

Curriculum

Diploma di Perito Chimico -1972/73, Laurea e abilitazione in Ingegneria Chimica presso l'Università degli studi di Genova 1979/80, Diploma alla Scuola di specializzazione in "Scienza e Tecnologia dei Materiali" della Facoltà di Scienze (UniGe) 1990. Funzioni svolte: Funzionario tecnico presso industria chimica Houghton s.p.a. per il settore oli per stampaggio e laminazione. (1981), dal 1985 Tecnico Laureato presso la Facoltà di Ingegneria dell'Università di Genova, dal gennaio 2004: Professore associato, Settore scientifico disciplinare ING-IND22 (Scienza e Tecnologia dei Materiali) presso il (DEUIM). E' titolare dei corsi di "Ceramic materials", "Scienza e tecnologia dei materiali" e "Tecnologia dei materiali e chimica applicata" presso la Scuola Politecnica dell'università di Genova. Le ricerche dell'Ing. Botter si svolgono prevalentemente nell'ambito dei processi per la produzione di materiali ceramici e materiali leganti e della caratterizzazione chimica, funzionale e microstrutturale dei prodotti ottenuti. In pensione dal 1/11/2022.

Elenco delle pubblicazioni

1	Gaggero G., Delucchi M., Di Tanna G., Lagazzo A., Vicini S., Botter R. (2022). Effect of different alginate salts on the rheological and tensile properties of waterborne paints. PROGRESS IN ORGANIC COATINGS, vol. 163, p. 1-10, ISSN: 0300-9440, doi: 10.1016/j.porgcoat.2021.106676
2	Dodero A., Alberti S., Gaggero G., Ferretti M., Botter R., Vicini S., Castellano M. (2021). An Up-to-Date Review on Alginate Nanoparticles and Nanofibers for Biomedical and Pharmaceutical Applications. ADVANCED MATERIALS INTERFACES, p. 2100809-2100836, ISSN: 2196-7350, doi: 10.1002/admi.202100809
3	Gaggero, Giulia, Delucchi, Marina, Allegretta, Giulio, Vicini, Silvia, Botter, Rodolfo (2021). Interaction of sodium alginate thickener with components of architectural water-based coatings. PROGRESS IN ORGANIC COATINGS, vol. 151, p. 1-21, ISSN: 0300-9440, doi: 10.1016/j.porgcoat.2020.106016
4	D'Intignano X. M., Cademartori D., Clematis D., Presto S., Viviani M., Botter R., Barbucci A., Cerisola G., Caboche G., Carpanese M. P. (2020). Infiltrated Ba _{0.5} Sr _{0.5} Co _{0.8} Fe _{0.2} O _{3-δ} -based electrodes as anodes in solid oxide electrolysis cells. ENERGIES, vol. 13, p. 1-10, ISSN: 1996-1073, doi: 10.3390/en13143659
5	Moliner C., Lagazzo A., Bosio B., Botter R., Arato E. (2020). Production, characterization, and evaluation of pellets from rice harvest residues. ENERGIES, vol. 13, p. 479-490, ISSN: 1996-1073, doi: 10.3390/en13020479
6	Lagazzo, Alberto, Moliner, Cristina, Bosio, Barbara, Botter, Rodolfo, Arato, Elisabetta (2019). Evaluation of the Mechanical and Thermal Properties Decay of PHBV/Sisal and PLA/Sisal Biocomposites at Different Recycle Steps. POLYMERS, vol. 11, p. 1-16, ISSN: 2073-4360, doi: 10.3390/polym11091477
7	Sanna, C., Lagazzo, A., Sala, E. M., Botter, R., Costamagna, P. (2018). IT-SOFC based on a disaggregated electrospun LSCF nanofiber electrode deposited onto a GDC electrolyte disc: Preparation technique and morphological characterization. BULGARIAN CHEMICAL COMMUNICATIONS, vol. 50, p. 48-54, ISSN: 0861-9808
8	M. Viviani, A. Barbucci, M. P. Carpanese, R. Botter, D. Clematis, S. Presto (2018). Ionic Conductivity of Na-doped SrSiO ₃ . BULGARIAN CHEMICAL COMMUNICATIONS, vol. 50 Special Issue D, p. 55-61, ISSN: 0861-9808
9	Pandey, Raghvendra, Viviani, Massimo, Singh, Prabhakar, Botter, Rodolfo, Carpanese, Maria Paola, Barbucci, Antonio, Presto, Sabrina (2018). The effect of synthesis and thermal treatment on phase composition and ionic conductivity of Na-doped SrSiO ₃ . SOLID STATE IONICS, vol. 314, p. 172-177, ISSN: 0167-2738, doi: 10.1016/j.ssi.2017.10.021
10	ENRICO, ANNA, ALIAKBARIAN, BAHAR, LAGAZZO, ALBERTO, Donazzi, A., BOTTER, RODOLFO, PEREGO, PATRIZIA, COSTAMAGNA, PAOLA (2017). Parameter Optimization for the Electrospinning of La _{1-x} Sr _x Co _{1-y} FeyO _{3-δ} Fibers for IT-SOFC Electrodes. FUEL CELLS, vol. 17, p. 415-422, ISSN: 1615-6846, doi: 10.1002/face.201600190

11	LAGAZZO, ALBERTO, VICINI, SILVIA, CATTANEO, CLAUDIA, BOTTER, RODOLFO (2016). Effect of fatty acid soap on microstructure of lime-cement mortar. CONSTRUCTION AND BUILDING MATERIALS, vol. 116, p. 384-390, ISSN: 0950-0618, doi: 10.1016/j.conbuildmat.2016.04.122
12	CONSANI, SIRIO, CARBONE, CRISTINA, Salviulo G., Zorzi F., Dinelli E., BOTTER, RODOLFO, Nodari L., Badocco D., LUCCHETTI, GABRIELLA (2016). Effect of temperature on the release and remobilization of ecotoxic elements in AMDcolloidal precipitates: the example of the Libiola copper mine, Liguria, (Italy). ENVIRONMENTAL SCIENCE AND POLLUTION RESEARCH INTERNATIONAL, vol. 23, p. 12900-12914, ISSN: 1614-7499, doi: 10.1007/s11356-016-6406-x
13	BERUTO, DARIO, BOTTER, RODOLFO, LAGAZZO, ALBERTO (2015). Immersion Calorimetric Method to Study Lime Surfaces Impurities and Particles Aggregate Morphologies. ADVANCES IN CERAMIC SCIENCE AND ENGINEERING, vol. 4, p. 7-18, ISSN: 2325-6885, doi: 10.14355/acse.2015.04.002
14	PAINI, MARCO, ALIAKBARIAN, BAHAR, CASAZZA, ALESSANDRO ALBERTO, LAGAZZO, ALBERTO, BOTTER, RODOLFO, PEREGO, PATRIZIA (2015). Microencapsulation of phenolic compounds from olive pomace using spray drying: A study of operative parameters. LEBENSMITTEL-WISSENSCHAFT + TECHNOLOGIE, vol. 62, p. 177-186, ISSN: 0023-6438, doi: 10.1016/j.lwt.2015.01.022
15	BERUTO, DARIO, BOTTER, RODOLFO, LAGAZZO, ALBERTO, FINOCCHIO, ELISABETTA (2012). Calcium oxides for CO ₂ capture obtained from the thermal decomposition of CaCO ₃ particles coprecipitated with Al ³⁺ ions. JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol. 32, p. 307-315, ISSN: 0955-2219, doi: 10.1016/j.jeurceramsoc.2011.08.022
16	BERUTO, DARIO, LAGAZZO, ALBERTO, BOTTER, RODOLFO (2012). Nanoscopic water layers adsorbed onto mesoporous silica aggregates and their effect on the stability and the static yield stress of their dispersion in liquid paraffin. COLLOIDS AND SURFACES. A, PHYSICOCHEMICAL AND ENGINEERING ASPECTS, vol. 407, p. 133-140, ISSN: 0927-7757, doi: 10.1016/j.colsurfa.2012.05.020
17	Beruto, Dario T., LAGAZZO, ALBERTO, BOTTER, RODOLFO (2012). Silica-paraffin and kaolin-paraffin dispersions: Use of rheological and calorimetric methods to investigate the nature of their dispersed microstructure units. COLLOIDS AND SURFACES. A, PHYSICOCHEMICAL AND ENGINEERING ASPECTS, vol. 396, p. 153-160, ISSN: 0927-7757, doi: 10.1016/j.colsurfa.2011.12.062
18	CARATTO, VALENTINA, SETTI, LUCA, CAMPODONICO, SERENA, CARNASCIALI, MARIA, BOTTER, RODOLFO, FERRETTI, MAURIZIO (2012). Synthesis and characterization of nitrogen-doped TiO ₂ nanoparticles prepared by sol-gel method. JOURNAL OF SOL-GEL SCIENCE AND TECHNOLOGY, vol. 63, p. 16-22, ISSN: 0928-0707, doi: 10.1007/s10971-012-2756-0
19	LAGAZZO, ALBERTO, P. Nortier, BOTTER, RODOLFO (2012). The effect of alkaline cations on the operation of the kraft recovery and other kilns. ATIP, vol. 66, p. 15-19, ISSN: 0997-7554
20	BERUTO, DARIO, BOTTER, RODOLFO, CABELLA, ROBERTO, LAGAZZO, ALBERTO (2010). A consecutive decomposition-sintering dilatometer method to study the effect of limestone impurities on lime microstructure and its water reactivity. JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol. 30, p. 1277-1286, ISSN: 0955-2219, doi: 10.1016/j.jeurceramsoc.2009.12.012
21	LAGAZZO, ALBERTO, S. Lenzi, BOTTER, RODOLFO, CIRILLO, PAOLO, F. Demicheli, BERUTO, DARIO (2010). A rheological method for selecting nano-kaolin powder as filler in SBR rubber. PARTICUOLOGY, vol. 8 (3), p. 245-250, ISSN: 1674-2001, doi: 10.1016/j.partic.2010.03.014
22	F. Valenza, BOTTER, RODOLFO, CIRILLO, PAOLO, BARBERIS, FABRIZIO, M. di Foggia, D. Sottile (2010). Sintering of waste of superalloy casting investment shells as a fine aggregate for refractory tiles. CERAMICS INTERNATIONAL, p. 459-463, ISSN: 0272-8842, doi: 10.1016/j.ceramint.2009.09.009
23	A. M. BEN HAMISSA, LODI, ALESSANDRA, M. SEFFEN, FINOCCHIO, ELISABETTA, BOTTER, RODOLFO, CONVERTI, ATTILIO (2010). Sorption of Cd(II) and Pb(II) from aqueous solutions onto Agave americana fibers. CHEMICAL ENGINEERING JOURNAL, vol. 159, p. 67-74, ISSN: 1385-8947, doi: 10.1016/j.cej.2010.02.036
24	BERUTO, DARIO, BOTTER, RODOLFO, CONVERTI, ATTILIO (2009). Effect of vacuum and of strong adsorbed water films on micropore formation in aluminum hydroxide xerogel powders. JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol. 330(1), p. 97-104, ISSN: 0021-9797, doi: 10.1016/j.jcis.2008.10.041

25	CAMA G., BARBERIS, FABRIZIO, BOTTER, RODOLFO, CIRILLO P., CAPURRO, PIETRO MARCO, QUARTO, RODOLFO, SCAGLIONE S., FINOCCHIO, ELISABETTA, MUSSI, VALENTINA, VALBUSA, UGO (2009). Preparation and properties of macroporous brushite bone cements. ACTA BIOMATERIALIA, vol. 5 (6), p. 2161-2168, ISSN: 1742-7061, doi: 10.1016/j.actbio.2009.02.012
26	BERUTO, DARIO, LAGAZZO, ALBERTO, BOTTER, RODOLFO, R. Grillo (2009). Yield stress measurements and microstructure of colloidal kaolin powders clusterized and dispersed in different liquids. PARTICUOLOGY, p. 438, ISSN: 1674-2001, doi: 10.1016/j.partic.2009.06.011
27	BERUTO, DARIO, BOTTER, RODOLFO, CONVERTI, ATTILIO (2008). Aluminum hydroxide microstructural units in gelled media aged, or nonaged, with alcohol and water. JOURNAL OF COLLOID AND INTERFACE SCIENCE, vol. 322, p. 158-167, ISSN: 0021-9797, doi: 10.1016/j.jcis.2008.02.025
28	BERUTO, DARIO, BARBERIS, FABRIZIO, BOTTER, RODOLFO (2005). Calcium carbonate binding mechanisms in the setting of calcium and calcium-magnesium putty-limes. JOURNAL OF CULTURAL HERITAGE, vol. 6, p. 253-260, ISSN: 1296-2074, doi: 10.1016/j.culher.2005.06.003
29	RAVERA, SILVIA, E. Repaci, MORELLI, ALESSANDRO, PEPE, ISIDORO, BOTTER, RODOLFO, BERUTO, DARIO (2004). Effects of extremely low frequency electromagnetic fields on the adenylate kinase activity of rod outer segment of bovine retina.. BIOELECTROMAGNETICS, vol. 25, p. 545-551, ISSN: 0197-8462
30	BERUTO, DARIO, BOTTER, RODOLFO (2004). Role of the water matric potential (M) and of equilibrium water content (EWC) on the water self-diffusion coefficient and on the oxygen permeability in hydrogel contact lenses. BIOMATERIALS, vol. 25, p. 2877-2883, ISSN: 0142-9612
31	FINI M., GIAVARESI G., NICOLI ALDINI N., TORRICELLI P., BOTTER, RODOLFO, BERUTO, DARIO, GIARDINO R. (2002). A bone substitute composed of polymethylmethacrylate and -tricalcium phosphate: results in terms of osteoblast function and bone tissue formation •. BIOMATERIALS, vol. 23, p. 4523-4531, ISSN: 0142-9612
32	BERUTO, DARIO, BOTTER, RODOLFO, FINI M. (2002). The effect of water in inorganic microsponges of calcium phosphates on the porosity and permeability of composites made with polymethylmethacrylate. BIOMATERIALS, vol. 23, p. 2509-2517, ISSN: 0142-9612
33	BIGI A., BOANINI E., BOTTER, RODOLFO, PANZAVOLTA S., RUBINI K. (2002). alfa-Tricalcium phosphate hydrolysis to octacalcium phosphate: effect of sodium polyacrylate.. BIOMATERIALS, vol. 23, p. 1849-1854, ISSN: 0142-9612
34	BERUTO, DARIO, BOTTER, RODOLFO (2000). Liquid-like H ₂ O adsorption layers to catalyze the Ca(OH) ₂ /CO ₂ solid–gas reaction and to form a non-protective solid product layer at 20°C. JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol. 20, p. 497-503, ISSN: 0955-2219
35	BERUTO, DARIO, CAPURRO M., BOTTER, RODOLFO (1999). Thermally activated step for densification and creep of high-porosity MgO compacts in the intermediate sintering stage. JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol. 19, p. 623-628, ISSN: 0955-2219
36	BERUTO, DARIO, BOTTER, RODOLFO, A. CASARINO, L. FIENI, GIORDANI, MARINO, C. LA ROSA, MANNONI, TIZIANO, VECCHIATTINI, RITA (1998). New laboratory researches to produce lime putty with controlled microstructure. PACT, vol. 2, p. 131-140, ISSN: 0257-8727
37	D. BERUTO, CAPURRO, PIETRO MARCO, BOTTER, RODOLFO (1998). Thermally Activated Step for Densification and Creep of High-porosity MgO Compacts in the Intermediate Sintering Stage. JOURNAL OF THE EUROPEAN CERAMIC SOCIETY, vol. 5, p. 623-628, ISSN: 0955-2219
38	ASTE T., BOTTER, RODOLFO, BERUTO, DARIO (1995). Double-layer granular SnO ₂ sensors. SENSORS AND ACTUATORS. B, CHEMICAL, vol. 25, p. 826-829, ISSN: 0925-4005
39	BERUTO, DARIO, CAPURRO, PIETRO MARCO, NOVAKOVIC R., BOTTER, RODOLFO (1995). Effect of weak uniaxial loads on creep strain rate in high-porosity MgO compacts during early sintering stages. JOURNAL OF MATERIALS SCIENCE, vol. 30, p. 4994-5001, ISSN: 0022-2461, doi: 10.1007/BF01154514
40	BOTTER, RODOLFO, ASTE T., BERUTO, DARIO (1994). Influence of microstructures on the functional properties of tin oxide-based gas sensors. SENSORS AND ACTUATORS. B, CHEMICAL, vol. 22, p. 27-35, ISSN: 0925-4005

41	ASTE T., BERUTO, DARIO, BOTTER, RODOLFO, CICCARELLI C., GIORDANI M., POZZOLINI P. (1994). Microstructural development during the oxidation process in SnO ₂ thin films for gas sensors. SENSORS AND ACTUATORS. B, CHEMICAL, vol. 19, p. 637-641, ISSN: 0925-4005, doi: 10.1016/0925-4005(93)01218-S
42	D. Beruto, BOTTER, RODOLFO, M. Capurro, P. Cirillo, FERRETTI, MAURIZIO, G. Giannetti, M. Giordani (1990). Measurements and use of the elastic and dissipative properties of ceramic superconductors for their functional characterization. Method and preliminary results. CERAMICA ACTA, vol. 2, p. 65-75, ISSN: 1121-6093
43	D. Beruto, BOTTER, RODOLFO, M. Giordani, COSTA, GIORGIO, FERRETTI, MAURIZIO, G. L. Olcese (1988). A thermogravimetric index for the prediction of the processing temperature of REBa ₂ Cu ₃ O _{7-x} high T _c superconducting materials. THERMOCHIMICA ACTA, vol. 133, p. 27-32, ISSN: 0040-6031