

Curriculum Vitae



Informazioni personali

Nome / Cognome **Alessandro d'ADAMO**
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Cittadinanza Italiana
Data di nascita 14 Giugno 1986
Sesso Maschile

Esperienza Lavorativa

11/2022 a oggi Professore Associato
Settore Scientifico Disciplinare: ING-IND/08 MACCHINE A FLUIDO
Dipartimento di Ingegneria 'Enzo Ferrari' – Università degli Studi di Modena e Reggio Emilia
Via Vivarelli 10, 41125 MODENA MO (Italy)

11/2019 a 11/2022 Ricercatore t.d. art. 24 c. 3 lett. B – Laboratorio di Ricerca Motori a Combustione Interna
Dipartimento di Ingegneria 'Enzo Ferrari' – Università degli Studi di Modena e Reggio Emilia
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08/2015 - 11/2019 Ricercatore t.d. art. 24 c. 3 lett. A – Laboratorio di Ricerca Motori a Combustione Interna
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2013-2021 Consulente su sviluppo modelli di combustione per il codice CFD STAR-CD (CD-adapco/SIEMENS SISW)

2014-2020 Consulente per progetti di modellazione combustione in motori a combustione interna (R&D CFD S.R.L.)

Abilitazione Scientifica Nazionale
Abilitazione scientifica nazionale alle funzioni di professore di I fascia di cui all'art. 16 della L. 240/2010 (SETTORE CONCORSUALE 09/C1, MACCHINE E SISTEMI PER L'ENERGIA E L'AMBIENTE) conseguita in data 06/06/2023, valida fino al 06/06/2034.

Temi di Ricerca

- Simulazione numerica di celle a combustibile e macchine elettrochimiche
- Simulazione numerica di flussi turbolenti reagenti
- Simulazione di combustione in motori a combustione interna
- Sviluppo di modelli numerici per accensione comandata, combustione turbolenta e previsione di combustioni anomale (detonazioni) per codici CFD 3D

Collaborazioni

Collaborazioni Accademiche: Istituto Motori-CNR (Italy), Penn State University (USA), University of Seoul (Corea), TU Wien (Austria).
Collaborazioni Industriali: Ferrari, Daimler, Audi, Winterthur Gas & Diesel, SIEMENS SISW, R&D CFD, Loccioni.

Progetti Finanziati

- Responsabile scientifico (PI) FAR (Fondo Ateneo per la Ricerca) Mission Oriented 2021 (NANO4COOL (NANOfluids For COOLing of PEM Fuel Cell Systems), finanziamento 64'470,00 €
- Responsabile scientifico (PI) FAR (Fondo Ateneo per la Ricerca) Dipartimentale 2020 (Virtual Characterization of Optimized Fuel Cells Designs Under Actual Operating Conditions), finanziamento 3'500,00 €
- Responsabile scientifico (PI) FAR (Fondo Ateneo per la Ricerca) Dipartimentale 2021 (Sviluppo di Metodologie per la Simulazione Elettro-Fluidodinamica di Elettrolizzatori PEM), finanziamento 12'034,39 €

Esperienza

Docenza del corso:
- Macchine e Sistemi Energetici, Corso di Laurea in Ingegneria Meccanica (a partire dall'A.A. 2018/19)

Didattica	<ul style="list-style-type: none"> - Simulazione Fluidodinamica dei Motori, Corso di Laurea Magistrale in Ingegneria Del Veicolo (a partire dall'A.A. 2016/17). - Design and Modelling of High Performance Combustion Systems, International Master's Degree Programme in Advanced Automotive Engineering (corso tenuto in lingua inglese, a partire dall'A.A. 2018/19) - CFD Modelling of Fuel Cell in Automotive Application, PhD Programme in Environmental and Industrial Engineering "Enzo Ferrari" (a partire dal XXXVI ciclo) <ul style="list-style-type: none"> - Relatore di 38 Tesi Magistrali di Laurea Magistrale in Ingegneria del Veicolo - Relatore di 1 Tesi di Dottorato in Ingegneria Industriale e del Territorio "Enzo Ferrari" - Relatore di 21 Relazioni Finali di Laurea in Ingegneria Meccanica
Istruzione e Formazione	
Data	01/2012 – 03/2015
Titolo	Dottore di Ricerca
Istituzione	Università degli Studi di Modena e Reggio Emilia – Dipartimento di Ingegneria "Enzo Ferrari" Via Vivarelli 10, 41125 MODENA MO (Italia)
Tesi di Dottorato	"Numerical Simulation of Abnormal Combustion in High Performance Spark-Ignition Engines" (Modellazione Numerica di Combustioni Anomale in Motori ad Accensione Comandata ad Elevate Prestazioni).
Relatore	Prof. Stefano Fontanesi
Data	02/2014 – 04/2014
Istituzione Ospitante	CD-adapco – Research Internship CD-adapco France (Paris) Tema: Sviluppo e implementazione di modello ISSIM-LES Spark-Ignition Model nel codice CFD STAR-CD
Data	08/2012 – 05/2013
Istituzione Ospitante	ENGINE RESEARCH CENTER Visiting Fellow University of Wisconsin-Madison (Madison, WI USA). Supervisore: Prof. C. J. Rutland Tema: Large-Eddy Simulation Analysis of Cycle-to-Cycle Variability in a Turbocharged GDI Engine
Data	01/2009 -04/2011
Titolo	Laurea Specialistica in Ingegneria del Veicolo, voto 110/110 e lode
Istituzione	Università degli studi di Modena e Reggio Emilia - Facoltà di Ingegneria Meccanica Via Vignolese 905, 41125 MODENA MO (Italia)
Tesi di Laurea	"Definizione di una metodologia per l'ottimizzazione della combustione in un motore da competizione" Progetto in collaborazione con Ferrari Gestione Sportiva.
Relatore	Prof. Stefano Fontanesi
Data	09/2005 - 12/2008
Titolo	Laurea in Ingegneria Meccanica, voto 110/110 e lode
Istituzione	Università degli studi di Modena e Reggio Emilia - Facoltà di Ingegneria Meccanica Via Vignolese 905, 41125 MODENA MO (Italia)
Tesi di Laurea	"Studio e ottimizzazione di un condotto di aspirazione di un motore ad accensione comandata"
Relatore	Prof. Stefano Fontanesi
Attività Editoriale	<ul style="list-style-type: none"> - Guest Editor della Special Issue "Hydrogen-Fuelled Spark-Ignition Engines" (energies) - Guest Editor della Special Issue "Experimental Analysis and Numerical Simulation of Fuel Cells" (processes) - Editorial Board Member (processes)
Trattati	Cantore, G., d'Adamo, A., "Motori e Sistemi Propulsivi per Autoveicoli", Società Editrice Esculapio, 2020, ISBN 978-88-9385-229-6

Publicazioni

1. Fontanesi, S., Cicalese, G., D'Adamo, A., and Pivetti, G., "Validation of a CFD Methodology for the Analysis of Conjugate Heat Transfer in a High Performance SI Engine," SAE Technical Paper 2011-24-0132, 2011, doi:10.4271/2011-24-0132.
2. Malaguti, S., D'Adamo, A., Cantore, G., Sementa, P. et al., "Experimental and Numerical Investigation of the Idle Operating Engine Condition for a GDI Engine," SAE Technical Paper 2012-01-1144, 2012, doi:10.4271/2012-01-1144.
3. Fontanesi, S., Paltrinieri, S., D'Adamo, A., Cantore, G. et al., "Knock Tendency Prediction in a High Performance Engine Using LES and Tabulated Chemistry," SAE Int. J. Fuels Lubr. 6(1):98-118, 2013, doi:10.4271/2013-01-1082. **Articolo su rivista.**
4. Fontanesi, S., Paltrinieri, S., Tiberi, A., and D'Adamo, A., "LES Multi-cycle Analysis of a High Performance GDI Engine," SAE Technical Paper 2013-01-1080, 2013, doi:10.4271/2013-01-1080.
5. Fontanesi, S., D'Adamo, A., Paltrinieri, S., Cantore, G. et al., "Assessment of the Potential of Proper Orthogonal Decomposition for the Analysis of Combustion CCV and Knock Tendency in a High Performance Engine," SAE Technical Paper 2013-24-0031, 2013, doi:10.4271/2013-24-0031.
6. Fontanesi, S., Paltrinieri, S., **d'Adamo, A.**, Duranti, S., "Investigation of boundary condition effects on the analysis of cycle-to-cycle variability of a turbocharged GDI engine", Oil & Gas Science and Technology – Rev. IFP Energies Nouvelles, DOI: 10.2516/ogst/2013142. **Articolo su rivista.**
7. Fontanesi, S., Cicalese, G., Cantore, G., and **D'Adamo, A.**, "Integrated In-Cylinder/CHT Analysis for the Prediction of Abnormal Combustion Occurrence in Gasoline Engines," SAE Technical Paper 2014-01-1151, 2014, doi:10.4271/2014-01-1151.
8. Fontanesi, S., Cicalese, G., **d'Adamo, A.**, Cantore, G., "A Methodology to Improve Knock Tendency Prediction in High Performance Engines," Energy Procedia Volume 45, 2014, Pages 769–778, doi:10.1016/j.egypro.2014.01.082
9. Fontanesi, S., **d'Adamo, A.**, Rutland, C.J., "Large-Eddy simulation analysis of spark configuration effect on cycle-to-cycle variability of combustion and knock," International Journal of Engine Research, first published on January 9, 2015 as doi:10.1177/1468087414566253. **Articolo su rivista.**
10. **d'Adamo, A.**, Berni, F., Breda, S., Lugli, M. et al., "A Numerical Investigation on the Potentials of Water Injection as a Fuel Efficiency Enhancer in Highly Downsized GDI Engines," SAE Technical Paper 2015-01-0393, 2015, doi:10.4271/2015-01-0393.
11. Giovannoni, N., **d'Adamo, A.**, Cicalese, G., and Cantore, G., "Effects of Fuel-Induced Piston-Cooling and Fuel Formulation on the Formation of Fuel Deposits and Mixture Stratification in a GDI Engine," SAE Technical Paper 2015-01-0394, 2015, doi:10.4271/2015-01-0394.
12. Giovannoni, N., **d'Adamo, A.**, Nardi, L., Cantore, G., "Effects of Fuel Composition on Charge Preparation, Combustion and Knock Tendency in a High Performance GDI Engine. Part I: RANS Analysis," Energy Procedia, Volume 81, December 2015, Pages 805–816, doi:10.1016/j.egypro.2015.12.087
13. **d'Adamo, A.**, Giovannoni, N., Nardi, L., Cantore, G., D'Angelis, A., "Effects of Fuel Composition on Charge Preparation, Combustion and Knock Tendency in a High Performance GDI Engine. Part II: LES Analysis," Energy Procedia, Volume 81, December 2015, Pages 817–825, doi:10.1016/j.egypro.2015.12.159
14. Severi, E., **d'Adamo, A.**, Berni, F., Breda, S., Lugli, M., Mattarelli, E., "Numerical Investigation on the Effects of Bore Reduction in a High Performance Turbocharged GDI Engine. 3D Investigation of Knock Tendency," Energy Procedia, Volume 81, December 2015, Pages 846–855, doi:10.1016/j.egypro.2015.12.094
15. **d'Adamo, A.**, Breda, S., Cantore, G., "Large-Eddy Simulation of Cycle-resolved Knock in a Turbocharged SI Engine," Energy Procedia, Volume 82, December 2015, Pages 45–50, doi:10.1016/j.egypro.2015.11.881
16. Breda, S., **d'Adamo, A.**, Testa, F., Severi, E., Cantore, G., "Effects on Knock Intensity and Specific Fuel Consumption of Port Water/Methanol Injection in a Turbocharged GDI Engine: Comparative Analysis," Energy Procedia, Volume 82, December 2015, Pages 96–102, doi:10.1016/j.egypro.2015.11.888
17. **d'Adamo, A.**, Breda, S., Fontanesi, S., and Cantore, G., "LES Modelling of Spark-Ignition Cycle-to-Cycle Variability on a Highly Downsized DISI Engine," SAE Int. J. Engines 8(5):2029-2041, 2015, doi:10.4271/2015-24-2403. **Articolo su rivista.**

18. Berni, F., Breda, S., **D'Adamo, A.**, Fontanesi, S. et al., "Numerical Investigation on the Effects of Water/Methanol Injection as Knock Suppressor to Increase the Fuel Efficiency of a Highly Downsized GDI Engine," SAE Technical Paper 2015-24-2499, 2015, doi:10.4271/2015-24-2499
19. Giovannoni, N., Breda, S., Paltrinieri, S., **D'Adamo, A.** et al., "CFD Analysis of the Effects of Fuel Composition and Injection Strategy on Mixture Preparation and Fuel Deposit Formation in a GDI Engine," SAE Technical Paper 2015-24-2408, 2015, doi:10.4271/2015-24-2408
20. **D'Adamo, A.**, Breda, S., Fontanesi, S., and Cantore, G., "A RANS-Based CFD Model to Predict the Statistical Occurrence of Knock in Spark-Ignition Engines," SAE Int. J. Engines 9(1):618-630, 2016, doi:10.4271/2016-01-0581. **Articolo su rivista.**
21. Breda, S., **D'Adamo, A.**, Fontanesi, S., Giovannoni, N. et al., "CFD Analysis of Combustion and Knock in an Optically Accessible GDI Engine," SAE Int. J. Engines 9(1):641-656, 2016, doi:10.4271/2016-01-0601. **Articolo su rivista.**
22. **d'Adamo, A.**, Breda, S., Fontanesi, S., Irimescu, A., Merola, S., Tornatore, C., "A RANS knock model to predict the statistical occurrence of engine knock", Applied Energy, Volume 191, 1 April 2017, Pages 251–263, <https://doi.org/10.1016/j.apenergy.2017.01.101>. **Articolo su rivista.**
23. **d'Adamo, A.**, Breda, S., Iaccarino, S., Berni, F. et al., "Development of a RANS-Based Knock Model to Infer the Knock Probability in a Research Spark-Ignition Engine," SAE Int. J. Engines 10(3):2017, doi:10.4271/2017-01-0551. **Articolo su rivista.**
24. Breda, S., **D'Adamo, A.**, Fontanesi, S., D'Orrico, F. et al., "Numerical Simulation of Gasoline and n-Butanol Combustion in an Optically Accessible Research Engine," SAE Int. J. Fuels Lubr. 10(1):32-55, 2017, <https://doi.org/10.4271/2017-01-0546>. **Articolo in Rivista.**
25. Iaccarino, S., Breda, S., **D'Adamo, A.**, Fontanesi, S. et al., "Numerical Simulation and Flame Analysis of Combustion and Knock in a DISI Optically Accessible Research Engine," SAE Int. J. Engines 10(2):576-592, 2017, doi:10.4271/2017-01-0555. **Articolo su rivista.**
26. Berni, F., Fontanesi, S., Cicalese, G., and **D'Adamo, A.**, "Critical Aspects on the Use of Thermal Wall Functions in CFD In-Cylinder Simulations of Spark-Ignition Engines," SAE Int. J. Commer. Veh. 10(2):2017, doi:10.4271/2017-01-0569. **Articolo su rivista.**
27. Ko, I., **D'Adamo, A.**, Fontanesi, S., and Min, K., "Study of LES Quality Criteria in a Motored Internal Combustion Engine," SAE Technical Paper 2017-01-0549, 2017, doi:10.4271/2017-01-0549.
28. Zardin, B., Cillo, G., Borghi, M., **D'Adamo, A.**, Fontanesi, S., "Pressure Losses in Multiple-Elbow Paths and in V-Bends of Hydraulic Manifolds", Energies 2017, 10(6), 788; doi:10.3390/en10060788. **Articolo su rivista.**
29. Ko, I., Min, K., Rulli, F., **D'Adamo, A.** et al., "Investigation of Sub-Grid Model Effect on the Accuracy of In-Cylinder LES of the TCC Engine under Motored Conditions," SAE Technical Paper 2017-24-0040, 2017.
30. Breda, S., **D'Adamo, A.**, Fontanesi, S., Del Pecchia, M. et al., "CFD Optimization of n-Butanol Mixture Preparation and Combustion in a Research GDI Engine," SAE Technical Paper 2017-24-0063, 2017.
31. **D'Adamo, A.**, Del Pecchia, M., Breda, S., Berni, F. et al., "Chemistry-Based Laminar Flame Speed Correlations for a Wide Range of Engine Conditions for Iso-Octane, n-Heptane, Toluene and Gasoline Surrogate Fuels," SAE Technical Paper 2017-01-2190, 2017.
32. Cicalese, G., Berni, F., Fontanesi, S., **D'Adamo, A.** et al., "A Comprehensive CFD-CHT Methodology for the Characterization of a Diesel Engine: from the Heat Transfer Prediction to the Thermal Field Evaluation," SAE Technical Paper 2017-01-2196, 2017.
33. Y. Shekhawat, D.C. Haworth, **A. d'Adamo**, F. Berni, S. Fontanesi, P. Schiffmann, D.L. Reuss and V. Sick, "An Experimental and Simulation Study of Early Flame Development in a Homogeneous-charge Spark-Ignition Engine", Oil & Gas Science and Technology - Rev. IFP Energies nouvelles (2017) 72, 32, <https://doi.org/10.2516/ogst/2017028>. **Articolo su rivista.**
34. Toedoso, L., Pirrello, D., Berni, F., De Bellis, V., Lanzafame, R., **d'Adamo, A.**, "Impact of intake valve strategies on fuel consumption and knock tendency of a spark ignition engine", Applied Energy, Volume 216, 15 April 2018, Pages 91-104. **Articolo su rivista.**
35. Bozza, F., De Bellis, V., Berni, F., **D'Adamo, A.** et al., "Refinement of a 0D Turbulence Model to Predict Tumble

- and Turbulent Intensity in SI Engines. Part I: 3D Analyses," SAE Technical Paper 2018-01-0850, 2018, <https://doi.org/10.4271/2018-01-0850>.
36. Del Pecchia, M., Breda, S., **D'Adamo, A.**, Fontanesi, S. et al., "Development of Chemistry-Based Laminar Flame Speed Correlation for Part-Load SI Conditions and Validation in a GDI Research Engine," SAE Int. J. Engines 11(6):2018, <https://doi.org/10.4271/2018-01-0174>. **Articolo su rivista.**
 37. Iacovano, S., **d'Adamo, A.**, Cantore, G., "Development of Chemistry-Based Laminar Flame Speed Correlation for Part-Load SI Conditions and Validation in a GDI Research Engine," Energy Procedia, Volume 148, August 2018, Pages 463-470, <https://doi.org/10.1016/j.egypro.2018.08.121>
 38. **d'Adamo, A.**, Breda, S., Berni, F., and Fontanesi, S., "Understanding the Origin of Cycle-to-Cycle Variation Using Large-Eddy Simulation: Similarities and Differences between a Homogeneous Low-Revving Speed Research Engine and a Production DI Turbocharged Engine," SAE Int. J. Engines 12(1):45-56, 2019, <https://doi.org/10.4271/03-12-01-0007>. **Articolo su rivista.**
 39. Breda, S., D'Orrico, F., Berni, F., **d'Adamo, A.**, Fontanesi S., Irimescu, A., Merola, S.S., "Experimental and numerical study on the adoption of split injection strategies to improve air-butanol mixture formation in a DISI optical engine", Fuel, Volume 243, 1 May 2019, Pages 104-124, <https://doi.org/10.1016/j.fuel.2019.01.111>. **Articolo su rivista.**
 40. Barbato, A., Rulli, F., Fontanesi, S., **D'Adamo, A.** et al., "A Comparison between Different Moving Grid Techniques for the Analysis of the TCC Engine under Motored Conditions," SAE Technical Paper 2019-01-0218, 2019, <https://doi.org/10.4271/2019-01-0218>.
 41. Rulli, F., Fontanesi, S., **d'Adamo, A.**, & Berni, F. (2019). A critical review of flow field analysis methods involving proper orthogonal decomposition and quadruple proper orthogonal decomposition for internal combustion engines. International Journal of Engine Research. <https://doi.org/10.1177/1468087419836178>. **Articolo su rivista.**
 42. **d'Adamo, A.**, Breda, S., Berni, F., Fontanesi, S., "The potential of statistical RANS to predict knock tendency: Comparison with LES and experiments on a spark-ignition engine", Applied Energy Volume 249, 1 September 2019, Pages 126-142, <https://doi.org/10.1016/j.apenergy.2019.04.093>. **Articolo su rivista.**
 43. Krastev, V. K., **d'Adamo, A.**, Berni, F., & Fontanesi, S. (2019). Validation of a zonal hybrid URANS/LES turbulence modeling method for multi-cycle engine flow simulation. International Journal of Engine Research. <https://doi.org/10.1177/1468087419851905>. **Articolo su rivista.**
 44. Sparacino, S., Berni, F., **d'Adamo, A.**, Krastev, V.K., Cavicchi, A., Postrioti, L., "Impact of the Primary Break-Up Strategy on the Morphology of GDI Sprays in 3D-CFD Simulations of Multi-Hole Injectors", Energies 2019, 12, 2890; doi:10.3390/en12152890. **Articolo su rivista.**
 45. Pessina, V., **D'Adamo, A.**, Iacovano, C., Fontanesi, S. et al., "Numerical Simulation of Syngas Blends Combustion in a Research Single-Cylinder Engine," SAE Technical Paper 2019-24-0094, 2019, doi:10.4271/2019-24-0094.
 46. Krastev, V., **D'Adamo, A.**, Rulli, F., and Fontanesi, S., "Effects of the Domain Zonal Decomposition on the Hybrid URANS/LES Modeling of the TCC-III Motored Engine Flow," SAE Technical Paper 2019-24-0097, 2019, doi:10.4271/2019-24-0097
 47. Cicci, F., **d'Adamo, A.**, Barbato, A., Breda, S., "Comparison of library-based and detailed chemistry models for knock prediction in spark-ignition engines," AIP Conference Proceedings 2191, 020046 (2019); <https://doi.org/10.1063/1.5138779>
 48. Rulli, F., Barbato, A., Fontanesi, S., **d'Adamo, A.**, "Large eddy simulation analysis of the turbulent flow in an optically accessible internal combustion engine using the overset mesh technique", International Journal of Engine Research, First Published January 29, 2020, <https://doi.org/10.1177/1468087419896469>. **Articolo su rivista.**
 49. Del Pecchia, M., Pessina, V., Berni, F., **d'Adamo, A.**, Fontanesi, S., "Gasoline-ethanol blend formulation to mimic laminar flame speed and auto-ignition quality in automotive engines", Fuel Volume 264, 15 March 2020, 116741, <https://doi.org/10.1016/j.fuel.2019.116741>. **Articolo su rivista.**
 50. Iacovano, C., **d'Adamo, A.**, Fontanesi, S., Di Ilio, G., Krastev, V., "Application of a zonal hybrid URANS/LES turbulence model to high and low resolution grids for engine simulation", International Journal of Engine Research 1–20, First Published July 1, 2020, <https://doi.org/10.1177/1468087420931712>. **Articolo su rivista.**

51. Ko, I., Rulli, F., Fontanesi, S., **d'Adamo, A.**, Min, K., "Methodology for the large-eddy simulation and particle image velocimetry analysis of large-scale flow structures on TCC-III engine under motored condition", International Journal of Engine Research, First Published July 9, 2020 Research Article <https://doi.org/10.1177/1468087420934599>. **Articolo su rivista.**
52. **D'Adamo, A.**, Riccardi, M., Locci, C., Romagnoli, M. et al., "Numerical Simulation of a High Current Density PEM Fuel Cell," SAE Technical Paper 2020-24-0016, 2020, <https://doi.org/10.4271/2020-24-0016>.
53. **A. d'Adamo**, C. Iacovano, S. Fontanesi, "Large-Eddy simulation of lean and ultra-lean combustion using advanced ignition modelling in a transparent combustion chamber engine", Applied Energy, Volume 280, 15 December 2020, 115949, <https://doi.org/10.1016/j.apenergy.2020.115949>. **Articolo su rivista.**
54. Riccardi, M., **d'Adamo, A.**, Vaini, A., Romagnoli, M., Borghi, M., Fontanesi, S., "Experimental Validation of a 3D-CFD Model of a PEM Fuel Cell", E3S Web Conf. Volume 197, 2020, <https://doi.org/10.1051/e3sconf/202019705004>
55. Krastev, V.K., Di Ilio, G., Iacovano, C., **d'Adamo, A.**, Fontanesi, S., "Standard and consistent Detached-Eddy Simulation for turbulent engine flow modeling: an application to the TCC-III engine", E3S Web Conf. Volume 197, 2020, <https://doi.org/10.1051/e3sconf/202019706021>
56. **A. d'Adamo**, M. Riccardi, M. Borghi, S. Fontanesi, "CFD Modelling of a Hydrogen/Air PEM Fuel Cell with a Serpentine Gas Distributor", Processes 2021, 9(3), 564; <https://doi.org/10.3390/pr9030564>. **Articolo su rivista.**
57. Iacovano, C., Zeng, Y., Anbarasu, M., Fontanesi, S., **d'Adamo A.**, "Validation of a LES Spark-Ignition Model (GLIM) for Highly-Diluted Mixtures in a Closed Volume Combustion Vessel," SAE Technical Paper 2021-01-0399, 2021, doi:10.4271/2021-01-0399
58. Barbato, A., Fontanesi, S., and **D'Adamo, A.**, "Impact of Grid Density and Turbulence Model on the Simulation of In-Cylinder Turbulent Flow Structures - Application to the Darmstadt Engine," SAE Technical Paper 2021-01-0415, 2021, doi:10.4271/2021-01-0415
59. **A. d'Adamo**, M. Haslinger, G. Corda, J. Höflinger, S. Fontanesi, T. Lauer, "Modelling Methods and Validation Techniques for CFD Simulations of PEM Fuel Cells", Processes 2021, 9(4), 688; <https://doi.org/10.3390/pr9040688>. **Articolo su rivista.**
60. **d'Adamo, A.**, Iacovano, C., Fontanesi, S. A Data-Driven Methodology for the Simulation of Turbulent Flame Speed across Engine-Relevant Combustion Regimes. Energies 2021, 14, 4210. <https://doi.org/10.3390/en14144210>. **Articolo su rivista.**
61. Iacovano C, **d'Adamo A**, Fontanesi S, Di Ilio G, Krastev VK. A wall-adapted zonal URANS/LES methodology for the scale-resolving simulation of engine flows. International Journal of Engine Research. July 2021. doi:10.1177/14680874211032379. **Articolo su rivista.**
62. Olcuire M, Iacovano C, **d'Adamo A**, Breda S, Lucchini T, Fontanesi S. Combustion modelling of turbulent jet ignition in a divided combustion chamber. International Journal of Engine Research. August 2021. doi:10.1177/14680874211037118. **Articolo su rivista.**
63. Bozza, F., Berni, F., Cicci, F., **D'Adamo, A.** et al., "Potentials of the Oversizing and H₂-Supported Lean Combustion of a VVA SI Gasoline Engine Towards Efficiency Improvement," SAE Technical Paper 2021-24-0007, 2021, doi:10.4271/2021-24-0007.
64. Giuseppe Corda, Stefano Fontanesi, **Alessandro d'Adamo**, "Methodology for PEMFC CFD Simulation Including the Effect of Porous Parts Compression", International Journal of Hydrogen Energy, 2022, <https://doi.org/10.1016/j.ijhydene.2022.02.201>
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Indicatori Bibliometrici

- H-index: 28 (fonte: Scopus)
- Pubblicazioni: 83, di cui 39 su rivista internazionale (fonte: Scopus)
- Citazioni: 1569 (fonte: Scopus)

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- Excellence in Oral Presentation – SAE World Congress 2015
- Excellence in Oral Presentation – SAE World Congress 2016
- Excellence in Oral Presentation – SAE World Congress 2017
- SAE Lloyd L. Withrow Distinguished Speaker Award (Detroit USA, 4/4/2017)
- Migliore Tesi di Dottorato (XXVIII Cycle), High Mechanics and Automotive Design & Technology PhD School, Università degli Studi di Modena e Reggio Emilia
- Riconoscimento per la Ricerca Nazionale e Internazionale 2014-Università degli Studi di Modena e Reggio Emilia
- Riconoscimento per la Ricerca Nazionale e Internazionale 2016-Università degli Studi di Modena e Reggio Emilia
- Riconoscimento per la Ricerca Nazionale e Internazionale 2017-Università degli Studi di Modena e Reggio Emilia
- AIGE Young Researcher Under 35 – 15th AIGE 2021 Conference on "Energy Conversion, Management, Recovery, Saving Storage and Renewable Systems"

Organizzazione di Congressi

- Chairman a LES for Internal Combustion Engine Flows (LES4ICE, Parigi FRANCIA 2016)
- Organizzatore e Chairman a High Efficiency Engine Concept Session – SAE World Congress 2017 (Detroit USA)
- Organizzatore e Chairman per la sessione High Efficiency Engine Concept Session –SAE 2017 International Powertrains, Fuels and Lubricants Meeting (Pechino CINA, 2017)
- Organizzatore per la sessione Abnormal SI Combustion (Knock) – SAE World Congress 2018 (Detroit USA)
- Organizzatore per la sessione Abnormal Combustion: Pre-Ignition Session –SAE 2018 International Powertrains, Fuels and Lubricants Meeting (Heidelberg GERMANIA)
- Organizzatore per la sessione Combustion in Gaseous Fueled Engines Session –SAE 2019 International Powertrains, Fuels and Lubricants Meeting (Austin USA)
- Organizzatore per la sessione Abnormal SI Combustion (Knock) – SAE World Congress 2019 (Detroit USA)
- Organizzatore per la sessione Alternative Powertrains – SAE Conference on Sustainable Mobility 2020 (Catania)
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Modena, 24/06/2024

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