

PERSONAL INFORMATION

Mauro Palumbo



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Last update: June 2023

WORK EXPERIENCE

From February 2020 -

Associate professor (ING-IND 22)

Chemistry Department, University of Torino

- Member of the MET group (Materiali Metallici)
- Member of the Departmental Didactical Committee
- Member of the Associazione Italiana Metallurgia (AIM)
- Member of the Associazione Italiana di Ingegneria dei Materiali (AIMAT)

December 2018 – December
2019

System Security Engineer

Aizoon Technology Consulting srl, Torino

December 2015 – November
2017

Postdoctoral Researcher

Scuola Internazionale di Studi Superiori Avanzati (SISSA), Trieste

October 2009 – November 2015

Research assistant

International Centre for Advanced Materials Simulations, University of Bochum, Bochum, Germany

October 2008 – September 2009

Postdoctoral Researcher

National Institute for Materials Science (NIMS), Tsukuba, Japan

November 2004 – October 2008

Postdoctoral Researcher

Chemistry Department, University of Torino and locality (if relevant, full address and website)

EDUCATION AND TRAINING

February 2018 – March 2019

Master course in Cybersecurity

*Replace with EQF
(or other) level if
relevant*

Dipartimento di Informatica, University of Pisa

2001 - 2004

PhD in Materials Science and Technology

Replace with EQF

(or other) level if relevant

2001 Chemistry Department, University of Torino
 Degree in Materials Science and Technology

Replace with EQF (or other) level if relevant

Chemistry Department, University of Torino

Research interests

My research activity always focused on the modelling materials properties and phase transformations using different methodologies essentially following three main lines:

- thermodynamic modelling using the CALPHAD method
- ab initio calculations using Density Functional Theory
- machine learning

The above methodologies are applied to different types of materials, mainly:

- Metallic alloys
- Metallic hydrides for hydrogen storage
- Materials for electrolytes in batteries
- Thermoelectric materials (Heusler compounds)

ADDITIONAL INFORMATION

Publications Author of 57 publications in peer-reviewed ISI journals, h-index: 19; Total citations: 1182 (source Scopus).

Selected publications:

Gulino, V., Dematteis, E.M., Como, M., Palumbo, M., Baricco, M.
 ACS Applied Energy Materials, (2021) 4 (7), pp. 7327-7337.

Gulino, V., Wolczyk, A., Golov, A.A., Eremin, R.A., Palumbo, M., Nervi, C., Blatov, V.A., Proserpio, D.M., Baricco, M.
 Inorganic Chemistry Frontiers, (2020) 7 (17), pp. 3115-3125

Aversano, F., Palumbo, M., Ferrario, A., ...Baricco, M., Castellero, A.
 Intermetallics, (2020), 127, p. 106988

Tumminello, S., Palumbo, M., Koßmann, J., ...Sommadossi, S., Fries, S.G.
 Metals, 2020, 10(9), pp. 1–19, 1142

Wang, P., Koßmann, J., Kattner, U.R., Palumbo, M., Hammerschmidt, T., Olson, G.B.
 Calphad: Computer Coupling of Phase Diagrams and Thermochemistry, 2019, 64, pp. 205–212

Naujoks, D., Eggeler, Y.M., Hallensleben, P., Frenzel, J., Fries, S.G. Palumbo, M, Koßmann J.
 Hammerschmidt, T, ... Drautz, R., Ludwig, A.
 Acta Materialia, 2017, 138, pp. 100–110

Palumbo, M., Dal Corso, A.
 Journal of Physics Condensed Matter, (2017) 29 (39), art. no. 395401

Palumbo, M.

Alloys and Intermetallic Compounds: From Modeling to Engineering, 2017, pp. 44–80

Sundman, B., Kattner, U.R., Sigli, C., Stratmann, M., Le Tellier, R., Palumbo, M., Fries, S.G
Computational Materials Science, (2016) 125, pp. 188-196.

Breidi, A., Fries, S.G., Palumbo, M., Ruban, A.V.
Computational Materials Science, 2016, 117, pp. 45–53

Pinatel, E.R., Palumbo, M., Massimino, F., Rizzi, P., Baricco, M.
Intermetallics, 2015, 62, pp. 7–16

Palumbo, M., Fries, S.G., Pasturel, A., Alfè, D. (2014) Journal of Chemical Physics, 140 (14), art. no. 144502

Palumbo, M., Fries, S.G., Corso, A.D., ...Hickel, T., Neugebauer, J.
Journal of Physics Condensed Matter, 2014, 26(33), 335401