

EUROPEAN CURRICULUM VITAE

PERSONAL INFORMATION

Name, Surname ANDREANA PIANCASTELLI
E-mail andreana.piancastelli@istec.cnr.it
Nationality Italian

WORK EXPERIENCE

Se dipendente CNR indicare: N. MATRICOLA 42041
QUALIFICA CTER
LIVELLO IV

Dates (from – to) 1990 - today

Name and address of employer CNR ISTEC National Research Council of Italy – Institute of Science and Technology for Ceramics

Type of business or sector Transparent ceramics, Si₃N₄, Biomaterials, Piezoelectric ceramics.

Occupation or position held Technician with permanent position

Responsible of the laboratory “rheological and textural characterization”.

Main activities and responsibilities My work is focused on characterizations like mercury intrusion porosimetry, specific surface area measurements, zeta potential and rheological characterization.

Dates (from – to) 2006 – today

Name and address of employer CNR ISTEC National Research Council of Italy – Institute of Science and Technology for Ceramics

Type of business or sector Transparent ceramics

Occupation or position held Technician with permanent position

Samples preparation mainly by cold consolidation like die and isostatic pressure; their densification in furnace in high vacuum and their characterization by SEM and transmittance measurements. XRD measurements.

Dates (from – to) 1988 - 2006

Name and address of employer CNR ISTEC National Research Council of Italy – Institute of Science and Technology for Ceramics

Type of business or sector Biomaterials

Occupation or position held Technician with permanent position

Main activities and responsibilities Preparation of inert/bioactive ceramics; synthesis of hydroxyapatite, preparation of different doped bioactive glasses, ceramics scaffolds and characterization of the obtained materials by rheological tests, porosimetry analysis, SEM and Z potential measurements.

**ISTRUZIONE E FORMAZIONE /
EDUCATION AND TRAINING**

Dates (from – to)	1984-1985
Name and type of organisation providing education and training	Istituto Statale D'Arte per la Ceramica "G.Ballardini"
Principal subjects occupational skills covered	
Title of qualification awarded	Diploma di Maturità Artistica
Level in National classification	
In ordine di data /Dates (from – to)	1982-83
Name and type of organisation providing education and training	Istituto Statale D'Arte per la Ceramica "G.Ballardini"
Principal subjects occupational skills covered	
Title of qualification awarded	Diploma di Perfezionamento delle Tecnologie Ceramiche Speciali
Level in National classification	
Dates (from – to)	1979-81
Name and type of organisation providing education and training	Istituto Statale D'Arte per la Ceramica "G.Ballardini"
Principal subjects occupational skills covered	
Title of qualification awarded	Diploma di Maestro d'arte
Level in National classification	

RESEARCH ACTIVITIES

Research sectors

- Transparent ceramics for high power lasers: YAG-based ceramics doped with active elements (Nd, Yb, Er)
- Transparent ceramics for protective windows (ALON, spinel MgAl₂O₄) with mechanical resistance even at high temperature
- Dental porcellains: preparation of enamels and dentines

Books and Articles

1. J.Hostasa, A.Piancastelli, G.Toci, M.Vannini, V.Biasini 'Transparent layered ceramics with structured Yb doping produced via tape casting ' *Optical Materials* 65 (2017) 21-27.
2. V.Medri, D.Sciti, D.Dalle Fabbriche, A. Piancastelli, E.Landi ' Ice templating of ZrB₂-SiC systems ' *Ceramic International* 41 (2015) 10324-10330.
3. L.Esposito, A.Piancastelli, P. Miceli, S.Martelli ' A thermodynamic approach to obtaining transparent spinel (mgAl₂O₄) by hot pressing', *Journal of European Ceramic Society* 35 (2015) 651-661
4. L. Esposito, A. Piancastelli, Y. Bykov, S. Egorov, A. Ereemeev, "Microwave Sintering of Yb:YAG Transparent Laser Ceramics", *Optical Materials*, 35 (2013)761-765
5. L. Esposito, A. Piancastelli and S. Martelli, "Production and characterization of transparent MgAl₂O₄ prepared by hot pressing ", *J. Eur.Ceram.Soc.*, 33 (2013) 737-747
6. J.Hostasa, L.Esposito, A.Piancastelli " Influence of Yb and Si content on the sintering and phase changes of Yb :YAG laser ceramics." *J.Europ.Cer.Soc.* 32 2012, 2949-2956
7. J.Hostasa, L.Silvestroni, A.Piancastelli, D.Sciti, L.Esposito and D. Di Martino " Slip casting of a Si₃N₄-based system ", *Int.J.Appl.Technol.* 9 [2] 246-258 2012
8. Laura Esposito, Thierry Epicier, Marina Serantoni, Andreana Piancastelli, Daniele Alderighi, Angela Pirri, Guido Toci, Matteo Vannini, Sergiu Anghel, Georges Boulon "Integrated analysis of non-linear loss mechanisms in Yb:YAG ceramics for lasers applications", *J.Europ.Cer.Soc.* 32(10) 2012, 2273-2281
9. Marina Serantoni, Andreana Piancastelli, Anna Luisa Costa, Laura Esposito "Improvements in the production of Yb:YAG transparent ceramic materials: Spray drying optimisation", *Optical Materials*, in press, doi:10.1016/j.optmat.2011.06.003
10. D. Alderighi, A. Pirri, G. Toci, M. Vannini, L. Esposito, A. L. Costa, A. Piancastelli, M. Serantoni, "Characterization of Yb:YAG ceramics as laser media", *Optical Materials*, 33 2 2011, 205-210
11. L. Esposito, A. Piancastelli, A. L. Costa, M. Serantoni, G. Toci, M. Vannini, "Experimental features affecting the transparency of YAG ceramics", *Optical Materials*, 33 5 2011, 713-721
12. A.L.Costa, M.Serantoni, M. Blosi, E.Mercadelli, L.Esposito, A. Piancastelli, A.Sanson "Microwave Assisted Synthesis of Yb:Y₂O₃ Based Materials for Laser Source Application" 2010 *Advanced Engineering Materials*, Vol.12 Issue3, 205-209.
13. L. Esposito, A. Piancastelli, "Role of powder properties and shaping techniques on the formation of pore-free YAG materials", *Journal of the European Ceramic Society*, 29 2 2009 317-322
14. A.Ravaglioli, A.Krajewski, G.Baldi, F.Tateo, L.Peruzzo and A.Piancastelli "Glass ceramic scaffolds for tissue engineering" *Advances in Applied Ceramics* N°5 Vol.107 pag 268-273 3 Luglio 2008.
15. A.Ravaglioli, A.Krajewski, A.Piancastelli, G.Baldi, A.Barzanti, A.Antonini, M.Mazzocchi "A comparison among some different doped bioactive glasses tested in vitro for tissue engineering" *Proc. 11th Meeting and Seminar on: Ceramics, Cells and Tissues; Faenza, October 2-5, 2007, p.258-262.*
16. A.Ravaglioli, A.Krajewski, A.Piancastelli, S.Tarlazzi, B.Fabbri, G.Ercolani, H.Du "Eggshells models for ceramic scaffolds" *Proc. 10th Meeting and Seminar on: Ceramics, Cells and Tissues; Faenza, May 23-27, 2006, p.180-186.*
17. A.Sanson, A.Piancastelli, E.Roncari "Glass-ceramics sealants for solid oxide fuel cells" In: *European Fuel Cell Technology & Applications, International Conference, CNR, Roma, 14-16 Dicembre 2005.*
18. A.Krajewski, A.Ravaglioli, G.C.Celotti, A.Piancastelli, M.Mazzocchi, B.Bacchini, L.Montanari, G.Zama, L.Piombi, M.Fini, R.Giardino "Mineral evolution of bone of partially-domesticated animals" *Proc. 9th Meeting and Seminar on Ceramics, cells and Tissues, Faenza 28 Settembre-1 Ottobre 2004 pp.389-399*

19. L. Esposito, D. Sciti, A. Piancastelli, A. Bellosi, "Microstructure and properties of porous β -SiC templated from soft woods", *Journal of the European Ceramic Society*, 24 2004 533-540.
20. A.Ravaglioli, A.Krajewski, A.Piancastelli, S.Datta, H.L.Du "Biologically inspired tissue engineering: suitabilized ceramic scaffolds" Proc. 9th Meeting and Seminar on Ceramics, cells and Tissues, Faenza 28 Settembre-1 Ottobre 2004 pp.158-165
21. F.Branda, G.Luciani, B.Silvestri, M.Colella, A.Costantini, A.Ravaglioli, A.Piancastelli "Influence of Ta2O5 addition on the cristallisation behaviour of bioactive glass (AP40)" *Phys.Chem.Glasses* 2004, 45 (6) pp.343-347
22. F.Branda, B.Silvestri, G.Luciani, A.Costantini, A.Ravaglioli, A.Piancastelli, A.Krajewski "Bioactivity of RKKP and AP40 glassy_materials" Proc. 8th Meeting and Seminar on Ceramics, Cells and Tissues, Faenza 18-21 Marzo 2003 pp.61-65.
23. A.Rosengren, E.Pavlovic, S.Oscarsson, A.Krajewski, A.ravaglioli, A.Piancastelli "Plasma protein adsorption pattern on characterized ceramic biomaterials" *Biomaterials* 23, 2002, pp.1237-1247.
24. C. Galassi, E. Roncari, C. Capiani, G. Fabbri, A. Piancastelli, M. Peselli, F. Silvano: "Processing of porous PZT materials for underwater acoustics" *IMF 10 Madrid 3-7/9/01 Ferroelectrics* Vol. 268, 2002, pp.47-52
25. E.Roncari, C.Galassi, F.Craciun, C.Capiani, A.Piancastelli "A microstructural study of porous piezoelectric ceramics obtained by different methods" *J. Eur. Ceram. Soc.* Vol. 21 (3) (2001) 409-417.
26. C.Galassi, E.Landi, A.Piancastelli, A.Tampieri "Proprietà reologiche di dispersioni di idrossiapatite", Proc. 7° Convegno Nazionale di Reologia, (Faenza), Pub. Faenza Editrice, Faenza 20-22 Giugno 2001, pp.93-98
27. M.Ferraris, E.Verné, P.Appendino, C.Moiescu, A.Krajewski, A.Ravaglioli, A.Piancastelli "Coatings on zirconia for medical applications" *Biomaterials* 21 (2000) 765-773.
28. P.Laudadio, E.Cunsolo, A.Krajewski, A.Ravaglioli, A.Piancastelli, M.Mazzocchi, R.Martinetti "Technology and clinical use of inert/bioactive ceramic ossicular" *Bioceramics* Vol. 12 (Proceedings of the 12th International Symposium on Ceramics in Medicine), Edited by H. Ohgushi, G. W. Hastings and T. Yoshikawa; World Scientific Publishing Co. Pte. Ltd. (Nara, Japan, 1999) pp.45- 48.
29. A.Krajewski, A.Piancastelli, R.Malavolti "Albumin adhesion on ceramics and correlation with their Z-potential" *Biomaterials* 19, 1998 pp 637-641
30. C.Galassi, E.Roncari, R.Greenwood, A.Piancastelli "Characterization of alumina suspensions by electroacoustics" V° EURO-CERAMICS vol.1, Ed. D.Bortzmeyer, M.Boussuge, Th.Chartier, G.Fantozzi, G.Iozes, A.Rousset, Trans Tech Publication, 1997, pp.329-332.
31. E.Verné, A.Terzuolo, F.Mousty, G.Pigozzi, A.Ravaglioli, A.Krajewski, A.Piancastelli "Glass-matrix biocomposite coatings on a Ti-6Al-4V alloy" Proc.3rd Meeting and seminar on: Ceramics, Cells and Tissues; Faenza May 5-6 1996 p.37-42
32. M.Toriyama, A.Ravaglioli, A.Krajewski, G.Celotti, A.Piancastelli "Synthesis of Hydroxyapatite by mechanochemical method and sintering of obtained powder" *J.Eur.Ceram.Soc.* 16, 1996, p.429-436.
33. A.Krajewski, R.Malavolti, A.Piancastelli "Albumine adhesion on some biological and non-biological glasses and connection with their Z-potentials" *Biomaterials* 1995, vol.16 n°3.
34. M.Toriyama, A.Ravaglioli, A.Krajewski, C.Galassi, E.Roncari, A.Piancastelli "Slip casting of mechanochemically synthesized hydroxyapatite" *Journal of Material Science*, 30, 1995
35. A.Ravaglioli, A.krajewski, M.Dondi, A.Piancastelli, G.Ercolani, S.Tarlazzi, L.Fanti "Chemical Properties of various Hydroxyapatite powders for industrial Production" *Interceram* (1) 1994, 2-7.
36. C.Capiani, A.Piancastelli, E.Rastelli, C.Galassi " Pressure casting of silicon nitride" Third EURO-CERAMICS vol.1, Ed. P.Duran, J.F.Fernandez, 1993, 543-548.
37. C.Galassi, E.Rocari, C.Capiani, A.Piancastelli, G.Pederzoli "Pressure casting of Alumina based slurries" 8th SIMCER, Rimini (1992) *Abstract-Ceramic Acta*, 5/6 1992-133.
38. A.Ravaglioli, A.Krajewski, A.Piancastelli, G.Berger, K.Adam, R.Gildenhaar "The influence of Alumina Porosity in Glass Ceramic adhesion" *InterCeram* 41(2)(1992) 69-74.(I)

39. A.Ravaglioli, A.Krajewski, A.Piancastelli, R.Martinetti "Physico-chemical characterization of Hydroxyapatite of unknown manufacture" in *Bioceramics and the Human Body*, Ed. A.Ravaglioli, A.Krajewski, pubblicato da Elsevier Science Pubbl.B.V. (Amsterdam, 1992), p.203-205.
40. C.Galassi, E.Roncari, A.Piancastelli "Characterization of Si₃N₄ aqueous suspensions" 7th ICSCS International conference on surface and colloid chemistry, Compiègne (F), July 7-13, (1991); poster B4/P34 Abstracts, vol.II, p.501.
41. C.Melandri, E.Roncari, C.Capiani, A.Piancastelli "Evaluation of green bodies related to the forming technique", *La chimica e l'industria* 73 (1990) p.558-565
42. C.Galassi, E.Roncari, C.Capiani, A.Piancastelli "Evaluation of green bodies related to the forming technique" *EURO-CERAMICS vol.1*, Ed. G. de With, R.A. Terpstra, R. Metselaar, Elsevier Applied Science, (1989), 1.181-1.185
43. A.Piancastelli, A.Ravaglioli, A.Krajewski, F.Trotta "Rivestimento di superfici di manufatti metallici con sistemi vetro-ceramici". *Proceedings of the 22nd International metallurgy Congress Innovation for quality (Bologna 17-19 Maggio 1988)* Il parte pag. 1831-1840.

**TRATTAMENTO DEI DATI
PERSONALI, INFORMATIVA E
CONSENSO**

Il D.Lgs. 30/6/2003, n. 196 "*Codice in materia di protezione dei dati personali*" regola il trattamento dei dati personali, con particolare riferimento alla riservatezza, all'identità personale e al diritto di protezione dei dati personali; l'interessato deve essere previamente informato del trattamento .

La norma in considerazione intende come "trattamento" qualunque operazione o complesso di operazioni concernenti la raccolta, la registrazione, l'organizzazione, la conservazione, la consultazione, l'elaborazione, la modifica, la selezione, l'estrazione, il raffronto, l'utilizzo, l'interconnessione, il blocco, la comunicazione, la diffusione, la cancellazione e la distruzione di dati, anche se non registrati in una banca dati.

In relazione a quanto riportato, autorizzo il CNR al trattamento dei dati contenuti nel presente *curriculum vitae* e nella documentazione della quale fa parte integrante

(*barrare la casella*) **Si, acconsento**

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