

PERSONAL INFORMATION

Family name, First name: Arletti, Rossella

Researcher unique identifier: orcid.org/0000-0001-9878-8657

Date of birth: 25/08/1977

Nationality: Italian

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EDUCATION

21-03-2005:PhD in Earth Sciences (2001-2004) Department of Earth Sciences, University of Modena and Reggio Emilia, Modena (UNIMORE), Italy. Thesis “Archaeometrical studies of ancient glass of the Roman Imperial Age”. PhD Supervisor : Prof. Giovanna Vezzalini.

19-12-2001: Master Degree in Geological Sciences (5 years) with full votes (110/110 cum laude), Department of Earth Sciences, UNIMORE

CURRENT POSITION

2019– present: Associate Professor, Department of Chemical and Geological Sciences, UNIMORE, Italy

PREVIOUS POSITIONS

2015– 2019 Associate Professor, Department of Earth Sciences, University of Torino (UNITO), Italy.

2010 – 2015: Researcher/Assistant Professor , Department of Earth Sciences, UNITO, Italy.

PERSONAL SUMMARY

RA research activity is focused on realization and characterization of advanced materials. During the enrolment in University of Torino her research activity was focused on the functionalization and characterization of porous materials for innovative and technological applications (e.g. energy storage, realization of gas sensors, CO₂ capture, drug carrying). After she joined the materials group of the Department of Chemical and Geological Science of Modena and Reggio Emilia University, she started work on ceramic materials and in particular on the recovery of End of Waste for the ceramic production.

Thanks to her scientific achievements in the field of crystallography she was awarded in 2014 with the “Mario Nardelli prize” for young crystallographer (Italian Association of Crystallography).

She has been the coordinator of the University of Turin Unit in the Project “SCENT-ATTRACT” 2019-2020 (<https://attract-eu.com>) financed in the frame of H2020 and coordinated by CERN (Ginerva) for the realization of advances sensors

She has been the National Coordinator (PI) of the PRIN Project “ZAPPING” (2017-2020) aimed at the exploitation of high pressure and zeolite confinement to induce polymerization of hydrocarbons and realize confined polymers, with low dimensionality, to be integrated in devices (i.e. gas sensing devices).

She has been coordinator of UNITO Unit of the project “ImPACT” (2013-2016) aimed at the understanding of the effects of the hyper-confinement on the supramolecular organization of organic molecules inside zeolite pores.

The results of these project have been published in first rank journals and presented to several international meetings. (Scopus N°Papers:106, N°citations:1878, H index: 25)

FELLOWSHIPS

2009 (Sept) – 2010 (Dec): Post-Doc at the Department of Earth Sciences, University of Ferrara, Italy. Project financed by ENI for structural studies on selectivity and adsorption of organic pollutants in zeolites.

2007 (Jun) – 2009 (Sept): Post-Doc at Department of Earth Sciences, UNIMORE. Project aimed at the understanding of host guest-interactions and phase transitions induced by pressure in microporous

materials of technological interest.

2006 (Jun) – 2007 (Jun): Post-Doc at École Supérieure Normale de Chimie, Montpellier, France. Project financed by TOTAL for structural studies on microporous materials used for catalysis.

2006 (Mar) – 2006 (May): Visiting Scientist at European Synchrotron Radiation Facility (ESRF), Grenoble, France. Project on the development of synchrotron micro-beam techniques.

2006 (Mar) – 2006 (May): Research contract at the Department of Earth Sciences, University of Messina, Italy. Project for the development of X-Ray diffraction experiments with non-conventional sources (synchrotron radiation) for the study of zeolite behavior under high pressure

2005 (May) – 2006 (Apr): Post-Doc at Department of Earth Sciences, UNIMORE. Project on the characterization of ancient materials.

TEACHING ACTIVITIES

2019/2021: Course “*Mineralogy II*” – B.Sc/Geological Sciences/UNIMORE Italy;

2019/2021: Course “*Environmental Mineralogy*” – M.Sc/Geosciences, Georisks and Georesources/UNIMORE Italy;

2019/2021: Course “*Mineralogy and ecosystem*” – M.Sc/Science for Education/UNIMORE Italy;

2016/2019: Course “*Advanced Powder Diffraction*” – M.Sc. Material Science/ UNITO/ Italy;

2011/2019: Course “*Mineral Science*” – B.Sc. Chemistry; / UNITO/ Italy; Course “*Mineralogy*” – B.Sc. Material Science; / UNITO/ Italy; Course “*Applied Mineralogy*” – M.Sc Material Science for Cultural Heritage/ UNITO/ Italy

Sept 2014: Course on “*X-ray Powder Diffraction*” 1st X-ray diffraction School/University of Oran/Algeria

She has been the supervisor of many Master Thesis, and the co-tutor of several PhD Thesis.

ORGANISATION OF SCIENTIFIC MEETINGS

- Sept. 2019: Convenor Session "Georesources, geomaterials and their synthetic counterparts: occurrence, properties, utilizations/industrial applications" SIMP-SGI-SOGEI conference, Parma (I)

- Sept. 2019: Convenor Session "Multi-techniques approach for in-situ/in operando studies" of Italian Society Synchrotron Light, Camerino (I)

- Sept. 2019: Convenor Session "In situ and in operando studies of systems structural evolution" MISCA congress, Napoli (I)

- Sept. 2018 Convenor Session “Zeolites and porous materials: Unravelling the relations between crystal-chemistry, stability, structure and properties” of “Geosciences for the Environment Natural Hazards and Cultural Heritage” SGI-SIMP Congress, Catania (I).

- June 2018: Member of the Scientific Committee of Italian Zeolite Association (AIZ) Congress, Modena (I).

- June 2018: Chair “Inorganic- Organic Functional Materials” Session of 3rd Joint Congress AIC-SILS, Rome (I)

- Sept 2017: Chair of SILS session of Joint congress FISMat- SILS (Physic of Materials - Italian Society Synchrotron Light), Trieste (I).

Sept 2016 Member of the Scientific Committee of 24th meeting of Italian Society of Synchrotron Light, Bari, Italy

Aug 2015 Convener of the Microsymposium “Mineralogical crystallography: Nature as a source of inspiration for new materials” at the 23th European Crystallographic Meeting, Rovinj- Croatia.

June 2015 Member of the Scientific Committee of 12th Meeting of Zeolites Science and Technology, Amantea, Italy

Aug 2014 Convener of the Symposium “Zeolites and porous materials” at the 21st International Mineralogical Association 2014, Johannesburg – Rep. Sud Africa

Feb 2012 Member of the Scientific Committee of 7th Meeting of Italian Association of Archaeometry, Modena, Italy (100 attendees).

INSTITUTIONAL RESPONSIBILITIES

2022- Present: Member of the Board of the Centro Interdipartimentale Grandi Strumenti -UNIMORE

2019 – Present: Member of the Board of the PhD Course “Models and Methods for Materials and Environmental Sciences-M3ES”, UNIMORE, Italy

2016 – 2019: President of the Interdepartmental Centre for Crystallography (CrisDI) of the UNITO Italy.

2016 – 2019: Member of the Board of the PhD School in Earth Sciences of the UNITO Italy.

2016 – 2019: Responsible of the Commission of Laboratory activities of Department of Earth Sciences of the UNITO, Italy.

2013 – 2019 Member of the Scientific Board of the Interdepartmental Centre for Nanomaterials, Interfaces and Surfaces(NIS) of the UNITO.

COMMISSIONS OF TRUST

2016 – pres. Editorial Board of European Journal of Mineralogy (EJM), Associate Editor.

2020 – pres. Editorial Board of Minerals, Associate Editor.

2021 – pres. Member of the commission “Instrumentation” of Italian Association of Crystallography (AIC)

2015 – pres. Scientific Evaluator for Italian VQR (Valutazione Qualità Ricerca).

2016 – 2020 Scientific Advisory Board of Italian Society of Synchrotron Light (SILS).

2013 – 2017 Scientific Advisory Board of Italian Society of Zeolites (AIZ).

2016 Scientific Evaluator for National Science Centre (Narodowe Centrum Nauki), Kraków

2015 Scientific Evaluator for Swiss National Science Foundation (SNSF), Bern

2010 – pres. Reviewer for peer reviewed ISI Journals (PCCP, Journal of Physical Chemistry, Microporous and Mesoporous Material, American Mineralogist, Microchemical Journal, J. of Analytical Chemistry, Powder Diffraction, Mineralogical Magazine, European Journal of Mineralogy, Materials, Archaeometry, J. of Archaeological Sciences)

MEMBERSHIPS OF SCIENTIFIC SOCIETIES

2010 –pres. Member of International Zeolite Association (IZA).

2005 –pres. Member of Italian Society of Mineralogy and Petrology (SIMP), Member of Italian Society of Crystallography (AIC), Member of Italian Society of Synchrotron Light (SILS)

PUBBLICAZIONI

Fonte Scopus:

Total number of publications in scientific journals=106

Total number of citation=1878

H-Index=25

Pubblicazioni in riviste indicizzate

(*=corresponding author)

(P1) Arletti, R., Ferro, O., Quartieri, S., Sani, A., Tabacchi, G., Vezzalini, G. (2003): Structural deformation mechanisms of zeolites under pressure. *American Mineralogist*, 88, 1416-1422.

(P2) Fois, E., Gamba, A., Tabacchi, G., Arletti, R., Quartieri, S., Vezzalini, G. (2005): The "template" effect of the extra-framework content on zeolite compression: the case of Yugawaralite at high pressure. *American Mineralogist*, 90, 28-35,

(P3) Arletti, R., Galli, E., Vezzalini, G., Wise, W. S. (2005): Mazzite-Na, a new zeolite from Boron, California: its description and crystal structure. *American Mineralogist*, 90, 1186-1191.

(P4) Fois, E., Gamba, A., Tabacchi, G., Quartieri, S., Arletti, R., Vezzalini, G. (2005): High-pressure behaviour of yugawaralite at different water content: an ab initio study. In: Oxide Based Materials. (Gamba, A., Colella, C. and Coluccia, S. eds.) *Studies in Surface Science and Catalysis series*, vol. 155, 271-280.

(P5) Arletti R.*, Dalconi, M.C., Quartieri, S., Triscari, M., Vezzalini, G. (2006): Roman coloured and opaque glass: a chemical and spectroscopic study. *Applied Physics A*, 83, 239-245.

(P6) Arletti, R., Mazzucato, E., Vezzalini, G. (2006): Influence of dehydration kinetics on the T-O-T bridge breaking in zeolites with framework type STI: the case of stellerite. *American Mineralogist*, 91, 628-634.

(P7) Arletti, R., Quartieri, S., Vezzalini, G. (2006): Glass mosaic tesserae from Pompeii: an archeometrical investigation. *Periodico Mineralogia*, 76, 25-38.

(P8) D'Acapito, F., Maurizio, C., Brunetti, B., Cartechini, L., Sgamellotti, A., Quartieri, S., Arletti, R. (2007): Archaeometric studies at the GILDA beamline at the European Synchrotron Radiation Facility. *Nuovo Cimento C*,30, 1-10.

(P9) Arletti, R., Cartechini, L., Giovannini, S., Rinaldi, R., Kockelmann, W., Cardarelli, A.(2007): Neutron diffraction study of Bronze Age tools from second millennium BC dwellings in Italy. *Nuovo Cimento*,30, 11-19.

(P10) Morsli, A., Driole, M.F., Cacciaguerra, T., Arletti, R., Chiche, B., Hamidi, F., Bengueddach, A., Quignard, F. Di Renzo, F. (2007): Microporosity of the amorphous aluminosilicate precursors of zeolites: the case of the gels of synthesis of mordenite. *Microporous and Mesoporous Materials*, 104, 208-216.

(P11) Arletti, R., Cartechini, L. Giovannini, S., Rinaldi, R., Kockelmann, W., Cardarelli, A (2007): Texture analysis of Bronze Age axes by neutron diffraction. *Applied Physics A*, 90, 9-14.

(P12) Arletti, R.*, Vezzalini, G., Biaggio Simona, S., Maselli Scotti, F. (2008): Archaeometrical study of Roman Imperial Age glass from Canton Ticino. *Archaeometry*,50, 606-626

(P13) Cartechini, L., Arletti, R., Rinaldi, R., Kockelmann, W., Giovannini, S., Cardarelli, A. (2008): Neutron scattering material analysis of Bronze Age metal artefacts. *Journal of Physic Condensed Matter*, 20, 104253-62.

(P14) Arletti, R.*, Vezzalini, G., Quartieri, S., Ferrari, D., Merlini, M., Cotte, M. (2008): Polychrome glass from Etruscan sites: first non-destructive characterization with synchrotron μ -XRF, μ -XANES and XRPD. *Applied Physics A*, 92, 127-135.

(P15) Fois, E., Gamba, A., Medici, C., Tabacchi, G., Quartieri, S., Mazzucato, E., Arletti, R., Vezzalini, G., Dmitriev V. (2008): High pressure deformation mechanism of Li-ABW: synchrotron XRPD study and ab-initio molecular dynamic simulations. *Microporous and Mesoporous Materials*, 115, 267-280.

(P16) Arletti, R.*, Gualtieri A.F., Di Renzo, F. (2008): In situ study of dehydration of ECR1: Na-as synthesized and NH₄-exchanged in comparison in *Studies in Surface Science and Catalysis*, Zeolites and related materials, Trend, target and challenges, 174, 901-904.

- (P17) Arletti, R.*, Quartieri, S., Vezzalini, G., Sabatino, G., Triscari, M., Mastelloni, M.A. (2008): Archaeometrical analyses of glass cakes and vitreous mosaic tesserae from Messina (Italy). *Journal of non crystalline solids*, 354, 4962-4969.
- (P18) Arletti, R.*, Giacobbe, C., Quartieri, S., Sabatino, G., Tigano, G., Triscari, M., Vezzalini, G., (2010): Archaeometrical investigation on Sicilian Early Bizantine glass: chemical and spectroscopic data. *Archaeometry*, 52, 99-114
- (P19) Arletti, R.*, Maiorano, C., Ferrari, D., Vezzalini, G., Quartieri, S. (2010): The First Archaeometric Data On Polychrome Iron Age Glass From Sites Located In Northern Italy. *Journal of Archaeological Science*, 37, 703-712
- (P20) Arletti, R.*, Vezzalini, G., Benati, S., Mazzeo Saracino, L., Gamberini, A., (2010): Roman window glass a comparison of findings of three different Italian Sites. *Archaeometry*, 52, 252-271
- (P21) Arletti, R.*, Fiori, C., Vandini, M. (2010): A study of glass tesserae from mosaics in the monasteries of Daphni and Hosios Loukas (Greece). *Archaeometry*, 52,796-815
- (P22) Arletti, R.*, Quartieri, S., Vezzalini, G. (2010): Elastic behaviour of zeolite boggsite in silicon oil and aqueous medium: a casa of high pressure induced over-hydration. *American Mineralogist* 95, 1247-1256
- (P23) Gliozzo, E., Arletti, R., Cartechini, L., Imberti, S., Kockelmann, W.A., Memmi, I., Rinaldi, R., Tykot, R. (2010): Non-invasive chemical and phase analysis of Roman bronze artefacts from Thamusida (Morocco). *Applied Radiation and Isotopes*,68, 2246-2251
- (P24) Montagna, G., Arletti, R., Vezzalini, G., Di Renzo, F. (2011): Borosilicate and aluminosilicate pollucite nanocrystals for the storage of radionuclides. *Powder Technologies*, 208, 491-495
- (P25) Arletti, R., Fiori, C., Vandini, M., Vezzalini, G. (2011): Mosaic glass from S. Pietro (Rome): manufacture technique and raw materials employed in late 16th century Italian glass. *Archaeometry*, 53, 365-386.
- (P26) Arletti, R.*, Conte, S., Vandini, M., Fiori, C., Bracci, S., Bacci, M., Porcinai, S., (2011): Florence Baptistery: chemical and Mineralogical Investigation of glass mosaic tesserae. *Journal of Archeological Science*, 38, 79-88.

(P27) Arletti, R.*, Rivi, L., Ferrari, D., Vezzalini, G. (2011): The Mediterranean group II: analyses of vessels from Etruscan context in northern Italy. *Journal of Archaeological Science*, 38, 2094-2100.

(P28) Arletti, R., Vezzalini, G., Morsli, A., Di Renzo, F., Dmitriev, V., Quartieri, S. (2011): Elastic behavior of MFI-type zeolites: 1- Pressure-induced over-hydration of Na-ZSM-5. *Microporous and Mesoporous materials*, 142, 696-707.

(P29) Quartieri, S., Montagna, G., Arletti, R., Vezzalini, G. (2011): Elastic behavior of MFI-type zeolites: Compressibility of H-ZSM-5 in penetrating and non-penetrating media. *Journal of Solid State Chemistry*, 181, 1505-1516.

(P30) Arletti, R.*, Bertoni, E., Vezzalini, G., Mengoli, D., (2011): Glass beads from Villanovian excavations in Bologna (Italy): an archaeometrical investigation, *European Journal of Mineralogy*, 23, 959-968.

(P31) De Ferri, L., Arletti, R., Quartieri, S., Ponterini, G. (2011): XANES, UV-VIS and luminescence spectroscopic study of chromophores in ancient HIMT glass. *European Journal of Mineralogy*, 23, 969-980.

(P32) Martucci, A., Pasti, I., Nassi, M., Alberti, A., Arletti, R., Bagatin, R., Vignola, R., Sticca, R., (2012): Adsorption mechanism of 1,2-dichloroethane into an organophilic zeolite mordenite: A combined diffractometric and gas chromatographic study. *Microporous and Mesoporous materials*, 151, 358-367.

(P33) Quartieri, S., Arletti, R., Vezzalini, G., Di Renzo, F., Dmitriev, V. (2012): Elastic behavior of MFI-type zeolites: 3- compressibility of silicalite and mordenite. *Journal of Solid State Chemistry*, 191, 201-212.

(P34) Arletti, R.*, Martucci, A., Alberti, A., Pasti, L., Nassi, M., Bagatin, R. (2012): Location of MTBE and toluene in the channel system of the zeolite mordenite: adsorption and host-guest interactions. *Journal of Solid State Chemistry*, 194, 135-142

(P35) Arletti, R.*, Ferrari, D., Vezzalini, G. (2012): Pre-Roman Glass from Mozia (Sicily-Italy): the first archaeometrical data. *Journal of Archaeometrical Science*, 39, 3396-3401.

(P36) Arletti, R.*, Quartieri, S., Freestone, I.C. (2013): A XANES study of chromophores in archaeological glass. *Applied Physics A*, 111, 99-108.

(P37) Gigli, L., Arletti, R., Quartieri, S., Di Renzo, F., Vezzalini, G., (2013): The high thermal stability of the synthetic zeolite K–L: Dehydration mechanism by in situ SR-XRPD experiments. *Microporous and Mesoporous materials*, 177, 8-16.

(P 38) Arletti, R.*, Vezzalini, G., Quartieri, S., Camara, F., Alvaro, M. (2013): A new framework topology in the dehydrated form of zeolite levyne. *American Mineralogist*, 98, 2063-2074.

(P39) Arletti, R.*, Mugnaioli, E., Kolbe, U., Di Renzo, F. (2014): MZ-35, a new layered pentasil borosilicate synthesized in the presence of large alkali cations. *Microporous and mesoporous materials*, 189, 64-70.

(P40) Arletti, R.*, Vezzalini, G., Quartieri, S., Di Renzo, F., Dmitriev, V. (2014): Pressure-induced water intrusion in FER-type zeolites and influence of the extraframework species on the structural deformations. *Microporous and Mesoporous materials*, 191, 27-37.

(P41) Vezzalini, G., Arletti, R., Quartieri, S. (2014): High pressure-induced structural changes, amorphization, and molecule penetration in MFI microporous materials: a review. *Acta Crystallographica B70*, 444–451.

(P42) Gigli, L., Arletti, R., Tabacchi, G., Fois, E., Vitillo, J.G., Martra, G., Agostini, G., Quartieri, S., Vezzalini, G. (2014): Close-Packed Dye Molecules in Zeolite Channels Self-Assemble into Supramolecular Nanoladders. *Journal of Physical Chemistry C*, 118, 15732–15743.

(P43) Conte, S., Chinni, T., Arletti, R., Vandini, M. (2014): Butrint (Albania) between Eastern and Western Mediterranean glass production: EMPA and LA-ICP- MS of Late Antique and Early Medieval finds. *Journal of Archeological Sciences*, 49, 6-20.

(P44) Leardini, L., Quartieri, S., Vezzalini, G., Arletti, R., (2015): Thermal behaviour of siliceous faujasite: Further structural interpretation of negative thermal expansion. *Microporous and mesoporous materials*, 202, 226-233.

(P45) Conte, S., Matarese I., Arletti, R., Quartieri, S., Jung, R., Pacciarelli, M., Gratuze, B. (2015): Recent Bronze Age vitreous materials from punta di Zambrone (Southern Italy). *European Journal of Mineralogy*, 27, 337-351.

- (P46) Vankova, S., Zanarini, S., Amici, J., Cámara, F., Arletti, R., Bodoardo, S., Penazzi, N. (2015): WO₃ Nanorolls Self-Assembled as Thin Films by Hydrothermal Synthesis. *Nanoscale*, 7, 7174-7177
- (P47) Danisi, R.M., Armbruster, T., Arletti, R., Gatta, G.D., Vezzalini, G., Quartieri, S., Dmitriev, V., (2015): Elastic behavior and pressure-induced structural modifications of the microporous Ca(VO)Si₄O₁₀•4H₂O dimorphs cavansite and pentagonite. *Microporous and mesoporous materials*, 204, 257-268.
- (P48) Gigli, L., Arletti, R.*, Vitillo, J., Alberto, G., Martra, G., Devaux, A., Vezzalini, G. (2015): Thionine Dye Confined in Zeolite L: Synthesis Location and Optical Properties. *Journal of Physical Chemistry C*, 119, 16156–16165.
- (P49) Lotti, P., Arletti, R., Gatta, G.D., Quartieri, S., Vezzalini, G., Merlini, M., Dmitriev, V., Hanfland, M. (2015): Compressibility and crystal-fluid interactions in all-silica ferrierite at high pressure. *Microporous and Mesoporous materials*, 218, 42-54
- (P50) Arletti, R.*, Leardini, L., Vezzalini, G., Quartieri, S., Gigli, L., Santoro, M., Haines, J., Rouquette, J., Konczewicz, L. (2015): Pressure-induced penetration of guest molecules in high-silica zeolites: The case of mordenite, *Physical Chemistry Chemical Physics*, 17, 24262-24274.
- (P51) Conte, S., Arletti, R., Mermati, F., Gratuze, B. (2016): Unravelling the Iron Age glass trade in southern Italy: the first trace-element analyses. *European Journal of Mineralogy*, 28, 409-433.
- (P52) Arletti, R., Gigli, L., Di Renzo, F., Quartieri, S. (2016): Evidence for the formation of stable CO₂ hydrates in zeolite Na-Y: Structural characterization by synchrotron X-ray powder diffraction. *Microporous and mesoporous materials*, 228, 248-255.
- (P53) Pastero, L., Arletti, R.*, Cámara, F., Gigli, L., Cagnoni, M. (2016): Synthesis and structure determination of the novel aluminophosphate TL-1: A new layered compound with corner-sharing AlX₆ chains. *Journal of Solid State Chemistry*, 242, 38–46.
- (P54) Arletti, R.*, Ronchi, L., Vezzalini, G., Quartieri, S., Ryzhikovb, A., Nouali, H., Daou, T.J., Patarin, J. (2016): Intrusion-Extrusion Experiments of MgCl₂ Aqueous Solution in Pure Silica Ferrierite: Evidence of the Nature of Intruded Liquid by in situ High Pressure Synchrotron X-ray Powder Diffraction. *Microporous and Mesoporous Materials*, 235, 253-260.

(P55) Pansini, M., Dell'Agli, G., Marocco, A., Netti P.A., Battista, E., Lettera, V., Vergara, P., Allia, P., Bonelli, B., Tiberto, P., Barrera, G., Alberto, G., Martra, G., Arletti, R., Esposito, S. (2017): Preparation and Characterization of Magnetic and Porous Metal-Ceramic Nanocomposites from a Zeolite Precursor and Their Application for DNA Separation. *Journal of Biomedical Nanotechnology*, 13, 1–12.

(P56) Arletti, R., Fois, E., Gigli, L., Vezzalini, G., Quartieri, S., Tabacchi, G. (2017): Irreversible Conversion of a Water–Ethanol Solution into an Organized Two-Dimensional Network of Alternating Supramolecular Units in a Hydrophobic Zeolite under Pressure. *Angewandte Chemie*, 56, 2105-2109

(P57) Arletti, R., Giacobbe, C., Quartieri, S., Vezzalini, G. (2017): The influence of the framework and extraframework content on the high pressure behaviour of the GIS type zeolites: the case of Amicite. *Minerals*, 7, 18-34.

(P58) Sahoo, T.R., Armandi, M., Arletti, R., Piumettim M., Bensaid, S., Manzoli, M., Panda, S.R., Bonelli, B. (2017): Pure and Fe-doped CeO₂ nanoparticles obtained by microwave assisted combustion synthesis: physico-chemical properties ruling their catalytic activity towards CO oxidation and soot combustion. *Applied Catalysis B: Environmental*, 211, 31-45.

(P59) Arletti, R., Fois, E., Tabacchi, G., Quartieri, S., Vezzalini, G. (2017): Pressure-induced penetration of water-ethanol mixtures in all-silica ferrierite. *Advanced Science Letters*, 23, 5966-5969.

(P60) Conte, S., Arletti, R., Henderson, J., Degryse, P., Blomme, A. (2018): Different glassmaking technologies in the production of iron age black glass from Italy and Slovakia. *Archaeological and Anthropological Sciences*, 10, 503-521.

(P61) Fiorentino, S., Chinni, T., Cirelli, E., Arletti, R., Conte, S., Vandini, M. (2018): Considering the effects of the Byzantine–Islamic transition: Umayyad glass tesserae and vessels from the qasr of Khirbet al-Mafjar (Jericho, Palestine). *Archaeological and Anthropological Sciences*, 10, 223–245.

(P62) Fantini, R., Arletti, R.*, Pastero, L., Quartieri, S., Di Renzo, F., Camara, F., Vezzalini, G. (2018): Structure of natural and NH₄-exchanged Sasbach faujasite: a single crystal study. *European Journal of Mineralogy*, 30, 515-523

(P63) Polisi, M., Arletti, R.*, Quartieri, S., Pastero, L., Giacobbe, C., Vezzalini, G. (2018): Dehydration mechanism of AlPO₄-5: a high-resolution synchrotron X-Ray powder diffraction study. *Microporous and Mesoporous Materials*, 261, 137–143.

(P64) Polisi, M., Arletti, R.*, Morandi, S., Fabbiani, M., Martra, G., Quartieri, S., Pastero, L., Vezzalini, G. (2018): Zeolite/dye hybrid composites: organization of photoactive azobenzene molecules inside $AlPO_4-5$. *Microporous and Mesoporous Materials*, 268, 25–30.

(P65) Gigli, L., Arletti, R., Fois, E., Tabacchi, G., Fabbiani, M., Vitillo, J.G, Martra, G., Devaux, A., Miletto, I., Quartieri, S., Calzaferri, G. (2017): Structure and Host-Guest Interactions of Perylene-Bisimide Dyes in Zeolite L Nanochannels. *Journal of Physic and Chemistry C*, 122, 3401-3418.

(P66) Esposito, S., Dell'Agli, G., Marocco, A., Bonelli, B., Allia, P., Tiberto, P., Barrera, G., Manzoli, M., Arletti, R., Pansini, M. (2018): Magnetic metal-ceramic nanocomposites obtained from cation exchanged zeolite by heat treatment in reducing atmosphere. *Microporous and Mesoporous Materials*, 268, 131-143.

(P67) Gigli, L., Arletti, R.*, Fois E., Tabacchi, G., Quartieri, S., Dmitriev, V., Vezzalini, G. (2018): Unravelling the High-Pressure Behaviour of Dye-Zeolite L Hybrid Materials. *Crystals*, 8, 79-101.

(P68) Arletti, R., Fantini, R., Giacobbe, C., Gierée, R., Vezzalini, G., Vigliaturo, R., Quartieri, S. (2018): High-temperature behavior of natural ferrierite: in-situ synchrotron X-ray powder diffraction study, *American Mineralogist*, 103, 1741–1748.

(P69) Confalonieri, G., Ryzhikov, A., Arletti, R.*, Nouali, H., Quartieri, S., Daou, T.J., Patarin, J. (2018): Intrusion– extrusion of electrolyte aqueous solutions in pure silica chabazite by in situ high pressure synchrotron X-ray powder diffraction. *Journal of Physic and Chemistry C*, 122, 28001-28012.

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Updated 12/10/2023