

## PERSONAL INFORMATION

Name: Bartocci Pietro  
Date of birth: 6/5/1978  
Place of birth: Umbertide, Italy  
Nationality: Italian  
Permanent residence: Italy  
Current address: Via G. Verga 12, Perugia, Italy  
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## EDUCATION & WORK EXPERIENCE

**2021** Awarded a Marie Curie project ad Principal Investigator by the European Union (GTCLC-NEG)  
**2018** Research fellow working on Life project “iRexfo”  
**2017** Biomass Research Centre, University of Perugia, Italy, Winner of a scholarship on thermochemical processes for bioenergy production  
**2017** Qualified as Associate professor of Energy Systems through the Italian National Scientific Evaluation 2016  
**2012-2017** University of Perugia, Italy, Department of Engineering, Researcher in the sector: Thermal machines and energetic and environmentally sustainable systems  
**2008-2012** University of Perugia, Italy, Biomass Research Centre, Research fellow in the project: "Chemico-physical characterization of biofuels and their performances in Energy conversion systems  
**2004-2007** University of Perugia, Italy, Biomass Research Centre, PhD in Energetics with a thesis on Energy crops: growth modelling and experimental testing with the aim of forecasting future availabilities.  
**2003-2004** University of Perugia, Italy, Department of Engineering, scholarship on Energy crops and agro-industry residues: experimentation and optimization of production and transformation systems  
**2003** University of Perugia, Italy, Degree in Agriculture and Technology Science

## MEMBERSHIP OF PROFESSIONAL BODIES

- member of the American Society of Mechanical Engineers (ASME),
- member of the Committee on Coal, Biomass and Alternative Fuels of the ASME,
- member of the International Biochar Initiative,
- member of the Italian Biochar Association,
- member of the Italian LCA Network.

## AWARDS

- awarded a Marie Curie project ad Principal Investigator by the European Union (GTCLC-NEG)
- Certificate of recognition of research merits, Al-Balqa University, Jordan, 2020.
- Outstanding reviewer 2019 and 2012 Applied Energy journal
- Best paper award 2019 at ASME IGTI with the title “Application of design-for-LCA methodology to compare architectural alternatives for the compressor rotor of an industrial gas turbine”
- Inserted in the Golden Book of the Municipality of Perugia (Italy), for scientific merits together with the staff of the Italian Biomass research Centre 2013

## RESEARCH PROJECTS & FUNDS

2020 Won Surfoly project funded in the PRIMA UE program (1 M€ budget)  
2020 Project with Perugia province on boilers emissions, CURIT Register;  
2020 Won an STSM (Short Term Scientific Mission) in the LIGNOCOST action with the university of Edimburgh. Title “Lignin magnetic carbon activation: Comparison of chemical and physical activation”.  
2019 Participating to the LIGNOCOST action on Lignin valorisation (<https://lignocost.eu/>),  
2018-now He contributed in writing and winning the grant for a LIFE project “iREXFO”  
2018 Awarded by the European Commission as Principal investigator of the project “Optimization of catalytic pyrolysis of digestate and sewage sludge” in the framework of BRISK2 project

2014 He was awarded by the European Commission as Principal investigator of the project: Kinetic constants of pyrolysis of pellet realized with mixtures of biomass and glycerol in the framework of BRISK project

2008-2011 member of the Technical Experts Group in the European project RuraleEvolution awarded by the Intelligent Energy program

2008-2011 member of the Technical Experts Group in the European project BEN awarded by the Intelligent Energy program

2004-2007 Technical responsible of a regional project made with region Umbria about "Sustainability of herbaceous crops for bioenergy production in Umbria"

#### TEACHING AND SUPERVISION

2012-2020 ICARE, China, Teacher in the master "Support to institutional and capacity building of the China-EU Institute for Clean and Renewable Energy - ICARE"

2004-2020 Supervisor of more than 40 master students of environmental and mechanical engineering courses

2018-2020 Supervisor of more than 20 Chinese Master Students at the ICARE Institute Huazhong University of Science and Technology, Wuhan.

2017 Supervisor of 1 PhD student working on Biocarbon, 2 industrial PhDs, one Pakistani PhD at University of Perugia

2016-2020 Evaluator of 2 Indian PhDs

2016 Teacher at Valladolid University Spain

2015 Supervisor of 3 Master degree Student at ICARE Institute, Huazhong University China

2012 Supervisor of a Japanese student working on pyrolysis gas cleaning systems

2009-2017 University of Perugia, Italy, Teacher of the course of Energy from Biomass and Wastes

2009 Regional Confederation of farmers, Umbria Italy, Teacher in the course "Farm regeneration and development through the use of alternative energies"

2005-2009 University of Perugia, Teacher in the course of Biotechnological processes of the degree course JCOB (Job Creation Oriented Biotechnology)

#### INVITED PRESENTATIONS

2017 Venice symposium, Venezia, Italy

2016 Third Symposium on Urban Mining and Circular Economy, Bergamo Italy

2016 1st International Conference on Bioenergy & Climate Change, Towards a Sustainable Development, Soria, Spain

2016 IConBM 2016, 2nd International Conference on BIOMASS, Taormina, Italy

2015 Perennial Biomass Crops for a Resource Constrained World, Stuttgart, Germany

#### SCIENTIFIC COMMITTEE OF INTERNATIONAL CONFERENCES AND JOURNAL EDITORIAL BOARDS

- 2021 Associate Principal Editor FUEL journal, Elsevier

- 2020 Subject Editor of Fuel journal, Elsevier

- Associate editor Processes journal, MDPI

- Associate Editor of the Springer Journal Energy Ecology and Environment

- Editorial board of the Thermal Science Journal

- Editorial Board Fuel Communications

- 2021 Guest editor in the special issue on Application of Carbon-Based Catalysts in Energy Conversion and Storage Systems, in the MDPI journal Catalysts

- 2018 Guest Editor of special issue on Cultivation and Downstream Processing of Algal Biomass, Fermentation MDPI

- 2019 Guest Editor of the special issue on Anaerobic digestion processes, Processes MDPI

- 2020 Guest Editor in the Elsevier journal Energy Technology and Sustainable Assessments on the special issue "Sustainable wastewater treatment: Challenges and Opportunities"

- 2021 Guest editor in the journal: Environment, Development and Sustainability, with the special issue: ICEE2021 - Current Progress on Advanced Technologies for Biofuel Production and Utilisation

- 2021 guest editor SDEWES special session: “Decarbonisation of industrial production emissions: special focus on steel industry”
- Scientific Committee of the International Conference on Energy Ecology and Environment
- Scientific Committee of the European Biomass Conference and Exhibition EUBCE
- Scientific Committee of the International Conference on Biomass (ICONBM)
- Scientific committee ICEE2021, India
- Scientific committee SDEWES 2021, Dubrovnik
- 2019 Scientific Committee of the 5th International Conference on Water Resource and Environment (WRE) 2019, July 16-19th, Macao, China
- Reviewer of the AR6 IPCC report in 2020
- 2019 Application reviewer for the Brisk2 European project
- 2017 Reviewer of scientific project for the National Research, Development and Innovation Office of Hungary
- 2017 reviewer of the document: “Energy Transition and the Future of Energy Research, Innovation and Education: An Action Agenda for European Universities”. (<https://www.eera-set.eu/uni-set-project-releases-final-reports/>)
- 2016 Scientific committee of the conference Bioenergy and Climate Change, Soria, Spain,
- Scientific committee of the conference SUSTEM 2015, organised in New Castle upon Tyne (UK).

#### PARTICIPATION IN INDUSTRIAL INNOVATION

2016-2020 2 Carbon footprints certified (<http://www.carbonfootprintitaly.it/p-2019-0005/>)

2016-2020 1 EPD certified (<https://www.environdec.com/Detail/?Epd=14090>)

2016-2020 1 carbon footprint and 1 EPD of floor

2016-2020 1 LCA of cheese production

2019 LCA training course at Soil and more, Hamburg, Germany

2016-2019 Member of the Technical Advisory board of the Product Environmental Footprint initiative at European level during the PEF Transition phase.

2018 – Training course on LCA delivered at the Umbrian Industry association

2017 Development of the Biobooster prototype (a biogas enhancing machine) in collaboration with a startup coming from Ravenna

2017 Revisor for bioenergy projects as a technician collaborating with banks consultancy agency

2016 Development of a system for textiles gasification with a chemical company based in Milan

2012 Fuel supply chain optimization for a Biomass 20Mwe power plant in Ferrara, Italy

#### **PUBLICATION SUMMARY**

**Number of publications in scopus: 64**

**Overall citations in scopus: 1257**

**h-index: 20**

#### LISTOF PUBLICATIONS

##### Books

- collaborated to the redaction of “Propaedeutic document to the redaction of the Italian Plan on Biomass and Biofuels for energy”, 2nd edition (in Italian), **2011**

- collaborated to the redaction of “Propaedeutic document to the redaction of the Italian Plan on Biomass and Biofuels”, 1st edition (in Italian), **2007**

##### Book chapters

1. **Bartocci, P.**, Wang, L., Skreiberg, Ø., Liberti, F., Bidini, G., Fantozzi, F., Biocarbon production and use as a fuel, in Z. Fang, R. L. Smith, XF Tian (Eds.) “Production of Materials from Sustainable Biomass Resources”, Springer 2019

2. **Bartocci, P.**, Skreiberg, Ø., Wang, L., Song, H., Yang, H., Zampilli, M., Bidini, G., Fantozzi, F., Mechanical aspects and applications 1 of pellets prepared from biomass resources, in Z. Fang, R. L. Smith, XF Tian (Eds.) “Production of Materials from Sustainable Biomass Resources”, Springer 2019
3. Fantozzi, F., **Bartocci, P.**, Fantozzi, P., Life Cycle Assessment in the vinegar sector, in A. Bekatorou “Advances in Vinegar Production”, CRC Press 2019.
4. Scrucca, F., Rotili, A., Presciutti, A., Fantozzi, F., Bartocci, P., Zampilli, M., Energy Valorization of Bio-glycerol: Carbon Footprint of Co-pyrolysis Process of Crude Glycerol in a CHP Plant (2019) Environmental Footprints and Eco-Design of Products and Processes, pp. 19-46
5. Fantozzi, F., **Bartocci, P.**, Biomass feedstock for IGCC systems, (2016) Integrated Gasification Combined Cycle (IGCC) Technologies, pp. 145-180
6. **P. Bartocci**, G. Bidini, B. D'Alessandro, F. Cotana, F. Fantozzi, Energy balance of cardoon (*Cynara cardunculus* L.) cultivation and pyrolysis, in: Perennial Biomass Crops for a Resource Constrained World, edited by I. Lewandowski, 2016, Springer
7. F. Fantozzi, **P. Bartocci**, Carbon footprint as a tool to limit Greenhouse Gases emissions, in: Greenhouse Gases, edited by Bernardo Llamas & Juan Pous, 2016, InTech, ISBN 978-953-51-4323-9
8. Already in Agreement with Elsevier Acquisition manager to write a text book on “Modeling in bioenergy production and planning”

#### Publications indexed in Scopus

1. Pinzi, S., Buratti, C., **Bartocci, P.**, Marseglia, G., Fantozzi, F., Barbanera, M., A simplified method for kinetic modeling of coffee silver skin pyrolysis by coupling pseudo-components peaks deconvolution analysis and model free-isoconversional methods, (2020) Fuel, 278, art. no. 118260,
2. Riva, L., Cardarelli, A., Andersen, G.J., Buø, T.V., Barbanera, M., **Bartocci, P.**, Fantozzi, F., Nielsen, H.K., On the self-heating behavior of upgraded biochar pellets blended with pyrolysis oil: Effects of process parameters, (2020) Fuel, 278, art. no. 118395,
3. Kang, Y., Yang, Q., **Bartocci, P.**, Wei, H., Liu, S.S., Wu, Z., Zhou, H., Yang, H., Fantozzi, F., Chen, H. Bioenergy in China: Evaluation of domestic biomass resources and the associated greenhouse gas mitigation potentials, (2020) Renewable and Sustainable Energy Reviews, 127, art. no. 109842,
4. Cai, N., Yang, H., Zhang, X., Xia, S., Yao, D., **Bartocci, P.**, Fantozzi, F., Chen, Y., Chen, H., Williams, P.T., Bimetallic carbon nanotube encapsulated Fe-Ni catalysts from fast pyrolysis of waste plastics and their oxygen reduction properties; (2020) Waste Management, 109, pp. 119-126
5. **P. Bartocci**, M. Zampilli, F. Liberti, V. Pistolesi, S. Massoli, G. Bidini, F. Fantozzi, LCA analysis of food waste co-digestion, Science of The Total Environment, 709, 2020, 136187
6. Cai, N., Xia, S., Zhang, X., Meng, Z., **Bartocci, P.**, Fantozzi, F., Chen, Y., Chen, H., Williams, P.T., Yang, H., Preparation of Iron- and Nitrogen-Codoped Carbon Nanotubes from Waste Plastics Pyrolysis for the Oxygen Reduction Reaction, (2020) ChemSusChem, 13 (5), pp. 938-944

7. Di Lorenzo, G., Giovannelli, A., **Bartocci, P.**, Fantozzi, F., Comparison of mini Organic Rankine Cycle plants for waste heat recovery. (2019) AIP Conference Proceedings, 2191, art. no. 020066,
8. Liberti, F., Pistolesi, V., Mouftahi, M., Hidouri, N., **Bartocci, P.**, Massoli, S., Zampilli, M., Fantozzi, F., An incubation system to enhance biogas and methane production: A case study of an existing biogas plant in Umbria, Italy. (2019) Processes, 7 (12), art. no. 925,
9. Riva, L., Nielsen, H.K., Skreiberg, Ø., Wang, L., **Bartocci, P.**, Barbanera, M., Bidini, G., Fantozzi, F., Analysis of optimal temperature, pressure and binder quantity for the production of biocarbon pellet to be used as a substitute for coke (2019) Applied Energy, 256, art. no. 113933,
10. Chandrasekaran, A., Subbiah, S., Ramachandran, S., Narayanasamy, S., **Bartocci, P.**, Fantozzi, F. Natural Draft-Improved Carbonization Retort System for Biocarbon Production from Prosopis juliflora Biomass (2019) Energy and Fuels, 33 (11), pp. 11113-11124
11. Murillo, G., He, Y., Yan, Y., Sun, J., **Bartocci, P.**, Ali, S.S., Fantozzi, F. Scaled-up biodiesel synthesis from Chinese Tallow Kernel oil catalyzed by Burkholderia cepacia lipase through ultrasonic assisted technology: A non-edible and alternative source of bio energy (2019) Ultrasonics Sonochemistry, 58, art. no. 104658,
12. Salimi, P., Norouzi, O., Pourhoseini, S.E.M., **Bartocci, P.**, Tavasoli, A., Di Maria, F., Pirbazari, S.M., Bidini, G., Fantozzi, F.; Magnetic biochar obtained through catalytic pyrolysis of macroalgae: A promising anode material for Li-ion batteries (2019) Renewable Energy, 140, pp. 704-714
13. Musacchio, A., Vicarelli, M., Colantoni, S., **Bartocci, P.**, Fantozzi, F. Implementing environmental impact assessment on the life cycle for industrial gas turbines development (2019) Proceedings of the ASME Turbo Expo, 3,
14. Musacchio, A., Vicarelli, M., Colantoni, S., **Bartocci, P.**, Fantozzi, F.; Application of design-for-LCA methodology to compare architectural alternatives for the compressor rotor of an industrial gas turbine (2019) Proceedings of the ASME Turbo Expo, 3,
15. **Bartocci, P.**, Tschentscher, R., Stensrød, R.E., Barbanera, M., Fantozzi, F. Kinetic analysis of digestate slow pyrolysis with the application of the master-plots method and independent parallel reactions scheme (2019) Molecules, 24 (9), art. no. 1657,
16. Murillo, G., S. Ali, S., Sun, J., Yan, Y., **Bartocci, P.**, El-Zawawy, N., Azab, M., He, Y., Fantozzi, F., Ultrasonic emulsification assisted immobilized Burkholderia cepacia lipase catalyzed transesterification of soybean oil for biodiesel production in a novel reactor design, Renewable Energy, 135, 2019, 1025-1034
17. Huiru, Z., Yunjun, Y., Liberti, F., **Bartocci, P.**, Fantozzi, F., Technical and economic feasibility analysis of an anaerobic digestion plant fed with canteen food waste, Energy Conversion and Management, 180, 2019, 938-948
18. Liberti, F., Pistolesi, V., Massoli, S., **Bartocci, P.**, Bidini, G., Fantozzi, F., I-REXFO LIFE: An innovative business model to reduce food waste, (2018) Energy Procedia, 148, pp. 439-446

19. **Bartocci**, P., Bidini, G., Laranci, P., Zampilli, M., D'Amico, M., Fantozzi, F. Environmental impact on the life cycle for turbine based biomass CHP plants (2018) Proceedings of the ASME Turbo Expo
20. Murillo, G., Sun, J., Ali, S.S., Yan, Y., **Bartocci**, P., He, Y., Evaluation of the kinematic viscosity in biodiesel production with waste vegetable oil, ultrasonic irradiation and enzymatic catalysis: A comparative study in two-reactors (2018) *Fuel*, 227, pp. 448-456
21. **Bartocci**, P., Bidini, G., Asdrubali, F., Beatrice, C., Frusteri, F., Fantozzi, F., Batch pyrolysis of pellet made of biomass and crude glycerol: Mass and energy balances (2018) *Renewable Energy*, 124, pp. 172-179
22. **Bartocci**, P., Zampilli, M., Bidini, G., Fantozzi, F., Hydrogen-rich gas production through steam gasification of charcoal pellet, (2018) *Applied Thermal Engineering*, 132, pp. 817-823 (cited 1 in scopus)
23. Wang, L., Buvarp, F., Skreiberg, Ø., **Bartocci**, P., Fantozzi, F., A study on densification and CO<sub>2</sub> gasification of biocarbon, (2018) *Chemical Engineering Transactions*, 65, pp. 145-150
24. **Bartocci**, P., Barbanera, M., Skreiberg, Ø., Wang, L., Bidini, G., Fantozzi, F., Biocarbon pellet production: Optimization of pelletizing process, (2018) *Chemical Engineering Transactions*, 65, pp. 355-360
25. Laranci, P., Zampilli, M., D'Amico, M., **Bartocci**, P., Bidini, G., Fantozzi, F., Geometry optimization of a commercial annular RQL combustor of a micro gas turbine for use with natural gas and vegetal oils (2017) *Energy Procedia*, 126, pp. 875-882
26. **Bartocci**, P., Kempegowda, R.S., Liberti, F., Bidini, G., Skreiberg, Ø., Fantozzi, F., Technical and economic feasibility of combusting biocarbon in small scale pellet boilers, (2017) *European Biomass Conference and Exhibition Proceedings, 2017 (25thEUBCE)*, pp. 1128-1134
27. **Bartocci**, P., Vaccari, F.P., Valagussa, M., Pozzi, A., Baronti, S., Liberti, F., Bidini, G., Fantozzi, F., Effect of biochar on water retention in soil, a comparison between two forms: Powder and pellet, (2017) *European Biomass Conference and Exhibition Proceedings, 2017 (25thEUBCE)*, pp. 1732-1736
28. **Bartocci**, P., Barbanera, M., D'Amico, M., Laranci, P., Cavalaglio, G., Gelosia, M., Ingles, D., Bidini, G., Buratti, C., Cotana, F., Fantozzi, F. Thermal degradation of driftwood: Determination of the concentration of sodium, calcium, magnesium, chlorine and sulfur containing compounds (2017) *Waste Management*, 60, pp. 151-157
29. **Bartocci**, P., Fantozzi, P., Fantozzi, F. Environmental impact of Sagrantino and Grechetto grapes cultivation for wine and vinegar production in central Italy (2017) *Journal of Cleaner Production*, 140, pp. 569-580
30. Zampilli, M., Bidini, G., Laranci, P., D'Amico, M., **Bartocci**, P., Fantozzi, F., Biomass microturbine based EFGT and IPRP cycles: Environmental impact analysis and comparison (2017) Proceedings of the ASME Turbo Expo

31. **Bartocci**, P., Anca-Couce, A., Słopiecka, K., Nefkens, S., Ević, N., Retschitzegger, S., Barbanera, M., Buratti, C., Cotana, F., Bidini, G., Fantozzi, F. Pyrolysis of pellets made with biomass and glycerol: Kinetic analysis and evolved gas analysis (2017) *Biomass and Bioenergy*, 97, pp. 11-19
32. Fantozzi, F., Frassoldati, A., **Bartocci**, P., Cinti, G., Quagliarini, F., Bidini, G., Ranzi, E.M. An experimental and kinetic modeling study of glycerol pyrolysis (2016) *Applied Energy*, 184, pp. 68-76
33. Zampilli, M., **Bartocci**, P., Bidini, G., Fantozzi, F. A Quantitative Methodology to Measure Injector Fouling Through Image Analysis (2016) *Energy Procedia*, 101, pp. 693-700
34. D'Alessandro, B., Bidini, G., Zampilli, M., Laranci, P., **Bartocci**, P., Fantozzi, F., Straight and waste vegetable oil in engines: Review and experimental measurement of emissions, fuel consumption and injector fouling on a turbocharged commercial engine (2016) *Fuel*, 182, pp. 198-209
35. **Bartocci**, P., Bidini, G., Saputo, P., Fantozzi, F., Biochar pellet carbon footprint (2016) *Chemical Engineering Transactions*, 50, pp. 217-222
36. Moriconi, N., Laranci, P., D'Amico, M., **Bartocci**, P., D'Alessandro, B., Cinti, G., Baldinelli, A., Discepoli, G., Bidini, G., Desideri, U., Cotana, F., Fantozzi, F. Design and preliminary operation of a gasification plant for micro-CHP with internal combustion engine and SOFC (2015) *Energy Procedia*, 81, pp. 298-308
37. Buratti, C., Barbanera, M., **Bartocci**, P., Fantozzi, F. Thermogravimetric analysis of the behavior of sub-bituminous coal and cellulosic ethanol residue during co-combustion (2015) *Bioresource Technology*, 186, pp. 154-162
38. Fantozzi, F., **Bartocci**, P., D'Alessandro, B., Testarmata, F., Fantozzi, P. Carbon footprint of truffle sauce in central Italy by direct measurement of energy consumption of different olive harvesting techniques (2015) *Journal of Cleaner Production*, 87 (1), pp. 188-196
39. **Bartocci**, P., D'Amico, M., Moriconi, N., Bidini, G., Fantozzi, F. Pyrolysis of olive stone for energy purposes (2015) *Energy Procedia*, 82, pp. 374-380
40. Bidini, G., Fantozzi, F., **Bartocci**, P., D'Alessandro, B., D'Amico, M., Laranci, P., Scozza, E., Zagaroli, M. Recovery of precious metals from scrap printed circuit boards through pyrolysis (2015) *Journal of Analytical and Applied Pyrolysis*, 111, pp. 140-147
41. Manos, B., **Bartocci**, P., Partalidou, M., Fantozzi, F., Arampatzis, S., Review of public-private partnerships in agro-energy districts in Southern Europe: The cases of Greece and Italy (2014) *Renewable and Sustainable Energy Reviews*, 39, pp. 667-678
42. Fantozzi, F., **Bartocci**, P., D'Alessandro, B., Arampatzis, S., Manos, B. Public-private partnerships value in bioenergy projects: Economic feasibility analysis based on two case studies (2014) *Biomass and Bioenergy*, 66, pp. 387-397
43. Paethanom, A., **Bartocci**, P., D'Alessandro, B., D'Amico, M., Testarmata, F., Moriconi, N., Słopiecka, K., Yoshikawa, K., Fantozzi, F., A low-cost pyrogas cleaning system for power generation: Scaling up from lab to pilot (2013) *Applied Energy*, 111, pp. 1080-108

44. Beatrice, C., Di Blasio, G., Lazzaro, M., Cannilla, C., Bonura, G., Frusteri, F., Asdrubali, F., Baldinelli, G., Presciutti, A., Fantozzi, F., Bidini, G., **Bartocci, P.**, Technologies for energetic exploitation of biodiesel chain derived glycerol: Oxy-fuels production by catalytic conversion (2013) *Applied Energy*, 102, pp. 63-71
45. Slopiecka, K., **Bartocci, P.**, Fantozzi, F. Thermogravimetric analysis and kinetic study of poplar wood pyrolysis (2012) *Applied Energy*, 97, pp. 491-497
46. D'Alessandro, B., **Bartocci, P.**, Fantozzi, F. Gas turbines CHP for bioethanol and biodiesel production without waste streams (2011) *Proceedings of the ASME Turbo Expo*, 1, pp. 691-700.
47. Fantozzi, F., D'Alessandro, B., **Bartocci, P.**, Desideri, U., Bidini, G. Assessment of the energy conversion of whole oil fruits with a pyrolysis and gas turbine process (2010) *Proceedings of the ASME Turbo Expo*, 1, pp. 685-693.
48. Fantozzi, F., D'Alessandro, B., **Bartocci, P.**, Desideri, U., Bidini, G. Performance evaluation of the IPRP technology when fuelled with biomass residuals and waste feedstocks (2009) *Proceedings of the ASME Turbo Expo*, 1, pp. 449-458
49. Fantozzi, F., Colantoni, S., **Bartocci, P.**, Desideri, U. Rotary kiln slow pyrolysis for syngas and char production from biomass and waste - Part I: Working envelope of the reactor (2007) *Journal of Engineering for Gas Turbines and Power*, 129 (4), pp. 901-907
50. Fantozzi, F., Colantoni, S., **Bartocci, P.**, Desideri, U. Rotary kiln slow pyrolysis for syngas and char production from biomass and waste - Part II: Introducing product yields in the energy balance (2007) *Journal of Engineering for Gas Turbines and Power*, 129 (4), pp. 908-913
51. Fantozzi, F., **Bartocci, P.**, Colantoni, S., Desideri, U. Rotary kiln slow pyrolysis for syngas and char production from biomass and waste - Part 2 introducing product yields in the energy balance (2006) *Proceedings of the ASME Turbo Expo*, 2, pp. 417-421
52. Fantozzi, F., **Bartocci, P.**, Colantoni, S., Desideri, U. Rotary kiln slow pyrolysis for syngas and char production from biomass and waste - Part 1 working envelope of the reactor (2006) *Proceedings of the ASME Turbo Expo*, 2, pp. 409-416

## CONFERENCE PAPERS

### 1. Proceedings of international congresses

1. **P. Bartocci**, Q. Yang, H. Zhou, H. Zhao, M. Zampilli, E. Gul, L. Malka, G. Bidini, F. Fantozzi, Integration of EnergyPlan with LCA analysis: a case study tailored on Italian NGCC power plants, 4<sup>th</sup> SEE SDEWES Conference in Sarajevo, June 28. July 02, 2020
2. **P. Bartocci**, Q. Yang, H. Zhou, M. Zampilli, E. Gul, H. Yang, G. Bidini, F. Fantozzi, Carbon footprint of 1 kWhe produced using hydrogen as fuel in a combined cycle in Italy, 15<sup>th</sup> SDEWES Conference in Cologne, September 1-5. 2020



3. **P. Bartocci**, L. Riva, H. K. Nielsen, Q. Yang, H. Yang, Ø. Skreiberg, L. Wang, Giulio Sorbini, Eid Gul, M. Barbanera, F. Fantozzi, How to produce green coke? Applied Energy Symposium, MIT A+B, August 12-14, 2020
4. L. Riva, H. K. Nielsen, T. Videm Buø, H. Zhuo, Q. Yang, H. Yang, Ø. Skreiberg, L. Wang, **P. Bartocci**, M. Barbanera, F. Fantozzi, LCA analysis of biocarbon pellet production to substitute coke, International Conference on Energy, Ecology and Environment ICEEE 2019, Jul 23-26, 2019, Stavanger, Norway
5. H. Zhou, Q. Yang, M. SHI, J. LI, H. Yang, F. Liberti, **P. Bartocci**, F. Fantozzi, LCA analysis of anaerobic digestion plant fed with canteen food waste in a university in China, International Conference on Energy, Ecology and Environment ICEEE 2019, Jul 23-26, 2019, Stavanger, Norway
6. **Bartocci, P.**, Bidini, G., Laranci, P., Zampilli, M., D'Amico, M., Fantozzi, F. Environmental impact on the life cycle for turbine based biomass chp plants (2018) Proceedings of the ASME Turbo Expo
7. Wang, L., Buvarp, F., Skreiberg, Ø., **Bartocci, P.**, Fantozzi, F., A study on densification and CO<sub>2</sub> gasification of biocarbon, (2018) Chemical Engineering Transactions, 65, pp. 145-150
8. **Bartocci, P.**, Barbanera, M., Skreiberg, Ø., Wang, L., Bidini, G., Fantozzi, F., Biocarbon pellet production: Optimization of pelletizing process, (2018) Chemical Engineering Transactions, 65, pp. 355-360
9. **Bartocci, P.**, Kempegowda, R.S., Liberti, F., Bidini, G., Skreiberg, Ø., Fantozzi, F., Technical and economic feasibility of combusting biocarbon in small scale pellet boilers, (2017) European Biomass Conference and Exhibition Proceedings, 2017 (25thEUBCE), pp. 1128-1134
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