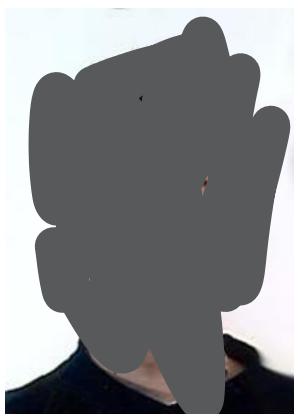


Curriculum Vitae

PERSONAL INFORMATION

Davide Mombelli



✉ davide.mombelli@polimi.it

🌐 ORCID: <https://orcid.org/0000-0002-8265-5312>

🌐 ResearchGate: <https://www.researchgate.net/profile/Davide-Mombelli-2>

🌐 Academia.Edu: https://polimi.academia.edu/DMombelli?from_navbar=true

🌐 Publons: <https://publons.com/researcher/O-8718-2017/>

CURRENT POSITION

From December 2018

Senior Researcher¹

Dipartimento di Meccanica - Politecnico di Milano

"Design, management and use of metallurgical slag and sludges improving metallurgical processes' efficiency, reducing environmental impact and recovering valuable metals from such chemical substances"

April 2017 – April 2023

National Academic Qualification for Associate Professor²

SC 09/A3 - SSD ING-IND 21

PREVIOUS POSITION

February 2015 – December 2019

Junior Researcher³

Dipartimento di Meccanica - Politecnico di Milano

"Characterization and study of slag and oxide powders produced by steelmaking process in order to make them inert and to exploit these wastes as raw materials"

January 2014 – January 2015

Research fellowship⁴

Dipartimento di Meccanica - Politecnico di Milano

"Acciai inossidabili: relazione tra microstruttura e trasparenza agli ultrasuoni in acciai inossidabili duplex e superduplex"

January 2011 – December 2013

Ph.D. student

Dipartimento di Meccanica - Politecnico di Milano

Ph.D. in Mechanical Engineering with Scholarship

March 2013 – May 2013

Visiting Researcher

Centre de Recherche Material de Grand Diffusion (C2MA - CGD)

Ecole des Mines d'Alès – France

July 2010 – November 2012

Research activity

Dipartimento di Meccanica - Politecnico di Milano

"Characterization of EAF black slag and fumes"

April 2006 – July 2006

Internship (Bachelor' Thesis)

Seko Bono Exacta S.p.A., Peschiera Borromeo (MI)

Characterization of alternative volumetric pump efficiency

¹ Ricercatore Senior a tempo determinato (RTDb) nel settore scientifico disciplinare ING-IND/21 - Metallurgia, settore concorsuale 09/A3 - Progettazione industriale, costruzioni meccaniche e metallurgia

² Abilitazione Scientifica Nazionale alle funzioni di professore universitario di Seconda Fascia, nel settore concorsuale 09/A3 Progettazione Industriale, Costruzione di Macchine e Metallurgia

³ Ricercatore Junior a tempo determinato (RTDa) nel settore scientifico disciplinare ING-IND/21 - Metallurgia, settore concorsuale 09/A3 - Progettazione industriale, costruzioni meccaniche e metallurgia

⁴ Assegnista di Ricerca ai sensi dell'art.22 della legge 30 dicembre 2010, n.240

EDUCATION

27/03/2014	Ph.D. in MECHANICAL ENGINEERING Politecnico di Milano Thesis: Study on inertization and safe environmental production of EAF slag	Very Good
04/05/2010	MASTER DEGREE in MECHANICAL ENGINEERING Politecnico di Milano Thesis: Produzione e caratterizzazione di schiume metalliche in acciaio dual phase (<i>Production and Characterization of dual phase steel foams</i>)	109/110
27/07/2006	BACHELOR in MECHANICAL ENGINEERING Politecnico di Milano Thesis: Caratterizzazione del rendimento di una pompa volumetrica alternativa (<i>Characterization of alternative volumetric pump efficiency</i>)	105/110
2003	TECHNICAL SCIENTIFIC HIGH SCHOOL - mechanical expert I.I.S.S. James Clerk Maxwell, Via Don Calabria 2, 20132 Milano (MI) – Italy	100/100

AWARDS

February 2021	Metals 2020 Outstanding Reviewer Award
September 2019	Publons Global Peer Review Awards, Top 1% in "Cross-field" Category
September 2016	Premio Felice De Carli

TEACHING ACTIVITIES

September 2019 – February 2020	Professor of the course “Tecnologie Metallurgiche” (metallurgical technologies) Politecnico di Milano – B.Sc. in Materials Engineering and Nanotechnology
From February 2018	Professor of the course “Tecnologie Metallurgiche” (metallurgical technologies) Politecnico di Milano – B.Sc. Mechanical Engineering
From September 2015	Professor of the course “Siderurgia” (process and technology of steelmaking) Politecnico di Milano – B.Sc. in Materials Engineering and Nanotechnology
August – October 2016	Lecturer - Occasional Reconversider - Viale Sarca 336, 20126 Milano - Italy Progetto Fondimpresa: da acciaio comune ad acciaio speciale, Acciaierie di Calvinano S.p.A., Calvisano (BS), Italy
March 2012 – July 2012	Lecturer - Occasional School of Management (MIP) - Politecnico di Milano, Via Lambruschini 4, 20156 Milano (MI) - Italy "Master in Processi Siderurgici" progetto Performa, Lucchini S.p.A. Piombino (LI), Italy
From February 2012	Lecturer - Occasional Associazione Italiana Metallurgia (AIM), Piazzale Morando 2, 20121 Milano - Italy Corso Forgiatori Recupero scorie e refrattario in acciaieria Macchina Fusoria Metallurgia Fuori Forno Le Scorie in Metallurgia Secondaria La Sorveglianza Sanitaria ed Epidemiologica nel Settore Metallurgico Siderurgia in Pillole Acciai ad Alto Carbonio

ACADEMIC SERVICES

From 2016	Head of the Research and Teaching Activities (RADRL) Ovens Area – Dipartimento di Meccanica - Politecnico di Milano
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EDITOR AND REFEREE

- 2020 **Guest Editor**
 Special Issue "Extractive Metallurgy and Circular Economy: From Metallurgical Waste to New Products" – Applied Science
https://www.mdpi.com/journal/applsci/special_issues/Metallurgical_Waste_New_Products
- 2019 **Guest Editor**
 Special Issue "Extractive Metallurgy from Metallurgical Waste or by-Products – Applied Science"
https://www.mdpi.com/journal/applsci/special_issues/Extractive_Metallurgy_Metallurgical_Waste
- From 2017 **Reviewer for International Peer-Reviewed Journals**
 158 verified reviews for the following international journals:
 Metals, Journal of Environmental Chemical Engineering, Materials, Processes, Minerals, Steel Research International, Process Safety and Environmental Protection, Resources, Conservation and Recycling, Hydrometallurgy, Journal of Industrial Ecology, Waste Management & Research, Journal of Environmental Management, Journal of Waste Management and Disposal, Journal of Iron and Steel Research International, Journal of Hazardous Materials, Journal of Waste Resources and Recycling
- From 2017 **Reviewer for National Research Funding**
 PRIN 2021
 UNI-IMPRESA 2019
 PRIN 2017

SCIENTIFIC COMMITTEES

- December 2021 **Scientific & Steering Committee**
 Raw Materials and Recycling international meeting
- July 2021 **Chairman of the session "IV"**
 EASES 2021 (4th European Academic Symposium on EAF Steelmaking)
- January 2021 **Chairman of the session "Acciai e Ghise"**
 38AIM (38th AIM National Congress)
- June 2018 **Chairman of the sessions "Products & Technology III" and "Industry 4.0 & Automation I"**
 ICS2018 (7th International Congress on Science and Technology of Steelmaking)

MEMBERSHIP

- From 2010 **Member**
 AIM (Associazione Italiana di Metallurgia)

PERSONAL SKILLS

- Mother tongue(s) Italian
- Other language(s) English: B2
 French: A2/B1
 Japanese: A1

PUBLICATIONS

Papers International Peer-reviewed Journals

- Mombelli, D., Dall'Osto, G., Mapelli, C., Gruttadauria, A., Barella, S.
 Modeling of a Continuous Charging Electric Arc Furnace Metallic Loss Based on the Charge Mix (2021) Steel Research International, 92 (5), art. no. 2000580
- Mombelli, D., Dall'Osto, G., Villa, G., Mapelli, C., Barella, S., Gruttadauria, A., Angelini, L., Senes, C., Bersani, M., Frittella, P., Moreschi, R., Marras, R., Bruletti, G.
 Study on the Pneumatic Lime Injection in the Electric Arc Furnace Process: An Evaluation on the Performance Benefits (2021) Steel Research International
- Willms, T., Echterhof, T., Steinlechner, S., Aula, M., Abdelrahim, A., Fabritius, T., Mombelli, D., Mapelli, C., Preiss, S.
 Investigation on the chemical and thermal behavior of recycling agglomerates from EAF by-products (2020) Applied Sciences (Switzerland), 10 (22), art. no. 8309, pp. 1-14.
- Mombelli, D., Mapelli, C., Barella, S., Gruttadauria, A., Ragona, M., Pisu, M., Viola, A.
 Characterization of cast iron and slag produced by red muds reduction via Arc Transferred Plasma (ATP)

- reactor under different smelting conditions
(2020) *Journal of Environmental Chemical Engineering*, 8 (5), art. no. 104293
5. Gruttadauria, A., Barella, S., Mapelli, C., Mombelli, D.
Influence of different soaking times at 1050 °c on the ut response due to microstructure evolution of 2205 duplex stainless steel
(2020) *Metals*, 10 (4), art. no. 503
 6. Mapelli, C., Barella, S., Gruttadauria, A., Mombelli, D., Bizzozero, M., Veys, X.
 γ Decomposition in Fe–Mn–Al–C lightweight steels
(2020) *Journal of Materials Research and Technology*, 9 (3), pp. 4604-4616
 7. Mombelli, D., Barella, S., Gruttadauria, A., Mapelli, C.
Iron recovery from Bauxite Tailings Red Mud by thermal reduction with blast furnace sludge
(2019) *Applied Sciences (Switzerland)*, 9 (22), art. no. 4902, .
 8. Mombelli, D., Gruttadauria, A., Barella, S., Mapelli, C.
The influence of slag tapping method on the efficiency of stabilization treatment of electric arc furnace carbon steel slag (EAF-C)
(2019) *Minerals*, 9 (11), art. no. 706
 9. Echterhof, T., Willms, T., Preiss, S., Aula, M., Abdelrahim, A., Fabritius, T., Mombelli, D., Mapelli, C., Steinlechner, S., Unamuno, I.
Fabrication of agglomerates from secondary raw materials reinforced with paper fibres by stamp pressing process
(2019) *Applied Sciences (Switzerland)*, 9 (19), art. no. 3946
 10. Barella, S., Mapelli, C., Mombelli, D., Gruttadauria, A., Laghi, E., Ancona, V., Valentino, G.
Model for the final decarburisation of the steel bath through a self-bubbling effect
(2019) *Ironmaking and Steelmaking*, 46 (8), pp. 721-724.
 11. Barella, S., Ciuffini, A.F., Gruttadauria, A., Mapelli, C., Mombelli, D., Longaretti, E.
Corrosion and oxidation behavior of a Fe-Al-Mn-C duplex alloy
(2019) *Materials*, 12 (16), art. no. 2572
 12. Mombelli, D., Mapelli, C., Barella, S., Gruttadauria, A., Spada, E.
Jarosite wastes reduction through blast furnace sludges for cast iron production
(2019) *Journal of Environmental Chemical Engineering*, 7 (2), art. no. 102966, .
 13. Marzorati, S., Goglio, A., Fest-Santini, S., Mombelli, D., Villa, F., Cristiani, P., Schievano, A.
Air-breathing bio-cathodes based on electro-active biochar from pyrolysis of Giant Cane stalks
(2019) *International Journal of Hydrogen Energy*, pp. 4496-4507
 14. Echterhof, T., Willms, T., Preiß, S., Omran, M., Fabritius, T., Mombelli, D., Mapelli, C., Steinlechner, S., Unamuno, I., Schüler, S., Mudersbach, D., Griessacher, T.
Developing a new process to agglomerate secondary raw material fines for recycling in the electric arc furnace - The fines2EAF project
(2019) *Metallurgia Italiana*, 111 (5), pp. 31-40
 15. Mombelli, D., Barella, S., Gruttadauria, A., Mapelli, C., Le Saout, G., Garcia-Diaz, E.
Effects of basicity and mesh on Cr leaching of EAF carbon steel slag
(2018) *Applied Sciences (Switzerland)*, 9 (1), art. no. 121
 16. Mapelli, C., Barella, S., Mombelli, D., Gruttadauria, A.
The integrated route for the steelmaking and the pollution sources [Il ciclo integrate di produzione dell'acciaio e le fonti inquinanti]
(2018) *Giornale Italiano di Medicina del Lavoro ed Ergonomia*, 40 (3), pp. 128-136.
 17. Mombelli, D., Mapelli, C., Barella, S., Gruttadauria, A., Sosio, R., Valentino, G., Ancona, V.
Model for Phosphorus Removal in LD Converter and Design of a Valuable Operative Practice
(2018) *Steel Research International*, 89 (5), art. no. 1700467
 18. Mombelli, D., Mapelli, C., Di Cecca, C., Barella, S., Gruttadauria, A., Ragona, M., Pisu, M., Viola, A.
Characterization of cast iron and slag produced by jarosite sludges reduction via Arc Transferred Plasma (ATP) reactor
(2018) *Journal of Environmental Chemical Engineering*, 6 (1), pp. 773-783.
 19. Zebarjadi Sar, M., Barella, S., Gruttadauria, A., Mombelli, D., Mapelli, C.
Impact of warm rolling process parameters on crystallographic textures, microstructure and mechanical properties of low-carbon boron-bearing steels
(2018) *Metals*, 8 (11), art. no. 927
 20. Mapelli, C., Barella, S., Gruttadauria, A., Mombelli, D., Ciuffini, A.F., Cusolito, M.
Defects, their source and detection in wire drawn products

- (2018) *Metallurgia Italiana*, 110 (6), pp. 5-10
21. Nemfardi, R., Bedini, R., Zucchelli, G., Bonora, D., Mapelli, C., Barella, S., Gruttadauria, A., Mombelli, D. Continuous annealing by resistance heating furnace of stainless steels wire drawn (2018) *Metallurgia Italiana*, 110 (6), pp. 48-51
 22. Zebarjadi Sar, M., Barella, S., Gruttadauria, A., Mombelli, D., Mapelli, C. The Influence of Thermomechanical Processing Conditions on the Evolution of Microstructure and Crystallographic Textures and the Mechanical Properties of Deformed Mild Steels in the Intercritical Region (2018) *Advances in Materials Science and Engineering*, 2018, art. no. 8298310
 23. Ciuffini, A.F., Barella, S., Di Cecca, C., Gruttadauria, A., Mombelli, D., Mapelli, C. Hot-dip aluminizing on AISI F55-UNS S32760 super duplex stainless steel properties: Effect of thermal treatments (2017) *Metals*, 7 (12), art. no. 525
 24. Ciuffini, A.F., Barella, S., Di Cecca, C., Gruttadauria, A., Mapelli, C., Mombelli, D. Isothermal austenite–Ferrite phase transformations and microstructural evolution during annealing in super duplex stainless steels (2017) *Metals*, 7 (9), art. no. 368
 25. Di Cecca, C., Barella, S., Mapelli, C., Gruttadauria, A., Ciuffini, A.F., Mombelli, D., Bondi, E. Thermal and chemical analysis of massive use of hot briquetted iron inside basic oxygen furnace (2017) *Journal of Iron and Steel Research International*, 24 (9), pp. 901-907.
 26. Barella, S., Gruttadauria, A., Mapelli, C., Mombelli, D., Taiana, P., Bosatra, M., Morini, A. Solidification microstructure of centrifugally cast Inconel 625 (2017) *China Foundry*, 14 (4), pp. 304-312
 27. Barella, S., Di Cecca, C., Gruttadauria, A., Mapelli, C., Mombelli, D., Ciuffini, A.F., Morini, A., Bosatra, M. Microstructure evolution and properties of Hastelloy UNS N06200 and UNS N06022 as a function of the applied thermal treatment (2017) *International Journal of Metalcasting*, 11 (3), pp. 456-466
 28. Mombelli, D., Mapelli, C., Di Cecca, C., Barella, S., Gruttadauria, A. Red mud reduction through blast furnace sludge for cast iron production [Riduzione di fanghi rossi d'allumina mediante fanghi d'altoforno per la produzione di ghisa] (2016) *Metallurgia Italiana*, 108 (11), pp. 23-41
 29. Mombelli, D., Mapelli, C., Di Cecca, C., Barella, S., Gruttadauria, A. Electric arc furnace slag: Study on leaching mechanisms and stabilization treatments [Scorie da forno elettrico ad arco: Studio sui meccanismi di rilascio e trattamenti di stabilizzazione] (2016) *Metallurgia Italiana*, 108 (10), pp. 5-17
 30. Mombelli, D., Mapelli, C., Barella, S., Di Cecca, C., Le Saout, G., Garcia-Diaz, E. The effect of microstructure on the leaching behaviour of electric arc furnace (EAF) carbon steel slag (2016) *Process Safety and Environmental Protection*, 102, pp. 810-821
 31. Mombelli, D., Di Cecca, C., Mapelli, C., Barella, S., Bondi, E. Experimental analysis on the use of BF-sludge for the reduction of BOF-powders to direct reduced iron (DRI) production (2016) *Process Safety and Environmental Protection*, 102, pp. 410-420
 32. Di Cecca, C., Barella, S., Mapelli, C., Ciuffini, A.F., Gruttadauria, A., Mombelli, D., Bondi, E. Use of DRI/HBI in ironmaking and steelmaking furnaces (2016) *Metallurgia Italiana*, 108 (4), pp. 33-38
 33. Gruttadauria, A., Barella, S., Mapelli, C., Mombelli, D., Castrodeza, E.M. Production of 17CrMoV5-11 steel sponges utilising powder metallurgical replication technique with SiC as space holder (2016) *Powder Metallurgy*, 59 (2), pp. 95-99
 34. Primavera, A., Pontoni, L., Mombelli, D., Barella, S., Mapelli, C. EAF Slag Treatment for Inert Materials' Production (2016) *Journal of Sustainable Metallurgy*, 2 (1), pp. 3-12
 35. Mombelli, D., Mapelli, C., Barella, S., Di Cecca, C., Le Saout, G., Garcia-Diaz, E. The effect of chemical composition on the leaching behaviour of electric arc furnace (EAF) carbon steel slag during a standard leaching test (2016) *Journal of Environmental Chemical Engineering*, 4 (1), pp. 1050-1060
 36. Barella, S., Cena, C., Gruttadauria, A., Mapelli, C., Mombelli, D., Ripamonti, D., Fantini, G., Dioni, D. Hardening optimization of high chromium-manganese austenitic steel

- (2016) ISIJ International, 56 (9), pp. 1668-1674
37. Gruttadauria, A., Barella, S., Di Cecca, C., Mombelli, D., Mapelli, C., Castrodeza, E.M.
Steel sponges by powder metallurgy [Produzione di spugne di acciaio tramite metallurgia delle polveri]
(2015) Metallurgia Italiana, 107 (5), pp. 41-45
 38. Mapelli, C., Barella, S., Gruttadauria, A., Mombelli, D., Ripamonti, D.
Heat treatment cycle optimization for A707L5 copper-nickel steel
(2015) Metallurgical Research and Technology, 112 (4), art. no. 150011, .
 39. Mombelli, D., Mapelli, C., Barella, S., Gruttadauria, A., Di Landro, U.
Laboratory investigation of Waelz slag stabilization
(2015) Process Safety and Environmental Protection, 94 (C), pp. 227-238.
 40. Barella, S., Bondi, E., Di Cecca, C., Ciuffini, A.F., Gruttadauria, A., Mapelli, C., Mombelli, D.
New perspective in steelmaking activity to increase competitiveness and reduce environmental impact
(2014) Metallurgia Italiana, 106 (11-12), pp. 31-39
 41. Mombelli, D., Mapelli, C., Barella, S., Gruttadauria, A., Le Saout, G., Garcia-Diaz, E.
The efficiency of quartz addition on electric arc furnace (EAF) carbon steel slag stability
(2014) Journal of Hazardous Materials, 279, pp. 586-596
 42. Manes, A., Pagani, M., Saponara, M., Mombelli, D., Mapelli, C., Giglio, M.
Metallographic characterisation of Al6061-T6 aluminium plates subjected to ballistic impact
(2014) Materials Science and Engineering A, 608, pp. 207-220
 43. Barella, S., Di Cecca, C., Gruttadauria, A., Mapelli, C., Mombelli, D., Fanezi Da Rocha, C., Strohaecker, T.
Study on the microstructure influence in ultrasonic test in duplex forged components
(2014) Metallurgia Italiana, 106 (10), pp. 29-36
 44. Guindani, A., Venturini, R., Mapelli, C., Barella, S., Gruttadauria, A., Mombelli, D.
Properties of hot rolled steel strips produced by endless casting-rolling plant
(2014) Metallurgia Italiana, 106 (1), pp. 27-32
 - Busè, R., Mombelli, D., Mapelli, C.
Metals recovery from furnaces dust: Waelz process [Recupero dei metalli dalle polveri di aspirazione dei forni: Processo Waelz]
(2014) Metallurgia Italiana, 106 (5), pp. 19-27
 45. Mapelli, C., Mombelli, D., Barella, S., Trezzi, P., Ferrari, G., Cagni, C.
Experimental trials and theoretical background about foaming, slag refractory interaction and feasibility of crude magnesium carbonate injection as foaming agent and its use for EAF refractory protection
(2014) Metallurgia Italiana, 106 (5), pp. 29-36
 46. Barella, S., Gruttadauria, A., Mapelli, C., Mombelli, D., Fanezi, C.L., Fioletti, F., Formentelli, M., Guarneri, M.
Effect of heat treatment and of primary austenite grain size on the minimum size of detectable defect on 26NiCrMoV11.5 high strength steel
(2014) Advanced Engineering Materials, 16 (1), pp. 103-111
 47. Amiri, S., Lecis, N., Manes, A., Mombelli, D., Giglio, M.
Determining elastic-plastic properties of Al6061-T6 from micro-indentation technique
(2014) Key Engineering Materials, 592-593, pp. 610-613
 48. Barella, S., Gruttadauria, A., Mapelli, C., Mombelli, D.
Investigation of failure and damages on a continuous casting copper mould
(2014) Engineering Failure Analysis, 36, pp. 432-438
 49. Giglio, M., Manes, A., Mapelli, C., Mombelli, D.
Relation between ductile fracture locus and deformation of phases in Ti-6Al-4V alloy
(2013) ISIJ International, 53 (12), pp. 2250-2258
 50. Mapelli, C., Manes, A., Giglio, M., Mombelli, D.
Structural effect evaluation of ballistic impact on a shaft by crystallography
(2013) SDHM Structural Durability and Health Monitoring, 9 (2), pp. 181-199
 51. Barella, S., Gruttadauria, A., Mapelli, C., Mombelli, D.
Anomalous corrosion phenomena observed on electrovalves of coffee espresso machines
(2013) Engineering Failure Analysis, 33, pp. 449-456
 52. Mapelli, C., Barella, S., Mombelli, D., Baldizzone, C., Gruttadauria, A.

- Comparison between symmetric and asymmetric hot rolling techniques performed on duplex stainless steel 2205
(2013) *International Journal of Material Forming*, 6 (3), pp. 327-339
53. Fantini, G., Fioletti, F., Formentelli, M., Guarneri, M., Gruttadauria, A., Mapelli, C., Mombelli, D. Study about chemical homogenization of ingots and optimization of heating cycle [Studio circa l'omogeneizzazione chimica dei lingotti ed ottimizzazione dei cicli di riscaldamento]
(2013) *Metallurgia Italiana*, 105 (3), pp. 47-52
54. Mapelli, C., Mapelli, V., Olsson, L., Mombelli, D., Gruttadauria, A., Barella, S. Viability study of the use of cast iron open cell foam as microbial fuel cell electrodes
(2013) *Advanced Engineering Materials*, 15 (3), pp. 112-117
55. Mapelli, C., Mombelli, D., Gruttadauria, A., Barella, S., Castrodeza, E.M. Performance of stainless steel foams produced by infiltration casting techniques
(2013) *Journal of Materials Processing Technology*, 213 (11), pp. 1846-1854
56. Mapelli, C., Mombelli, D., Barella, S., Gruttadauria, A. Influence of the residual stresses induced by tool wear on the failure of brass electro-valves
(2013) *Engineering Failure Analysis*, 27, pp. 141-149
57. Barella, S., Gruttadauria, A., Magni, F., Mapelli, C., Mombelli, D. Survey about safe and reliable use of EAF slag
(2012) *ISIJ International*, 52 (12), pp. 2295-2302
58. Mombelli, D., Mapelli, C., Gruttadauria, A., Baldizzone, C., Magni, F., Levrangi, P.L., Simone, P. Analysis of electric arc furnace slag
(2012) *Steel Research International*, 83 (11), pp. 1012-1019
59. Mapelli, C., Barella, S., Gruttadauria, A., Mombelli, D., Baldizzone, C., Brambilla, L. Metallographic and microstructural investigation on copper based nails of the Roman Empire Age
(2012) *Revue de Metallurgie. Cahiers D'Informations Techniques*, 109 (4), pp. 203-216
60. Barella, S., Gruttadauria, A., Mapelli, C., Mombelli, D. Critical evaluation of role of viscosity and gas flowrate on slag foaming
(2012) *Ironmaking and Steelmaking*, 39 (6), pp. 463-469
61. Mapelli, C., Manes, A., Giglio, M., Mombelli, D., Giudici, L., Baldizzone, C., Gruttadauria, A. Survey about effects of shot peening conditions on fatigue performances of Ti-6Al-4V mechanical specimens featured by different cross-section geometries
(2012) *Materials Science and Technology*, 28 (5), pp. 543-548
62. Baldizzone, C., Gruttadauria, A., Mapelli, C., Mombelli, D. Investigation of failure in a crankpin of a motorcycle engine
(2012) *Journal of Failure Analysis and Prevention*, 12 (2), pp. 123-129
63. Mapelli, C., Mombelli, D., Gruttadauria, A., Baldizzone, C., Magni, F., Levrangi, P.L., Simone, P. Micro-structural and chemical characterization of electric arc furnace slag
(2012) *Yejin Fenxi/Metallurgical Analysis*, 32 (3), pp. 7-13
64. Giglio, M., Manes, A., Mapelli, C., Mombelli, D., Baldizzone, C., Gruttadauria, A. Crystallographic analysis of specimens used for calibrate a failure model for an Al 6061 - T6 alloy
(2012) *Key Engineering Materials*, 488-489, pp. 89-92
65. Castrodeza, E.M., Gruttadauria, A., Mapelli, C., Mombelli, D. Processing and characterization of dual phase steel foams featured by different pore distribution
(2011) *Steel Research International*, 82 (8), pp. 918-925
66. Mapelli, C., Gruttadauria, A., Mombelli, D., Castrodeza, E. Production and characterization of dual phase steel foams [Produzione e caratterizzazione di schiume metalliche in acciaio dual phase]
(2011) *Metallurgia Italiana*, 103 (7-8), pp. 9-16
67. Mapelli, C., Manes, A., Giglio, M., Mombelli, D., Baldizzone, C., Gruttadauria, A. Microstructural investigation on an Al 6061 T6 alloy subjected to ballistic impact
(2011) *Procedia Engineering*, 10, pp. 3447-3452
68. Gruttadauria, A., Mombelli, D., Castrodeza, E.M., Mapelli, C. Process and characterization of dual phase steel foam
(2010) *Revista Materia*, 15 (2), pp. 192-198

Proceedings in International
Conferences

- 46) D. Mombelli, G. Dall'Osto, C. Mapelli, A. Gruttadauria, S. Barella
Study of the influence of the charging materials on the metallic loss of a continuous charging electric arc furnace by multiple linear regression
Proc. 4th European Academic Symposium on EAF Steelmaking, organized by RWTH Aachen University – IOB Department for Industrial Furnaces and Heat Engineering, 16-18 June 2021, Virtual Editoin (Germany)
- 45) D. Mombelli, G. Dall'Osto, G. Villa, C. Mapelli, S. Barella, A. Gruttadauria, L. Angelini, C. Senes, M. Bersani, P. Frittella, R. Moreschi, R. Marras, G. Brulletti
An evaluation of the pneumatic lime injection benefits for the production of C82D2 steel by electric arc furnace
Proc. 4th European Academic Symposium on EAF Steelmaking, organized by RWTH Aachen University – IOB Department for Industrial Furnaces and Heat Engineering, 16-18 June 2021, Virtual Editoin (Germany)
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Low speed shredding process for reducing steel making operating expenditure
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