



Europass Curriculum Vitae

Personal information

First name(s) / Surname(s) **Fabrizio Adani**
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E-mail (fabrizio.adani@unimi.it)
Nationality (Italiana)
Date of birth (17, Giugno 1964)
Gender (maschio)

Work experience

Dates dal 1996
Occupation or position held Ricamatore, Professore Associato, **Professore Ordinario**
Main activities and responsibilities Ricerca, Educazione
Name and address of employer Università degli studi di Milano
Type of business or sector Ricamatore/Educazione

Dates dal 1994 al 1996
Occupation or position held Ricamatore
Main activities and responsibilities Ricamatore
Name and address of employer Politecnico di Milano
Type of business or sector Ricamatore: Scienza dei Polimeri

Dates da 1990 al 1993
Occupation or position held Ph.D student
Main activities and responsibilities Ricerca/Educazione
Name and address of employer Università degli Studi di Milano

Type of business or sector Ricercatore

Dates dal 1988 al 1990

Occupation or position held R & D

Main activities and responsibilities R & D

Name and address of employer Italtraco srl

Type of business or sector Ricerca/Engineering

Mother tongue(s) **Italiano**

Other language(s)

Self-assessment
European level ()*

**Inglese
Language**

Understanding		Speaking		Writing
Listening	Reading	Spoken interaction	Spoken production	
C1	C1	C1	C1	C1

(*) [Common European Framework of Reference for Languages](#)

Appartenenza a società, Progetti Recenti, Patent, Pubblicazioni recenti (ISI)

Annexes

Competenze comunicative ▪ ottime competenze comunicative

Competenze organizzative e gestionali ▪ leadership : attualmente responsabile di un team di 16 persone, ottima leadership

Competenze professionali ▪ Ricerca, didattica e capacità istituzionali

Competenz
e digitali

AUTOVALUTAZIONE				
Elaborazione delle informazioni	Comunicazione	Creazione di Contenuti	Sicurezza	Risoluzione di problemi
Avanzato	Avanzato	intermedio	intermedio	Avanzato

Livelli: Utente base - Utente intermedio - Utente avanzato
[Competenze digitali - Scheda per l'autovalutazione](#)

Patente di guida B

Annexes.

Membro di Comitati e/o enti:

- Membro gruppo EU di standardizzazione CEN /TC 223 “soil improver and growing media” and of CEN (until 2006).
- Membro gruppo EU di standardizzazione CEN /TC 343 Solid recovered Fuels “sampling, sample reduction and supplementary test methods” (until 2006)
- Membro gruppo EU di standardizzazione CEN/BT/TF 151 “Horizontal standard in the field of sludge, biowaste and soil”.
- Membro della Commissione: Soil and Environment of the National Standardization Body (UNI).
- Dal 2016, Expert Group EIP-Agri FOCUS GROUP NUTRIENT RECYLCING – promosso dalla DG Agriculture and Rural Development Unit H5 - Research and innovation (EU).
- Dal 2017, membro del comitato scientifico del Consorzio Italiano Biotecnologie (Italbiotech).
- Dal 2018, Membro del Comitato Scientifico della Federazione Italiana Produttori di Energia Rinnovabile (FIPER)

14. Riconoscimenti e Incarichi Istituzionali (ultimi 5 anni).

- Dal 2012 è delegato per il rettore per il Green Chemistry Cluster della Regione Lombardia.
- Dal 2017, è Adjunct Professor presso il National Center for International Research of BioEnergy Science and Technology (iBEST) China Agricultural University (Cina).

15. Relazioni ad invito internazionali (ultimi 5 anni).

Date	Place	Presentation Title
Aprile 30, 2012	Institute of Waste Treatment & Reclamation College of Environmental Science & Engineering Tongji University, Shanghai (China)	<i>Biogas and management of nitrogen and nutrient: new solution from Lombardy (I)</i>
Maggio 22-29, 2013	Islamic Azad University Isfahan (Iran)	<i>1. Anaerobic Digestion and Renewable fertilizers 2. Anaerobic digestion of Organic Fraction Municipal Solid Waste 3. Waste Management</i>

		<i>in Italy: application and research</i>
Maggio 22-29, 2013	Iranian Research Organization for Science and Technology (IROST) Tehran (Iran)	<ol style="list-style-type: none"> 1 <i>Anaerobic Digestion and Renewable fertilizers</i> 2 <i>Anaerobic Digestion of Organic Fraction Municipal Solid Waste</i> 3 <i>Waste Management in Italy: application and research</i>
Settembre- 27, 2013	Zero End Waste: Renewable Nutrients, Energy, and Water – 2013' CAU-WUR Workshop on Biogas 2013, China-EU Biogas Symposium, Beijing (China).	<i>Anaerobic digestion and renewable fertilizers</i>
Agosto 6, 2014	Join BioEnergy institute, Emeryville, CA (USA).	<i>Bioenergy, bio-compounds and environment: developing a bio-refinery concept starting from biogas</i>
Ottobre 29- Novembre 2014	Great Cycle - 2014 - Forum of Renewable Energy Promotion in Developing Countries & Great Cycle: 2014' Symposium of Bioenergy Science and Technology, Beijing (China).	<i>Bioenergy, bio-compounds and environment: developing a bio-refinery concept starting from biogas</i>
Aprile 27, 2015	College of Engineering, China Agricultural University, Beijing (China).	<i>Nutrient recovery and emission control in biogas plant</i>
Aprile 28, 2015	College of Engineering, China Agricultural University, Beijing (China).	<i>Biomass management</i>
Marzo 10, 2016	Isituto federal Catarinense campus Araquari, Araquari (Brasil)	<i>Um Novo conceiapplicavel na agricultura: a economia circular.</i>
Luglio, 26, 2016	Join BioEnergy institute, Emeryville, CA (USA)	<i>Arundo donax L.: a 2nd generation crop for bioenergy and biorefinery</i>
Settembre. 26, 2017	Great Cycle 2017' International Symposium of Bioenergy & Environment Science and Technology, Beijing (China).	<i>Nutrient speciation during anaerobic digestion of animal slurry and fertilizer production</i>
Ottobre 3, 2016	Isituto federal Catarinense campus Araquari, Araquari (Brasil)	<i>Circular Economy: A New Concept.</i>
Ottobre 5, 2016	Isituto federal Catarinense campus Araquari, Araquari (Brasil)	<i>Short course - Biogas Production</i>
Maggio 22-24, 2018	41A REUNIÃO ANUAL DA SOCIEDADE BRASILEIRA DE QUÍMICA Foz do Iguaçu, PR, Brazil (Brasil)	<i>Developing a biorefinery concept for Arundo donax</i>

Agosto 16, 2018	Join BioEnergy institute, Emeryville, CA (USA)	<i>Developing a biorefinery concept for Arundo donax</i>
Agosto 2018	Join BioEnergy institute, Emeryville, CA (USA)	

16. Esperienze all'estero (ultimi 5 anni)

Giugno-Sett. 2014	Visiting Scholar at Join BioEnergy institute, Emeryville, CA (USA).
Giugno-Sett. 2015	Visiting Scholar at Join BioEnergy institute, Emeryville, CA (USA).
Luglio-Sett. 2016	Visiting Scholar Join BioEnergy institute, Emeryville, CA (USA)
Luglio-Sett. 2018	Visiting Scholar Join BioEnergy institute, Emeryville, CA (USA)

17. Progetti Rilevanti (ultimi 5 anni).

Recovering Clean Energy and Nutrients from Anaerobic Fermentation of Kitchen Waste, funded by the Ministry of Science and Technology of China – China - (awarded on 2015).

POWER - Renewable P-fertilizer from livestock effluent to prevent water eutrophication –Founded by Cariplo Foundation (awarded on 2015).

DANCE - Integrated algae based biorefinery from renewable carbon sources to produce high value products. Granted by Cariplo Foundation (Italy) (awarded on 2015).

CoWBOY - Cheese-industry Waste to added-value compounds and bio-materials: an integrated Biorefinery – granted by Fondazione Cariplo (Project N. 2015-0441) (awarded on 2016).

BALANCE - Biomethane Low Impact Production and Carbon Dioxide Bio-Capture for Circular Economy. Granted by Cariplo Foundation (Italy) (awarded on 2016).

RAINBOW- Renewable RAw materials valorisation for INnovative BiOplastic production from urban Waste. Granted by Lombardy Region/EU Regione Lombardia-Bando Linea R&S per Aggregazioni (Awarded on 2017).

PHA STAR. Sviluppo di nuovi manufatti per il settore design da bioplastiche sostenibili Granted by Lombardy Region/EU Regione Lombardia-Bando Linea R&S per Aggregazioni (Awarded on 2017).

VITISOM - VITiculture Innovative Soil Organic Matter management: variable-rate distribution system and monitoring of Impacts LIFE Environment and Resource Efficiency, granted by EU - LIFE15 ENV/IT/000392 (awarded on 2016).

LIFE DOP - Demonstrative model for circular economy process in high quality dairy industry. Granted by EU, LIFE Environment and Resource Efficiency LIFE15 ENV/IT/000392 (awarded on 2016).

SABANA - Sustainable Algae Biorefinery for Agriculture and Aquaculture. Granted by European Community-H2020-BG-2016-1, H2020-Proposal ID n. 727874 8Awarded on 2016).

SYSTEMIC - Large-scale eco-innovation to advance circular economy and mineral recovery from organic waste in Europe-Systemic. Granted by EU- H2020-IND-CE-2016-17 ID proposal 730400-2 (awarded on 2016).

NUTRY2CYCLE - Transition towards a more carbon and nutrient efficient agriculture in Europe. Granted by EU, H2020 – SFS 2016 - 2017 - Type of action: RIA Sustainable

17. Patent

- Adani f. **PROCEDURE FOR THE PRODUCTION OF BIOFUEL FROM ORGANIC WASTES**. Granted European Patent N.2242555.
- Adani f. **PROCEDURE FOR THE PRODUCTION OF BIOFUEL FROM ORGANIC WASTES**. Granted US 2011/000125°1.

18. Bibliometric data

Documents = 168; Citation = 4638; HI = 42 (Scopus);
Documents = 168; Citation = 6631; HI = 49 (Google Scholar).

19. Publication (Last 5 years)

1. Papa, G., Scaglia, B., Schievano, A., Adani, F. (2014). Structure of organic matter could explain litter decomposition. *Biogeochemistry*, 117 (2-3), 313-324.
2. Scaglia, B., D'Imporzano, G., Garuti, G., Negri, M., Adani, F. (2014). Sanitation ability of anaerobic digestion performed at different temperature on sewage sludge. *Science of the Total Environment*, 466-467, 888-897.
3. Nguyen M.T., Mecheri B., D'Epifanio A. Pepè Sciarria T., Adani F., Licoccia S.. (2014). Iron chelates as low-cost and effective electrocatalyst for oxygen reduction reaction in microbial fuel cells. *International. J. Hydrogen*, 39, 6462-6469.
4. Schievano A., D'Imporzano G., Orzi V., Colombo G. b, Maggiore T., Adani F. (2014). Biogas from dedicated energy crops in Northern Italy: electric energy generation costs. *Global Change Biology – Bioenergy*. doi: 10.1111/gcbb.12186.
5. Malerba, A.D., Kaiser, K., Tambone, F., (...), Buscaroli, A., Provenzano, M.R. (2014). Hydrophilic and hydrophobic fractions of water-soluble organic matter in digestates obtained from different organic wastes. *International Biodeterioration and Biodegradation* 94, 73-78.
6. Schievano A., Tenca, A., Lonati S., Manzini E., Adani F (2014). Two-stage instead of one-stage anaerobic digestion can really increase energy recovery from biomass. *Applied Energy*, 124, 335-342.
7. Riva, C., Schievano, A., D'Imporzano, G., Adani, F. (2014) Production costs and operative margins in electric energy generation from biogas. Full-scale case studies. *Waste Management*, 34 (8), 1429-1435.

8. Salati, S., D'Imporzano, G., Panseri, S., Pasquale, E., Adani, F. (2014). Degradation of aflatoxin B1 during anaerobic digestion and its effect on process stability (2014). *International Biodeterioration and Biodegradation* 94, 19-23
9. Pilu, R., Cassani, E., Landoni, M., Corno, L., Adani, F. (2014) Genetic characterization of an Italian Giant Reed (*Arundo donax* L.) clones collection: Exploiting clonal selection. *Euphytica* 196 (2), 169-181.
10. Manenti F., Adani F. 2014. Integrating the Concept of Bio-Refinery onto the Biogas Field: the BIOREFILL Strategy. *Computer Aided Chemical Engineering*, 33, 1513-1518.
11. Gallia, A., Veronesi, D., Embaló, U.S., (...), Adani, F., Schievano, A. (2014). Domestic low-tech anaerobic digesters in Guiné-Bissau: a bench-scale preliminary study on locally available waste and wastewater (2014). *Environment, Development and Sustainability*, in press.
12. Corno, L., Pilu, R., Adani, F. *Arundo donax* L.: A non-food crop for bioenergy and bio-compound production (2014). *Biotechnology Advances* 32 (8), 1535-1549.
13. Scaglia, B., Cassani, E., Pilu, R., Adani, F. (2014). Expression of *Arabidopsis thaliana* S-ACP-DES3 in *Escherichia coli* for high-performance biodiesel production. *RSC Advances* 4 (108), 63387-63392.
14. Tambone, F., Terruzzi, L., Scaglia, B., Adani, F. (2015) Composting of the solid fraction of digestate derived from pig slurry: Biological processes and compost properties, *Waste Management* 35, 55-61.
15. Pepe Sciarria, T., Merlino, G., Scaglia, B., (...), Licoccia, S., Adani, F. (2015) Electricity generation using white and red wine lees in air cathode microbial fuel cells. *Journal of Power Sources* 274, 393-399.
16. Scaglia, B., Pognani, M., Adani, F. (2015). Evaluation of hormone-like activity of the dissolved organic matter fraction (DOM) of compost and digestate. *Science of the Total Environment* 514, 314-321.
17. Papa, G., Rodriguez, S., George, A., (...), Adani, F., (2015). Comparison of different pretreatments for the production of bioethanol and biomethane from corn stover and switchgrass. *Bioresource Technology* 183, 101-110.
18. Luca, C., Pilu, R., Tambone, F., Scaglia, B., Adani, F. (2015). New energy crop giant cane (*Arundo donax* L.) can substitute traditional energy crops increasing biogas yield and reducing costs. *Bioresource Technology*, 192, 197-204.
19. Orzi, V., Scaglia, B., Lonati, S., (...), Alborali, G.L., Adani, F. (2015). The role of biological processes in reducing both odor impact and pathogen content during mesophilic anaerobic digestion. *Science of the Total Environment*, 526, 116-126.

20. Schievano, A., Adani, F., Buessing, L., (...), Rossoni, M., Goldfarb, J.L. (2015) An integrated biorefinery concept for olive mill waste management: Supercritical CO₂ extraction and energy recovery. *Green Chemistry*, 17, 2874-2887.
21. Busato, J.G., Papa, G., Canellas, L.P., (...), de Oliveira, A.L., Leão, T.P. (2015) Phosphatase activity and its relationship with physical and chemical parameters during vermicomposting of filter cake and cattle manure. *Journal of the Science of Food and Agriculture*, in press.
22. Manzini, E., Scaglia, B., Schievano, A., Adani, F. Dark fermentation effectiveness as a key step for waste biomass refineries: Influence of organic matter macromolecular composition and bioavailability *International Journal of Energy Research*, 39 (11), pp. 1519-1527.
23. Ledda, C., Idà, A., Allemand, D., Mariani, P., Adani, F. (2015) Production of wild *Chlorella* sp. cultivated in digested and membrane-pretreated swine manure derived from a full-scale operation plant. *Algal Research* 12, 68-73.
24. Ledda, C., Romero Villegas, G.I., Adani, F., Acién Fernández, F.G., Molina Grima, E. (2015). Utilization of centrate from wastewater treatment for the outdoor production of *Nannochloropsis gaditana* biomass at pilot-scale. *Algal Research* 12, 17-25.
25. Chiochetta, C.G., Cotelle, S., Masfaraud, J.-F., (...), Adani, F., Radetski, C.M. (2015). Use of agro-industrial organic sludge amendment to remediate degraded soil: chemical and eco(genotoxicological) differences between fresh and stabilized sludge and establishment of application rates. *Environmental. Science and Pollution Research*.
26. Luca, C., Pilu, R., Tambone, F., Scaglia, B., Adani, F. (2015). New energy crop giant cane (*Arundo donax* L.) can substitute traditional energy crops increasing biogas yield and reducing costs. *Bioresource Technology* 191, 197-204.
27. Ledda, C., Schievano, A., Scaglia, B., (...), Acién Fernández, F.G., Adani, F. (2015). Integration of microalgae production with anaerobic digestion of dairy cattle manure: An overall mass and energy balance of the process. *Journal of Cleaner Production*
28. Riva, C., Orzi, V., Carozzi, M., (...), D'Imporzano, G., Adani, F. (2016). Short-term experiments in using digestate products as substitutes for mineral (N) fertilizer: Agronomic performance, odours, and ammonia emission impacts. *Science of the Total Environment* 547, 206-214.
29. Ledda C, Tamiazzo J., Borin M., Adani F. (2016). A simplified process of swine slurry treatment by primary filtration and *Haematococcus pluvialis* culture to produce low cost astaxanthin, *Ecological Engineering*, 90, 244-250.
30. Mungwe, J.N., Colombo, E., Adani, F., Schievano, A. (2016). The fixed dome digester: An appropriate design for the context of Sub-Saharan Africa? *Biomass and Bioenergy* 95, 35-44.

31. Croce, S., Wei, Q., D'Imporzano, G., Dong, R., Adani, F. (2016). Anaerobic digestion of straw and corn stover: The effect of biological process optimization and pre-treatment on total bio-methane yield and energy performance. *Biotechnology Advances* 34, 1289-1304.
32. Healey, A.L., Lee, D.J., Lupoi, J.S., Papa, G., Guenther, J.M., Corno, L., Adani, F., Singh, S., Simmons, B.A., Henry, R.J. (2016). Evaluation of relationships between growth rate, tree size, lignocellulose composition, and enzymatic saccharification in interspecific *Corymbia* hybrids and parental taxa (Article). *Frontiers in Plant Science*, 7, Article number 1705 Open Access.
33. Corno, L., Pilu, R., Cantaluppi, E., Adani, F. (2016). Giant cane (*Arundo donax* L.) for biogas production: The effect of two ensilage methods on biomass characteristics and biogas potential. *Biomass and Bioenergy*, 93, 131-136.
34. Corno, L., Lonati, S., Riva, C., Pilu, R., Adani, F. (2016). Giant cane (*Arundo donax* L.) can substitute traditional energy crops in producing energy by anaerobic digestion, reducing surface area and costs: A full-scale approach. *Bioresour Technol*, 218, 826-832.
35. Busato, J.G., Papa, G., Canellas, L.P., Adani, F., de Oliveira, A.L., Leão, T.P. (2016). Phosphatase activity and its relationship with physical and chemical parameters during vermicomposting of filter cake and cattle manure. *Journal of the Science of Food and Agriculture* 96, 1223-1230.
36. Schievano, A., Pepé Sciarria, T., Gao, Y.C., Scaglia, B., Salati, S., Zanardo, M., Quiao, W., Dong, R., Adani, F. (2016). Dark fermentation, anaerobic digestion and microbial fuel cells: An integrated system to valorize swine manure and rice bran. *Waste Management* 56, 519-529.
37. Scaglia, B., Baglieri, A., Tambone, F., Gennari, M., Adani, F. (2016). Chlorpyrifos-methyl solubilisation by humic acids used as bio-surfactants extracted from lignocelluloses and kitchen wastes. *Chemosphere* 159, 208-213.
38. Scaglia, B., Nunes, R.R., Rezende, M.O.O., Tambone, F., Adani, F.^a (2016). Investigating organic molecules responsible of auxin-like activity of humic acid fraction extracted from vermicompost. *Science of the Total Environment* 562, 289-295.
39. Cantaluppi, E., Cassani, E., Puglisi, D., Corno, L., Munaro, M., Landoni, M., Adani, F., Pilu, R. (2016). Study on the inflorescences of *Arundo donax* L. clones sampled in Italy. *Revista Brasileira de Botanica* 39, 275-285.
40. Chiochetta, C.G., Cotellet, S., Masfaraud, J.-F., Toumi, H., Quaranta, G., Adani, F., Radetski, C.M. (2016). Use of agro-industrial organic sludge amendment to remediate degraded soil: chemical and eco(genotoxicological) differences between fresh and stabilized sludge and establishment of application rates. *Environmental Science and Pollution Research* 23, 3018-3025.
41. Ledda, C., Schievano, A., Scaglia, B., Rossoni, M., Acien Fernández, F.G., Adani, F. (2016). Integration of microalgae production with anaerobic

- digestion of dairy cattle manure: An overall mass and energy balance of the process. *Journal of Cleaner Production* 112, 103-112.
42. Manenti, F., Adani, F., Rossi, F., Bozzano, G., Pirola, C. (2016). First-principles models and sensitivity analysis for the lignocellulosic biomass-to-methanol conversion process. *Computers and Chemical Engineering* 84, 558-567.
 43. Algapani, D.E., Qiao, W., Su, M., di Pumpo, F., Wandera, S.M., Adani, F., Dong, R. (2016). Bio-hydrolysis and bio-hydrogen production from food waste by thermophilic and hyperthermophilic anaerobic process. *Bioresource Technology* 216, 768-777.
 44. Corno L., Pilu R., Tran K., Tambone F., Singh S., Simmons B. A., . Adani F. (2016). Sugars Production for Green Chemistry from 2nd Generation Crop (Arundo donax L.): A Full Field Approach. *ChemistrySelect* 2016, 1, 2617 – 2623.
 45. Tambone, F. Adani, F. (2017). Nitrogen mineralization from digestate in comparison to sewage sludge, compost and urea in a laboratory incubated soil experiment. *Journal of Plant Nutrition and Soil Science*, in press. DOI: 10.1002/jpln.201600241
 46. Salati, S., D'Imporzano, G., Menin, B., Veronesi, D., Scaglia, B., Abbruscato, P., Mariani, P., Adani, F. (2017). Mixotrophic cultivation of *Chlorella* for local protein production using agro-food by-products. *Bioresource Technology* 230, 82-89.
 47. Goldfarb, J.L., Buessing, L., Gunn, E., Lever, M., Billias, A., Casoliba, E., Schievano, A., Adani, F. (2017). Novel Integrated Biorefinery for Olive Mill Waste Management: Utilization of Secondary Waste for Water Treatment. *ACS Sustainable Chemistry and Engineering* 5, 876-884.
 48. Iannaci, A., Pepè Sciarria, T., Mecheri, B., Adani, F., Licoccia, S., D'Epifanio, A. (2017). Power generation using a low-cost sulfated zirconium oxide based cathode in single chamber microbial fuel cells. *Journal of Alloys and Compounds* 693, 170-176.
 49. Pognani, M., Scaglia, B., D'imporzano, G., Adani, F. (2107). Isolation and characterization of surface-active fractions responsible for foam formation during anaerobic digestion of municipal wastes. *Environmental Progress and Sustainable Energy* 36, 359-365.
 50. Scaglia, B. , Pognani, M., Adani, F. (2017). The anaerobic digestion process capability to produce biostimulant: the case study of the dissolved organic matter (DOM) vs. auxin-like property. *Science of the Total Environment* 589, 36-45.
 51. Veronesi, D., D'Imporzano, G., Salati, S., Adani, F. (2017). Pre-treated digestate as culture media for producing algal biomass. *Ecological Engineering* 105, 335-340.
 52. Papa G., Feldman T., Sale K.L., Adani F., Singh S., Simmons B.A. (2017). Parametric study for the optimization of ionic liquid pretreatment of corn stover. *Bioresource Technology* 241, 627–637.

53. Algapani D., Qiao W., di Pumpo F., Bianchi D. Wandera S.M., Adani F., Dong R. (2017). Long-term bio-H₂ and bio-CH₄ production from food waste in a continuous two-stage system: Energy efficiency and conversion pathways. *Bioresource Technology*, in press, dx.doi.org/10.1016/j.biortech.2017.05.164.
54. D'Imporzano, G., Silvia, S., Davide, V., Barbara, S., Fabrizio, A. (2017). Microalgae mixotrophic growth: Opportunity for stream depuration and carbon recovery. In: *Prospect and Challenges in Algal Biotechnology* (Thripathy, B.N. and Kumar D., eds.), Springer Nature Singapore, pp. 326.
55. Orzi, V., Riva, C., Scaglia, B., (...), Tambone, F., Adani, F. (2018). Anaerobic digestion coupled with digestate injection reduced odour emissions from soil during manure distribution. *Science of the Total Environment* 621, pp. 168-176
56. Mapelli, F., Marasco, R., Fusi, M., (...), Borin, S., Daffonchio, D. (2018). The stage of soil development modulates rhizosphere effect along a High Arctic desert chronosequence. *ISME Journal*, 12, 1188-1198.
57. Algapani, D.E., Qiao, W., di Pumpo, F., (...), Adani, F., Dong, R. (2018). Long-term bio-H₂ and bio-CH₄ production from food waste in a continuous two-stage system: Energy efficiency and conversion pathways. *Bioresource Technology* 248, 204-213.
58. Pepè Sciarria, T. Batlle-Vilanova, P., Colombo, B., Scaglia, B., Balaguer, .D., Colprim, J., Puig, S., Adani, F. (2018). Bio-electrorecycling of carbon dioxide into bioplastics. *Green Chemistry*, 20, 4058-4066.
59. Orzi, V., Riva, C., Scaglia, B., D'Imporzano, G., Tambone, F., Adani, F. (2018). Anaerobic digestion coupled with digestate injection reduced odour emissions from soil during manure distribution. *Sci. Total. Environ.*, 621, 168-176.
60. Tarragó, E., Sciarria, T.P., Rusalleda, M., Colprim, J., Balaguer, M.D., Adani, F., Puig, S. (2018). Effect of suspended solids and its role on struvite formation from digested manure. *J Chem. Technol. Biotechnol.*, 93, 2758-2765.
61. D'Imporzano, G., Veronesi, D., Salati, S., Adani, F. (2018). Carbon and nutrient recovery in the cultivation of *Chlorella vulgaris*: A life cycle assessment approach to comparing environmental performance. *J. Cleaner Production*, 194, 685-694.
62. Scaglia, B., Tambone, F., Corno, L., Orzi, V., Lazzarini, Y., Garuti, G., Adani, F. (2018). Potential agronomic and environmental properties of thermophilic anaerobically digested municipal sewage sludge measured by an unsupervised and a supervised chemometric approach. *Sci. Total. Environm.* 637-638, 791-802.
63. Cadena, E., Adani, F., Font, X., Artola, A. (2018). Including an Odor Impact Potential in Life Cycle Assessment of waste treatment plants. *International Journal of Environmental Science and Technology*, 15, 2193-2202.
64. D'Imporzano, G., Pilu, R., Corno, L., Adani, F. (2018). *Arundo donax* L. can substitute traditional energy crops for more efficient, environmentally-friendly

production of biogas: A Life Cycle Assessment approach. *Bioresource Technology*, 267, 249-256.

65. Villegas Calvo, M., Colombo, B., Corno, L., Eisele, G., Cosentino, C., Papa, G., Scaglia, B., Pilu, R., Simmons, B.A., Adani, F. (2018) Bioconversion of giant cane for integrated production of biohydrogen, carboxylic acid and PHAs in a multi-stage biorefinery approach. *ACS Sustainable Chem. Eng.*.
10.1021/acssuschemeng.8b03794.
66. Mina Aylaja, Elkbir Lhadia, and Fabrizio Adani (2018). Municipal waste and poultry manure compost affect biomass production, nitrate reductase activity and heavy metals in tomato plants. *Compost Science & utilization*, DOI:
[10.1080/1065657X.2018.1524316](https://doi.org/10.1080/1065657X.2018.1524316)
67. Algapani, D.E., Qiao, W., Ricci, M., Bianchi, D., M. Wandera, S., Adani, F., Dong, R. (2019). Bio-hydrogen and bio-methane production from food waste in a two-stage anaerobic digestion process with digestate recirculation. *Renewable Energy*, 130, 1108-1115.
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