# Laurent Fulcheri

List of Publications by Year
in descending order



| 46 | 1,113 | 471509 17 | 395702 33 |
|---|---|---|---|
| papers | citations | h-index | g-index |

| 47 | 47 | 47 | 944 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Waste Gasification by Thermal Plasma: A Review. Waste and Biomass Valorization, 2013, 4, 421-439. | 3.4 | 207 |
| 2 | Assessment of Carbon Dioxide Dissociation as a New Route for Syngas Production: A Comparative Review and Potential of Plasma-Based Technologies. Energy & Fuels, 2013, 27, 2712-2722. | 5.1 | 103 |
| 3 | Carbon black processing by thermal plasma. Analysis of the particle formation mechanism. Chemical Engineering Science, 2001, 56, 2123-2132. | 3.8 | 88 |
| 4 | Direct conversion of CO2 and CH4 into liquid chemicals by plasma-catalysis. Applied Catalysis B: Environmental, 2020, 261, 118228. | 20.2 | 75 |
| 5 | Synthesis of carbon nanotubes and nano-necklaces by thermal plasma process. Carbon, 2004, 42, 2543-2549. | 10.3 | 61 |
| 6 | Why turquoise hydrogen will Be a game changer for the energy transition. International Journal of Hydrogen Energy, 2022, 47, 25831-25848. | 7.1 | 50 |
| 7 | Experimental Study on Gasoline Reforming Assisted by Nonthermal Arc Discharge. Energy & Fuels, 2008, 22, 556-560. | 5.1 | 48 |
| 8 | Three-Phase AC Arc Plasma Systems: A Review. Plasma Chemistry and Plasma Processing, 2015, 35, 565-585. | 2.4 | 41 |
| 9 | Ethanol and E85 Reforming Assisted by a Non-thermal Arc Discharge. Energy & Fuels, 2010, 24, 2607-2613. | 5.1 | 38 |
| 10 | Three-Dimensional Unsteady MHD Modeling of a Low-Current High-Voltage Nontransferred DC Plasma Torch Operating With Air. IEEE Transactions on Plasma Science, 2011, 39, 1889-1899. | 1.3 | 35 |
| 11 | 3D Unsteady State MHD Modeling of a 3-Phase AC Hot Graphite Electrodes Plasma Torch. Plasma Chemistry and Plasma Processing, 2013, 33, 491-515. | 2.4 | 30 |
| 12 | Title is missing!. Plasma Chemistry and Plasma Processing, 1999, 19, 69-89. | 2.4 | 23 |
| 13 | Comparison of Simple Particle-Radiation Coupling Models Applied on a Plasma Black Process. Plasma Chemistry and Plasma Processing, 2004, 24, 603-623. | 2.4 | 22 |
| 14 | Hydrocarbons synthesis from syngas by very high pressure plasma. Chemical Engineering Journal, 2014, 241, 1-8. | 12.7 | 21 |
| 15 | A Comparison Between MHD Modeling and Experimental Results in a 3-Phase AC Arc Plasma Torch: Influence of the Electrode Tip Geometry. Plasma Chemistry and Plasma Processing, 2014, 34, 975-996. | 2.4 | 19 |
| 16 | Three Stages Modeling of n-Octane Reforming Assisted by a Nonthermal Arc Discharge. Energy & Fuels, 2009, 23, 4931-4936. | 5.1 | 18 |
| 17 | High Speed Video Camera and Electrical Signal Analyses of Arcs Behavior in a 3-Phase AC Arc Plasma Torch. Plasma Chemistry and Plasma Processing, 2013, 33, 779-796. | 2.4 | 18 |
| 18 | Thermodynamics and Kinetics Analysis of Gasoline Reforming Assisted by Arc Discharge. Energy & Fuels, 2008, 22, 1888-1893. | 5.1 | 17 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | Influence of temperature and pressure on carbon black size distribution during allothermal cracking of methane. Aerosol Science and Technology, 2016, 50, 26-40. | 3.1 | 16 |
| 20 | Production of Carbon Nanotubes and Other Nanostructures Via Continuous 3â€Phase AC Plasma Processing. Fullerenes Nanotubes and Carbon Nanostructures, 2004, 12, 571-581. | 2.1 | 15 |
| 21 | Characterization of a 3-Phase a.c. Free Burning Arc Plasma. Plasma Science and Technology, 2006, 8, 156-163. | 1.5 | 15 |
| 22 | Experimental Study of Hydrocarbons Synthesis from Syngas by a Tipâ€“Tip Electrical Discharge at Very High Pressure. Plasma Chemistry and Plasma Processing, 2011, 31, 663-679. | 2.4 | 15 |
| 23 | Study on Argon Plasma Jets at Atmospheric Pressure in Ambient Air Excited by Surface Waves. IEEE Transactions on Plasma Science, 2014, 42, 911-916. | 1.3 | 15 |
| 24 | Dry reforming of methane in a tipâ€“tip arc discharge reactor at very high pressure. International Journal of Hydrogen Energy, 2015, 40, 3388-3401. | 7.1 | 13 |
| 25 | Experimental study on plasma-catalytic synthesis of hydrocarbons from syngas. Applied Catalysis A: General, 2019, 588, 117269. | 4.3 | 13 |
| 26 | Triâ€fold process integration leveraging highâ€•and <scp>lowâ€temperature</scp> plasmas: From biomass to fertilizers with local energy and for local use. Journal of Advanced Manufacturing and Processing, 2021, 3, e10081. | 2.4 | 13 |
| 27 | Exhaust Gas Fuel Reforming of Diesel Fuel by Nonthermal Arc Discharge for NOxTrap Regeneration Application. Energy & Fuels, 2011, 25, 1034-1044. | 5.1 | 10 |
| 28 | 3-D Flow Modeling of a Three-Phase AC Plasma Torch Working With Air Using a Stationary Source Domain With Gas Radiation. IEEE Transactions on Plasma Science, 2016, 44, 996-1008. | 1.3 | 10 |
| 29 | Combination of VOC degradation and electro-hydrodynamic pumping actions in a surface dielectric barrier discharge reactor. Chemical Engineering Journal, 2017, 309, 471-479. | 12.7 | 8 |
| 30 | Development of a volumetric methodâ€”experimental test bench for hydrogen storage characterisation. International Journal of Hydrogen Energy, 2007, 32, 1846-1854. | 7.1 | 7 |
| 31 | Synthesis of Titania Nanoparticles Using a Compact Nonequilibrium Plasma Torch. Japanese Journal of Applied Physics, 2008, 47, 7343. | 1.5 | 7 |
| 32 | 2D Axisymmetric Coupled Computational Fluid Dynamicsâ€“Kinetics Modeling of a Nonthermal Arc Plasma Torch for Diesel Fuel Reforming. Energy & Fuels, 2011, 25, 2833-2840. | 5.1 | 6 |
| 33 | Tailorâ€Made Carbon Nanomaterials for Bulk Applications via Highâ€Intensity Arc Plasma. Fullerenes Nanotubes and Carbon Nanostructures, 2005, 13, 67-75. | 2.1 | 5 |
| 34 | Non-Equilibrium Nitrogen DC-Arc Plasma Treatment of TiO<SUB>2</SUB> Nanopowder. Journal of Nanoscience and Nanotechnology, 2009, 9, 256-260. | 0.9 | 5 |
| 35 | New perspectives on the dynamics of AC and DC plasma arcs exposed to cross-fields. Journal Physics D: Applied Physics, 2017, 50, 065203. | 2.8 | 5 |
| 36 | A New Plasma Electro-Burner Concept for Biomass and Waste Combustion. Waste and Biomass Valorization, 2017, 8, 2791-2805. | 3.4 | 5 |

| # | Article | IF | Citations |
|---|---|---|---|
| 37 | Applying chemical engineering concepts to non-thermal plasma reactors. Plasma Science and Technology, 2018, 20, 065512. | 1.5 | 5 |
| 38 | An optimal method for the computation of the parameterR<sub>s</sub>of the net emission coefficient approximation approach for determining the electrical and thermal characteristics of plasma arcs. Journal Physics D: Applied Physics, 2017, 50, 445202. | 2.8 | 3 |
| 39 | Electrode sheath model for an argon free burning arc discharge at very high pressure and low intensity. , 2008, , . | | 2 |
| 40 | Experimental study on the formation of higher fluorocarbons from CF4 by a tipâ€“tip electrical arc discharge at very high pressure. Journal of Fluorine Chemistry, 2014, 166, 96-103. | 1.7 | 2 |
| 41 | Theoretical and experimental study of an argon free burning arc dicharge at very high-pressure and low-intensity. , 2008, , . | | 1 |
| 42 | Analytical Solution for the Electric Arc Dynamics and Heat Transfer When Exposed to a Magnetic Cross-Field. Journal of Heat Transfer, 2018, 140, . | 2.1 | 1 |
| 43 | A Combined Finite-Element-Finite-Volume Method for Thermal Arc Numerical Simulation. Journal of Physics: Conference Series, 2019, 1243, 012011. | 0.4 | 1 |
| 44 | A Simple Theory for Cathode Jets in Plasma Arcs. Journal of Physics: Conference Series, 2019, 1243, 012016. | 0.4 | 1 |
| 45 | Publisher's Note: â€œSynthesis of Titania Nanoparticles Using a Compact Nonequilibrium Plasma Torchâ€• Japanese Journal of Applied Physics, 2008, 47, 9019. | 1.5 | 0 |
| 46 | STM and STS investigation of few-wall carbon nanotubes containing non-hexagonal rings. , 2003, , . | | 0 |