), 7, 37-42
5. Connolly J. and Cesare B. (1993) C-O-H-S fluid composition and oxygen fugacity in graphitic metapelites. *Journal of Metamorphic Geology*, 11, 379-388.
6. Cesare B. (1994) Hercynite as the product of staurolite decomposition in the contact aureole of Vedrette di Ries, eastern Alps, Italy. *Contributions to Mineralogy and Petrology*, 116, 239-246.
7. Cesare B. (1994) Synmetamorphic veining: origin of andalusite-bearing veins in the Vedrette di Ries contact aureole, Eastern Alps, Italy. *Journal of Metamorphic Geology*, 12, 643-653.
8. Cesare B. and Grobety B. (1995) Epitaxial replacement of kyanite by staurolite: a TEM study of the microstructures. *American Mineralogist*, 95, 78-86.
9. Cesare B. Hollister L.S. (1995) Andalusite-bearing veins at Vedrette di Ries (Eastern Alps - Italy): fluid phase composition based on fluid inclusions. *Journal of Metamorphic Geology*, 13, 687-700.
10. Cesare B. (1995) Graphite precipitation within C-O-H fluid inclusions: closed-system chemical and density changes, and thermobarometric implications. *Contributions to Mineralogy and Petrology*, 122, 25-33.
11. Cesare B., Salvioli Mariani E., Venturelli G. (1997) Crustal anatexis and melt extraction in the restitic xenoliths at El Joyazo (SE Spain). *Mineralogical Magazine*, 61, 15-27.
12. Pennacchioni G. Cesare B. (1997) Ductile-brittle transition in pre-Alpine amphibolite facies mylonites during evolution from water-present to water-deficient conditions (Mont Mary nappe, Italian Western Alps). *Journal of Metamorphic Geology*, 15, 777-791.
13. Cesare B. Maineri C. (1999) Fluid-present anatexis of metapelites at El Joyazo (SE Spain): constraints from raman spectroscopy of graphite. *Contributions to Mineralogy and Petrology*, 135, 41-52.
14. Cesare B. (1999) Multi-Stage pseudomorphic replacement of garnet during polymetamorphism: Microstructures and their interpretation. *Journal of Metamorphic Geology*, 17, 723-734.
15. Cesare B. (1999) Multi-Stage pseudomorphic replacement of garnet during polymetamorphism: 2. algebraic analysis of mineral assemblages. *Journal of Metamorphic Geology*, 17, 735-746.
16. Cesare B. (2000) Incongruent melting of biotite to spinel in a quartz-free restite at El Joyazo (SE Spain): Textures and reaction characterization. *Contributions to Mineralogy and Petrology*, 139: 273-284.
17. Cesare B. Gomez-Pugnaire M.T. (2001) Crustal melting in the Alborán domain: constraints from the xenoliths of the Neogene Volcanic Province. *Physics and Chemistry of the Earth, Part A*, 26/4-5, 255-260.
18. Cesare B., Poletti E., Boiron M-C. Cathelineau M. (2001) Alpine metamorphism and veining in the Zentralgneis Complex of the SW Tauern Window: a model of fluid-rock interactions based on fluid inclusions. *Tectonophysics*, 336, 121-136.
19. Cesare B. Rubatto D., Hermann J. Barzi L. (2002) Evidence for Late Carboniferous subduction-type magmatism in mafic-ultramafic cumulates of the SW Tauern Window (Eastern Alps). *Contributions to Mineralogy and Petrology*, 142, 449-464.
20. Cesare B. Marchesi C. Connolly J.A.D. (2002) Growth of myrmekite coronas by contact metamorphism of granitic mylonites in the aureole of Cima di Vila (eastern Alps - Italy). *Journal of Metamorphic Geology*, 20, 203-213.
21. Cesare B., Gomez-Pugnaire M.T., Sanchez-Navas A. Grobety B. (2002) Andalusite - sillimanite replacement (Mazarrón - SE Spain): microstructural and TEM study. *American Mineralogist*, 87, 433-444.
22. Cesare B., Cruciani G. and Russo U. (2003) Hydrogen deficiency in titanium-rich biotite from anatectic metapelites (El Joyazo - SE Spain): implications for high-temperature petrogenesis *American Mineralogist*, 88, 583-595.
23. Cesare B., Marchesi C., Hermann J. and Gomez-Pugnaire M.T. (2003) Primary melt inclusions in andalusite from anatectic graphitic metapelites: Implications for the position of the Al_2SiO_5 triple point. *Geology*, 31, 7, 573-576.
24. Cesare B., Gomez-Pugnaire M.T., Rubatto D. (2003) Residence time of S-type anatectic magmas beneath the Neogene Volcanic Province of SE Spain: a zircon and monazite SHRIMP study. *Contributions to Mineralogy and Petrology*, 146: 28-43.
25. Burlini L.; Cesare B.; Mazzoli C.; Meli S.; Peruzzo L.; Sassi R.; Spiess R.; Sassi F.P. (2003). Standardized operational

procedures for the project "Composition and evolution of the continental crust, with special regard to the Italian crystalline basements". In F.P. Sassi (Ed.) The abundance of 55 elements and petrovolumetric models of the crust in 9 type areas from the crystalline basements of Italy, with some geophysical and petrophysical data. *Accademia Nazionale delle Scienze detta dei XL, Scritti e Documenti*, vol. 32 pp. 23-34.

26. Mazzoli C.; Sassi R.; Burlini L.; Cesare B.; Peruzzo L.; Spiess R.; Sassi F.P. (2003). The abundance of 55 elements and petrovolumetric models of the crust in the Aurina and Pusteria valleys (site 4). In F.P. Sassi (Ed.) The abundance of 55 elements and petrovolumetric models of the crust in 9 type areas from the crystalline basements of Italy, with some geophysical and petrophysical data. *Accademia Nazionale delle Scienze detta dei XL, Scritti e Documenti*, vol. 32 pp. 197-251.
27. Sassi F.P., Cesare B., Mazzoli C., Peruzzo L., Sassi R. and Spiess R. (2004) The crystalline basements of the Italian eastern Alps: a review of the metamorphic features. *Periodico di Mineralogia*, vol. 73, 23-42.
28. Frezzotti M.L., Cesare B. and Scambelluri M. (2004) Fluids at extreme P-T metamorphic conditions: the message from high-grade rocks. *Periodico di Mineralogia*, vol. 73, 209-219.
29. Clarke, D.B., Dorais, M., Barbarin, B., Barker, D., Cesare, B., et al. (2005) Occurrence and Origin of Andalusite in Peraluminous Felsic Igneous Rocks. *Journal of Petrology*, 46, 441-472.
30. Cesare B., Meli S., Nodari L., Russo U. (2005) Fe^{3+} reduction during biotite melting in graphitic metapelites: another origin of CO_2 in granulites. *Contributions to Mineralogy and Petrology*, 149, 129-140.
31. Alvarez-Valero A.M., Cesare B., Kriegsman L. (2005) Formation of elliptical garnets in a metapelitic enclave by melt-assisted dissolution and reprecipitation. *Journal of Metamorphic Geology*, 23, 65-74.
32. Tarolli, P., Borga, M., Cesare, B., Zanon, F., Tollardo, M., Macconi P.P. (2006) Innesco di frane superficiali durante eventi di precipitazione brevi ed intensi in zone alpine. *Quaderni di Idronomia Montana*, 26, 95-112.
33. Cesare B., Maineri C., Baron Toaldo A., Pedron D. and Acosta Vigil A. (2007) Immiscibility between carbonic fluids and granitic melts during crustal anatexis: a fluid and melt inclusion study in the enclaves of the Neogene Volcanic Province of SE Spain. *Chemical Geology*, 237, 433-449.
34. Acosta-Vigil A., Cesare B., London D., Morgan G.B.VI (2007) Microstructures and composition of melt inclusions in a crustal anatexis environment: the metapelitic enclaves within El Hoyazo dacites, SE Spain. *Chemical Geology*, 237, 450-465.
35. Ferri, F., Burlini, L., Cesare, B., Sassi R. (2007) Seismic properties of lower crustal xenoliths from El Hoyazo (SE Spain): experimental evidence up to partial melting. *Earth and Planetary Science Letters*, 253; 239-253.
36. Alvarez-Valero A.M., Cesare B., Kriegsman L. (2007) Formation of spinel-cordierite-feldspars-glass coronas after garnet in metapelitic xenoliths. Reaction modelling and geodynamic implications. *Journal of Metamorphic Geology*, 25, 305-320.
37. Cesare, B., Satish-Kumar, M., Cruciani, G., Pocker, S., Nodari (2008) Mineral chemistry of Ti-rich biotite from pegmatite and metapelitic granulites of the Kerala Khondalite Belt (SE India): Petrology and further insight into titanium substitutions. *American Mineralogist*, 93, 327-338
38. Cesare B. (2008) Crustal melting: working with enclaves. *Mineralogical Association of Canada Short Course* 38, Quebec City, Quebec, p. 37-55.
39. Acosta-Vigil, A., Buick, I., Hermann, J., Cesare, B. and Rubatto D. (2008) Mechanisms and kinetics of crustal anatexis from a LA-ICP-MS study of partially melted metapelitic enclaves and host El Hoyazo dacite, SE Spain. *Geotemas*, 10, 1369-1372. (ISSN: 1567-5172)
40. Cesare B., Rubatto D., Gómez-Pugnaire M.T. (2009) Do extrusion ages reflect magma generation processes at depth? An example from SE Spain. *Contributions to Mineralogy and Petrology*, 157, 267-279.
41. Perini G., Cesare B., Gómez-Pugnaire M.T., Ghezzi, S., Tommasini S. (2009) Armouring effect in decoupling Sr-Nd isotopes during disequilibrium crustal melting: the case study of frozen migmatites from El Hoyazo and Mazarrón, SE Spain. *European Journal of Mineralogy*, 21, 117-131.
42. Tajcmanova L., Connolly JAD, Cesare B. (2009) A thermodynamic model for titanium and ferric iron solution in biotite. *Journal of Metamorphic Geology*, 27, 153-165
43. Lavina B., Cesare B., Álvarez-Valero A.M., Uchida H., Downs R.T., Koneva A., Dera P. (2009) Closure temperatures of intracrystalline ordering in anatexis and metamorphic hercynite, $\text{Fe}^{2+}\text{Al}_2\text{O}_4$. *American Mineralogist*, 94, 657-665.
44. Cesare B., Ferrero S., Salvioli-Mariani E., Pedron D. e Cavallo A. (2009) Nanogranite and glassy inclusions: the anatexis melt in migmatites and granulites. *Geology*, 37, 627-630.
45. Della Ventura G., Bellatreccia F., Cesare B., Harley S. and Piccinini M. (2009) FTIR microspectroscopy and SIMS study of water-poor cordierite from El Hoyazo, Spain: Application to mineral and melt devolatilization. *Lithos*, 113, 498-506.
46. Spiess, R., Cesare, B., Mazzoli C. e Sassi R. (2009) The crystalline basement of the Adria micro-plate. *Rendiconti online Soc. Geol. It.*, 9, 60-63.

47. Cesare, B., Mazzoli C., Sassi, R., Spiess R. e Sassi F.P. (2009) Petrogenetic processes in the middle crust of the Eastern Alps. *Rendiconti online Soc. Geol. It.*, 9, 18-20.
48. Acosta-Vigil A., Buick I., Hermann J., Cesare B., Rubatto D., London D., Morgan VI G.B. (2010) Mechanisms of Crustal Anatexis: a Geochemical Study of Partially Melted Metapelitic Enclaves and Host Dacite, SE Spain. *Journal of Petrology*, 51, 785-821.
49. Cesare, B., Mazzoli C., Sassi, R., Spiess R. e Sassi F.P. (2010) Beauty and complexity of metamorphism: case studies from the frontal part of the Adria Micro-plate. *Rendiconti Lincei*, 21, S73-S94.
50. Spiess, R., Cesare, B., Mazzoli C., Sassi R. e Sassi F.P. (2010) The crystalline basement of the Adria micro-plate in the Eastern Alps: a review of the palaeostructural evolution from the Neoproterozoic to the Cenozoic. *Rendiconti Lincei*, 21, S31-S50.
51. Cesare, B. and Acosta-Vigil, A. (2011) Using melt inclusions for understanding crustal melting processes. *McGraw-Hill Yearbook of Science & Technology*, 355-359.
52. Ferrero S., Bodnar R.J., Cesare B., Viti C. (2011) Re-equilibration of primary fluid inclusions in peritectic garnet from metapelitic enclaves, El Hoyazo, Spain. *Lithos*, 124, 117-131.
53. Cesare, B., Acosta-Vigil, A., Ferrero, S. and Bartoli, O. (2011) Melt inclusions in migmatites and granulites. In: (Eds.) Marnie A. Forster, and John D. Fitz Gerald, The Science of Microstructure - Part II, *Journal of the Virtual Explorer*, Electronic Edition, ISSN 1441-8142, volume 40, paper2.
54. Satish-Kumar M., Yurimoto H., Itoh S., Cesare B. (2011) Carbon isotope anatomy of a single graphite crystal in a metapelitic migmatite revealed by high-resolution SIMS analysis. *Contributions to Mineralogy and Petrology*, , 162, 821-834.
55. Holness, M.B., Cesare, B. & Sawyer, E.W. (2011) Melted rocks under the microscope: microstructures and their interpretation. *Elements*, 7, 245-250.
56. Sawyer, E.W., Cesare, B. & Brown M. (2011) When the continental crust melts. *Elements*, 7, 227-232.
57. Ferrero, S., Bartoli, O., Cesare, B., Salvioli-Mariani, E., Acosta-Vigil, A., Cavallo, A., Groppo, C. & Battiston, S. (2012) Microstructures of melt inclusions in anatectic metasedimentary rocks. *Journal of Metamorphic Geology*, 30, 303-322.
58. Acosta-Vigil A., Buick I., Cesare B., London D., Morgan VI G.B. (2012) The extent of equilibration between melt and residuum during regional anatexis and its implications for differentiation of the continental crust: a study of partially melted metapelitic enclaves. *Journal of Petrology*, 53, 1319-1356.
59. Bartoli, O., Cesare, B., Poli, S., Bodnar, R.J., Acosta-Vigil, A., Frezzotti, M.L. and Meli S. (2013) Recovering the composition of melt and the fluid regime at the onset of crustal anatexis and S-type granite formation. *Geology*, 41: 115-118.
60. Ferri F., Gibert B., Violay M. and Cesare B. (2013) Electrical conductivity in a partially molten crust from measurements on metasedimentary enclaves. *Tectonophysics*, 586:84 – 94.
61. Bartoli, O., Cesare, B., Poli, S., Acosta-Vigil, A., Esposito R., Turina A., Bodnar, R.J., Angel R.J., Hunter J. (2013) Nanogranite inclusions in migmatitic garnet: behavior during piston-cylinder remelting experiments. *Geofluids* 13, 405-420
62. Bartoli, O., Tajčmanová L., Cesare, B., Acosta-Vigil, A. (2013) Phase equilibria constraints on melting of stromatic migmatites from Ronda (S Spain): insights on the formation of peritectic garnet. *Journal of Metamorphic Geology*, 31, 775-789.
63. Ferrero, S., Braga, R., Berkesi, M., Cesare, B. and Laridhi Ouazaa N. (2014) Production of metaluminous melt during fluid-present anatexis of the Maghrebien basement (La Galite Archipelago – Central Mediterranean. *Journal of Metamorphic Geology*, 32, 229-225.
64. Bartoli O., Cesare B., Remusat L., Acosta-Vigil A. and Poli S. (2014) The H₂O content of granite embryos. *EPSL*, 395, 281-290.
65. Barich A., Acosta-Vigil A., Garrido C.J., Cesare B., Tajcmanova L., Bartoli O. (2014) Microstructures and petrology of melt inclusions in the anatectic sequence of Jubrique (Betic Cordillera, S Spain): Implications for crustal anatexis. *Lithos*, 206-207; 303-320.
66. Acosta-Vigil A., Rubatto D., Bartoli O., Cesare B., Meli S., Pedrera A., Azor A., Tajcmanova L. (2014) Age of anatexis in the crustal footwall of the Ronda peridotites, S Spain. *Lithos* 210-211; 147-167.
67. Moore S.J., Cesare B. and Carlson W.D. (2015) Epitaxial nucleation of garnet on biotite in the polymetamorphic metapelites surrounding the Vedrette di Ries intrusion (Italian Eastern Alps). *European Journal of Mineralogy*, 27; 5-18.
68. Carosi R., Montomoli C., Langone A., Turina A., Cesare B., Iaccarino S., Fascioli L., Visonà D., Ronchi A., Man Rai S. (2015) Eocene partial melting recorded in peritectic garnets from kyanite-gneiss, Greater Himalayan Sequence, central Nepal. In: Mukherjee, S., Carosi, R., van der Beek, P. A., Mukherjee, B. K. & Robinson, D. M. (eds): Tectonics of the Himalaya. *Geological Society, London, Special Publications*, 412, 111–129.

69. Cesare B., Acosta-Vigil A., Bartoli O., Ferrero S. (2015) What can we learn from melt inclusions in migmatites and granulites? *Lithos*, 239, 186-216.
70. Bartoli O., Cesare B., Acosta-Vigil A. (2015) High-temperature metamorphism and crustal melting: working with melt inclusions. *Periodico di Mineralogia*, 84, 591-614
71. Ridolfi F., Braga R., Cesare B., Renzulli A., Perugini D., Del Moro S. (2016) Unravelling the complex interaction between mantle and crustal magmas encoded in the lavas of San Vincenzo (Tuscany, Italy). Part I: Petrography and Thermobarometry. *Lithos*, 244, 218-232
72. Ridolfi F., Braga R., Cesare B., Renzulli A., Perugini D., Del Moro S. (2016) Unravelling the complex interaction between mantle and crustal magmas encoded in the lavas of San Vincenzo (Tuscany, Italy). Part II: Geochemical Overview and Modelling. *Lithos*, 244, 233-249
73. Ferri F., Burlini L., Cesare B. (2016) Effect of partial melting on V_p and V_s in crustal enclaves from Mazarrón (SE Spain). *Tectonophysics*, 671, 139–150
74. Bartoli O., Acosta-Vigil A., Ferrero S., Cesare B. (2016) Granitoid magmas preserved as melt inclusions in high-grade metamorphic rocks. *American Mineralogist*, in press.
75. Acosta-Vigil A., Barich A., Bartoli O., Garrido C.J., Cesare B., Remusat L., Poli S., Raepsaet C. (2016) The composition of nanogranitoids in migmatites overlying the Ronda peridotites (Betic Cordillera, S Spain): the anatexis history of a polymetamorphic basement. *Contrib. Mineral. Petrol*, in press

Submitted

Bartoli O., Acosta-Vigil A., Tajčmanová L., Cesare B. (submitted) Crustal emplacement of the largest exposure of subcontinental lithospheric mantle: new constraints from melt inclusions and phase equilibria in migmatites beneath Ronda peridotites (Betic Cordillera, S Spain). *Lithos*,

Editing di Volumi

Sassi F.P., Cesare B., Mazzoli C., Peruzzo L., Rizzo G., Sassi R. and Spiess R. (Editors) The abundance of 55 elements and petrovolumetric models of the crust in 9 type areas from the crystalline basements of Italy, with some geophysical and petrophysical data. Accademia Nazionale delle Scienze detta dei XL, Scritti e Documenti. (vol. 32), 463 pp. (2003)

Castelli D. and Cesare B. (Eds.) A showcase of the Italian research in metamorphic petrology. Special issue di Periodico di Mineralogia, vol. 73 (2), 271 pp. (2004)

Sawyer, E.W., Cesare, B. & Brown M. (Editors) When the continental crust melts. *Elements*, (vol. 7, August 2011).

Field Trip Guides

Cesare B., Fioretti A. and Rosenberg C. (2004) The periadriatic intrusion of Vedrette di Ries - Rieserferner (eastern Alps): petrology, emplacement mechanisms and contact aureole. 32nd IGC, B17 Field Trip Guide Book. Published by APAT – Italian Agency for the Environmental Protection and Technical Services - Via Vitaliano Brancati, 48 - 00144 Roma – Italy, 36pp.

Guide e Carte Geologiche:

Cesare B., Mazzoli C., Meli S., Peruzzo L., Sassi R., Spiess R. e Zane A. (1997) Carta dei Basamenti Cristallini della Provincia di Bolzano alla scala 1:50.000

Cesare B., Fioretti A.M., Rosenberg C. (2004) The periadriatic intrusion of Vedrette di Ries - Rieserferner (eastern Alps): petrology, emplacement mechanism and contact aureole. B17 Field Trip Guide, International Geological Congress, Florence.

Peloso L., Cesare B. (2008) Vedrette di Ries - Magmatismo, metamorfismo e morfologia glaciale in un itinerario di alta quota. Agenda del Comitato Scientifico C.A.I., mese di Settembre. 14 pp.

Cesare B., Keim L., Mair V., Mazzoli C., Meneghel M., Moretti A., Peruzzo L., Sassi R. & Spiess R. (in stampa) Note illustrative della Carta Geologica d'Italia alla scala 1:50.000 Foglio 009 - Anterselva.

Cesare B., Peloso L. (2010) Vedrette di Ries - Un anello tra rocce magmatiche, metamorfiche e ghiacciai. *Via Gealpina*, in stampa

Tesi di Dottorato

Cesare B. (1992) Metamorfismo di contatto di rocce pelitiche nell'aureola di Vedrette di Ries (Alpi Orientali, Italia). Tesi per il conseguimento del titolo di Dottorato in Scienze della Terra (IV Ciclo), 106 pp.

Testi di Seminari:

- Connolly J. and Cesare B. (1993) Phase diagrams for graphitic rocks. VII Summer School on Earth and Planetary Sciences "Quantitative phase diagram applications in earth material sciences". Siena, Novembre 1993 Lecture Notes, 25 pp.
- Cesare B. (1997) Minerogenesi Metamorfica, II. Il metamorfismo di contatto. Scuola di Mineralogia "La minerogenesi". Appunti delle Lezioni, Ponza, 16-20/6/1997. 182-192.
- Cesare B. (1998) Anatessi crostale e genesi di magmi granitici: evidenze negli xenoliti metapelitici di El Joyazo (Spagna Meridionale). 2^a Scuola del Gruppo Nazionale di Petrografia "Metodologie e modellizzazioni nella moderna petrologia Magmatica" Asiago, 15-19/6
- Cesare B. (1998) Gas e fluidi sopracritici in ambienti naturali e sperimentali. 3^a Scuola del Gruppo Nazionale di Petrografia "Processi subsolidus nelle rocce e nei materiali", Pavia, 14-18/10