

1. DEGANELLO S., ARTIOLI G.: Thermal expansion of cesanite between 22-390 °C. *Neues Jahrb. Mineral. Monatsh.* **12**, 565-568, 1982.
2. ANDERSON A.T., SWIHART G.H., ARTIOLI G., GEIGER C.A.: Segregation vesicles, gas filter-pressing, and igneous differentiation. *J. Geol.* **92**, 55-72, 1984.
3. SMITH J.V., PLUTH J.J., ARTIOLI G., ROSS F.K.: Neutron and x-ray refinements of scolecite. *Proc. 6th Int. Zeolite Conf.*, Reno, Nevada, 1983; Olson D. and Bisio A. eds., Butterworth, Guildford, UK, 842-850, 1984.
4. ARTIOLI G., PLUTH J.J., SMITH J.V.: Synthetic phosphorus-substituted analcime, with ordered aluminum and silicon/phosphorus. *Acta Cryst.* **C40**, 214-217, 1984.
5. ARTIOLI G., SMITH J.V., KVICK Å.: Neutron diffraction study of natrolite, Na<sub>2</sub>Al<sub>2</sub>Si<sub>3</sub>O<sub>10</sub>·2H<sub>2</sub>O, at 20 K. *Acta Cryst.* **C40**, 1658-1662, 1984.
6. BENNET J.M., COHEN J.M., ARTIOLI G., PLUTH J.J., SMITH J.V.: Crystal structure of AlPO<sub>4</sub>-21, a framework aluminophosphate containing tetrahedral phosphorus and both tetrahedral and trigonal-bipyramidal aluminum in 3-, 4-, 5-, and 8- rings. *Inorg. Chem.* **24**, 188-193, 1985.
7. ARTIOLI G., SMITH J.V., KVICK Å.: Multiple hydrogen positions in the zeolite brewsterite, (Sr<sub>0.95</sub>Ba<sub>0.05</sub>)Al<sub>2</sub>Si<sub>6</sub>O<sub>16</sub>·5H<sub>2</sub>O. *Acta Cryst.* **C41**, 492-497, 1985.
8. ARTIOLI G., SMITH J.V., PLUTH J.J., KVICK Å., STÅHL K.: Neutron diffraction studies of the hydrogen bonding and water molecules in zeolites. In: Držaj B., Hočevar S. and Pejovnik S. (eds.), *Proc. Int. Symp. on Zeolites*, Portoroz, Yugoslavia, 1984. Studies in Surface Science and Catalysis, Elsevier, Vol. 24, 249-254, 1985. ISSN 0167-2991, ISBN 9780444425683, DOI: 10.1016/S0167-2991(08)65289-1
9. KVICK Å., ARTIOLI G., SMITH J.V.: Neutron diffraction study of the zeolite yugawaralite at 13 K. *Zeit. Krist.* **174**, 265-281, 1986.
10. SMITH J.V., ARTIOLI G., KVICK Å.: Low albite, NaAlSi<sub>3</sub>O<sub>8</sub>: neutron diffraction study of crystal structure at 13 K. *Amer. Miner.* **71**, 727-733, 1986.
11. ARTIOLI G., SMITH J.V., PLUTH J.J.: X-ray structure refinement of mesolite, Na<sub>2</sub>Ca<sub>2</sub>Al<sub>6</sub>Si<sub>9</sub>O<sub>80</sub>·8H<sub>2</sub>O. *Acta Cryst.* **C42**, 937-942, 1986.
12. ARTIOLI G., RINALDI R., KVICK Å., SMITH J.V.: Neutron diffraction structure refinement of the zeolite gismondine at 15 K. *Zeolites* **6**, 361-366, 1986.
13. SMYTH J.R., SMITH J.V., ARTIOLI G., KVICK Å.: Crystal structure of coesite, a high pressure form of SiO<sub>2</sub>, at 15 and 298 K from single-crystal neutron and x-ray diffraction data: test of bonding models. *J. Phys. Chem.* **91**, 988-992, 1987.
14. ARTIOLI G.: Zeolites. Structure and applications. Workshop on "Industrial Minerals: their use and technologies". *Quaderni di Castel Ivano*, **1**, 37-48, 1989.
15. ARTIOLI G., SMITH J.V., KVICK Å.: Single crystal neutron diffraction study of partially dehydrated laumontite at 15 K. *Zeolites* **9**, 377-391, 1989.
16. ARTIOLI G., ALBERTI G., CAGOSSI G., DAVOLI G., MOLESINI M.: I minerali secondari di alcuni giacimenti a solfuri della zona di Ivrea-Verbanò. *Riv. Min. Ital.* **2**, 75-81, 1990.
17. ARTIOLI G.: Diffrazione neutronica da monocristalli. Scuola su "La diffrattometria nell'analisi strutturale: introduzione ai metodi sperimentali". Associazione Italiana di Cristallografia, Perugia, 1990.
18. ARTIOLI G., KVICK Å.: Synchrotron x-ray Rietveld study of perialite, the natural counterpart of synthetic zeolite-L. *Eur. J. Miner.* **2**, 749-759, 1990.
19. ARTIOLI G.: Diffrattometria di campioni policristallini con luce di sincrotrone. *Atti 1ª Scuola Nazionale di Luce di Sincrotrone e Ricerca Chimica*, S. Margherita di Pula, Cagliari, 1990; G. Vlaic ed., CNR, Roma, 197-203, 1991.
20. ARTIOLI G., ALBERTI G., CAGOSSI G., BELLOTTO M.: Quantitative determination of crystalline and amorphous component in clinoptilolite-rich rocks by Rietveld analysis of X-ray powder diffraction profiles. *Atti 1ª Convegno Italiano di Scienza e Tecnologia delle Zeoliti*, L'Aquila, 1991; C. Colella ed., De Frede, Napoli, 261-270, 1991.
21. VEZZALINI G., ARTIOLI G., QUARTIERI S.: The crystal chemistry of cowlesites. *Atti 1ª Convegno Italiano di Scienza e Tecnologia delle Zeoliti*, L'Aquila, 1991; C. Colella ed., De Frede, Napoli, 91-96, 1991.
22. ARTIOLI G., SACCHI M., BALERNA A., BURATTINI E., SIMEONI S.: XANES studies of Fe in pumpellyite-group minerals. *Neues Jahrb. Mineral. Monatsh.* **9**, 413-421, 1991.
23. ARTIOLI G., TORRES SALVADOR M.R.: Characterization of the natural zeolite gonnardite. Structure analysis of natural and cation exchanged species by the Rietveld method. *Mater. Sci. Forum* **79-82**, part 2, 845-850, 1991.
24. ARTIOLI G.: The crystal structure of garronite. *Amer. Miner.* **77**, 189-196, 1992.
25. ARTIOLI G.: Luce di sincrotrone. *Scuola di mineralogia sperimentale*. Gruppo Nazionale di Mineralogia, Assisi, 1992.
26. ARTIOLI G.: Diffrazione di materiali policristallini. *Atti 2ª Scuola Nazionale di Luce di Sincrotrone e Ricerca Chimica*, S. Margherita di Pula, Cagliari, 1992; G. Vlaic ed., CNR, Roma, 1992.
27. VEZZALINI G., ARTIOLI G., QUARTIERI S., FOY H.R.: The crystal chemistry of cowlesite. *Miner. Mag.* **56**, 575-579, 1992.
28. SIGHINOLFI G.P., SARTONO S., ARTIOLI G.: Chemical and mineralogical studies on hominid remains from Sangiran, Central Java (Indonesia). *J. Human Evolution* **24**, 57-68, 1993.
29. QUARTIERI S., ANTONIOLI G., LOTTICI P.P., ARTIOLI G.: X-ray absorption study at Fe K-edge in garnets from Ivrea-Verbanò zone. *Miner. Mag.* **57**, 249-256, 1993.
30. ARTIOLI G., STÅHL K.: Fully hydrated laumontite: a structure study by flat-plate and capillary powder diffraction techniques. *Zeolites* **13**, 249-255, 1993.

31. FAYOS J., ARTIOLI G., TORRES R.: Packing analysis of racket-like molecules: C<sub>6</sub>H<sub>5</sub>MX (M=metal, X=Cl,Br,I). Crystal structure determination of microcrystalline C<sub>6</sub>H<sub>5</sub>HgCl by XRD. *J. Cryst. Spect. Res.* **23**, 595-600, 1993.
32. ARTIOLI G., GALLI E., FERRARI M.: Acido urico biidrato: un nuovo minerale? *Riv. Miner. It.* **4**, 261-264, 1993.
33. ARTIOLI G., RINALDI R., STÄHL K., ZANAZZI P.F.: Structure refinement of natural beryls by single crystal neutron and X-ray diffraction. *Amer. Miner.* **78**, 762-768, 1993.
34. STÄHL K., ARTIOLI G.: A neutron powder diffraction study of fully deuterated laumontite. *Eur. J. Miner.* **5**, 851-856, 1993.
35. QUARTIERI S., ANTONIOLI G., ARTIOLI G., LOTTICI P.P.: XANES study of titanium coordination in natural diopsidic pyroxenes. *Eur. J. Miner.* **5**, 1101-1109, 1993.
36. QUARTIERI S., ARTIOLI G., DERIU A., LOTTICI P.P., ANTONIOLI G.: <sup>57</sup>Fe-Mössbauer investigation on garnets from Ivrea-Verbano zone. *Miner. Mag.* **57**, 671-676, 1993.
37. ARTIOLI G., GEIGER C.A.: The crystal chemistry of pumpellyite: an X-ray Rietveld refinement and <sup>57</sup>Fe Mössbauer study. *Phys. Chem. Miner.* **20**, 443-453, 1994.
38. ARTIOLI G.: Simulazione di strutture a strati. *Atti della III Edizione delle Giornate di Studio sulla Diffrazione a Raggi X da Materiali Policristallini*, Trento, 1994; P. Scardi ed., Trento, 189-208, 1994.
39. ARTIOLI G., BELLOTTO M., PALOSZ B.: High temperature in situ Rietveld study of Fe,Mg partitioning in olivine. *Powder Diffraction* **9**, 63-74, 1994.
40. ARTIOLI G., GUALTIERI A.: Trasformazioni di fase e cinetiche di reazione. Scuola di mineralogia su *Le reazioni mineralogiche: aspetti chimico-fisici*. Gruppo Nazionale di Mineralogia, Grado, 1994.
41. ARTIOLI G., GALLI E., BURATTINI E., CAPPUCCIO G., SIMEONI S.: Palygorskite from Bolca, Italy: a characterization by high-resolution synchrotron radiation powder diffraction and computer modeling. *Neues Jahrb. Miner. Mon.* **5**, 217-229, 1994.
42. GUALTIERI A., ARTIOLI G., BELLOTTO M., CLARK S.M., PALOSZ B.: High temperature phase transition of muscovite-2M<sub>1</sub>: angle and energy dispersive powder diffraction studies. *Mat. Sci. Forum* **166-169**, 547-552, 1994.
43. ARTIOLI G., GALLI E.: The crystal structures of orthorhombic and monoclinic palygorskite. *Mat. Sci. Forum* **166-169**, 647-652, 1994.
44. ARTIOLI G., FOY H.J.: Gobbinsite from Magheramorne Quarry, Northern Ireland. *Miner. Mag.* **58**, 615-620, 1994.
45. ARTIOLI G., DAVOLI G.: Low-Ca pyroxenes from LL group chondritic meteorites: crystal structural studies and implications for their thermal histories. *Earth Planet. Sci. Lett.* **128**, 469-478, 1994.
46. MERLINO S., PASERO M., ARTIOLI G., KHOMYAKOV A.P.: Penkvilksite, a new silicate structure: OD character, X-ray single crystal (1M) and powder Rietveld (2O) refinements of two MDO polytypes. *Amer. Miner.* **79**, 1185-1193, 1994.
47. ARTIOLI G., RINALDI R., WILSON C.C., ZANAZZI P.F.: High temperature Fe/Mg cation partitioning in olivine: in situ single crystal neutron diffraction study. *Amer. Miner.* **80**, 197-200, 1995.
48. ARTIOLI G.: Developments of XRPD in Mineralogy. In: Masciocchi N., Artioli G. (eds.) "Il contributo della diffrazione a polveri alla cristallografia strutturale: tecniche Rietveld ed ab-initio". *Ric. Sci. Educ. Perm.* **98**, 223-238, 1995.
49. PASSAGLIA E., ARTIOLI G., GUALTIERI A., CARNEVALI R.: Diagenetic mordenite from Ponza, Italy. *Eur. J. Miner.* **7**, 429-438, 1995.
50. ARTIOLI G., QUARTIERI S., DERIU A.: Spectroscopic studies of coexisting prehnite-pumpellyite and epidote-pumpellyite. *Can. Miner.* **33**, 67-75, 1995.
51. BELLOTTO M., GUALTIERI A., ARTIOLI G., CLARK S.M.: Kinetic study of the kaolinite-mullite reaction sequence. Part I: kaolinite dehydroxylation. *Phys. Chem. Minerals* **22**, 207-214, 1995.
52. GUALTIERI A., BELLOTTO M., ARTIOLI G., CLARK S.M.: Kinetic study of the kaolinite-mullite reaction sequence. Part II: mullite formation. *Phys. Chem. Minerals* **22**, 215-222, 1995.
53. PAVESE A., ARTIOLI G., PRENCIPE M.: X-ray single-crystal diffraction study of pyrope in the temperature range 30-973 K. *Amer. Miner.* **80**, 457-464, 1995.
54. ARTIOLI G.: Synchrotron X-ray diffraction techniques: Application to zeolites. *Natural Zeolites '93*, D.W. Ming and F.A. Mumpton eds., Int. Comm. Natural Zeolites, Brockport, 199-207, 1995.
55. ARTIOLI G., NORBY P.: Studi diffrattometrici di zeoliti con risoluzione temporale: verso una caratterizzazione strutturale delle trasformazioni di fase e delle cinetiche di reazione. *Bollettino Associazione Italiana Zeoliti* **5**, 10-26, 1995.
56. ARTIOLI G., CRUCIANI G.: Diffrazione da materiali policristallini con luce di sincrotrone. Applicazioni cristallografiche in ambienti condizionanti. *Atti 3ª Scuola Nazionale di Luce di Sincrotrone*, G. Vlaic ed., S. Margherita di Pula, Cagliari, 1995.
57. ARTIOLI G., RINALDI R., WILSON C.C., ZANAZZI P.F.: Single crystal pulsed neutron diffraction of a highly hydrous beryl. *Acta Cryst.* **B51**, 733-737, 1995.
58. ARTIOLI G., BELLOTTO M., GUALTIERI A., PAVESE A.: Nature of structural disorder in natural kaolinites: a new model based on computer simulation of powder diffraction data and electrostatic energy calculation. *Clays Clay Miner.* **43**, 438-445, 1995.
59. GUALTIERI A., ARTIOLI G.: Quantitative determination of chrysotile asbestos in bulk materials by combined Rietveld and RIR methods. *Powder Diffraction* **10**, 269-277, 1995.
60. ARTIOLI G., PAVESE A., MOZE O.: Dispersion relation of acoustic phonons in pyrope garnet: relationship between vibrational properties and elastic constants. *Amer. Miner.* **81**, 19-25, 1996.
61. ARTIOLI G., PAVESE A., BELLOTTO M., COLLINS S.P., LUCCHETTI G.: Mn crystal chemistry in pumpellyite: a resonant scattering powder Rietveld study using synchrotron radiation. *Amer. Miner.* **81**, 603-610, 1996.

62. STÄHL K., ARTIOLI G., HANSON J.C.: The dehydration process in the zeolite laumontite: a real-time synchrotron X-ray powder diffraction study. *Phys. Chem. Minerals* **23**, 328-336, 1996.
63. ARTIOLI G., STÄHL K., HANSON J.C.: The dehydration process in the natural zeolite laumontite: a real-time synchrotron X-ray powder diffraction study. *Mat. Sci. Forum* **228-231**, 369-374, 1996.
64. ARTIOLI G.: Diffrazione di neutroni da materiali policristallini. *Atti III Scuola di Diffrazione e Spettroscopia Neutronica*, Palau, Sassari, 1996; P.F. Ricci ed., Gruppo Nazionale di Struttura della Materia, Roma.
65. MASCIOCCHI N., ARTIOLI G.: Lattice parameters determination from powder diffraction data: Results from a round-robin project. *Powder Diffraction* **11**, 253-258, 1996.
66. ARTIOLI G., BESSON J.-M., DOVE M.T., GEIGER C.A., RINALDI R., SCHÄFER W.: Neutron scattering in the earth sciences. In: *Scientific Prospects for Neutron Scattering with Present and Future Sources*; European Science Foundation/European Neutron Scattering Association, 94-108, 1996.
67. PAVESE A., ARTIOLI G.: Profile fitting intergration of single crystal diffraction data. *Acta Cryst.* **A52**, 890-897, 1996.
68. GUALTIERI A., NORBY P., ARTIOLI G., HANSON J.C.: Kinetics of formation of zeolite Na-A [LTA] from natural kaolinities. *Phys. Chem. Minerals* **24**, 191-199, 1997.
69. QUARTIERI S., ANTONIOLI G., ARTIOLI G., GEIGER C.A., LOTTICI P.P.: Temperature dependence of disorder and correlation effects in almandine X-site: XAFS study and comparison with XRD data. *Phys. Chem. Minerals* **24**, 200-205, 1997. [69 bis] QUARTIERI S., ANTONIOLI G., ARTIOLI G., GEIGER C.A., LOTTICI P.P.: Temperature dependence of disorder and correlation effects in the almandine X-site. *J. Phys. IV France* **7**, 1157-1158, 1997.
70. GUALTIERI A., NORBY P., ARTIOLI G., HANSON J.C.: Kinetic study of hydroxysodalite formation by time-resolved synchrotron powder diffraction. *Microporous Mater.* **9**, 189-201, 1997.
71. ARTIOLI G., MASCIOCCHI N., GALLI E.: The elusive crystal structure of uric acid dihydrate: implication for epitaxial growth during biomineralization. *Acta Cryst.* **B53**, 498-503, 1997.
72. PROSERPIO D.M., ARTIOLI G., MULLEY S., CHACON G., ZHENG C.: Site differentiation by synchrotron radiation resonant scattering: case study of BaZn<sub>2</sub>Ge<sub>2</sub>. *Chem. Materials* **9**, 1463-1466, 1997.
73. CRUCIANI G., ARTIOLI G., GUALTIERI A., STÄHL K., HANSON J.C.: Dehydration dynamics of stilbite using synchrotron radiation powder diffraction. *Amer. Miner.* **82**, 729-739, 1997.
74. ARTIOLI G., PAVESE A., STÄHL K., McMULLAN R.K.: Single-crystal neutron-diffraction study of pyrope in the temperature range 30-1173 K. *Canadian Miner.* **35**, 1009-1019, 1997.
75. ARTIOLI G.: Utilizzo della luce di sincrotrone nelle Scienze della Terra. *Notiziario Neutroni e Luce di Sincrotrone* **2**, N. 2, 4-13, 1997.
76. ARTIOLI G.: In situ powder diffraction studies of temperature induced transformations in minerals. *Nucl. Instr. Meth. Phys. Res.* **B 133**, 45-49, 1997.
77. COOMBS D.S., ALBERTI A., ARMBRUSTER T., ARTIOLI G., COLELLA C., GALLI E., GRICE J.D., LIEBAU F., MANDARINO J.A., MINATO H., NICKEL E.H., PASSAGLIA E., PEACOR D.R., QUARTIERI S., RINALDI R., ROSS M., SHEPPARD R.A., TILLMANN S., VEZZALINI G.: Recommended nomenclature for zeolite minerals. Report of the Subcommittee on zeolites of the International Mineralogical Association, Commission on New Minerals and Mineral Names. *Can. Miner.* **35**, 1571-1606, 1997; *Eur. J. Miner.* **10**, 1037-1081, 1998; *Miner. Mag.* **62**, 533-571, 1998; *Amer. Miner.* **83**, 935, 1998; the report is also available on line at [http://www.minsocam.org/AmMin/Special\\_Features/SF.html](http://www.minsocam.org/AmMin/Special_Features/SF.html)
78. PAVESE A., ARTIOLI G., MOZE O.: Inelastic neutron scattering from pyrope powder: experimental data and theoretical calculations. *Eur. J. Miner.* **10**, 59-69, 1998.
79. PASSAGLIA E., ARTIOLI G., GUALTIERI A.: Crystal chemistry of the zeolites erionite and offretite. *Amer. Miner.* **83**, 577-589, 1998.
80. GUALTIERI A., ARTIOLI G., PASSAGLIA E., BIGI S., VIANI A., HANSON J.C.: Crystal structure-crystal chemistry relationship in the zeolites erionite and offretite. *Amer. Miner.* **83**, 590-606, 1998.
81. VIANI A., ARTIOLI G., BELLOTTO M.: Thermal expansion of C<sub>3</sub>S and Mg-doped alite. *Mat. Sci. Forum* **278-281**, 384-389, 1998.
82. LEVY D., ARTIOLI G.: Thermal expansion of chromites and zinc spinels. *Mat. Sci. Forum* **278-281**, 390-395, 1998.
83. MAZZUCATO E., ARTIOLI G., GUALTIERI A.: Dehydroxylation kinetics of muscovite-2M<sub>1</sub>. *Mat. Sci. Forum* **278-281**, 424-429, 1998.
84. ARTIOLI G., PAVESE A., LEVY D., RUSSO U., HOSER A.: Cation partitioning in (Mg<sub>0.70</sub>Fe<sub>0.23</sub>)Al<sub>1.97</sub>O<sub>4</sub> synthetic spinel by in situ neutron powder diffraction. *Mat. Sci. Forum* **278-281**, 692-697, 1998.
85. BELLOTTO M., ARTIOLI G., CRISTIANI C., FORZATTI P., GROPPI G.: On the crystal structure and cation valence of Mn-substituted Ba-β-Al<sub>2</sub>O<sub>3</sub>. *J. Catal.* **179**, 597-605, 1998.
86. PAVESE A., ARTIOLI G., RUSSO U., HOSER A.: Cation partitioning versus temperature in (Mg<sub>0.70</sub>Fe<sub>0.23</sub>)Al<sub>1.97</sub>O<sub>4</sub> synthetic spinel by in situ neutron powder diffraction. *Phys. Chem. Minerals* **26**, 242-250, 1999.
87. QUARTIERI S., ANTONIOLI G., GEIGER C.A., ARTIOLI G., LOTTICI P.P.: XAFS characterization of the structural site of Yb in synthetic pyrope and grossular garnets. *Phys. Chem. Minerals* **26**, 251-256, 1999.
88. MAZZUCATO E., ARTIOLI G., GUALTIERI A.: High temperature dehydroxylation of muscovite-2M<sub>1</sub>: a kinetic study by in situ XRPD. *Phys. Chem. Minerals* **26**, 375-381, 1999.
89. LAMBERTI C., BORDIGA S., ZECCHINA A., CARATI A., FITCH A.N., ARTIOLI G., PETRINI G., SALVALAGGIO M., MARRA G.L.: Structural characterization of Ti-silicalite-1: a synchrotron radiation X-ray powder diffraction study. *J. Catal.* **183**, 222-231, 1999.

90. PAVESE A., ARTIOLI G., HULL S.: In situ powder neutron diffraction of cation partitioning vs. pressure in  $Mg_{0.94}Al_{2.04}O_4$  synthetic spinel. *Amer. Miner.* **84**, 905-912, 1999.
91. LEVY D., ARTIOLI G., GUALTIERI A., QUARTIERI S., VALLE M.: Chromium crystal chemistry in mullite-spinel refractory ceramics. *Mater. Res. Bull.* **34**, 711-720, 1999.
92. ARTIOLI G.: Dehydration processes in natural zeolites. *Plinius* **21**, 253-257, 1999.
93. ARTIOLI G., MARCHI M.: On the space group of garronite. *Powder Diffr.* **14**, 190-194, 1999.
94. ARTIOLI G., GALLI E.: Gonnardite: re-examination of holotype material, and discreditation of tetranatrolite. *Amer. Miner.* **84**, 1445-1450, 1999.
95. ARTIOLI G.: In situ structural and kinetic powder diffraction studies of aluminosilicates. In: *Microscopic properties and processes in minerals*, Wright K., Catlow R. eds., Kluwer, Dordrecht; *NATO Science Series*, Series C, vol. **543**, 177-187, 1999.
96. ARTIOLI G., FUMAGALLI P., POLI S.: The crystal structure of  $Mg_8(Mg_2Al_2)Al_8Si_{12}(O,OH)_{56}$  pumpellyite and its relevance in ultramafic systems at high pressure. *Amer. Miner.* **84**, 1906-1914, 1999.
97. CATTI M., LEVY D., ARTIOLI G.: Synchrotron powder diffraction study of  $BiPbSr_{1.8}CaMn_{2.1}O_9$ , Mn-analogue of BSCCO-2212 superconductor. *J. Sol. St. Chem.* **147**, 501-508, 1999.
98. MEINARDI F., QUILICI S., BORGHESI A., ARTIOLI G.: Microstructure imaging of C54-TiSi<sub>2</sub> polycrystalline thin films by micro-Raman spectroscopy. *Appl. Phys. Lett.* **75**, 3090-3092, 1999.
99. CELLA F., ARTIOLI G., GOBBO L.A.: Characterization of blastfurnace slag used in composite cements by X-ray diffraction and fluorescence analysis. *5th Brazilian Conference on Portland Cement*, Volume of Proceedings, 10pp, 1999.
100. ARTIOLI G.: Inorganic compounds and minerals studied using X-ray diffraction. *Encyclopedia of Spectroscopy and Spectrometry*, Lindon J.C., Tranter G.E., Holmes J.L. eds., Vol. 2, pp. 924-933, 2000. Academic Press, London. Accessible on line at <http://www.academicpress.com/spectro/specopen.htm>
101. ARTIOLI G., LAMBERTI C., MARRA G.L.: Neutron powder diffraction study of orthorhombic and monoclinic defective silicalite. *Acta Cryst.* **B56**, 2-10, 2000.
102. PAVESE A., ARTIOLI G., HOSER A.:  $MgAl_2O_4$  synthetic spinel: cation and vacancy distribution as a function of temperature, from in situ neutron powder diffraction. *Zeit. Kristall.* **215**, 406-412, 2000.
103. RINALDI R., ARTIOLI G., WILSON C.C., MCINTYRE G.: Octahedral cation ordering in olivine at high temperature. I: In situ single crystal neutron diffraction on natural mantle olivines (Fa12 and Fa10). *Phys. Chem. Minerals* **27**, 623-629, 2000.
104. REDFERN S.A.T., ARTIOLI G., RINALDI R., HENDERSON C.M.B., KNIGHT K.S., WOOD B.J.: Octahedral cation ordering in olivine at high temperature. II: In situ powder neutron diffraction on synthetic Fa50. *Phys. Chem. Minerals* **27**, 630-637, 2000.
105. MARRA G.L., ARTIOLI G., FITCH A.N., MILANESIO M., LAMBERTI C.: Orthorhombic to monoclinic phase transition in high-Ti-loaded TS-1: an attempt to locate Ti in the MFI framework by low temperature XRD. *Microp. Mesop. Materials* **40**, 85-94, 2000.
106. BORDIGA S., ROGGERO I., UGLIENGO P., ZECCHINA A., BOLIS V., ARTIOLI G., BUZZONI R., MARRA G.L., RIVETTI F., SPANO' G., LAMBERTI C.: Characterization of defective silicalite. *J. Chem. Soc. Dalton Trans.*, 3921-3929, 2000.
107. ARTIOLI G., BAGNASCO GIANNI G., BRUNI S., CARIATI F., FERMO P., MORIN S., RUSSO U.: Studio spettroscopico della tecnologia di cottura di ceramiche etrusche dagli scavi di Tarquinia. In: M. Martini et al. (eds.) *Atti I Congresso Nazionale di Archeometria*, Verona, 2-4 dicembre 1999. Patron Editore, Bologna, pp. 335-349, 2000. ISBN 88-555-2571-9
108. ARTIOLI G.: Recent advances in the crystal structure and crystal chemistry of natural zeolites. *Natural zeolites for the third millennium*, C. Colella and F.A. Mumpton eds., De Frede Editore, Napoli, 37-44, 2000.
109. CAROTENUTO L., PICCOLO C., ARTIOLI G., NORBY P., GRIZZETTI R.: Study of the initial stage of zeolite A synthesis by dynamic light scattering and synchrotron X-ray diffraction. *Trends in Optics and Photonics, Photon Correlation Scattering* **47**, 86-88, 2000.
110. ARTIOLI G., STÄHL K., CRUCIANI G., GUALTIERI A., HANSON J.C.: In situ dehydration of yugawaralite. *Amer. Miner.* **86**, 185-192, 2001.
111. LAMBERTI C., BORDIGA S., ZECCHINA A., ARTIOLI G., MARRA G., SPANÒ G.: Ti location in the MFI framework of Ti-Silicalite-1: A neutron powder diffraction study. *J. Amer. Chem. Soc.* **123**, 2204-2212, 2001.
112. SCHMIDT M.W., DUGNANI M., ARTIOLI G.: Synthesis and characterization of white micas in the join muscovite-aluminoceladonite. *Amer. Miner.* **86**, 555-565, 2001.
113. RINALDI R., ARTIOLI G., DOVE M.T., SCHÄFER W., SCHOFIELD P.F., WINKLER B.: Neutron scattering in mineral science, earth science, and related fields with the European Spallation Source. In *Scientific Trends in Condensed Matter Research and Instrumentation Opportunities at ESS*; Progress Report of the ESS-SAC/ENSA Workshop, Engelberg, Switzerland, 91-106, 2001.
114. MENEGHINI C., ARTIOLI G., BALERNA A., GUALTIERI A.F., NORBY P., MOBILIO S.: Multipurpose imaging-plate camera for in-situ powder XRD at the GILDA beamline. *J. Synchrotron Rad.* **8**, 1162-1166, 2001.
115. GUALTIERI A., VIANI A., BANCHIO G., ARTIOLI G.: Quantitative phase analysis of natural raw materials containing montmorillonite. *Mat. Sci. Forum* **378-381**, 702-707, 2001.
116. LEE Y., HRILJAC J.A., VOGT T., PARISE J.B., ARTIOLI G.: First structural investigation of a super-hydrated zeolite. *J. Amer. Chem. Soc.* **123**, 12732-12733, 2001.
117. RIMOLDI B., DAPIAGGI M., ARTIOLI G.: Inquinamento da cristobalite nella produzione di piccoli particolari metallici. *Giorn. Igienisti Industr.* **26**, 230-241, 2001.
118. GROPPI G., ARTIOLI G., CRISTIANI C., LIETTI L., FORZATTI P.: Decomposition/reformation processes and CH<sub>4</sub> combustion activity of PdO over Al<sub>2</sub>O<sub>3</sub> supported catalysts for gas turbine applications. In: Iglesia E., Spivey J.J., Fleisch T.H. (eds.) "Natural Gas Conversion VI", Proceedings

- of the 6<sup>th</sup> Natural Gas Conversion Symposium, Alaska, June 2001. *Stud. Surf. Sci. Catal.* **136**, 345-350, 2001.
119. MARRA G.L., SPANO' G., ARTIOLI G., ZECCHINA A., BORDIGA S., LAMBERTI C.: Location of the active Ti sites in the MFI framework of Ti-silicalite-1 catalyst by high resolution powder diffraction. *ISIS Facility Annual Report 2001*, Highlights, 26-27, 2001.
  120. ARTIOLI G.: Single-crystal neutron diffraction. *Eur. Journ. Mineral.* **14**, 233-239, 2002.
  121. WANG Z., LAZOR P., SAXENA S.K., ARTIOLI G.: High pressure raman spectroscopic study of spinel (ZnCr<sub>2</sub>O<sub>4</sub>). *J. Sol. St. Chem.* **165**, 165-170, 2002.
  122. LEE Y., VOGT T., HRILJAC J.A., PARISE J.B., ARTIOLI G.: Pressure-induced volume expansion of zeolites in the natrolite family. *J. Amer. Chem. Soc.* **124**, 5466-5475, 2002.
  123. RINALDI R., ARTIOLI G., DOVE M.T., SCHAEFER W., SCHOFIELD P.F., WINKLER B.: 4.7 Mineral Sciences, Earth Sciences, Environment and Cultural Heritage. In: The ESS Project, Volume II. New Science and Technology for the 21st Century. ESS Council, 4-89/4-108, 2002.
  124. ARTIOLI G., KOCKELMANN W., MAGERL A., MEZEI F., RINALDI R., SCHAEFER W., SCHOFIELD P.F., ZOPPI M.: 6.5 Cultural Heritage: Artefacts and Materials. In: The ESS Project, Volume II. New Science and Technology for the 21st Century. ESS Council, 6-47/6-54, 2002.
  125. ARTIOLI G., GIES H., HANSEN T., JOBIC H., LANDER G.H., LATROCHE M., MULDER F.M.: 6.7 Sustainable Development, Clean Technologies, and Environmental Systems. In: The ESS Project, Volume II. New Science and Technology for the 21st Century. ESS Council, 6-65/6-72, 2002.
  126. GRIZZETTI R., ARTIOLI G.: Kinetics of nucleation and growth of zeolite LTA from clear solution by in situ and ex situ XRPD. *Microp. Mesop. Materials* **54**, 105-112, 2002.
  127. VIANI A., GUALTIERI A.F., ARTIOLI G.: The nature of disorder in montmorillonite by simulation of X-ray powder patterns. *Amer. Miner.* **87**, 966-975, 2002.
  128. CAMANA G., CHATEIGNER D., ZUCALI M., ARTIOLI G.: The grid-work texture of authigenic microcrystalline quartz in siliceous crust-type (SCT) mineralized horizons. *Amer. Miner.* **87**, 1128-1138, 2002.
  129. RINALDI R., ARTIOLI G., KOCKELMANN W., KIRFEL A., SIANO S.: The contribution of neutron scattering to cultural heritage research. *Notiziario Neutroni e Luce di Sincrotrone* **7**, 30-37, 2002.
  130. MONACO H.L., ARTIOLI G.: Experimental methods in X-ray and neutron crystallography. In: C. Giacovazzo (ed.) *Fundamentals of Crystallography*, Second Edition, Ch. 5. IUCr Texts on Crystallography, Vol. 7. Oxford Science Publications, Oxford, pp. 295-411, 2002.
  131. ARTIOLI G., GRIZZETTI R., CAROTENUTO L., PICCOLO C., COLELLA C., LIGUORI B., AIELLO R., FRONTERA P.: In situ dynamic light scattering and synchrotron X-ray powder diffraction study of the early stages of zeolite growth. In: R. Aiello, G. Giordano, F. Testa (eds.) *Impact of zeolites and other porous materials on the new technologies at the beginning of the new millennium*. Elsevier, Amsterdam. *Studies in Surface Science and Catalysis*, Vol. **142A**, 45-52, 2002.
  132. VOLTOLINI M., ARTIOLI G., MORET M.: Microtopographic features and dissolution behaviour of natural zeolite surfaces studied by atomic force microscopy (AFM). In: R. Aiello, G. Giordano, F. Testa (eds.) *Impact of zeolites and other porous materials on the new technologies at the beginning of the new millennium*. Elsevier, Amsterdam. *Studies in Surface Science and Catalysis*, Vol. **142B**, 1721-1728, 2002.
  133. DAPIAGGI M., ARTIOLI G., PETRAS L.: A newly developed high-temperature chamber for in situ X-ray diffraction: Setup and calibration procedures. *The Rigaku Journal* **19**, 35-41, 2002.
  134. ANGELINI I., ARTIOLI G., BELLINTANI P., DIELLA V., POLLA A., RESIDORI G.: Project "Glass materials in the protohistory North Italy": a first summary. In: D'Amico C. (ed.), *Atti II Congresso Nazionale di Archeometria*. Bologna 29 gennaio-1 febbraio 2002, Pàtron Editore, Bologna, pp 581-595, 2002.
  135. ANGUILANO L., ANGELINI I., ARTIOLI G., MORONI M., BAUMGARTEN B., OBERRAUCH H.: Smelting slags from Copper and Bronze Age archaeological sites in Trentino and Alto Adige. In: D'Amico C. (ed.), *Atti II Congresso Nazionale di Archeometria*. Bologna 29 gennaio-1 febbraio 2002, Pàtron Editore, Bologna, pp 627-638, 2002.
  136. ANGUILANO L., ANGELINI I., ARTIOLI G., MORONI M., BAUMGARTEN B., OBERRAUCH H.: Analisi di scorie di estrazione del rame provenienti da siti dell'Età del Bronzo dell'Alto Adige. In: Baumgarten B., Mair V., Schölzhorn H. (eds.), *Atti 5° Workshop Internazionale delle Miniere Ridanna/Monteneve*. Bolzano 15-22 settembre 2002, Provincia Autonoma di Bolzano-Museo di Scienze Naturali Alto Adige, Bolzano, pp. 7-14, 2002.
  137. ARTIOLI G.: Conventional and advanced diffraction techniques. In: M. Mellini, B. Messiga (eds.) *Engineering mineralogy of ceramic materials*. Proc. of the International School of Earth and Planetary Sciences. Siena 8-11 giugno 2001, pp 55-64, 2002.
  138. ARTIOLI G.: Atomic displacement parameters from diffraction studies: The experimental evidence. In: C.M. Gramaccioli (ed.) *Energy modelling in minerals*. Eötvös University Press, Budapest. *EMU Notes in Mineralogy*, Vol. **4**, Ch. 13, pp 389-405, 2002.
  139. ANGELINI I., POLLA A., ARTIOLI G.: Archaeometric investigation of ornamental faience beads from Lavagnone (BS). *Not. Arch. Bergom.* **10**, 285-299, 2002.
  140. DAPIAGGI M., TIANO W., ARTIOLI G., SANSON A., FORNASINI P.: The thermal behaviour of cuprite: An XRD-EXAFS combined approach. *Nucl. Inst. Meth. Phys. Res.* **B200**, 231-236, 2003.
  141. CATTANEO A., GUALTIERI A., ARTIOLI G.: Kinetic study of the dehydroxylation of chrysotile asbestos with temperature by in situ XRPD. *Phys. Chem. Minerals* **30**, 177-183, 2003.
  142. VOLTOLINI M., ARTIOLI G., MORET M.: Molecular resolution images of the surfaces of natural zeolites by atomic force microscopy. *Microp. Mesop. Materials* **61**, 79-84, 2003.

143. ARTIOLI G., GEIGER C.A., DAPIAGGI M.: The crystal chemistry of juldolite-Fe<sup>3+</sup> from Bombay, India, studied using synchrotron X-ray powder diffraction and <sup>57</sup>Fe Mössbauer spectroscopy. *Amer. Miner.* **88**, 1084-1090, 2003.
144. ARTIOLI G., GRIZZETTI R.: Tecniche sperimentali nello studio di cinetiche di nucleazione e crescita cristalline. In: Aquilano D., Artioli G., Moret M. (eds.) "Meccanismi della crescita cristallina: fondamenti e applicazioni". Università degli Studi di Milano, Libreria CLUP srlc, Milano, *Ric. Sci. Educ. Perm.* **121**, 301-318, 2003.
145. ARTIOLI G.: Synchrotron X-ray powder diffraction. In: Mobilio, S. & Vlaic, G. (eds.) "Synchrotron radiation: Fundamentals, methodologies and applications". Proc. of the VI Scuola Nazionale di Luce di Sincrotrone, S. Margherita di Pula, Cagliari, Italy, 17-28 September 2001. *SIF Società Italiana di Fisica, Bologna, Atti di Conferenze*, Vol. **82**, pp. 377-399, 2003.
146. ARTIOLI G., DUGNANI M., ANGELINI I., LUTTEROTTI L., PEDROTTI A., FLECKINGER A.: Early copper Alpine metallurgy. In: *Proc. of the International Conference on "Archaeometallurgy in Europe"*. Milano, Italy, 24-26 September 2003. Associazione Italiana di Metallurgia, Milano, Vol. **2**, pp. 19-27, 2003.
147. ANGELINI I., ARTIOLI G., SALZANI L.: Chemical and metallographic investigation of weapons from the Bronze Age necropolis at Olmo di Nogara, Italy. In: *Proc. of the International Conference on "Archaeometallurgy in Europe"*. Milano, Italy, 24-26 September 2003. Associazione Italiana di Metallurgia, Milano, Vol. **2**, pp. 67-76, 2003.
148. ARTIOLI G., DUGNANI M., HANSEN T., LUTTEROTTI L., PEDROTTI A., SPERL G.: Crystallographic texture analysis of the Iceman and coeval copper axes by non-invasive neutron powder diffraction. In: A. Fleckinger (ed.) "La mummia dell'età del rame. 2. Nuove ricerche sull'uomo venuto dal ghiaccio". Collana del Museo Archeologico dell'Alto Adige, Vol. **3**, Folio Verlag, Bolzano, pp. 9-22, 2003.
149. TIANO W., DAPIAGGI M., ARTIOLI G.: Thermal expansion in cuprite-type structures from 10 K to decomposition temperature: Cu<sub>2</sub>O and Ag<sub>2</sub>O. *J. Appl. Cryst.* **36**, 1461-1463, 2003.
150. MILANESIO M., ARTIOLI G., GUALTIERI A.F., PALIN L., LAMBERTI C.: Template burning inside TS-1 and Fe-MFI molecular sieves: An in situ XRPD study. *J. Am. Chem. Soc.* **125**, 14549-14558, 2003.
151. ANGELINI I., ARTIOLI G., BELLINTANI P., DIELLA V., POLLA A., RECCHIA G., RESIDORI G.: Materiali vetrosi da Grotta Manaccora e Coppa Nevigata: inquadramento archeologico e archeometrico nell'ambito della civiltà del Bronzo italiana. In: C. Piccioli, F. Sogliani (eds.) "Il vetro in Italia meridionale e insulare", Atti del Secondo Convegno Multidisciplinare. Napoli, Italy, 5-7 Dicembre 2001. Tipografia Zaccaria, Napoli, pp. 127-138, 2003.
152. ANGELINI I., ARTIOLI G., BELLINTANI P.: Progetto "Ambre e materiali vetrosi protostorici della Valle dell'Adige nel quadro delle coeve attestazioni dell'Italia del Nord". Primi risultati sulle ambre. *Preistoria Alpina* **39**, 227-241, 2003.
153. PROVERBIO M., DAPIAGGI M., ARTIOLI G.: Thermal expansion and excess properties of akermanite-gehlenite synthetic solid solution series. *Mat. Sci. Forum* **443-444**, 401-404, 2004.
154. MILANESIO M., ARTIOLI G., GUALTIERI A., PALIN L., LAMBERTI C.: Template burning inside zeolite framework monitored by in situ X-ray powder diffraction. *ESRF 2003 Highlights*, 113-114, 2004.
155. LEVY D., ARTIOLI G., DAPIAGGI M.: The effect of oxidation and reduction on thermal expansion of magnetite from 298K to 1173 K at different vacuum conditions. *J. Sol. St. Chem.* **177**, 1713-1716, 2004.
156. GRIZZETTI R., ARTIOLI G., GEMMI M., CARSUGHI F., RIELLO P.: In situ WAXS-SAXS synchrotron study of the kinetics of nucleation and growth in Linde Type-A zeolite (LTA). In: E. Van Steen, L. Callanan, M. Claeys (eds.) *Proc. 14<sup>th</sup> International Zeolite Conference*, Cape Town, South Africa, 25-30 April 2004. Document Production Technologies, Cape Town, pp. 355-363.
157. ARTIOLI G., DUGNANI M., LUTTEROTTI L., FLECKINGER A., BAUMGARTEN B., HANSEN T., TORREGROSSA J.: Skillful copper forging at the time of the Iceman. *ILL Annual Reports 2003, Highlights*, 50-51, 2004.
158. ANGELINI I., ARTIOLI G., BELLINTANI P., DIELLA V., GEMMI M., POLLA A., ROSSI A.: Chemical analyses of Bronze Age glasses from Frattesina di Rovigo, Northern Italy. *J. Arch. Sc.* **31**, 1175-1184, 2004.
159. ARTIOLI G., DUGNANI M.: Crystallographic texture analysis: applications in mineralogy and archaeometry. *Period. Miner.* **73**, 5-16, 2004. WOS:000208523200002
160. ARTIOLI G.: Caratterizzazione non distruttiva di manufatti archeologici. In: S. Siano (ed.) *Atti del Corso Internazionale su "Tecnologie e metodologie innovative per lo studio e il restauro di manufatti archeologici"*, Castiglione, 31 Maggio-5 Giugno 2004. Collana "Manufatti Archeologici. Studio e Conservazione". Nardini Editore, Firenze, pp. 478-492, 2004.
161. DAPIAGGI M., GEIGER C.A., ARTIOLI G.: Microscopic strain in synthetic pyrope-grossular solid solutions determined by synchrotron X-ray powder diffraction at 5 K: The relationship to enthalpy of mixing behavior. *Amer. Miner.* **90**, 506-509, 2005.
162. GEMMI M., MERLINI M., CORNARO U., GHISLETTI D., ARTIOLI G.: In situ simultaneous synchrotron powder diffraction and mass spectrometry study of methane anaerobic combustion on iron-oxide-based oxygen carriers. *J. Appl. Cryst.* **38**, 353-360, 2005.
163. ANGELINI I., ARTIOLI G., BELLINTANI P., POLLA A.: Protohistoric vitreous materials of Italy: From early faience to Final Bronze Age glasses. *AIHV, Annales du 16<sup>e</sup> Congrès de l'Association Internationale pour l'Histoire du Verre*, London, UK, 7-13 September 2003, pp. 32-36, 2005.
164. MERLINI M., GEMMI M., ARTIOLI G.: Thermal expansion and phase transitions in akermanite and gehlenite. *Phys. Chem. Minerals* **32**, 189-196, 2005.
165. ARTIOLI G., WOLF S.: The linking role of the Alps in past cultures: An archaeometric approach. Preface. *Archaeometry, Special Issue* **47**, i-ii, 2005. DOI: 10.1111/j.1475-4754.2005.00196.x WOS:000229975400001

166. RINALDI R., GATTA G.D., ARTIOLI G., KNIGHT K.S., GEIGER C.A.: Crystal chemistry, cation ordering and thermoelastic behaviour of CoMgSiO<sub>4</sub> olivine at high temperature as studied by in situ neutron powder diffraction. *Phys. Chem. Minerals* **32**, 655-664, 2005.
167. SANSON A., DALBA G., FORNASINI P., GRISENTI R., ROCCA F., ARTIOLI G., DAPIAGGI M., TIANO W.: EXAFS and XRD study of local dynamics in Cu<sub>2</sub>O and Ag<sub>2</sub>O. *Physica Scripta* **Vol. T115**, 271-273, 2005.
168. ARTIOLI G., LADDAGA L., DAPIAGGI M.: Archaeometry of pottery: mineralogical and chemical analyses. In: M. Liverani (ed.) *Aghram Nadharif. The Barkat Oasis (Sha'abiya of Ghat, Libyan Sahara) in Garamantian times*. Arid Zone Archaeology, Monograph 5. Edizioni all'Insegna del Giglio, Firenze; pp. 249-257, 475-480, 2005.
169. BELLINTANI P., ANGELINI I., ARTIOLI G., POLLA A.: Bottoni conici e perle in glassy faience delle fasi iniziale e piena della media Età del Bronzo dell'Italia Centrale tirrenica: archeologia ed archeometria. *Padusa Anno XLI*, Nuova Serie, 223-230, 2005.
170. AIELLO R., ARTIOLI G., CAROTENUTO L., COLELLA C., NORBY P., STERTE J.: Zeolite synthesis in microgravity. European Space Agency, Special Publication, SP-1281 'Topical Teams in Life & Physical Sciences: Towards New Research Applications in Space', June 2005, Pp. 78-85, 2005. ISBN 92-9092-974-X ISSN 0379-6566
171. ARTIOLI G., DAPIAGGI M., LUTTEROTTI L., KOCKELMANN W.: Texture analysis of prehistoric copper axes. *Highlights of ISIS Science, ISIS2005 Review of the year*, 17, 2005.
172. ANGELINI I., POLLA A., ARTIOLI G.: I vaghi in vetro provenienti dalla necropoli di Ponte Nuovo (Gazzo Veronese): indagini archeometriche e confronto con materiali coevi. *Not. Arch. Bergom.* **13**, 141-152, 2005.
173. GEMMI M., MERLINI M., CORNARO U., GHISLETTI D., ARTIOLI G.: In situ study of methane anaerobic combustion on iron oxides: Towards a clean hydrogen production process. *ESRF Highlights 2005*, 42-23, 2006.
174. ANGELINI I., ARTIOLI G., POLLA A., DE MARINIS R.C.: Early Bronze Age faience from North Italy and Slovakia: A comparative archaeometric study. *Proc. 34<sup>th</sup> Int. Symposium on Archaeometry*, Zaragoza, Spain, 3-7 May 2004, pp. 371-378, 2006.
175. ARTIOLI G.: Diffrazione da materiali policristallini II: geometrie e componenti strumentali. In: N. Masciocchi e A. Guagliardi (eds.) "Analisi di materiali policristallini mediante tecniche di diffrazione", *Atti della Scuola Nazionale di Diffrazione da Materiali Policristallini*. Martina Franca, Taranto, 26-30 Giugno 2006, pp. 27-38, 2006. ISBN 978-88-95362-04-5
176. ARTIOLI G.: Tecniche di affinamento Rietveld. In: N. Masciocchi e A. Guagliardi (eds.) "Analisi di materiali policristallini mediante tecniche di diffrazione", *Atti della Scuola Nazionale di Diffrazione da Materiali Policristallini*. Martina Franca, Taranto, 26-30 Giugno 2006, pp. 120-130, 2006. ISBN 978-88-95362-04-5
177. SANSON A., ROCCA F., DALBA G., FORNASINI P., GRISENTI R., DAPIAGGI M., ARTIOLI G.: Negative thermal expansion and local dynamics in Cu<sub>2</sub>O and Ag<sub>2</sub>O. *Phys. Rev. B* **73**, 214305, 2006. DOI: 10.1103/PhysRevB.73.214305 WOS:000238696200064
178. KOCKELMANN W., CHAPON L.C., ENGELS R., SCHELLEN J., NEELMEIJER C., WALCHA H.M., ARTIOLI G., SHALEV S., PERELLI-CIPPO E., TARDOCCI M., GORINI G., RADAELLI P.G.: Neutrons in cultural heritage research. *J. Neutron Res.* **14**, 37-42, 2006.
179. ANGELINI I., ARTIOLI G.: Studio archeometallurgico di noduli metallici da Santa Caterina Tredossi. In: Pizzi C. "L'abitato dell'età del bronzo di Santa Caterina Tredossi (Cremona)", Comune di Milano, Settore Cultura Musei e Mostre, New Press snc, Como, pp. 135-140, 2006.
180. ARTIOLI G., DAPIAGGI M., FORNASINI P., SANSON A., ROCCA F., MERLI M.: Negative thermal expansion in cuprite-type compounds: A combined synchrotron XRPD, EXAFS, and computational study of Cu<sub>2</sub>O and Ag<sub>2</sub>O. *J. Phys. Chem. Solids* **67**, 1918-1922, 2006. DOI: 10.1016/j.jpcs.2006.05.043 WOS:000241089600003
181. ANGELINI I., NICOLA C., ARTIOLI G.: Studio analitico dei materiali vetrosi. In: Venturino Gambari M. "Navigando lungo l'Eridano. La necropoli protogolasecchiana di Morano sul Po", Città di Casale Monferrato, Museo Civico, pp. 77-82, 2006.
182. MERLINI M., GEMMI M., ARTIOLI G.: Low temperature SR-XRPD study of akermanite-gehlenite solid solution. *Zeit. Krist. Suppl.* **23**, 419-424, 2006.
183. DAPIAGGI M., ARTIOLI G., MAZZOCCHIA C., MERLINI M.: Structural characterization of high-temperature K-exchanged sodalite. *Zeit. Krist. Suppl.* **23**, 437-442, 2006.
184. BELLINTANI P., ANGELINI I., ARTIOLI G., POLLA A.: Origini dei materiali vetrosi italiani: esotismi e localismi. In: "Materie prime e scambi nella protostoria Italiana", *Atti della XXXIX Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria*, Firenze, Italy, 25-27 Novembre 2004, Vol III, pp. 1495-1531, IIPP Firenze 2006. ISBN 978-88-6045-051-7
185. SARACINO M., ANGELINI I., ARTIOLI G., BELLINTANI P., SALZANI L.: Gli impasti ceramici di alcuni insediamenti protostorici del territorio polesano. In: "Materie prime e scambi nella protostoria Italiana", *Atti della XXXIX Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria*, Firenze, Italy, 25-27 Novembre 2004, Vol II, pp 1246-1251, 2006. ISBN 978-88-6045-051-7
186. CICIPELLI C., ALBORE LIVADIE C., ANGELINI I., ARTIOLI G., BELLINTANI P.: Le ambre di Poggio Marino. Primi risultati delle indagini di caratterizzazione. In: "Materie prime e scambi nella protostoria Italiana", *Atti della XXXIX Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria*, Firenze, Italy, 25-27 Novembre 2004, Vol III, pp 1601-1607, 2006. ISBN 978-88-6045-051-7
187. SALZANI L., ANGELINI I., ARTIOLI G., BELLINTANI P., CUPITO' M.: Le ambre delle necropoli di Olmo di Nogara e Scalvinetto (VR). In: "Materie prime e scambi nella protostoria Italiana", *Atti della XXXIX Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria*, Firenze, Italy, 25-27 Novembre 2004, Vol III, pp 1608-16013, 2006. ISBN 978-88-6045-051-7

188. CINQUEPALMI T., RECCHIA G., ANGELINI I., ARTIOLI G., BELLINTANI P., POLLA A.: Exotica da siti interni. Il caso dell'insediamento dell'età del Bronzo di Masseria Chiancudda (BR). In: *"Materie prime e scambi nella protostoria Italiana"*, Atti della XXXIX Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria, Firenze, Italy, 25-27 Novembre 2004, Vol III, pp 1614-1620, 2006. ISBN 978-88-6045-051-7
189. POLLA A., ANGELINI I., ARTIOLI G.: Analisi d'immagine per la caratterizzazione strutturale dei materiali vetrosi. In: *"Materie prime e scambi nella protostoria Italiana"*, Atti della XXXIX Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria, Firenze, Italy, 25-27 Novembre 2004, Vol III, pp 1621-1626, 2006. ISBN 978-88-6045-051-7
190. TECCHIATI U., ANGELINI I., ARTIOLI G., BELLINTANI P., POLLA A.: Vetri dal sito del Bronzo finale di Salorno – Cava Girardi (BZ). In: *"Materie prime e scambi nella protostoria Italiana"*, Atti della XXXIX Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria, Firenze, Italy, 25-27 Novembre 2004, Vol III, pp 1627-1631, 2006. ISBN 978-88-6045-051-7
191. ANGELINI I., ANGLE M., ARTIOLI G., BELLINTANI P., LUGLI F., MARTINELLI N., POLLA A., TAGLIACOZZO A., ZARATTINI A.: Il villaggio delle Macine (Castelgandolfo, Roma). *Atti Terzo Incontro di Studi sul Lazio e la Sabina*, Roma 18-20 Novembre 2004 "Lazio e Sabina" Vol 3., De Luca Editori d'Arte, Roma, pp 157-168, 2006.
192. SARACINO M., ANGELINI I., ARTIOLI G., BELLINTANI P., CHIAFFONI B.: Frattesina – fase tre: Archeologia ed Archeometria della produzione ceramica. In: Fabbri B., Gualtieri S., Romito M. (eds), *Atti 8ª Giornata di Archeometria della Ceramica*, Vietri 27-28 aprile 2004, Edipuglia, pp. 63-74, 2006.
193. BELLINTANI P., ANGELINI I., ARTIOLI G., POLLA A.: Villaggio delle Macine: le più antiche perle in vetro e ambra dell'Italia centrale. In: *"Strategie di insediamento fra Lazio e Campania in età preistorica e protostorica"*, Atti della XL Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria, Roma, Napoli, Pompei, Italy, 30 Novembre- 03 Dicembre 2005, Vol II, pp 891-895, 2007.
194. SANSON A., ROCCA F., DALBA G., FORNASINI P., GRISENTI R., DAPIAGGI M., ARTIOLI G.: Negative thermal expansion and local dynamics in Cu<sub>2</sub>O and Ag<sub>2</sub>O. *ESRF Highlights 2006*, 82-83, 2007.
195. ARTIOLI G.: Book review: Wenk, H.-R. Neutron scattering in the Earth Sciences. *Miner. Mag.* **71**, 121, 2007.
196. GATTA G.D., RINALDI R., KNIGHT K.S., MOLIN G., ARTIOLI G.: High temperature structural and thermoelastic behaviour of mantle orthopyroxene: An in situ neutron powder diffraction study. *Phys. Chem. Minerals* **34**, 185-200, 2007. DOI: 10.1007/s00269-006-0138-2 WOS:000245299600005
197. ARTIOLI G., MAPELLI C.: Manufacturing techniques of copper age axes. *Proc. 2<sup>nd</sup> Intern. Conference "Archaeometallurgy in Europe 2007"*, Aquileia, 17-21 June 2007. Proc. CD. Printed in the Selected Papers Volume, AIM, Milano, pp. 93-100, 2009. ISBN 88-85298-71-0
198. ANGELINI I., MASIERO E., ARTIOLI G., MOLIN G., FRIZZI T., ALBERTI R., VENTURINO GAMBARI M.: Snapshot of a Final Bronze Age metalworker: Archaeometallurgical study of the hoard and the working tools from Chusa di Pesio, Cuneo, Italy. *Proc. 2<sup>nd</sup> Intern. Conference "Archaeometallurgy in Europe 2007"*, Aquileia, 17-21 June 2007. Proc. CD. ISBN 88-85298-61-3
199. ARTIOLI G., ANGELINI I., BURGER E., BOURGARIT D.: Petrographic and chemical investigation of the earliest copper smelting slags in Italy: towards a reconstruction of the beginning of copper metallurgy. *Proc. 2<sup>nd</sup> Intern. Conference "Archaeometallurgy in Europe 2007"*, Aquileia, 17-21 June 2007. Proc. CD. Printed in the Selected Papers Volume, AIM, Milano, pp. 12-20, 2009. ISBN 88-85298-71-0
200. BURGER E., BOURGARIT D., ROSTAN P., CAROZZA L., ARTIOLI G.: The mystery of plattenschlake in protohistoric copper smelting: early evidence at the Early Bronze Age site of Saint Veran, French Alps. *Proc. 2<sup>nd</sup> Intern. Conference "Archaeometallurgy in Europe 2007"*, Aquileia, 17-21 June 2007. Proc. CD. ISBN 88-85298-61-3
201. GIUSSANI B., MARELLI M., RECCHIA S., COLPANI F., ANGELINI I., ARTIOLI G.: Tracing the provenance of ancient copper objects: A multivariate data analysis approach. *Proc. 2<sup>nd</sup> Intern. Conference "Archaeometallurgy in Europe 2007"*, Aquileia, 17-21 June 2007. Proc. CD. ISBN 88-85298-61-3
202. DOLFINI A., ARTIOLI G., ANGELINI I., FRIZZI T., ALBERTI R.: Early copper metallurgy in Central Italy: Issues of production and social consumption. *Proc. 2<sup>nd</sup> Intern. Conference "Archaeometallurgy in Europe 2007"*, Aquileia, 17-21 June 2007. Proc. CD. ISBN 88-85298-61-3
203. NICOLIS F., BELLINTANI P., ARTIOLI G., CAPPELLOZZA N.: Archaeological excavation at Pletz von Mozze, Luserna, Trentino, Italy. A case study for assessment of late bronze age metallurgical activities. *Proc. 2<sup>nd</sup> Intern. Conference "Archaeometallurgy in Europe 2007"*, Aquileia, 17-21 June 2007. Proc. CD. ISBN 88-85298-61-3
204. Dapiaggi M., Artioli G., Righi C., Carli R.: High temperature reactions in mold flux slags: Kinetic versus composition control. *J. Non-Cryst. Solids* **353**, 2852-2860, 2007. DOI: 10.1016/j.jnoncrysol.2007.05.019 WOS:000249670300006
205. ARTIOLI G., LATTANZI P.: Foreword: surface reactivity of minerals. *Eur. J. Miner.* **19**, 295, 2007. DOI: 10.1127/0935-1221/2007/0019-1734 WOS:000247938300001
206. ANGELINI I., ARTIOLI G.: Le armi eneolitiche di Spessa (Cologna Veneta) e di Gambarella (Povegliano): indagini chimiche e tessiturali. *Bollettino Del Museo Civico di Storia Naturale di Verona* **31**, 51-61, 2007
207. MERLINI M., ARTIOLI G., MENEGHINI C., CERULLI T., BRAVO A., CELLA F.: The early hydration and the set of Portland cements: In situ X-ray powder diffraction studies. *Powd. Diffr.* **22**, 201-208, 2007. DOI: 10.1154/1.2754713 WOS:000249543700001



208. KULKARNI S.R., MERLINI M., PHATAK N., SAXENA S.K., ARTIOLI G., GUPTA S., BARSOUM M.W.: High-temperature thermal expansion and stability of  $V_2AlC$  up to 950 °C. *J. Amer. Ceram. Soc.* **90**, 3013-3016, 2007. DOI: 10.1111/j.1551-2916.2007.01847.x WOS:000249276800058
209. GEMMI M., MERLINI M., CRUCIANI G., ARTIOLI G.: Non-ideality and defectivity of the âkermanite-gehlenite solid solution: An X-ray diffraction and TEM study. *Amer. Miner.* **92**, 1685-1694, 2007. DOI: 10.2138/am.2007.2380 WOS:000249968300017
210. POLLA A., ANGELINI I., ARTIOLI G.: Studio delle proprietà fisiche e reologiche di vetri archeologici tramite confronto con materiali di sintesi. D'Amico C. (ed.), *Atti IV Congresso Nazionale di Archeometria*. Pisa, 1-3 febbraio 2006, Pàtron Editore, Bologna, pp 499-505, 2007.
211. COLPANI F., MARELLI M., GIUSSANI B., RECCHIA S., ANGELINI I., BAUMGARTEN B., ARTIOLI G.: Copper isotopic ratio and trace elements spectrometric measurements (ICP-QMS) within Alps and Apennine Cu-ores: Discovering regional geochemical tracers for archaeometrical purposes by advanced chemiometric techniques. In: D'Amico C. (ed.), *Atti IV Congresso Nazionale di Archeometria*. Pisa, 1-3 febbraio 2006, Pàtron Editore, Bologna, pp 547-559, 2007.
212. ARTIOLI G.: Crystallographic texture analysis of archaeological metals: interpretation of manufacturing techniques. *Appl. Physics A* **89**, 899-908, 2007. DOI: 10.1007/s00339-007-4215-2 WOS:000250234500012
213. DAPIAGGI M., SALA M., ARTIOLI G., FRANSEN M.J.: Evaluation of phase detection limit on filter-deposited dust particles from Antarctic ice cores. *Zeit. Krist. Suppl.* **26**, 73-78, 2007. DOI: 10.1524/zksu.2007.2007.suppl.26.73 WOS:000258748400012
214. MERLINI M., MENEGHINI C., ARTIOLI G., CERULLI T.: Synchrotron radiation XRPD study on the early hydration of cements. *Zeit. Kristallog. Suppl.* **26**, 411-416, 2007. DOI: 10.1524/zksu.2007.2007.suppl.26.411 WOS:000253340900033
215. FORNASINI P., SANSON A., VACCARI M., ARTIOLI G., DAPIAGGI M.: Local lattice dynamics and negative thermal expansion in crystals. *Proc. Phonons 2007. J. Phys.: Conf. Series* **92**, 01253, 1-4, 2007. DOI: 10.1088/1742-6596/92/1/012153 WOS:000265677100153
216. MARITAN L., ANGELINI I., ARTIOLI G., MAZZOLI C., SARACINO M.: Analisi dei processi post-deposizionali in ceramiche: il caso di Pontecchio Polesine, Frattesina e Adria. *Padusa Anno XLIII*, Nuova Serie, 209-222, 2007.
217. ARTIOLI G., ANGELINI I., POLLA A.: Crystals and phase transitions in protohistoric glass materials. *Phase Transitions* **81**, 233-252, 2008. DOI: 10.1080/01411590701514409 WOS:000252405000007
218. MERLINI M., ARTIOLI G., CERULLI T., CELLA F., BRAVO A.: Tricalcium aluminate hydration in additivated systems. A crystallographic study by SR-XRPD. *Cem. Concr. Res.* **38**, 477-486, 2008. DOI: 10.1016/j.cemconres.2007.11.011 WOS:000254819600006
219. MERLINI M., GEMMI M., CRUCIANI G., ARTIOLI G.: High-temperature behaviour of melilite: in situ X-ray diffraction study of gehlenite-âkermanite-Na melilite solid solution. *Phys. Chem. Miner.* **35**, 147-155, 2008. DOI: 10.1007/s00269-007-0206-2 WOS:000254251700004
220. ARTIOLI G., BAUMGARTEN B., MARELLI M., GIUSSANI B., RECCHIA S., NIMIS P., GIUNTI I., ANGELINI I., OMENETTO P.: Chemical and isotopic tracers in Alpine copper deposits: geochemical links between mines and metal. *Geo.Alp* **5**, 139-148, 2008.
221. ARTIOLI G., NIMIS P., GRUPPO ARCA, RECCHIA S., MARELLI M., GIUSSANI B.: Geochemical links between copper mines and ancient metallurgy: the Agordo case study. *Rend. Online Soc. Geol. It.* **4**, 15-18, 2008.
222. SALA M., DELMONTE B., FREZZOTTI M., PROPOSITO M., SCARCHILLI C., MAGGI V., ARTIOLI G., DAPIAGGI M., MARINO F., RICCI P.C., DE GIUDICI G.: Evidence of calcium carbonates in coastal (Talos Dome and Ross Sea area) East Antarctica snow and firn: Environmental and climatic implications. *Earth Planet. Sci. Lett.* **271**, 43-52, 2008. DOI: 10.1016/j.epsl.2008.03.045 WOS:000257835600005
223. DAPIAGGI M., KIM H., BOŽIN E.S., BILLINGE S.J.L., ARTIOLI G.: Study of the negative thermal expansion of cuprite-type structures by means of temperature-dependent pair distribution function analysis: preliminary results. *J. Phys. Chem. Solids* **69**, 2182-2186, 2008. DOI: 10.1016/j.jpccs.2008.03.030 WOS:000260142000012
224. NICOLA C., MONTANA G., ARTIOLI G., NODARI L., RUSSO U.: La problematica del colore negli "smaltini di calcara" palermitani. In: Bacci M. (ed.) *Atti del Convegno "Colore e arte: storia e tecnologia del colore nei secoli"*. Firenze, 28 Febbraio-2 Marzo 2007. Pàtron Editore, Bologna, pp. 289-301, 2008.
225. BOURGARIT D., ROSTAN P., BURGER E., CAROZZA L., MILLE B., ARTIOLI G.: The beginning of copper mass production in the western Alps: the Saint-Véran mining area reconsidered. *Historical Metallurgy* **42**, 1-11, 2008.
226. ARTIOLI G., NICOLA C., MONTANA G., ANGELINI I., NODARI L., RUSSO U.: The blue enamels in the baroque decorations of the churches of Palermo, Sicily: Fe<sup>2+</sup>-coloured glasses from lime kilns. *Archaeometry*, **51**, 197-213, 2009. DOI: 10.1111/j.1475-4754.2008.00414.x WOS:000263909000002
227. MARITAN L., ANGELINI I., ARTIOLI G., MAZZOLI C., SARACINO M.: Secondary phosphates in the ceramic materials from Frattesina (Rovigo, North-Eastern Italy). *J. Cult. Herit.* **10**, 144-151, 2009. DOI: 10.1016/j.culher.2008.01.008 WOS:000264831900016
228. ANGELINI I., MOLIN G., ARTIOLI G.: L'atelier metallurgico di Monte Cavanero. Indagini chimiche e metallografiche. In: Venturino Gambari M. (ed.) *Il ripostiglio del Monte Cavanero di Chiusa di Pesio (Cuneo)*. LineLab.Edizioni, Alessandria, Pp. 107-165, 2009.
229. ARTIOLI G., ANGELINI I., GIUNTI I., OMENETTO P., VILLA I.: La provenienza del metallo degli oggetti di Monte Cavanero: considerazioni basate sugli isotopi del Pb e sulla geochimica delle mineralizzazioni cuprifere limitrofe. In: Venturino Gambari M. (ed.) *Il ripostiglio del Monte Cavanero di Chiusa di Pesio (Cuneo)*. LineLab.Edizioni, Alessandria, Pp. 167-178, 2009.

230. ANGELINI I., POLLA A., GIUSSANI B., BELLINTANI P., ARTIOLI G.: Final Bronze Age glass in Northern Italy: Is Frattesina the only glass production centre? In: Moreau J.F., Auger R., Chabot J., Herzog A. (eds.) *Proc. ISA 2006, 36<sup>th</sup> Intern. Symposium on Archaeometry, Quebec City, Canada 2-6 May 2006*. Cahiers d'archéologie du CELAT, n. 25, Série Archéométrie, n. 7. CELAT, Université Laval, Quebec, Pp. 329-337, 2009.
231. COLPANI F., ANGELINI I., ARTIOLI G., TECCHIATI U.: Copper smelting activities at the Millan and Gudon Chalcolithic sites (Bolzano, Italy): chemical and mineralogical investigations of the archaeometallurgical finds. In: Moreau J.F., Auger R., Chabot J., Herzog A. (eds.) *Proc. ISA 2006, 36<sup>th</sup> Intern. Symposium on Archaeometry, Quebec City, Canada 2-6 May 2006*. Cahiers d'archéologie du CELAT, n. 25, Série Archéométrie, n. 7. CELAT, Université Laval, Quebec, Pp. 367-374, 2009.
232. ANGUILANO L., OBERRAUCH H., HAUSER H., REHREN T., ARTIOLI G.: Copper smelting at Fennhals-Kurtatsch (South Tyrol). In: Moreau J.F., Auger R., Chabot J., Herzog A. (eds.) *Proc. ISA 2006, 36<sup>th</sup> Intern. Symposium on Archaeometry, Quebec City, Canada 2-6 May 2006*. Cahiers d'archéologie du CELAT, n. 25, Série Archéométrie, n. 7. CELAT, Université Laval, Quebec, Pp. 375-382, 2009.
233. KULKARNI S.R., MERLINI M., PHATAK N., SAXENA S.K., ARTIOLI G., AMINI S., BARSOUM M.W.: Thermal expansion and stability of Ti<sub>2</sub>SC in air and inert atmospheres. *J. Alloys Comp.* **469**, 395-400, 2009. DOI: 10.1016/j.jallcom.2008.01.150 WOS:000263801500070
234. ARTIOLI G.: Neutrons in archaeometry and conservation science: the contribution of neutron scattering to cultural heritage. In: J. Campo ed. "Neutrons reveal all – A compilation of divulgative articles", ESS-Bilbao, Spain, contribution 4.1, pp. 60-63, 2009. Downloadable: <http://www.essbilbao.com/Descargas/neutrons.pdf>
235. ARTIOLI G. Archeometria ed archeologia: il fascino di un amore difficile. *Riv. Archeol.* Anno XXXI 2007. Pp. 207-209, 2009.
236. ANGELINI I., POLLA A., ARTIOLI G.: Protohistoric vitreous materials and synthetic analogues: Study of chemico-physical and rheological properties. In: Janssens K., Degryse P., Cosyns P., Caen J., Van't Dack L. (eds.) *Annales of the 17<sup>th</sup> Congress of the International Association for the History of Glass, Antwerp 2006*. AIHV-University Press Antwerp, Brussel, Pp. 539-545, 2009.
237. ARTIOLI G., GIUNTI I., ANGELINI I., GRUPPO ARCA, GIUSSANI B., MARELLI M., RECCHIA M., NIMIS P., OMENETTO P., VILLA I.: Legami geochimici fra miniere, scorie e metallo: verso un modello per determinare la provenienza e la diffusione del rame preistorico. *Frammenti* **2**, 81-89, 2010.
238. MARELLI M., GIUSSANI B., ANGELINI I., ARTIOLI G., RECCHIA S.: Improving the quality of <sup>63</sup>Cu/<sup>65</sup>Cu ratio determination by ICP-QMS through a careful evaluation of instrumental performances. *J. Anal. At. Spect.* **25**, 893-898, 2010. DOI: 10.1039/c002962a WOS:000278100000019
239. ARTIOLI G., CERULLI T., CRUCIANI G., DALCONI M.C., FERRARI G., PARISATTO M., RACK A., TUCOULOU R.: X-ray diffraction microtomography (XRD-CT), a novel tool for non-invasive mapping of phase development in cement materials. *Anal. Bioanal. Chem.* **397**, 2131-2136, 2010. DOI: 10.1007/s00216-010-3649-0 WOS:000279453000012
240. GEIGER C.A., DACHS E., DALCONI M.C., ARTIOLI G.: Molecular H<sub>2</sub>O in armenite, BaCa<sub>2</sub>Al<sub>6</sub>Si<sub>9</sub>O<sub>30</sub>·2H<sub>2</sub>O, and epididymite, Na<sub>2</sub>Be<sub>2</sub>Si<sub>6</sub>O<sub>15</sub>·H<sub>2</sub>O: Heat capacity, entropy and local-bonding behavior of confined H<sub>2</sub>O in microporous silicates. *Geochim. Cosmochim. Acta* **74**, 5202-5215, 2010. DOI: 10.1016/j.gca.2010.05.033 WOS:000281094900004
241. ARTIOLI G.: Scientific methods and the cultural heritage. Oxford University Press, Oxford. Pp. 552, 2010. ISBN 978-0-19-954826-2
242. ARTIOLI G., BULLARD J.W.: Cement hydration: the role of adsorption and crystal growth. Proc. School on "Adsorption, absorption, and crystal growth", Gargnano, Italy, 18-23 April 2010. Published in *Cryst. Res. Technol.* **48**, 903-918, 2013. DOI: 10.1002/crat.201200713 WOS:000327594300014
243. FERRARI G., ARTIOLI G., PARISATTO M.: From HPC to HPSS: The use of superplasticizers for the improvement of S/S technology. In: Lake C.B., Hills C.D. (eds.) *2010 International Solidification/Stabilization Technology Forum*. Dalhousie University, Canada, Pp. 193-203, 2010.
244. ARTIOLI G.: Mineralogy and cultural heritage. *Chimia* **64**, 712-715, 2010. DOI: 10.2533/chimia.2010.712 WOS:000284033900005
245. BOURGARIT D., ROSTAN P., CAROZZA L., MILLE B., ARTIOLI G.: Vingt ans de recherches à Saint-Véran, Hautes Alpes: état des connaissances de l'activité de production de cuivre à l'âge du Bronze ancien. *Trabajos de Prehist.* **67**, 269-285, 2010. DOI: 10.3989/tp.2010.10039 WOS:000286134100003
246. ARTIOLI G., SECCO M., MAZZOLI C., COLETTI C., VALLUZZI M.R., DA PORTO F.: Characterization of stone masonry panels consolidated by injection of compatible grouts in buildings damaged by the 2009 Abruzzo earthquake. In: J. Válek, C. Groot, J.J. Hughes (eds.) *2nd Historic Mortars Conference HMC2010 and RILEM TC 203-RHM Final Workshop*. Prague, Czech Republic, 22-24 September 2010. Proceedings IV.04, RILEM Publications, Bagnaux, pp. 871-881, 2010. ISBN: 978-2-35158-112-4
247. TAPPARO A., ARTIOLI G., ANGELINI I., FAVARO G.: The mystery of the discoloured flints. New molecule turn prehistoric lithic artefacts blue. *Anal. Bioanal. Chem.* **399**, 2389-2393, 2011. DOI: 10.1071/s00216-010-4625-4 WOS:000287141700011
248. VALENTINI L., DALCONI M.C., PARISATTO M., CRUCIANI G., ARTIOLI G.: Towards three-dimensional quantitative reconstruction of cement microstructure by X-ray diffraction microtomography. *J. Appl. Cryst.* **44**, 272-280, 2011. DOI: 10.1107/S0021889810054701 WOS:000288758500002
249. ARTIOLI G., NOCITI V., ANGELINI I.: Gambling with Etruscan dice: A tale of numbers and letters. *Archaeometry* **53**, 1031-1043, 2011. DOI: 10.1111/j.1475-4754.2011.00596.x WOS:000294598800011
250. MONACO H.L., ARTIOLI G.: Experimental methods in X-ray and neutron crystallography. In: C. Giacovazzo (ed.) *Fundamentals of Crystallography*, Third Edition, Ch. 5. IUCr Texts on Crystallography, Vol. **15**. Oxford Science Publications, Oxford, pp. 301-416, 2011. ISBN 978-0-19-957365-3

251. ARTIOLI G., CASARIN F., DALLA BENETTA M., DA PORTO F., SECCO M., VALLUZZI M.R.: Restoration of historic masonry structures damaged by the 2009 Abruzzo earthquake through injection grouts. In: J. Ingham, M. Dhanasekar, M. Masia (eds.) *9th Australasian Masonry Conference*. Queenstown, New Zealand, 15-18 February 2011. Proc. CD., pp. 1-10, 2011. ISBN: 978-0-473-18069-0 WOS:000333245800007
252. ANGELINI I., NICOLA C., ARTIOLI G., DE MARINIS R.C., RAPI M., UBOLDI M.: Chemical, mineralogical and textural characterization of the Early Iron Age vitreous materials from the Golasecca Culture (Northern Italy). In: I. Turbanti.Memmi (ed.) *Proceedings of the 37th International Symposium on Archaeometry*, Siena, Italy, 12-16 May 2008. Springer Verlag, Berlin, pp. 25-32, 2011.
253. POLLA A., ANGELINI I., ARTIOLI G., BELLINTANI P., DORE A.: Archaeometric investigation of Early Iron Age glass from Bologna. In: I. Turbanti.Memmi (ed.) *Proceedings of the 37th International Symposium on Archaeometry*, Siena, Italy, 12-16 May 2008. Springer Verlag, Berlin, pp. 139-144, 2011.
254. MONTAGNINO D., COSTA E., MASSARO F.R., ARTIOLI G., AQUILANO D.: Growth morphology of gypsum in the presence of copolymers. *Cryst. Res. Techn.* DOI: 10.1002/crat.201100131 WOS:000295315900002
255. PARISATTO M., ARTIOLI G., GERARDUZZI M., MAZZOLI C., COLLINA A., PELLAY R.: Characterization of cementitious granular materials produced from contaminated soils. Proc. XIII ICCI International Congress on the Chemistry of Cement, Madrid, Spain, 3-8 July 2011. Abstr. Vol., p. 123. Paper n. 286, 2011.
256. VALENTINI L., DALCONI M.C., PARISATTO M., CRUCIANI G., ARTIOLI G.: Non-invasive assessment and modelling of cement micro-structures. Proc. XIII ICCI International Congress on the Chemistry of Cement, Madrid, Spain, 3-8 July 2011. Abstr. Vol., p. 344. Paper n. 147, 2011.
257. SECCO M., MARITAN L., LAMPRENTI G.I., ARTIOLI G., MAZZOLI C.: Degradation of reinforced concretes from industrial buildings caused by combined sulphate-phosphate attack. In: Zaragoza A., López Agüí J., Palomo Á. (eds.) Proc. XIII ICCI International Congress on the Chemistry of Cement, Madrid, Spain, 3-8 July 2011. Abstr. Vol., p. 453. Paper n. 165, 2011. ISBN 978-84-7292-399-7
258. ARTIOLI G., ANGELINI I.: Mineralogy and archaeometry: fatal attraction. *Eur. J. Miner.* **23**, 849-855, 2011. DOI: 10.1127/0935-1221/2011/0023-2119 WOS:000298669300002
259. DALCONI M.C., FAVERO M., ARTIOLI G.: *In-situ* XRPD of hydrating cement with lab instrument: reflection vs. transmission measurements. Proc. EPDIC-11, Warsaw, Poland, 18-22 September 2008. *Zeit. Krist. Proc.* **1**, 155-161, 2011. DOI 10.1524/zkpr.2011.0023
260. ARTIOLI G.: Dal minerale al metallo: il punto delle ricerche su provenienza del metallo ed interpretazione delle tecnologie metallurgiche nell'età del rame. Proc. XLIII Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria "L'età del rame in Italia". Bologna, 26-29 novembre 2008, IIPP, Firenze, pp.167-170, 2011.
261. ANGELINI I., GIUNTI I., ARTIOLI G.: Indagini archeometallurgiche su reperti dell'età del Rame della valle del Piave. *Quaderni di Archeologia del Veneto*, Vol. XXVII, 107-115, 2011.
262. SECCO M., STIEVANIN E., DA PORTO F., MODENA C., ARTIOLI G., MAZZOLI C.: Non destructive and medium destructive analyses on an early 20<sup>th</sup> century reinforced concrete structure: the case study of the Victory Monument in Bolzano. In: *Proceedings of the 10th International Conference on non-destructive investigations and microanalysis for the diagnostics and conservation of cultural and environmental heritage – ART '11*, Firenze 13-15 April 2011. CD proceeding NDT21, 2011.
263. STIEVANIN E., DA PORTO F., MODENA C., SECCO M., ARTIOLI G.: Characterization studies on the reinforced concrete dome of the former General Market of Verona, built in 1929. In: *Proceedings of the "Domes in the World" International Scientific Congress*, Firenze, 2011.
264. VOLTOLINI M., ARTIOLI G., MORET M.: The dissolution of laumontite in acidic aqueous solutions: a controlled-temperature in situ atomic force microscopy study. *Amer. Miner.* **97**, 150-158, 2012. DOI: 10.2138/am.2012.3837 WOS:000298893400014
265. ARTIOLI G., DALCONI M.C., PARISATTO M., VALENTINI L., VOLTOLINI M., FERRARI G.: 3D imaging of complex materials: the case of cement. *Int. J. Mater. Res.* **103**, 145-150, 2012. DOI: 10.3139/146.110665 WOS:000300467700002
266. LAMPRENTI G.I., ARTIOLI G., OLIVA L., ONGARO A., MARETTO S., BONINO F., BARBERA K., BORDIGA S.: Role of phosphate species and speciation kinetics in detergency solutions. *Industrial Engin. Chem. Res.* **51**, 4173-4180, 2012. DOI: 10.1021/ie202130y WOS:000301681000005
267. NIMIS P., OMENETTO P., GIUNTI I., ARTIOLI G., ANGELINI I.: Lead isotope systematics in hydrothermal sulphide deposits from the central-eastern Southalpine (northern Italy). *Eur. J. Miner.* **24**, 23-37, 2012. DOI: 10.1127/0935-1221/2012/0024-2163 WOS:000300879400003
268. ADDIS A., ANGELINI I., ARTIOLI G.: Final Bronze Age copper slags from Luserna (Trentino, Italy). In: Vezzalini G., Zannini P. (eds) *Atti VII Congresso Nazionale di Archeometria*. Modena, 22-24 febbraio 2012, Patron Editore, Bologna. CD proceeding, ISBN 978-88-555-3166-5, 2012.
269. VALENTINI L., ARTIOLI G., VOLTOLINI M.: Multifractal Analysis of Calcium Silicate Hydrate (C-S-H) Mapped by X-ray Diffraction Microtomography. *J. Amer. Ceram. Soc.* **95**, 2647-2652, 2012. DOI: 10.1111/j.1551-2916.2012.05255.x WOS:000307101000043
270. ARTIOLI G.: Archaeometallurgy: the contribution of mineralogy. In: Herrero J.M., Vendrell M. (eds) *"Archaeometry and cultural heritage: the contribution of mineralogy"*, *Seminarios de la Sociedad Española de Mineralogía*, Vol. 09, 65-78, 2012. ISSN 1698-5478
271. ANGELINI I., NICOLA C., ARTIOLI G.: Materiali vetrosi protostorici della sardegna: indagini archeometriche e confronto analitico con reperti coevi. Proc. XLIV Riunione Scientifica dell'Istituto Italiano di Preistoria e Protostoria "La preistoria e la protostoria della Sardegna". Cagliari, Barumini, Sassari, 23-28 novembre 2009, IIPP, Firenze, pp.1131-1150, 2012.
272. ARTIOLI G., ANGELINI I., NIMIS P.: Mineralizzazioni e produzioni di rame in ambito Bellunese. In: Angelini A., Leonardi G. (eds.) *Atti del Convegno "Il castelliere di Castel de Pedena: un sito di frontiera*

- del II e I millennio a.C.*”, *Feltre 6 giugno 2009*. Saltuarie del Laboratorio del piovego, n. 9, 167-176, 2012. ISBN 978-88-86106-38-2
273. MARITAN L., SECCO M., MAZZOLI C., ARTIOLI G.: Secondary phases in archeological and historical materials: a microstructural approach for interpreting the correct sequences of crystallization. In: Meeks N., Cartwright C., Meek A., Mongiatti A. (ed.) *“Historical Technology, Materials and Conservation - SEM and microanalysis”*. British Museum and Archetype Publications, London. Pp. 169-172, 2012. ISBN 978-1-904982-65-4
274. VOLTOLINI M., DALCONI M.C., ARTIOLI G., PARISATTO M., VALENTINI L., RUSSO V., TUCOULOU R.: Understanding cement hydration at the microscale: New opportunities from "pencil-beam" synchrotron X-ray diffraction tomography. *J. Appl. Cryst.* **46**, 142-152, 2013. DOI: 10.1107/S0021889812046985 WOS:000313658700018
275. ARTIOLI G., ANGELINI I., NESTOLA F.: New milarite/osumilite-type phase formed during ancient grazing of an Egyptian scarab. *Appl. Phys. A* **110**, 371–377, 2013. DOI: 10.1007/s00339-012-7125-x WOS:000313960400015
276. ARTIOLI G.: Science for the cultural heritage: the contribution of X-ray diffraction. *Rend. Lincei – Scienze Fisiche e Naturali*, **24** (Suppl 1), S55–S62, 2013. DOI: 10.1007/s12210-012-0207-z WOS:000316007500006
277. ARTIOLI G., ANGELINI I.: Evolution of vitreous materials in Bronze Age Italy. In: Janssens K. ed. *Modern Methods for Analysing Archaeological and Historical Glass*. Vol. II, Ch. 5.3. John Wiley & Sons, Chichester. Pp. 355-368, 2013. ISBN 978-0-470-51614-0
278. ANGELINI I., ARTIOLI G., PEDROTTI A., TECCHIATI U.: La metallurgia dell'età del Rame dell'Italia settentrionale con particolare riferimento al Trentino e all'Alto Adige. Le risorse minerarie e i processi di produzione del metallo. In: R.C. De Marinis (ed.) *“L'età del Rame: la Pianura Padana e le Alpi al tempo di Ötzi”*. Catalogo della mostra. Compagnia della Stampa Massetti Rodella editori, Brescia. Pp. 101-116, 2013. ISBN 978-88-8486-553-3
279. VIANI A., GUALTIERI A.F., SECCO M., PERUZZO L., ARTIOLI G., CRUCIANI G.: Crystal chemistry of cement-asbestos. *Am. Miner.* **98**, 1095-1105, 2013. DOI: 10.2138/am.2013.4347 WOS:000321315600002
280. ARTIOLI G., SECCO L. (eds.): CRISTALLI! Uno sguardo sul mondo della cristallografia. *Catalogo della mostra organizzata in occasione dell'Anno Internazionale della Cristallografia 2014*. Padova Ottobre 2013-Febbraio 2014.
281. ARTIOLI G., CRUCIANI G.: Book review: Applied mineralogy of cement and concrete. *Elements* **9**, 310, 2013.
282. ARTIOLI G., MASCIOCCHI N.: Anno Internazionale della Cristallografia – 2014: Cent'anni di Diffrazione. *Il Nuovo Saggiatore* **29**, 85-86, 2013.
283. GUASTONI A., SECCO L., ARTIOLI G.: CRISTALLI! Uno sguardo sul mondo della cristallografia. *Rivista Mineralogica Italiana* **4**, 274-278, 2013.
284. ANGELINI I., SALVEMINI F., GRAZZI F., VONTOBEL P., DAVYDOV V., VIGONI A., ZOPPI M., ARTIOLI G.: Indagini morfologiche, chimiche e tessiturali degli stili in ferro da *Iulia Concordia*. In: Pettenò E., Vigoni A. (eds) *Riscoprire Iulia Concordia*, Fondazione Antonio Colluto, L'Album 19, Grafiche Turato Edizioni, pp. 159-163, 2013. ISBN 978-88-89524-71-8
285. ANGELINI I., ARTIOLI G., CANOVARO C., MIRIELLO D., PINGITORE V., RUFFOLO S.A., CAPPA M., CRISCI G.M.: Analisi archeometriche sul Gallo conservato nei Musei Vaticani: un raro esempio di bronzo dorato basso-medievale. In: S. Guido *“Il Gallo Vaticano – Museo Storico Artistico del Tesoro di San Pietro”*. Bollettino d'archivio 22-23, Edizioni Capitolo Vaticano, Roma. Pp. 40-43, 2013. ISBN 978-88-6339-036-0
286. SALVEMINI F., GRAZZI F., ANGELINI I., DAVYDOV V., VONTOBEL P., VIGONI A., ARTIOLI G., ZOPPI M.: Residual strain mapping of Roman styli from Iulia Concordia – Italy. *Materials Characterization* **91**, 58-64, 2014. DOI: 10.1016/j.matchar.2014.02.008 WOS:000335624700008
287. DAL SASSO G., MARITAN L., SALVATORI S., MAZZOLI C., ARTIOLI G.: Discriminating pottery production by image analysis: a case study of Mesolithic and Neolithic pottery from Al Khiday (Khartoum, Sudan). *J. Arch. Sci.* **46**, 125-143, 2014. DOI: 10.1016/j.jas.2014.03.004 WOS:000337013800013
288. ARTIOLI G., VALENTINI L., DALCONI M.C., PARISATTO M., SECCO M., FERRARI G., RUSSO V.: Application of advanced X-ray micro-tomography to the characterization of the 3D microstructure in cement pastes. Proceedings CD, 36<sup>th</sup> ICMA International Conference on Cement Microscopy, Milano, Italy, 13-17 April 2014. Pp. 23-30. ISBN: 1-930787-09-X
289. FERRARI G., RUSSO V., SALVIONI D., SQUINZI M., ARTIOLI G., DALCONI M.C.: Nano-dispersions of silicate hydrate for the solidification/stabilization of waste. Proceedings CD, 36<sup>th</sup> ICMA International Conference on Cement Microscopy, Milano, Italy, 13-17 April 2014. Pp. 529-540. ISBN: 1-930787-09-X
290. SECCO M., PERUZZO L., ARTIOLI G., VALENTINI L., DALCONI M.C., FERRARI G., RUSSO V.: Micro-chemical and micro-mineralogical characterization of clinker relicts from aged cement composites. Proceedings CD, 36<sup>th</sup> ICMA International Conference on Cement Microscopy, Milano, Italy, 13-17 April 2014. Pp. 654-671. ISBN: 1-930787-09-X
291. SALVEMINI F., GRAZZI F., ANGELINI I., VONTOBEL P., VIGONI A., ARTIOLI G., ZOPPI M.: Morphological reconstruction of Roman arrowheads from *Iulia Concordia*: Italy. *Appl. Phys. A*, **117**, 1227-1240. DOI: 10.1007/s00339-014-8511-3
292. VALENTINI L., PARISATTO M., RUSSO V., FERRARI G., BULLARD J.W., ANGEL R.J., DALCONI M.C., ARTIOLI G.: Simulation of the hydration kinetics and elastic moduli of cement mortars by microstructural modelling. *Cem. Concr. Comp.* **52**, 54-63, 2014. DOI: 10.1016/j.cemconcomp.2014.05.005 WOS:000339695200007

293. ARTIOLI G., VALENTINI L., DALCONI M.C., PARISATTO M., VOLTOLINI M., RUSSO V., FERRARI G.: Imaging of nano-seeded nucleation in cement pastes by X-ray diffraction tomography. *Int. J. Mater. Res.* **105**, 628-631, 2014. DOI: 10.3139/146.111049 WOS:000339328300003
294. MARANGONI M., SECCO M., PARISATTO M., ARTIOLI G., BERNARDO A., COLOMBO P., ALTALSI H., BINMAJED M., BINHUSSAIN M.: Cellular glass-ceramics from a self foaming mixture of glass and basalt scoria. *J. Non-crystalline Solids* **403**, 38-46, 2014. DOI: 10.1016/j.jnoncrysol.2014.06.016
295. GLIOZZO E., MATTINGLY D.J., COLE F., ARTIOLI G.: In the footsteps of Pliny: tracing the sources of Garamantian carnelian from Fazzan, south-west Libya. *J. Arch. Sci.* **52**, 218-241, 2014. DOI: 10.1016/j.jas.2014.07.029
296. SECCO M., PERUZZO L., PALASSE L., ARTIOLI G., VIANI A., GUALTIERI A.F.: Crystal chemistry of clinker relicts from aged cementitious materials. *J. Appl. Cryst.* **47**, 1626-1637, 2014. DOI: 10.1107/S1600576714018287
297. DAL SASSO G., MARITAN L., ANGELINI I., USAI D., ARTIOLI G.: Bone diagenesis at the micro-scale: Bone alteration patterns during multiple burial phases at Al Khiday (Khartoum, Sudan) between the Early Holocene and the II century AD. *Palaeogeography, Palaeoclimatology, Palaeoecology* **416**, 30-42, 2014. DOI: 10.1016/j.palaeo.2014.06.034
298. ARTIOLI G., ANGELINI I., NIMIS P., ADDIS A., VILLA I.M.: Prehistoric copper metallurgy in the Italian Eastern Alps: recent results. *Historical metallurgy* **47**, 51-59, 2013 (published 2014)
299. ANGELINI I., ARTIOLI G.: Analisi archeometriche sullo scarabeo ed i vaghi di collana. In: M. Minoja, A. Usai (eds) "Le sculture di Mont'e Prama", Gangemi Editore, Roma, pp. 331-344, 2014. ISBN: 978-88-492-2942-4
300. CANOVARO C., ANGELINI I., BORGNA E., ARTIOLI G.: Analisi archeometriche di pani e panelle provenienti dai ripostigli di Cervignano e Muscoli (Udine). 35° Convegno Nazionale AIM, Roma 5-7- Novembre 2014. Atti del Convegno in CD-ROM. ISBN: 978-88-98990-01-6
301. ARTIOLI G.: Powder diffraction and synchrotron radiation. In: S. Mobilio, F. Boscherini, C. Meneghini (eds.) "Synchrotron radiation - Basics, methods and applications", Springer-Verlag, Berlin Heidelberg. Chpt. 10, pp. 319-336, 2015. ISBN: 978-3-642-55314-1
302. ARTIOLI G., VALENTINI L., VOLTOLINI M., DALCONI M.C., FERRARI G. RUSSO V.: Direct imaging of nucleation mechanisms by synchrotron diffraction micro-tomography: Superplasticizer-induced change of C-S-H nucleation in cement. *Cryst. Growth Des.*, **15**, 20-23, 2015. DOI: 10.1021/cg501466z
303. VALENTINI L., ARTIOLI G., PARISATTO M., PERUGINI D., MARCHESINI B.: Non-invasive assessment of disequilibrium growth patterns in tourmaline nodules by X-ray microtomography. *Am. Min.* **100**, 459-465, 2015. DOI: 10.2138/am-2015-4987
304. ARTIOLI G., PARISATTO M., ANGELINI I.: High energy X-ray tomography of Bronze Age copper ingots. In: Hauptmann A., Modarressi-Tehrani D. (eds.) Proc. 3<sup>rd</sup> Intern. Conference "Archaeometallurgy in Europe III", Bochum, Germany, 29 June-1 July 2011. Der Anschnitt, Beiheft 26, Bochum, pp. 387-390, 2015. ISBN 978-3-937203-74-4
305. VALENTINI L., DALCONI M.C., FAVERO M., ARTIOLI G., FERRARI G.: In situ XRD measurement and quantitative analysis of hydrating cement: implications for sulfate incorporation in C-S-H. *J. Am. Ceram. Soc.* **98**, 1259-1264, 2015. DOI: 10.1111/jace.13401
306. PARISATTO M., DALCONI M.C., VALENTINI L., ARTIOLI G., RACK A., TUCOULOU R., CRUCIANI G., FERRARI G.: Examining microstructural evolution of Portland cements by in situ synchrotron micro-tomography. *Journal of Materials Science* **50**, 1805-1817, 2015. DOI: 10.1007/s10853-014-8743-9
307. ARTIOLI G., ANGELINI I., TECCHIATI U., PEDROTTI A.: Eneolithic copper smelting slags in the Eastern Alps: local patterns of metallurgical exploitation in the Copper Age. *J. Arch. Sci.* **63**, 78-83, 2015. DOI: 10.1016/j.jas.2015.08.013
308. ARTIOLI G.: IYCr2014: Cent'anni di diffrazione – 2015: Quarant'anni del GMPE – Il rapporto fra ricerca cristallografica, mineralogia moderna, e collezionismo. In: Volume per i 40 anni del GMPE.
309. TAMBURINI S., NATALI M., GARBIN E., VALLUZZI M.R., ARTIOLI G.: Comparison of fibres in geopolymer matrix for structural reinforcement of masonry (FRGP): compatibility, reactivity, durability. In: Leonelli C., Romagnoli M. (eds.) "Geopolymers: The route to eliminate waste and emissions in ceramic and cement manufacturing", Proceedings of the First ECI Conference on Geopolymers, Hernstein, Austria, 24-29 May 2015. Società Chimica Italiana, Bologna, pp. 99-102, 2015. ISBN 978-1-326-37732-8
310. FERRARI G., RUSSO V., DRAGONI M., ARTIOLI G., DALCONI M.C., SECCO M., TAMBORRINO L., VALENTINI L.: The influence of C3A on the dissolution kinetics of alite/gypsum mixtures in the presence of PCE's. In: Malhotra V.M., Gupta P.R., Holland T.C (eds.) *Eleventh International Conference on Superplasticizers and Other Chemical Admixtures in Concrete. Ottawa, Canada, 12-15 July 2015*. Conference proceedings, SP-302-17, pp. 227-242, 2015. ISBN: 9781942727224
311. FERRARI G., BROCCHI A., TORELLI L., ARTIOLI G., SECCO M., VALENTINI L., DALCONI M.C.: Characterization of concrete made with recycled aggregates produced from returned concrete. In: Holland T.C, Gupta P.R., Malhotra V.M. (eds.) *13<sup>th</sup> Int. Conference on Recent Advances in Concrete Technology and Sustainability Issues. Ottawa, Canada, 14-17 July 2015*. Conference Proceedings, SP 303-11, pp. 147-165, 2015. ISBN: 9781942727231
312. FERRARI G., RUSSO V., SALVIONI D., SURICO F., ARTIOLI G., DALCONI M.C., SECCO M., VALENTINI L.: The influence of a new metal silicate hydrate additive on concrete strength and durability. In: Holland T.C, Gupta P.R., Malhotra V.M. (eds.) *13<sup>th</sup> Int. Conference on Recent Advances in Concrete Technology and Sustainability Issues. Ottawa, Canada, 14-17 July 2015*. Conference Proceedings, SP-303-12, pp. 167-181, 2015. ISBN: 9781942727231
313. FERRARI G., NUSSBAUMER W., RUSSO V., ARTIOLI G., DALCONI M.C., FAVERO M., VALENTINI L., MBA BLASQUEZ M.: New polysilicate for high early strength and durability of concrete. In: C.T. Tam, K.C.G. Ong, T.H. Tan, Y. Chhabra (eds.) *OWICS 2015 - 40<sup>th</sup> Conference on Our World in*

- Concrete & Structures. Singapore, 26-28 August 2015. Conference Proceedings*, pp. 373-382, 2015. **ISBN**: 978-981-09-6518-1
314. ARTIOLI G., VALENTINI L., VOLTOLINI M., DALCONI M.C., FERRARI G., RUSSO V.: Diffraction-enhanced computed tomography of cement pastes: 3D imaging of the nucleation processes. *14<sup>th</sup> Int. Congress on the Chemistry of Cement. Beijing, China 13-16 October 2015. Conference Proceedings CD, FSN 1041.*
  315. FERRARI G., RUSSO V., SALVIONI D., ARTIOLI G., DALCONI M.C., FAVERO M., VALENTINI L., SECCO M., GEPPI M.: New accelerating admixture based on metal silicate hydrates. *14<sup>th</sup> Int. Congress on the Chemistry of Cement. Beijing, China 13-16 October 2015. Conference Proceedings CD, FSN 1050.*
  316. ANGELINI I., ARTIOLI G., NIMIS P., VILLA I.M.: La metallurgia preistorica del rame nell'Italia nord-orientale: quadro d'insieme e recenti sviluppi. *Atti della XLVIII Riunione Scientifica dell'IIPP, Padova 2013, Studi di Preistoria e Protostoria, Vol. 2, Preistoria e Protostoria del Veneto, 271-277, 2015. ISBN: 978-88-6045-056-2*
  317. VINCENZUTTO D., DALLA LONGA E., ANGELINI I., ARTIOLI G., NIMIS P., VILLA I.M.: I manufatti in bronzo del sito arginato di Fondo Paviani (Verona) – Scavi Università di Padova 2007-2012. Inquadramento tipocronologico e analisi archeometriche. *Atti della XLVIII Riunione Scientifica dell'IIPP, Padova 2013, Studi di Preistoria e Protostoria, Vol. 2, Preistoria e Protostoria del Veneto, 833-838, 2015. ISBN: 978-88-6045-056-2*
  318. CUPITÒ M., ANGELINI I., ARTIOLI G., NIMIS P., VILLA I.M.: Il torques tipo Canegrate di Fondo Paviani (Verona) alla luce delle analisi archeometriche. *Atti della XLVIII Riunione Scientifica dell'IIPP, Padova 2013, Studi di Preistoria e Protostoria, Vol. 2, Preistoria e Protostoria del Veneto, 839-844, 2015. ISBN: 978-88-6045-056-2*
  319. ANGELINI A., ANGELINI I., ARTIOLI G., NIMIS P., VILLA I.M.: Tipologia e archeometria dei bronzi di Castel de Pedena (San Gregorio nelle Alpi, Belluno). *Atti della XLVIII Riunione Scientifica dell'IIPP, Padova 2013, Studi di Preistoria e Protostoria, Vol. 2, Preistoria e Protostoria del Veneto, 881-886, 2015. ISBN: 978-88-6045-056-2*
  320. ANGELINI A., ANGELINI I., ARTIOLI G., NIMIS P., TASCA G., VILLA I.M., VINCENZUTTO D.: Una nuova ascia vicina al tipo Ponte S. Giovanni da Cesiomaggiore (Belluno). Inquadramento tipocronologico e analisi archeometriche. *Atti della XLVIII Riunione Scientifica dell'IIPP, Padova 2013, Studi di Preistoria e Protostoria, Vol. 2, Preistoria e Protostoria del Veneto, 915-920, 2015. ISBN: 978-88-6045-056-2*
  321. CASANOVA MUNICCHIA A., BALDI M., ADDIS A., ARTIOLI G., FANTUSATI E., RICCI M.A., SECCO M., SODO A.: Characterization of Meroitic pottery (I-IV century AD) from Abu Erteila (Sudan). *1st International Conference on Metrology for Archaeology, Benevento, Italy, 22-23 October 2015. Pp. 556-560, 2015. ISBN-15: 978-88-940453-3-8*
  322. ANGELINI I., MOLIN G., ARTIOLI G.: La situla di Pieve d'Alpago: indagini chimiche, metallografiche ed isotopiche. In: G. Gangemi, M. Bassetti e D. Voltolini (eds.) *"Le signore dell'Alpago"*, Caneva Ed., pp. 209-218, 2016. **ISBN**: 9788884092946
  323. ADDIS A., ANGELINI I., NIMIS P., ARTIOLI G.: Late Bronze Age copper smelting slags from Luserna (Trentino, Italy): interpretation of the metallurgical process. *Archaeometry* **58**, 96-114, 2016. **DOI**: doi: 10.1111/arc.12160
  324. SECCO M., VALENTINI L., DALCONI M.C., ARTIOLI G., ATTWELL C., OFFENBERG A., FERRARI G.: Microstructural characterization of geopolymer concrete for industrial applications. In: Schmidt W., Msinjili N.S. (eds.) *2<sup>nd</sup> International Conference "Advances in Cement and Concrete Technology in Africa", Dar Es Salaam, Tanzania, 27-29 January 2016. Conference proceedings*, 163-167, 2016. **ISBN**: 978-3-9817502-3-2
  325. ARTIOLI G., QUARTIERI S.: The contribution of geoscience to cultural heritage studies. *Elements* **12**, 13-18, 2016. **DOI**: 10.2113/gselements.12.1.13
  326. VALENTINI L., FAVERO M., DALCONI M.C., RUSSO V., FERRARI G., ARTIOLI G.: Kinetic Model of Calcium-Silicate Hydrate Nucleation and Growth in the Presence of PCE Superplasticizers. *Crystal Growth & Design* **16**, 646-654, 2016. **DOI**: 10.1021/acs.cgd.5b01127
  327. ARTIOLI G., SECCO M.: Modern and ancient masonry: nature and role of the binder. In: Modena C., da Porto F., Valluzzi M.R. (eds) *Proceedings of IB<sup>2</sup>MAC 2016 – 16<sup>th</sup> International Brick and Block Masonry Conference*, Padova, 26-30 June 2016. CRC Press/Balkema, pp. 3-10, 2016. **ISBN**: 978-1-138-02999-6
  328. SECCO M., ADDIS A., ARTIOLI G.: Characterization of lime-stabilized earthen mortars from historic masonry structures. In: Modena C., da Porto F., Valluzzi M.R. (eds) *Proceedings of IB<sup>2</sup>MAC 2016 – 16<sup>th</sup> International Brick and Block Masonry Conference*, Padova, 26-30 June 2016. CRC Press/Balkema, pp. 1889-1896, 2016. **ISBN**: 978-1-138-02999-6
  329. ARTIOLI G.: XRD – X-Ray Diffraction. In: Allan G. Gilbert (ed.) *The Encyclopedia of Geoarchaeology*. Springer, Heidelberg-Berlin. Pp. 1019-1025, 2016. **ISBN**: 978-1-4020-4409-0
  330. ARTIOLI G., ANGELINI I., NIMIS P., VILLA I.M.: A lead-isotope database of copper ores from the Southeastern Alps: A tool for the investigation of prehistoric copper metallurgy. *Journ. Archaeol. Sci.* **75**, 27-39, 2016. **DOI**: 10.1016/j.jas.2016.09.005
  331. ARTIOLI G., ANGELINI I., ADDIS A., CANOVARO C., CHIARANTINI L., BENVENUTI M.: Ceramiche tecniche, scorie, minerali e metalli: interpretazione del processo metallurgico. In: Fedeli F., Galiberti A. (eds.) *Metalli e metallurghi della preistoria. L'insediamento eneolitico di San Carlo-Cava Solvay*. Tagete Edizioni, Pontedera. Pp. 69-81, 2016. **ISBN**: 978-88-6529-142-9
  332. DAL SASSO G., LEBON M., ANGELINI I., MARITAN L., USAI D., ARTIOLI G.: Bone diagenesis variability among multiple burial phases at Al Khiday (Sudan) investigated by ATR-FTIR spectroscopy.

333. DILARIA S., ADDIS A., SECCO M., BONETTO J., ARTIOLI G., SALVADORI M.: Vitruvian recipes in Roman Aquileia (Italy): the floor bedding mortars of Bestie Ferite and Tito Macro domus. In: Papayianni I., Stefanidou M., Pachta V. (eds.) *Proceedings of the 4th Historic Mortars Conference – HMC 2016*, Aristotle University of Thessaloniki, Greece. Pp. 145-154, 2016. ISBN: 978-960-99922-3-7
334. PASIAN C., SECCO M., PIQUÉ F., RICKERBY S., ARTIOLI G., CATHER S.: Performance of grout with reduced water content: the importance of porosity and related properties. In: Papayianni I., Stefanidou M., Pachta V. (eds.) *Proceedings of the 4th Historic Mortars Conference – HMC 2016*, Aristotle University of Thessaloniki, Greece. Pp. 639-646, 2016. ISBN: 978-960-99922-3-7
335. HAYEN R., VAN STRYDONCK M., BOARETTO E., LINDROOS A., HEINEMEIER J., RINGBOM Å, HUEGLIN S., MICHALSKA D., HAJDAS I., MARZAIOLI F., MASPERO F., GALLI A., ARTIOLI G., MOREAU C., GUIBERT P., CAROSELLI M.: Analysis and characterization of historic mortars for absolute dating. In: Papayianni I., Stefanidou M., Pachta V. (eds.) *Proceedings of the 4th Historic Mortars Conference – HMC 2016*, Aristotle University of Thessaloniki, Greece. Pp. 656-664, 2016. ISBN: 978-960-99922-3-7
336. ADDIS A., SECCO M., PRETO N., MARZAIOLI F., PASSARIELLO I., BROGIOLO G.P., CHAVARRIA ARNAU A., ARTIOLI G., TERRASI F.: New strategies for radiocarbon dating of mortars: Multi-step purification of the lime binder. In: Papayianni I., Stefanidou M., Pachta V. (eds.) *Proceedings of the 4th Historic Mortars Conference – HMC 2016*, Aristotle University of Thessaloniki, Greece. Pp. 665-672, 2016. ISBN: 978-960-99922-3-7
337. FERRARI G., RUSSO V., PASSALACQUA D., CURTO F., ARTIOLI G., DALCONI M.C., VALENTINI L., MBA M.: New silicate hydrate as concrete permeability reducing admixture. In: Plank J., Lei L., Echt T. (eds.) *Proceedings of the 2nd ICCCM - International Conference on the Chemistry of Construction Materials*. Munich, Germany, 10-12 October 2016. German Chemical Society GDC-Monographie, Vol. 50, 59-62, 2016. ISBN: 978-3-936028-96-6
338. BONETTO J., ARTIOLI G., SECCO M., ADDIS A.: The use of the pozzolanic ashes in the big yards of Cisalpine Gaul during the Roman Republican Age: The cases of Aquileia and Ravenna. In: Camporeale S., DeLaine J., Pizzo A. (eds.) *Proceedings of the 5th International Workshop on the Archaeology of Roman Construction*. Oxford, 11-12 April 2015. "Arqueología de la Construcción V. Man-made materials, engineering and infrastructure". CSIC, Madrid. Pp. 29-44, 2016. ISBN: 978-84-00-10142-8
339. USAI D., MARITAN L., DAL SASSO G., ARTIOLI G., SALVATORI S., JAKOB T., SALVATO T.: Late Pleistocene/Early Holocene Evidence of Prostatic Stones at Al Khiday Cemetery, Central Sudan. *PLoS ONE* **12**, e0169524, 2017. DOI: 10.1371/journal.pone.0169524
340. FERRARI G., VALENTINI L., RUSSO V., DALCONI M.C., FAVERO M., ARTIOLI G.: Improving the performance of PCE superplasticizers in early stiffening Portland cement. *Constr. Building Mater.* **130**, 83-91, 2017. DOI: 10.1016/j.conbuildmat.2016.11.015
341. GLIOZZO E., KOCKELMANN W.A., ARTIOLI G.: Neutron diffraction of Cu-Zn-Sn ternary alloys: non-invasive assessment of the compositions of historical bronze/brass copper ternary alloys. *Journ. Appl. Crystall.* **50**, 49-60, 2017. DOI: 10.1107/S1600576716017805
342. ARTIOLI G.: Book review. "Recent Advances in the Scientific Research on Ancient Glass and Glaze. World Scientific, 2016". *Journ. Appl. Crystall.* **50**, 669-670, 2017. DOI: 10.1107/S1600576717001558
343. ADDIS A., SECCO M., ARTIOLI G., MARZAIOLI F., PASSARIELLO I., TERRASI F.: The mortars of the excavation at the Baptistery of Padua: 14C dating and production technology. In: Chavarria Arnau A. (ed.) "Ricerche sul Centro Episcopale di Padova – Scavi 2011-2012", Progetti di Archeologia – SAP Società Archeologica, Quingentole. Pp. 69-83, 2017. ISBN: 978-88-99547-10-3
344. ANTONELLI F., VEDOVETTO P., ADDIS A., SECCO M., ARTIOLI G.: Studio archeometrico di marmi bianchi dallo scavo presso il Complesso Episcopale di Padova. In: Chavarria Arnau A. (ed.) "Ricerche sul Centro Episcopale di Padova – Scavi 2011-2012", Progetti di Archeologia – SAP Società Archeologica, Quingentole. Pp. 181-185, 2017. ISBN: 978-88-99547-10-3
345. MILLE B., ARTIOLI G.: Les objets launaciens: composition élémentaire du métal, composition isotopique du plomb. In: Guilaine J. et al. (eds.) "Launac et le Launacien. Dépôts des bronzes protohistoriques du sud de la Gaule", Presses Universitaires de la Méditerranée, Montpellier. Pp. 123-177, 2017. ISBN: 978-2-36781-213-7
346. ADDIS A., ANGELINI I., ARTIOLI G.: Late Bronze Age copper smelting in the southeastern Alps: How standardized was the smelting processes? Evidence from Transacqua and Segonzano, Trentino, Italy. *Archaeol. Anthropol. Sci.* **9**, 985-999, 2017. DOI: 10.1007/s12520-016-0462-5
347. ARTIOLI G., ANGELINI I.: Archeologia e archeometria: conoscere e superare i limiti della "techné". In: Cupitò M., Vidale M., Angelini A. (eds.) "Beyond limits – Studi in onore di Giovanni Leonardi". Antenor Quaderni 39, Padova University Press, Padova. Pp. 665-674, 2017. ISBN: 978-88-6938-070-9
348. ARTIOLI G., ANGELINI I., KAUFMANN G., CANOVARO C., DAL SASSO G., VILLA I.M.: Long-distance connections in the Copper Age: new evidence from the Alpine Iceman's copper axe. *PLoS ONE* **12**, e0179263, 2017. DOI: 10.1371/journal.pone.0179263 [correction in: Artoli G, Angelini I, Kaufmann G, Canovaro C, Dal Sasso G, Villa IM (2017) Correction: Long-distance connections in the Copper Age: New evidence from the Alpine Iceman's copper axe. *PLoS ONE* **12**: e0189561. DOI: 10.1371/journal.pone.0189561]
349. ASSCHER Y., DAL SASSO G., NODARI L., ANGELINI I., BOFFA BALLARAN T., ARTIOLI G.: Differentiating between long and short range disorder in Infra-Red Spectra: On the meaning of "crystallinity" in silica. *Phys. Chem. Chem. Phys.* **19**, 21783-21790, 2017. DOI: 10.1039/C7CP03446F
350. RODLER A.S., ARTIOLI G., KLEIN S., PETSCHICK R., FINK-JENSEN P., BRØNS C.: Provenancing ancient pigments: lead isotope analyses of the copper compound of egyptian blue pigments from



- ancient mediterranean artefacts. *J. Archaeol. Sci.: Reports* **16**, 1-18, 2017. DOI: 10.1016/j.jasrep.2017.09.008
351. ANGELINI I., ARTIOLI G., NICOSIA C.: Metals and metalworking residues. In: Nicosia C., Stoops G. (eds.) *"Archaeological soil and sediment micromorphology"*. John Wiley and Sons, Hoboken. Pp. 213-222, 2017. ISBN: 978-1-118-94105-8
352. FERRARI G., RUSSO V., GAMBA M., ARTIOLI G., DALCONI M.C., VALENTINI L.: The fatal attraction between PCEs and swelling clays. In: Plank J., Lei L. (eds.) *Conference Proceedings. 2nd International Conference on Polycarboxylate Superplasticizers, PCE 2017*. Munich, Germany, 27-28 September 2017. Pp. 251-261, 2017. ISBN: 978-3-9816240-6-9
353. VALENTINI L., DALCONI M.C., ARTIOLI G.: Advanced methods for assessing the nucleation and growth kinetics and microstructural development of conventional and alternative cementitious binders. In: Banjad Pecur I., Baricevic A., Stirmer N., Bjegovic D. (eds.) *Proceedings of the 1st International Conference on Constructio Materials for Sustainable Future – CoMS\_2017*. Zadar, Croatia, 19-21 April 2017. University of Zagreb, Faculty of Civil Engineering, Zagreb, Croatia. Pp. 336-339, 2017. ISBN: 978-953-8168-04-8
354. ARTIOLI G., ANGELINI I., CANOVARO C.: L'argento dei reperti di Marengo. Ipotesi di provenienza basate sui rapporti isotopici del Pb. In: Micheletto E., Venturino M. (eds.) *Argenti di Marengo. Contesto e materiali*. ArcheologiaPiemonte 6. LineLab.edizioni, Alessandria. Pp. 165-172, 2017. ISBN: 88-89038-63-2
355. ARTIOLI G., SECCO M., ADDIS A., BELLOTTO M.: Role of hydrotalcite-type layered double hydroxides in delayed pozzolanic reactions and their bearing on mortar dating. In: Pöllmann H. (ed.) *Cementitious Materials. Composition, Properties, Applications*. De Gruyter, Amsterdam. Pp. 147-158, 2017. DOI: 10.1515/9783110473728-006
356. HAJDAS I., LINDROOS A., HEINEMEIER J., RINGBOM Å., MARZAIOLI F., TERRASI F., PASSARIELLO I., CAPANO M., ARTIOLI G., ADDIS A., SECCO M., MICHALSKA D., CZERNIK J., GOSLAR T., HAYEN R., VAN STRYDONCK M., FONTAINE L., BOUDIN M., MASPERO F., PANZERI L., GALLI A., URBANOVA P., GUIBERT P.: Preparation and dating of mortar samples—MOrtar Dating Inter-comparison Study (MODIS). *Radiocarbon* **59**, 1845-1858, 2017. DOI: 10.1017/RDC.2017.112
357. HAYEN R., VAN STRYDONCK M., FONTAINE L., BOUDIN M., LINDROOS A., HEINEMEIER J., RINGBOM Å., MICHALSKA D., HAJDAS I., HUEGLIN S., MARZAIOLI F., TERRASI F., PASSARIELLO I., CAPANO M., MASPERO F., PANZERI L., GALLI A., ARTIOLI G., ADDIS A., SECCO M., BOARETTO E., MOREAU C., GUIBERT P., URBANOVA P., CZERNIK J., GOSLAR T., CAROSELLI M.: Mortar dating methodology: assessing recurrent issues and needs for further research. *Radiocarbon* **59**, 1859-1871, 2017. DOI: 10.1017/RDC.2017.129
358. RAINER L., GRAVES K., MAEKAWA S., GITTINS M., PIQUÉ F. (eds.) with contribution of ANGELINI I., ARTIOLI G., SECCO M.: Scientific report on the wall paintings in the Tablinum of the House of the Bicentenary. In: *"Conservation of the architectural surfaces in the Tablinum of the House of the Bicentenary, Herculaneum. Project report. Phase I: Examination, investigations, and condition assessment."* Chapter 5. The Getty Conservation Institute, Los Angeles. Pp. 167-240, 2017. ISBN: 978-1-937433-43-7
359. NIMIS P., OMENETTO P., STASI G., CANOVARO C., DAL SASSO G., ARTIOLI G., ANGELINI I.: Lead isotopes systematics in ophiolite-associated sulphide deposits from the Western Alps and Northern Apennine (Italy). *Eur. J. Mineral.* **30**, 17-31, 2017. DOI: 10.1127/ejm/2018/0030-2696
360. ARTIOLI G.: Let the walls speak. A brief history of binders in architecture. *Rendiconti. Accademia Nazionale delle Scienze detta dei XL. Memorie di Scienze Fisiche e Naturali*. Vol. **XLI**, Parte II, Tomo I, 7-18, 2017.
361. STIEVANIN E., GARBIN E., SECCO M., DA PORTO F., ARTIOLI G.: Early reinforced concrete structures, a methodological approach from materials and details to structural assessment. In: ICACMS 2017, International Conference on Advances in Construction Materials and Systems. Chennai, India, 3-8 September 2017. Vol. 3, Pp. 587-596, 2017.
362. SECCO M., ADDIS A., ARTIOLI G., ANGELINI I.: Analisi Archeometriche sui leganti strutturali. In: "La Villa d'Ozio", Museo Archeologico Romano, Santa Maria Assunta, MAR Positano. Pp. 239-244, 2017. Archaeometric analyses on structural binders. In: "The Otium Villa", Museo Archeologico Romano, Santa Maria Assunta, MAR Positano, Opera Edizioni, Salerno. Pp. 239-244, 2017. ISBN: 978-88-943968-6-7
363. MARCHETTI N., ANGELINI I., ARTIOLI G., BENATI G., BITELLI G., CURCI A., MARFIA G., ROCCETTI M.: NEARCHOS. Networked Archaeological Open Science: Advances in Archaeology through field analytics and scientific community sharing. *J. Archaeol. Res.* **26**, 447-469, 2018. DOI: 10.1007/s10814-017-9112-4
364. DAL SASSO G., ANGELINI I., MARITAN I., ARTIOLI G.: Raman hyperspectral imaging as an effective and highly informative tool to study the diagenetic alteration of fossil bones. *Talanta* **179**, 167-176, 2018. DOI: 10.1016/j.talanta.2017.10.059
365. SALVEMINI F., GRAZZI F., ANGELINI A., VONTOBEL P., VIGONI A., ARTIOLI G., ZOPPI M.: Morphological reconstruction of Roman styli from Iulia Concordia - Italy. *Archaeol. Anthropol. Sci.* **10**, 781-794, 2018. DOI: 10.1007/s12520-016-0390-4
366. SECCO M., DILARIA S., ADDIS A., BONETTO J., ARTIOLI G., SALVADORI M.: The evolution of the Vitruvian recipes over 500 years of floor-making techniques: the case studies of Domus delle Bestie Ferite and Domus di Tito Macro (Aquilaia, Italy). *Archaeometry* **60**, 185-206, 2018. DOI: 10.1111/arcm.12305
367. PASIAN C., SECCO M., PIQUÉ F., ARTIOLI G., RICKERBY S., CATHER S.: Lime-based injection grouts with reduced water content: An assessment of the effects of the water-reducing agents



- ovalbumin and ethanol on the mineralogical evolution and properties of grouts. *Journal of Cultural Heritage* **30**, 70-80, 2018. DOI: 10.1016/j.culher.2017.10.003
368. BELLOTTO M., ARTIOLI G., DALCONI M.C., CORSO R.: On the preparation of concentrated gypsum slurry to reuse sulfate-process TiO<sub>2</sub> byproduct stream. *Journal of Cleaner Production* **195**, 1468-1475, 2018. DOI: 10.1016/j.jclepro.2017.12.089
369. VALENTINI L., DALCONI M.C., ARTIOLI G.: Role of polycarboxylate-ether superplasticizers on cement hydration kinetics and microstructural development. In: Proceedings of the 2nd International Congress on Materials & Structural Stability, CMSS-2017. *MATEC Web of Conferences*, vol. **149**, Art.n. 01004. EDP Sciences, Les Ulis. 2018. DOI: 10.1051/mateconf/201814901004
370. VALENTINI L., FERRARI G., RUSSO V., ŠTEFANČIČ M., ZALAR SERJUN V., ARTIOLI G.: Use of nanocomposites as permeability reducing admixtures. *Journal of the American Ceramic Society* **101**, 4275-4284, 2018. DOI: 10.1111/jace.15548
371. DAL SASSO G., ZERBONI A., MARITAN L., ANGELINI I., COMPOSTELLA C., USAI D., ARTIOLI G.: Radiocarbon dating reveals the timing of formation and development of pedogenic calcium carbonate concretions in Central Sudan during the Holocene. *Geochimica et Cosmochimica Acta* **238**, 16-35, 2018. DOI: 10.1016/j.gca.2018.06.037
372. DAL SASSO G., ASSCHER Y., ANGELINI I., NODARI L., ARTIOLI G.: A universal curve of apatite crystallinity for the assessment of bone integrity and preservation. *Scientific Reports* **8**, 12025, 2018. DOI: 10.1038/s41598-018-30642-z
373. BELLOTTO M., BIASCI R., ARTIOLI G.: Dal marmo alla carta. *Industria della carta*, **Ottobre 2018**, 18-21.
374. FERRARI G., GAMBA M., SURICO F., ARTIOLI G., DALCONI M.C., VALENTINI L.: The troubled relationship between PCEs and cement in the presence of swelling clays. *12th International Conference on Superplasticizers and Other Chemical Admixtures in Concrete*, Beijing, China, 28-31 October 2018.
375. FERRARI G., RUSSO V., MAZZETTI M., ARTIOLI G., SECCO M., VALENTINI L.: Nanosized polysilicate admixture for sustainability in precast concrete industry. *14th ICACTS-2018, 14th International Conference on Recent Advances in Concrete Technology and Sustainability Issues*, Beijing, China, 30 October – 2 November 2018.
376. FERRARI G., AL-MANASIR N., ARTIOLI G., CONTESSI S., PELLAY R., CALGARO L.: From HPC to HPSS: New frontiers in waste stabilization. *14th International Conference on Recent Advances in Concrete Technology and Sustainability Issues*. Beijing, China, 30 October – 2 November 2018.
377. FERRARI G., BROCCHI A., ARTIOLI G., DALCONI M.C., VALENTINI L.: New activating filler for sustainable concrete. Proceedings 3rd R.N. Raikar Memorial International Conference and Gettu-Kodur International Symposium on Advances in Science and Technology of Concrete, 14-15 December 2018, Mumbai, India.
378. VENTURINO M., FERRERO L., ARTIOLI G., CANOVARO C., ANGELINI I.: Sepolture ad inumazione dell'Età del Bronzo nel Piemonte meridionale. *Quaderni di Archeologia del Piemonte* **2**, 11-43, 2018. ISSN: 2533-2597
379. CREMASCHI M., MUTTI A., PIZZI C., SALVIONI M., ARTIOLI G., ANGELINI I.: Nuove ricerche nella palafitta di Parma. In: Bernabò Brea M. (ed.) "Preistoria e Protostoria dell'Emilia Romagna", Studi di Preistoria e Protostoria – 3, Vol II, pp. 73-82, 2018. ISBN: 978-88-6045-072-2
380. CANOVARO C., ANGELINI I., BORGNA E., ARTIOLI G.: Analisi chimiche e metallografiche di ripostigli dell'area aquileiese. Studi di Preistoria e Protostoria – 5, "Preistoria e Protostoria del Caput Adriae", pp. 343-354, 2018. ISBN: 978-88-6045-069-2
381. BITTELLI M., ANDRENELLI M.C., SIMONETTI G., PELLEGRINI S., ARTIOLI G., PICCOLI I., MORARI F.: Shall we abandon sedimentation methods for particle size analysis in soils? *Soil & Tillage Research* **185**, 36–46, 2019. DOI: 10.1016/j.still.2018.08.018
382. ARTIOLI G.: Diffraction. *The Encyclopedia of Archaeological Sciences*, Sandra L. López Varela ed., Vol I, pp. 514-516, 2019. Wiley-Blackwell, Malden, MA. ISBN: 978-0-470-67461-1 [www.wiley.com/en-it/The+Encyclopedia+of+Archaeological+Sciences-p-9780470674611](http://www.wiley.com/en-it/The+Encyclopedia+of+Archaeological+Sciences-p-9780470674611)
383. SECCO M., STIEVANIN E., MODENA C., ARTIOLI G., DA PORTO F.: Characterization and conservation of Villa Girasole, a 1930s reinforced concrete revolving house near Verona. In: Croft C., Macdonald S., Ostergren G (eds.) *Concrete: Case Studies in Conservation Practice*. GCI Getty Conservation Institute, Conserving Modern Heritage Series. Pp. 46-57, 2019. ISBN: 978-1-60606-576-1
384. RODLER A.S., KLEIN S., ARTIOLI G., BRØNS C.: Probing the provenance of archaeological glaze colorants: Polychrome faunal reliefs of the Ishtar gate and the processional way of Babylon. *Archaeometry* **61**, 837-855, 2019. DOI: 10.1111/arc.12455
385. ADDIS A., SECCO M., MARZAIOLI F., ARTIOLI G., CHAVARRIA-ARNAU A., PASSARELLO I., TERRASI F., BROGIOLO G.P.: Selecting the most reliable <sup>14</sup>C dating material inside mortars: The origin of the Padua Cathedral. *Radiocarbon* **61**, 375-393, 2019. DOI:10.1017/RDC.2018.147
386. CANOVARO C., ANGELINI I., ARTIOLI G., NIMIS P., BORGNA E.: Metal flow in the Late Bronze Age across the Friuli-Venezia Giulia plain (Italy): New insights on Cervignano and Muscoli hoards through chemical and isotopic investigations. *Archaeological and Anthropological Sciences* **11**, 4829–4846, 2019. DOI: 10.1007/s12520-019-00827-2
387. ANGELINI I., CANOVARO C., VENTURINO M., ARTIOLI G.: The silver treasure of Marengo: silver provenancing and insights into late antiquity Roman and Gallo-Roman hoards. *Archaeological and Anthropological Sciences* **11**, 4959–4970, 2019. DOI: 10.1007/s12520-019-00851-2
388. SECCO M., PREVIATO C., ADDIS A., ZAGO G., KAMSTEEG A., DILARIA S., CANOVARO C., ARTIOLI G., BONETTO J.: Mineralogical clustering of the structural mortars from the Sarno Baths, Pompeii: A tool to interpret construction techniques and relative chronologies. *Journal of Cultural Heritage* **40**, 265-273, 2019. DOI: 10.1016/j.culher.2019.04.016

389. ANGELINI I., ASSCHER Y., SECCO M., PARISATTO M., ARTIOLI G.: The pigments of the Frigidarium in the Sarno Baths, Pompeii: Identification, stratigraphy and weathering. *Journal of Cultural Heritage*, 309-316, 2019. DOI: 10.1016/j.culher.2019.04.021
390. ASSCHER Y., ANGELINI I., SECCO M., PARISATTO M., CHABAN A., DEIANA R., ARTIOLI G.: Combining multispectral images with x-ray fluorescence to quantify the distribution of pigments in the frigidarium of the Sarno Baths, Pompeii. *Journal of Cultural Heritage*, 317-323, 2019. DOI: 10.1016/j.culher.2019.04.014
391. SEBASTIANI L., DILARIA S., SALVADORI M., SECCO M., ORIOLO F., RUBINICH M., ARTIOLI G., ADDIS A.: Tectoria e pigmenti nella pittura medio-imperiale e tardoantica di Aquileia: uno studio archeometrico. In: Salvadori M., Fagioli F., Sbroli C. (eds.) *Nuovi dati per la conoscenza della pittura antica*. Atti del I Colloquio AIRPA, Aquileia, 16-17 Giugno 2017. Edizioni Quasar, Roma. Pp. 31-46, 2019. ISBN: 978-88-7140-954-2
392. LING J., HJÄRTHNER-HOLDAR E., GRANDIN L., STOS-GALE Z., KRISTIANSEN K., MELHEIM A.L., ARTIOLI G., ANGELINI I., KRAUSE R., CANOVARO C.: Moving metals IV: swords, metal sources and trade networks in Bronze Age Europe. *Journal of Archaeological Science: Reports* **26**, 101837, 2019. DOI: 10.1016/j.jasrep.2019.05.002
393. ARTIOLI G.: Powder diffraction in art and archaeology. In: Gilmore C.J., Kaduk J.A., Schenk H. (eds.) *International Tables for Crystallography. Volume H: Powder Diffraction*. Chapter 7.4. IUCr-Wiley. Pp. 759-766, 2019. ISBN: 978-1-118-41628-0 DOI: 10.1107/97809553602060000115
394. DILARIA S., SECCO M., BONETTO J., ARTIOLI G.: Technical analysis on materials and characteristics of mortar-based compounds in Roman and Late antique Aquileia (Udine, Italy). A preliminary report of the results. In: Alvarez J.I., Fernandez J.M., Navarro I, Duran A., Sirera R. (eds.) *Proceedings of HMS 2019, 5th Historic Mortars Conference*, Pamplona, Spain. RILEM Publications S.A.R.L., Paris, France. Pp. 665-680, 2019. ISBN: 978-2-35158-221-3
395. PASIAN C., SECCO M., PIQUE F., ARTIOLI G., CATHER S.: Lime-pozzolan injection grouts with ovalbumin and ethanol added as water-reducing agents: grout design and assessment of the mineralogical evolution. In: Alvarez J.I., Fernandez J.M., Navarro I, Duran A., Sirera R. (eds.) *Proceedings of HMS 2019, 5th Historic Mortars Conference*, Pamplona, Spain. RILEM Publications S.A.R.L., Paris, France. Pp. 1238-1250, 2019. ISBN: 978-2-35158-221-3
396. MARZAIOLI F., TERRASI F., PASSARIELLO I., D'ONOFRIO A., DI RIENZO B., STELLATO L., ARTIOLI G., ADDIS A., SECCO M., NONNI S., CAPANO M.: Investigation of pre-screening and cost-effective tools for Mortar dating at CIRCE and CIRCe: data from the usage of <sup>13</sup>C in the framework of synthetic samples. *Archeologia dell'Architettura* **XXIV**, 73-79, 2019. ISSN: 1126-6236 ISBN: 978-88-7814-923-6
397. ARTIOLI G., OBERTI R. (eds.): *The contribution of mineralogy to cultural heritage*. EMU Notes in Mineralogy, Vol. 20. European Mineralogical Union, Mineralogical Society of Great Britain & Ireland. Pp. 448, 2019. ISBN: 978-0903059-5
398. ARTIOLI G., OBERTI R.: Introduction: The role of modern mineralogy in cultural heritage studies. In: Artioli G., Oberti R. (eds.) *"The contribution of mineralogy to cultural heritage"*. EMU Notes in Mineralogy, Vol. 20, Chpt. 1, 1-11, 2019. DOI: 10.1180/EMU-notes.20.1
399. ANGELINI I., GRATUZE B., ARTIOLI G.: Glass and other vitreous materials through history. In: Artioli G., Oberti R. (eds.) *"The contribution of mineralogy to cultural heritage"*. EMU Notes in Mineralogy, Vol. 20, Chpt. 3, 87-150, 2019. DOI: 10.1180/EMU-notes.20.3
400. ARTIOLI G., SECCO M., ADDIS A.: The Vitruvian legacy: Mortars and binders before and after the Roman world. In: Artioli G., Oberti R. (eds.) *"The contribution of mineralogy to cultural heritage"*. EMU Notes in Mineralogy, Vol. 20, Chpt. 4, 151-202, 2019. DOI: 10.1180/EMU-notes.20.4
401. ARTIOLI G., COTTE M., DELGADO M., RAFALSKA-LASOCHA A.: CrysAC activities towards a crystallography-based knowledge of archaeometry and conservation. *Materials Structure* **26**, 94-96, 2019. ISSN: 1211-5894 (print) 1805-4382 (online)
402. ArchaeoGLOBE Project: Archaeological assessment reveals Earth's early transformation through land use. *Science* **365**, 897-902, 2019. DOI: 10.1126/science.aax1192
403. CONTESSI S., BELLOTTO M., DALCONI M.C., CALGARO L., SECCO M., FERRARI G., ARTIOLI G., BONETTO A.: Low-CO2 Binders for restoring a Pb-contaminated Soil: Improvements and Drawbacks with respect to Ordinary Portland Cement. *Proceedings of 1st ILCCC 2019, Innovation in Low-Carbon Cement & Concrete Technology*, London 24-26 June 2019.
404. GUALTIERI A.F., GATTA G.D., ARLETTI R., ARTIOLI G., BALLIRANO P., CRUCIANI G., GUAGLIARDI A., Malferrari D., Masciocchi N., Scardi P.: Quantitative phase analysis using the Rietveld method: towards a procedure for checking the reliability and quality of the results. *Periodico di Mineralogia* **88**, 147-151, 2019. DOI: 10.2451/2019PM870
405. GUALTIERI A.F., GATTA G.D., ARLETTI R., ARTIOLI G., BALLIRANO P., CRUCIANI G., GUAGLIARDI A., Malferrari D., Masciocchi N., Scardi P.: Analisi di fase quantitativa mediante metodo Rietveld: verso un protocollo di verifica di autenticità e qualità dei referti. *La Chimica e l'Industria online*, N° 5, Pp. 34-37, Settembre/Ottobre 2019. DOI: 10.17374/Ci.2019.101.5.34
406. ARTIOLI G., CANOVARO C., ANGELINI I.: Analisi chimiche e microstrutturali di due lesine provenienti da Ponte Molino. In: Longhi C., Tirabassi I. (eds.) *Un villaggio della fine del III Millennio a.c. sulle rive del Tartaro a Ponte Molino di Ostiglia*. Catalogo della mostra, Revere – Palazzo Ducale. Comune di Borgo Mantovano, Museo del Po di Revere. Pp. 37-39, 2019.
407. VALENTINI L., MASCARIN L., DALCONI M.C., GARBIN E., FERRARI G., ARTIOLI G.: Performance and properties of alkali-activated blend of calcined laterite and waste marble powder. In: Sharma M., Emmanuel A.C., Krishnan S. (eds.) *Proceedings of LC3, 3rd International Conference on Calcined Clays for Sustainable Concrete*. New Delhi, India, 15-17 October 2019. Vol. II, 85-91.

408. ARTIOLI G., LAROCHE M., CANOVARO C., ANGELINI I.: Le dépôt de haches de Centeilles (Siran, Hérault) et ses relations avec le district minier de Cabrières-Péret. In: "Paysages pour l'homme", Actes du colloque international en hommage à Paul Ambert. Cabrières, 15-19 Octobre 2019, Association Culturelle des Amis des Cabrières. Pp. 243-248, 2019.
409. GUIDORZI L., RE A., PICOLLO F., FANTINO F., MARTIRE L., ARTIOLI G., PERUZZO L., BOESSO S., RIGATO V., LA TORRE L., CARLUCCI D., LO GIUDICE A.: He+ Irradiation of Quartz for the Identification of Ceramic Forgeries Aged by Radiation. LNL Annual Report 2018, INFN-LNL Report 258, Laboratori Nazionali di Legnaro. Pp. 161-162, 2019. **ISSN:** 1828-8561
410. VALENTINI L., MASCARIN L., ARTIOLI G.: Microstructural analysis of cement materials by lab and beamline techniques. In: 9th Conference on Industrial Computed Tomography, Padova, Italy (iCT 2019). The e-Journal of Nondestructive Testing, Vol. 24 No.03, Issue 2019-03-01, 2019. **ISSN:** 1435-4934
411. CALGARO L., BADETTI E., BONETTO A., CONTESSI S., PELLAY R., FERRARI G., ARTIOLI G., MARCOMINI A.: Consecutive thermal and wet conditioning treatments of sedimentary stabilized cementitious materials from HPSS® technology: Effects on leaching and microstructure. *Journal of Environmental Management* 250, 109503, 2019. **DOI:** 10.1016/j.jenvman.2019.109503
412. BONETTO J., BERTELLI A., BRIDI E., MARESO N., BUENO M., SECCO M., ADDIS A., ARTIOLI G.: 11.3 Le fabbriche del Teatro del Pythion: materiali, attività di cantiere e tecniche di costruzione. In: Bonetto J., Francisci D., Mazzocchin S. (eds.) "Gortyna IX.1 Il teatro del Pythion. Scavi e Ricerche 2001-2013", Monografie della Scuola Archeologica Italiana di Atene, XXVIII, Pp. 390-542, 2019. **ISSN:** 1970-6146 **ISBN:** 978-960-9559-16-4
413. RICCI G., SECCO M., MARZAIOLI F., PASSARIELLO I., TERRASI F., ARTIOLI G.: New strategies in mortar characterization and radiocarbon dating. In: Proceedings of IMEKO TC-4 International Conference on Metrology for Archaeology and Cultural Heritage, Florence, 4-6 December 2019. Pp. 95-99, 2019. **ISBN:** 978-92-990084-5-4
414. CONTESSI S., CALGARO L., DALCONI M.C., BONETTO A., BELLOTTO M., FERRARI G., MARCOMINI A., ARTIOLI G.: Stabilization of lead contaminated soil with traditional and alternative binders. *Journal of Hazardous Materials* 382, 120990, 2020. **DOI:** 10.1016/j.jhazmat.2019.120990
415. ARTIOLI G., FERRARI G., DALCONI M.C., VALENTINI L.: Nanoseeds as modifiers of the cement hydration kinetics. In: Liew M.S., Nguyen-Tri P., Nguyen T.A., Kakooei S. (eds.) "Smart nanoconcretes and cement based materials: Properties, Modellings and Applications". Chpt. 29. Elsevier, Amsterdam. Pp. 257-269, 2020. **ISBN:** 978-0-12-817854-6
416. DOLFINI A., ANGELINI I., ARTIOLI G.: Copper to Tuscany – Coals to Newcastle? The dynamics of metalwork exchange in early Italy. *PLoS-ONE* 15, e0227259, 2020. **DOI:** 10.1371/journal.pone.0227259
417. SECCO M., DILARIA S., BONETTO J., ADDIS A., TAMBURINI S., PRETO N., RICCI G., ARTIOLI G.: Technological transfers in the Mediterranean on the verge of the Romanization: insights from the waterproofing renders of Nora (Sardinia, Italy). *Journal of Cultural Heritage* 44, 63-82, 2020. **DOI:** 10.1016/j.culher.2020.01.010
418. ARTIOLI G., CANOVARO C., NIMIS P., ANGELINI I.: LIA of prehistoric metals in the Central Mediterranean area: a review. *Archaeometry* 62, Suppl. 1, 53–85, 2020. **DOI:** 10.1111/arc.12542
419. POLES L., GENTILE A., GIUFFRIDA A., VALENTINI L., ENDRIZZI I., APREA E., GASPERI F., DISTEFANO G., ARTIOLI G., LA MALFA S., COSTA F., LOVATTI L., DI GUARDO M.: Role of fruit flesh cell morphology and MdPG1 allele type in influencing juiciness and texture properties in apple. *Postharvest Biology and Technology* 164, 111161, 2020. **DOI:** 10.1016/j.postharvbio.2020.111161
420. DAL SASSO G., ARTIOLI G., MARITAN L., ANGELINI I.: A microscopic view of ancient bones: archaeometry and taphonomy of human remains from Al-Khiday (Central Sudan). In: Usai D., Tuzzato S., Vidale M. (eds.) *Tales of three worlds – Archaeology and beyond: Asia, Italy, Africa – A tribute to Sandro Salvadori*. Archaeopress Archaeology, Oxford. Pp. 234-249, 2020. **ISBN:** 978-1-78969-440-6
421. VALENTINI L., MASCARIN L., DALCONI M.C., GARBIN E., FERRARI G., ARTIOLI G.: Performance and Properties of Alkali-Activated Blend of Calcined Laterite and Waste Marble Powder. In: Bishnoi S. (ed.) *Calcined Clays for Sustainable Concrete*. Proceedings of the 3rd International Conference on Calcined Clays for Sustainable Concrete, RILEM Bookseries Vol. 25, Springer, Singapore. Pp. 375-380, 2020. **DOI:** 10.1007/978-981-15-2806-4\_44; **ISBN:** 978-981-15-2805-7
422. OUNISSI C., MAHMOUDI S., VALENTINI L., BENNOUR A., GARBIN E., ARTIOLI G., MONTACER M.: Potential of using Kebilian clays reserves (South Tunisia) for production of geopolymer materials. *Clay Minerals* 55, 101-111, 2020. **DOI:** 10.1180/clm.2020.14
423. KUSKONMAZ C., DE STEFANI A., ARTIOLI G., ZANARINI M., ALESSANDRI BONETTI G., BRUNO G., GRACCO A.: The use of the laser confocal scanning microscopy to measure resin remnants on customized lingual bracket. *BMC Oral Health* 20, 142, 2020. **DOI:** 10.1186/s12903-020-01132-4
424. URBANOVA P., BOARETTO E., ARTIOLI G.: The state-of-the-art of dating techniques applied to ancient mortars and binders: a review. *Radiocarbon* 62, 503-525, 2020. **DOI:** 10.1017/RDC.2020.43
425. ASSCHER Y., VAN ZUIDEN A., ELIMELECH C., GENDELMAN P., AD U., SHARVIT J., SECCO M., RICCI G., ARTIOLI G.: Prescreening hydraulic lime-binders for disordered calcite in Caesarea Maritima: Characterizing the chemical environment using FTIR. *Radiocarbon* 62, 527-543, 2020. **DOI:** 10.1017/RDC.2020.20
426. RICCI G., SECCO M., MARZAIOLI F., TERRASI F., PASSARIELLO I., LAMPUGNANI P., ARTIOLI G.: The castle of Cannero, Lake Maggiore, Italy: An insight into XV-XVI century mortar techniques and their bearing on the radiocarbon dating of complex mortars. *Radiocarbon* 62, 617–631, 2020. **DOI:** 10.1017/RDC.2020.31
427. GUIDORZI L., RE A., PICOLLO F., APRA' P., FANTINO F., MARTIRE L., ARTIOLI G., PERUZZO L., BOESSO S., RIGATO V., LA TORRE L., LO GIUDICE A.: Multi-technique study of He+ micro-irradiation

- effects on natural quartz crystals contained in archaeological pottery. *Nuclear Instrumentation and Methods in Physics Research B* 479, 143-149, 2020. **DOI:** 10.1016/j.nimb.2020.06.035
428. CONTESSI S., DALCONI M.C., POLLASTRI S., CALGARO L., MENEGHINI C., FERRARI G., MARCOMINI A., ARTIOLI G.: Cement-stabilized contaminated soil: Understanding Pb retention with XANES and Raman spectroscopy. *Science of the Total Environment* 752, 141826, 2020. **DOI:** 10.1016/j.scitotenv.2020.141826
429. CESCATTI E., SECCO M., DA PORTO F., ARTIOLI G., MODENA C., XU L.: Characterization of mortar and stone masonry quality in Amatrice historical buildings hit by the 2016 central Italy earthquake. In: Kubica, Kwiecień & Bednarz (eds) "Brick and Block Masonry - From Historical to Sustainable Masonry", Proceedings of IB2MaC 2020, 17th International Brick and Block Masonry Conference, Kraków, Poland, 5–8 July 2020. Pp. 474-482, 2020. **DOI:** 10.1201/9781003098508; ISBN: 978-0-367-56586-2
430. BECHOR B., SIVAN D., MIKO S., HASAN O., GRISONIC M., RADIĆ ROSSI I., LORENTZEN B., ARTIOLI G., RICCI G., IVELJA T., SPADA G., BROOK A.: Salt pans as a new archaeological sea-level proxy: a test case from Dalmatia, Croatia. *Quaternary Science Reviews* 250, 106680, 2020. **DOI:** 10.1016/j.quascirev.2020.106680
431. YASUR-LANDAU A., CLINE E.H., MANNING S., ARTIOLI G.: An Anatolian-style lead figurine from the Assyrian Colony period found in the Middle Bronze Age palace of Tel Kabri. *Bulletin of the American Schools of Oriental Research*, on line, 2020. **DOI:** 10.1086/711885
432. FONDRIEST M., MECKLENBURGH J., PASSELEGUE F.X., ARTIOLI G., NESTOLA F., SPAGNUOLO E., REMPE M., DI TORO G.: Pseudotachylite alteration and the rapid fade of earthquake scars from the geological record. *Geophysical Research Letters*, 47, e2020GL090020, 2020. **DOI:** 10.1029/2020GL090020
433. ANGELINI I., CANOVARO C., ARTIOLI G., MIGLIAVACCA M.: Uomo della roccia: la lesina di rame. In: Migliavacca M. (ed.) "Il sito di Uomo della Roccia (Muzzolon di Cornedo Vicentino) - Comunità e ambiente prealpino dal quinto millennio a.C.", SAP Società Archeologica s.r.l., Quingentole. Pp. 77-84, 2020. **ISBN:** 978-88-99547-44-8
434. CANOVARO C., ARTIOLI G., ANGELINI I.: La lesina di Tana della Mussina: studio archeometallurgico e ipotesi di provenienza. In: Tirabassi I., Formella W., Cremaschi M. (eds.) "La Tana della Mussina di Borzano – Dallo scavo pionieristico dell'Ottocento agli studi scientifici del Ventunesimo secolo", Federazione Speleologica Regionale dell'Emilia Romagna, DEA Documenti ed Evidenze di Archeologia 16, MIBACT Soprintendenze ABAP Emilia-Romagna, FSRER Editore, Bologna. Pp. 91-95, 2020. **ISBN:** 978-88-943271-7-5
435. ARTIOLI G., RICCI G., SECCO M.: Datazione al radiocarbonio e caratterizzazione mineropetrografica, microstrutturale e microchimica di campioni di malte storiche provenienti dall'Abbazia di Santa Maria a Cavour (TO). In: Balbo A., Barello F., Lorenzatto A. (eds.) "Da Vibio Pansa a Proietto – Caburum, il suo territorio, le valli tra il I secolo a.C. e il V secolo d.C.", Atti della giornata di studio Abbazia di Santa Maria, Cavour (TO), 23 giugno 2018. LAR Editore, Torino. Pp. 165-175, 2020. **ISBN:** 978-88-31236-33-1
436. BARELLO F., LORENZATTO A., ARTIOLI G., RICCI G., SECCO M.: Cavour. Abbazia di S. Maria. Ritrovamento di strutture all'esterno dell'abside e datazioni delle malte. *Notiziario della Soprintendenza Archeologia, Belle Arti e Paesaggio per la Città metropolitana di Torino, Quaderni* 4, 183-186, 2020. **ISSN:** 2533-2597
437. VENTURINO M., ANGELINI I., ARTIOLI G., CANOVARO C.: Alba, corso Europa. Scuola primaria "G. Rodari". Indagini archeometriche sulla lesina di rame. *Notiziario della Soprintendenza Archeologia, Belle Arti e Paesaggio per la Città metropolitana di Torino, Quaderni* 4, 254-257, 2020. **ISSN:** 2533-2597
438. RICCI G., SECCO M., ARTIOLI G., MARZAIOLI F., PASSARIELLO I., TERRASI F., VALLUZZI M.R.: The contribution of archaeometric analyses to the Multi-Disciplinary Research in Hierapolis of Phrygia, Turkey. In: Proceedings of IMEKO TC-4 International Conference on Metrology for Archaeology and Cultural Heritage, Trento, 22-24 October 2020. Pp. 348-353, 2020. **ISBN:** 978-92-990084-9-2
439. EZ-ZAKI H., RIVA L., BELLOTTO M., VALENTINI L., GARBIN E., PUNTA C., ARTIOLI G.: Influence of cellulose nanofibrils on the rheology, microstructure and strength of alkali activated ground granulated blast-furnace slag: A comparison with ordinary Portland cement. *Materials and Structures* 54, 23, 2021. **DOI:** 10.1617/s11527-020-01614-5
440. SECCO M., RAINER L., GRAVES K., HEGINBOTHAM A., ARTIOLI G., PIQUÉ F., ANGELINI I.: Ochre-based pigments in the tablinum of the House of the Bicentenary (Herculaneum, Italy) between decorative technology and natural disaster. *Minerals* 11, 67, 2021. **DOI:** 10.3390/min11010067
441. ASSCHER Y., ANGELINI I., SECCO M., PARISATTO M., CHABAN A., DEIANA R., ARTIOLI G.: Mineralogical interpretation of multispectral images: the case study of the pigments in the frigidarium of the Sarno Baths, Pompeii. *Journal of Archaeological Sciences: Reports* 35, 102774, 2021. **DOI:** 10.1016/j.jasrep.2020.102774
442. CALGARO L., CONTESSI S., BONETTO A., BADETTI E., FERRARI G., ARTIOLI G., MARCOMINI A.: Calcium aluminate cement as an alternative to ordinary Portland cement for the remediation of heavy metals contaminated soil: mechanisms and performance. *Journal of Soils and Sediments* 21, 1755-1768, 2021. **DOI:** 10.1007/s11368-020-02859-x
443. ARTIOLI G.: Analisi degli isotopi del piombo e origine dei piombi valsusini. In: M. Rossi (ed.) "Miniera del Rugèt a Gravere – Patrimonio storico-ambientale in alta val di Susa (Torino)", AIPSAM, Il Patrimonio Storico-Ambientale, E20ProgettiEditore, Torino, 2021. **ISBN:** 978-88-97816-00-0
444. DALCONI M.C., ARTIOLI G., MASCIOCCHI N., GIACOBBE C., CASTIGLIONI F., FERRARI G.: The crystal structure of a new calcium aluminate phase containing formate. *Cement and Concrete Research* 146, 106490, 2021. **DOI:** 10.1016/j.cemconres.2021.106490

445. EZ-ZAKI H., MWITI MARANGU J., BELLOTTO M., DALCONI M.C., ARTIOLI G., VALENTINI L.: A fresh view on limestone calcined clay cement (LC3) pastes. *Materials* 14, 3037, 2021. **DOI:** 10.3390/ma14113037
446. DILARIA S., SEBASTIANI L., SALVADORI M., SECCO M., ORIOLO F., ARTIOLI G.: Caratteristiche dei pigmenti e dei tectoria ad Aquiliea: un approccio archeometrico per lo studio dei frammenti di intonaco provenienti da scavi di contesti residenziali aquileiesi (II sec. a.C. – V sec d.C.). In: Cavalieri M., Tomassini P. (eds.) “La peinture murale antique: méthodes et apports d’une approche technique”. Actes du colloque de Louvain-la-Neuve, 21 Avril 2017. Quaderni AIRPA. Edizioni Quasar, Roma. Pp. 125-147, 2021. **ISBN:** 978-88-5491-066-9
447. TECCHIATI U., ANGELINI I., CANOVARO C., ARTIOLI G.: Metallurgy in the 3rd and 2nd millennium BC in South Tyrol and adjacent areas. Research and excavations of the Archaeological Heritage Office of the Autonomous Province of Bolzano-South Tyrol. In: Proceedings of the workshop “Alpenkupfer im Vinschgau”, Vintschger Museum, Schludern, 14-15 May 2021. *Geo.Alp* 17, 27-28, 2020 (published 2021). **ISSN:** 1824-7741
448. ARTIOLI G., HUSSEY D.S.: Imaging with Neutrons. In: Cole D.R., Ross N.L. (eds.) *Exploring Earth and Planetary Materials with Neutrons*. *Elements* 17, 189-194, 2021. **DOI:** 10.2138/gselements.17.3.189
449. GARBIN E., PANIZZA M., TAMBURINI S., NATALI M., ARTIOLI G.: Fibre reinforced geopolymers as inorganic strengthening composites for masonry structures. In: Roca P., Pelà L., Molins C. (eds.), *Proceedings of SAHC 2021, 12th International Conference on Structural Analysis of Historical Constructions*. CIMNE, Barcelona. Pp. 2564-2575, 2021. **ISBN:** 978-84-123222-0-0
450. RICCI G., SECCO M., ADDIS A., PISTILLI A., MARZAIOLI F., PASSARIELLO I., TERRASI F., ARTIOLI G.: Le analisi archeometriche delle malte. In: Chavarría Arnau A., Brogiolo G.P. (eds.) “TORBA (Va) - Scavi archeologici 2013-2019”. *Progetti di Archeologia*, Vol 24. SAP Società Archeologica s.r.l., Quingentole. Pp. 155-163, 2021. **ISBN:** 978-88-99547-56-1
451. ARTIOLI G.: I cristalli tra scienza, arte e storia. *Comics & Science “The crystal issue”*, 26-27, 2021. **ISBN:** 978-88-8080-469-7
452. RICCI G., MONTI A.M., PAGANO R., MARTINI M., CANEVE L., ARTIOLI G.: Unusual luminescence of quartz from La Sassa, Tuscany: Insights on the crystal and defect nanostructure of quartz. *Minerals* 11, 1345, 2021. **DOI:** 10.3390/min11121345
453. RODLER A.S., MATTHYS S.M., BRØNS C., ARTIOLI G., SNOECK C., DEBAILLE V., GODERIS S.: Investigating the provenance of Egyptian blue pigments in ancient Roman polychromy. *Archaeometry Journal of the Hungarian National Museum, Archeometriai Műhely XVIII/2* 97-108, 2021. **HU ISSN:** 1786-271X
454. DALCONI M.C., GARBIN E., GRAZZI F., ARTIOLI G., FERRARI G.: Boron rich mortars for neutron shielding, mechanical and attenuation properties. ICCM2021, 11th ACI/RILEM International Conference on Cementitious Materials and Alternative Binders for Sustainable Concrete. Online conference, 7-10 June 2021. *ACI Symposium Papers, Volume ACI SP-349, Paper 23*, pp. 332-350, 2021. **ISBN-13:** 978-1-64195-139-5 **DOI:** 10.14359/51732756
455. BELLOTTO M., DALCONI M.C., GARBIN E., ARTIOLI G.: On the formulation of reactive binders containing soluble borate compounds. ICCM2021, 11th ACI/RILEM International Conference on Cementitious Materials and Alternative Binders for Sustainable Concrete. Online conference, 7-10 June 2021. *ACI Symposium Papers, Volume ACI SP-349, Paper 26*, pp. 383-393, 2021. **ISBN-13:** 978-1-64195-139-5 **DOI:** 10.14359/51732759
456. ARTIOLI G., RICCI G., BALDISSIN G., ANDRIANAKIS M., ANGELINI I., ASSCHER Y., BECHERINI F., BERNARDI A., BLÜMICH B., CHABAN A., DEIANA R., DUCHÈNE S., GIOVANNACCI D., MARZAIOLI F., PARISATTO M., PASSARIELLO I., REHORN C., SECCO M., TORNARI V., ZOLEO A.: Indagini diagnostiche innovative e non invasive alla scoperta di un affresco di Giotto a lungo dimenticato. *Studi e Testi «Il Santo»*, LXI 393-406, 2021. **ISSN:** 0391-7819
457. MASCARIN L., GARBIN E., DI SIPIO E., DALLA SANTA G., BERTERMANN D., ARTIOLI G., BERNARDI A., GALGARO A.: Selection of backfill grout for shallow geothermal systems: Materials investigation and thermo-physical analysis. *Construction and Building Materials* 318, 125832, 2022. **DOI:** 10.1016/j.conbuildmat.2021.125832
458. NOBOUASSIA BEWA C., VALENTINI L., KOUAMO TCHAKOUTÉ H., KAMSEU E., YANKWA DJOBO J.N., DALCONI M.C., GARBIN E., ARTIOLI G.: Reaction kinetics and microstructural characteristics of iron-rich-laterite-based phosphate binder. *Construction and Building Materials* 320, 126302, 2022. **DOI:** 10.1016/j.conbuildmat.2021.126302
459. ARTIOLI G.: Authentication and the perception of fakes. Forgeries of natural specimens. In: Salvadori M., Bernard E., Zamparo L., Baggio M. (eds.) “Beyond forgery – Collecting, authentication and protection of cultural heritage”, Padova University Press, Università degli Studi di Padova. *Antenor Quaderni* 52, 67-77, 2022. **ISBN:** 978-88-6938-292-5
460. DAL SASSO G., DALCONI M.C., FERRARI G., SKOV PEDERSEN J., TAMBURINI S., BERTELOTTI F., GUAGLIARDI A., BRUNO M., VALENTINI L., ARTIOLI G.: An atomistic model describing the structure and morphology of Cu-doped C-S-H hardening accelerator nanoparticles. *Nanomaterials* 12, 342, 2022. **DOI:** 10.3390/nano12030342
461. EZ-ZAKI H., BELLOTTO M., ARTIOLI G., VALENTINI L.: Influence of supplementary cementitious materials on factors controlling the fresh state of hydraulic binders. *Materials Today: Proceedings* 58, 1169-1173, 2022. **DOI:** 10.1016/j.matpr.2022.01.307
462. ANGELINI I., BETTINESCHI C., VENTURINO M., ARTIOLI G.: Gaming in pre-Roman Italy: Characterization of early Ligurian and Etruscan small pieces, including dice. *Applied Sciences* 12, 2130, 2022. **DOI:** 10.3390/app12042130
463. DILARIA S., PREVIATO C., SECCO M., BUSANA M.S., BONETTO J., CAPPELLATO J., RICCI G., ARTIOLI G., TAN P.: Phasing the history of ancient buildings through PCA on mortars’ mineralogical

- profiles: the example of the Sarno Baths (Pompeii). *Archaeometry* 64, 866-882, 2022. **DOI:** 10.1111/arc.12746
464. RICCI G., SECCO M., ADDIS A., PISTILLI A., PRETO N., BROGIOLO G.P., CHAVARRIA ARNAU A., MARZAIOLI F., PASSARIELLO I., TERRASI F., ARTIOLI G.: Integrated multi-analytical screening approach for reliable radiocarbon dating of ancient mortars. *Scientific Reports* 12, 3339, 2022. **DOI:** 10.1038/s41598-022-07406-x
465. DILARIA S., SECCO M., RUBINICH M., BONETTO J., MIRIELLO D., BARCA D., ARTIOLI G.: High-performing mortar-based materials from the Late Imperial baths of Aquileia. An outstanding example of Roman building tradition in Northern Italy. *Geoarchaeology* 37, 637–657, 2022. **DOI:** 10.1002/gea.21908
466. BONETTO A., CALGARO L., CONTESSI S., BADETTI E., ARTIOLI G., MARCOMINI A.: A multi-technique approach for the identification of multiple contamination sources nearby a polluted industrial site. *Land Degradation & Development* 33, 2317–2326, 2022. **DOI:** 10.1002/ldr.4300
467. OUNISSI C., MAHMOUDI S., VALENTINI L., BENNOUR A., ARTIOLI G.: Étude des argiles du Sud-est de la Tunisie en vue de leur utilisation en céramique. *Revue Française de Géotechnique* 210007, 2022. **DOI:** 10.1051/geotech/2022004
468. ZUENA M., PONDELAK A., GARBIN E., PANIZZA E., NODARI L., ŠKRLEP L., SEVER ŠKAPIN A., ARTIOLI G., TOMASIN P.: Innovative calcium carbonate-based products to repair cracked cement mortars. *Materials* 15, 4044, 2022. **DOI:** 10.3390/ma15124044
469. MONTI A.M., RICCI G., MARTINI M., GALLI A., LUGLI F., DALCONI M.C., ARTIOLI G.: Unusual luminescence of quartz from La Sassa, Tuscany: Insights on the crystal and defect nanostructure of quartz - Further developments. *Minerals* 12, 828, 2022. **DOI:** 10.3390/min12070828
470. ARTIOLI G., BRAVO A., BROGGIO S., FERRARI G., SANTONICOLA F., SURICO F., TORELLI L., VALENTINI L., ZECCHINI A.: Low-carbon durable concrete for the new Genoa's San Giorgio Bridge. In: Coffetti D., Coppola L., Holland T.C. (eds.) "Recent advances in concrete technology and sustainability issues", Proceedings of the 15th International Conference, Milan, Italy, 13-15 July 2022. ACI American Concrete Institute, SP-355, pp. 1-10, 2022. **ISBN:** 978-1-64195-184-5
471. FORNONI P., DESTEFANI M., MORETTI E., SURICO F., ARTIOLI G., DALCONI M.C.: Study of the effect of different type of clays on the initial flowability of mortars in the presence of polycarboxylate superplasticizers. In: Coffetti D., Coppola L., Holland T.C. (eds.) "Recent advances in concrete technology and sustainability issues", Proceedings of the 15th International Conference, Milan, Italy, 13-15 July 2022. ACI American Concrete Institute, SP-355, pp. 271-282, 2022. **ISBN:** 978-1-64195-184-5
472. LIU Y., CHEN Q., DALCONI M.C., MOLINARI S., VALENTINI L., WANG Y., SUN S., WANG P., ARTIOLI G.: Retention of phosphorus and fluorine in phosphogypsum for cemented paste backfill: Experimental and numerical simulation studies. *Environmental Research* 214, 113775, 2022. **DOI:** 10.1016/j.envres.2022.113775
473. LIU Y., CHEN Q., DALCONI M.C., MOLINARI S., VALENTINI L., WANG Y., SUN S., WANG P., ARTIOLI G.: Enhancing the sustainable immobilization of phosphogypsum by cemented paste backfill with the activation of  $\gamma$ -Al<sub>2</sub>O<sub>3</sub>. *Construction and Building Materials* 347, 128624, 2022. **DOI:** 10.1016/j.conbuildmat.2022.128624
474. ARTIOLI G.: XRD – X-Ray Diffraction. In: A.S. Gilbert et al. (eds.) *Encyclopedia of Geoarchaeology*. Encyclopedia of the Earth Sciences Series. Springer Nature Switzerland AG 2022. **DOI:** 10.1007/978-3-030-44600-0\_29-1
475. FERRARI G., BROCCHI A., CASTIGLIONI F., BRAVO A., MORETTI E., SALVIONI D., SQUINZI M., ARTIOLI G., DALCONI M.C., VALENTINI L., DAL SASSO G.: A new multifunctional additive for blended cements. *Construction and Building Materials* 354, 129086, 2022. **DOI:** 10.1016/j.conbuildmat.2022.129086
476. PEDROTTI A., ANGELINI I., ARTIOLI G., CANOVARO C., TECCHIATI U., OBERRAUCH H.: The Bell Beaker rock sanctuary Pignone Kopf (South Tyrol, Italy): Burnt offerings and local metallurgy in the Eastern Alps. In: Abegg C., Carloni D., Cousseau F., Derenne E., Ryan-Despraz J. (eds) *The Bell Beaker culture in all its forms*. Proceedings of the 22nd Meeting of 'Archéologie et Gobelets' 2021, Geneva, Switzerland. Archaeopress Publishing, Oxford, pp. 265-278, 2022. **ISBN:** 9781803273631
477. SECCO M., ASSCHER Y., RICCI G., TAMBURINI S., PRETO N., SHARVIT J., ARTIOLI G.: Cementation processes of Roman pozzolan binders from Caesarea Maritima (Israel). *Construction and Building Materials* 355, 129128, 2022. **DOI:** 10.1016/j.conbuildmat.2022.129128
478. SCAGGION C., CASTELLI S., USAI D., ARTIOLI G.: 3D digital dental models' accuracy for anthropological study: comparing close-range photogrammetry to  $\mu$ -CT scanning. *Digital Applications in Archaeology and Cultural Heritage* 27, e00245, 2022. **DOI:** 10.1016/j.daach.2022.e00245
479. ARTIOLI G., CANOVARO C.: Tecniche di analisi e metodologie utilizzate. In: Muscio G. (ed.) "Tesori della terra, storie di uomini e di miniere – Schätze der erde, geschichten von menschen und bergwerken". Interreg EU Italia-Österreich TesTerra. Comunità di Montagna della Carnia, pp. 73-77, 2022. **ISBN:** 978-88-96546-11-6
480. ASHKENAZI D., BELTRAME C., COLPO S., INBERG A., CANOVARO C., ARTIOLI G.: Archaeometallurgical characterization of Mediterranean discoidal shaped copper alloy ingots retrieved from sea environment. *Journal of Archaeological Science: Reports* 47, 103716, 2022. **DOI:** 10.1016/j.jasrep.2022.103716
481. RAVAZZI C. et al.: Scenari di ricostruzione delle interazioni uomo-ambiente-clima in Lombardia (N-Italia) dal Paleolitico medio all'età del Ferro. In: Raffaele C. de Marinis, Marta Rapi (eds.) "Preistoria e Protostoria in Lombardia e Canton Ticino". *Rivista di Scienze Preistoriche* LXXII S2, 9-36, 2022. **ISSN:** 0035-6514 **ISBN:** 978-88-6045-092-0

482. TIRABASSI I., ANGELINI I., ARTIOLI G., CANOVARO C., CARRA C., LONGHI C.: Un sito periferiale, delimitato da fossato, della tarda età del Rame a Ponte Molino di Ostiglia (MN). In: Raffaele C. de Marinis, Marta Rapi (eds.) "Preistoria e Protostoria in Lombardia e Canton Ticino". Rivista di Scienze Preistoriche LXXII S2, 283-294, 2022. **ISSN:** 0035-6514 **ISBN:** 978-88-6045-092-0
483. DILARIA S., SECCO M., BONETTO J., RICCI G., ARTIOLI G.: Making ancient mortars hydraulic. How composition influences type and crystallinity of reaction products. HMC 2022 Proc. 6th Historic Mortars Conference. Ljubljana, Slovenia, 21-23 September 2022. CIP, Ljubljana, pp. 55-69, 2022. **ISBN:** 978-961-68884-77-8
484. VENTURINO M., ANGELINI I., ARTIOLI G.: Alba, Via Cencio - Indagini archeometriche sul filamento di stagno. Notiziario della Soprintendenza Archeologia, Belle Arti e Paesaggio per la Città metropolitana di Torino, Quaderni 6, 237-240, 2022. **ISSN:** 2533-2597
485. VEDOVETTO P., ANTONELLI A., SECCO M., ARTIOLI G.: Marble architectural elements and liturgical furniture of the Santa Giustina basilica in Padova: New archaeometric data on the importation of Proconnesian marble in the late antique Adriatic. *Heritage* 6, 3063-3073, 2023. **DOI:** 10.3390/heritage6030163
486. LIU Y., MOLINARI S., DALCONI M.C., VALENTINI L., RICCI G., CARRER C., FERRARI G., ARTIOLI G.: The leaching behaviors of lead, zinc, and sulfate in pyrite ash contaminated soil: mineralogical assessments and environmental implications. *Journal of Environmental Chemical Engineering* 11, 109687, 2023. **DOI:** 10.1016/j.jece.2023.109687
487. ARTIOLI G., CANOVARO C., ANGELINI I.: Lead isotope ratios applied to Sardinian tin metal objects. In: Perra M., Lo Schiavo F. (eds.) *Atti V Festival della Civiltà Nuragica*, Orroli, 10-12 Settembre 2021. Arkadia Editore, Cagliari, pp. 271-279, 2023. **ISBN:** 978-88-68514-464
488. ARTIOLI G.: Metals: waste and recovery. In: Tribaudino M., Vollprecht D., Pavese A. (eds.) *Proceedings of the EMU School 2022 on "Minerals and waste recovery: An Anthropocene tale"*. Bardonecchia, Italy, 20-24 June 2022. Minerals and Waste, Earth and Environmental Sciences Library, Springer Nature, Switzerland, pp. 117-134, 2023. **DOI:** 10.1007/978-3-031-16135-3\_5
489. LIU Y., WANG P., DALCONI M.C., MOLINARI S., VALENTINI L., WANG Y., SUN S., CHEN Q., ARTIOLI G.: The sponge effect of phosphogypsum-based cemented paste backfill in the atmospheric carbon capture: roles of fluorides, phosphates, and alkalinity. *Separation and Purification Technology* 315, 123702, 2023. **DOI:** 10.1016/j.seppur.2023.123702
490. LIU Y., MOLINARI S., DALCONI M.C., VALENTINI L., BELLOTTO M.P., FERRARI G., PELLAY R., RILIEVO G., VIANELLO F., SALVIULO G., CHEN Q., ARTIOLI G.: Mechanistic insights into Pb and sulfates retention in ordinary Portland cement and aluminous cement: Assessing the contributions from binders and solid waste. *Journal of Hazardous Materials* 418, 131849, 2023. **DOI:** 10.1016/j.jhazmat.2023.131849
491. VALENTINI L., DAL SASSO G., CASTIGLIONI F., BUSI M., FERRARI G., DALCONI M.C., STROBL M., ARTIOLI G.: Assessing cement matrix permeability by neutron dark field imaging. In: A. Jędrzejewska et al. (eds.) *SynerCrete 2023*, RILEM Bookseries 43, 347-354, 2023. **DOI:** 10.1007/978-3-031-33211-1\_31
492. MASCARIN L., VALENTINI L., ARTIOLI G., DALCONI M.C., COLOMBANI J.: Dissolution-precipitation kinetics during C3S hydration: A holographic interferometry study. *Cement and Concrete Research* 173, 107252, 2023. **DOI:** 10.1016/j.cemconres.2023.107252
493. TORNARI V., DUCHÈNE S., ANDRIANAKIS M., NOWIK W., BRISSAUD D., GIOVANNACCI D., KUPPER M., REHORN C., BLUEMICH B., RICCI G., ARTIOLI G.: A combined ND diagnostic investigation by DHSPI, SIRT, NMR, THZ, on Giotto fresco. *Journal of Cultural Heritage* 63, 206-216, 2023. **DOI:** 10.1016/j.culher.2023.07.021
494. CANOVARO C., PORCARO M., BARBARO B., ARTIOLI G., LUCARELLI C., LUGLI F., DEPALMAS A., BRUNETTI A.: A multi analytical characterization of a small bronze figurine from Gran Carro site (Bolsena lake, Italy). *Journal of Archaeological Science: Reports* 51, 104230, 2023. **DOI:** 10.1016/j.jasrep.2023.104230
495. DILARIA S., SECCO M., BONETTO J., RICCI G., ARTIOLI G.: Making ancient mortars hydraulic. How to parametrize type and crystallinity of reaction products in different recipes. In: Bokan Bosiljkov V., Padovnik A., Turk T. (eds.) "Conservation and restoration of historic mortars and masonry structures", Proceedings of the Historic Mortars International Conference HMC2022, Ljubljana, Slovenia, 21-23 September 2022. RILEM Bookseries, Cham, Springer Nature Switzerland, pp. 36-52, 2023. **DOI:** 10.1007/978-3-031-31472-8
496. GARBIN E., PANIZZA M., NATALI M., ARTIOLI G., TAMBURINI S.: Fibre Reinforced Geopolymers (FRGPs) as inorganic composites for flexural strengthening of brick masonry. Originally presented at the "12th International Conference on Structural Analysis of Historical Constructions (SAHC)", 2021. *International Journal of Architectural Heritage*, pp. 1-18, 2023. **DOI:** 10.1080/15583058.2023.2285853
497. KAUFMANN G., ARTIOLI G., ANGELINI I., CANOVARO C., VILLA I.M.: Zur Herkunft endneolithischer Kupferbeile Südtirols. In: "Mentor einer Forschergeneration - Hans Nothdurfter (1940-2022) zum Gedenken." *Der Schlern* 97, Heft 12, pp. 5-21, 2023. **ISBN:** 9770036614502
498. SCAGGION C., DAL SASSO G., NODARI L., PAGANI L., CARRARA N., ZOTTI A., BANZATO T., USAI D., PASQUALETTO L., GADIOLI G., ARTIOLI G.: A FTIR-based model for the diagenetic alteration of archaeological bones. *Journal of Archaeological Sciences*, 161, 105900, 2024. **DOI:** 10.1016/j.jas.2023.105900
499. SALEH M., POLYMERIS G.S., PANZERI L., TSOUTSOUMANOS E., RICCI G., SECCO M., MARTINI M., ARTIOLI G., DILARIA S., GALLI A.: Analysis probes and statistical parameters affecting the OSL ages of mortar samples; a case study from Italy. *Radiation Physics and Chemistry* 214, 111298, 2024. **DOI:** 10.1016/j.radphyschem.2023.111298

500. ARTIOLI G., RICCI G.: Cementitious materials. In: Nikita E., Rehren T. (eds.) *Encyclopedia of Archaeology*, 2nd Edition, Academic Press, London. Vol. 2, pp. 523-530, 2024. DOI: 10.1016/B978-0-323-90799-6.00130-0 ISBN: 9780323907996
501. CHEN Z., ZHOU W., YU Y., TORNARI V., ARTIOLI G.: Defect isolation from whole to local field separation in complex interferometry fringe patterns through development of weighted least-squares algorithm. *Digital 4*, 104–113, 2024. DOI: 10.3390/digital4010004
502. SCAGGION C., MARINATO M., DAL SASSO G., NODARI L., SAUPE T., ANELI S., PAGANI L., SCHEIB C.L., RIGO M., ARTIOLI G.: A fresh perspective on infrared spectroscopy as a prescreening method for molecular and stable isotope analyses on ancient human bones. *Scientific Reports* 14, 1028, 2024. DOI: 10.1038/s41598-024-51518-5