Antonio Tregrossi

List of Publications by Year
in descending order

55 papers	2,434 citations	159525 30 h-index	197736 49 g-index
55 all docs	55 docs citations	55 times ranked	1473 citing authors

#	Article	IF	Citations
1	Structureâ€“property relationship in nanostructures of young and mature soot in premixed flames. Proceedings of the Combustion Institute, 2009, 32, 697-704.	2.4	240
2	Infrared spectroscopy of some carbon-based materials relevant in combustion: Qualitative and quantitative analysis of hydrogen. Carbon, 2014, 74, 127-138.	5.4	124
3	Soot nanostructure evolution in premixed flames by High Resolution Electron Transmission Microscopy (HRTEM). Proceedings of the Combustion Institute, 2015, 35, 1895-1902.	2.4	120
4	Analysis of process parameters for steady operations in methane mild combustion technology. Proceedings of the Combustion Institute, 2005, 30, 2605-2612.	2.4	102
5	The combustion of benzene in rich premixed flames at atmospheric pressure. Combustion and Flame, 1999, 117, 553-561.	2.8	93
6	The effect of temperature on soot properties in premixed methane flames. Combustion and Flame, 2010, 157, 1959-1965.	2.8	93
7	The effect of temperature on soot inception in premixed ethylene flames. Proceedings of the Combustion Institute, 1996, 26, 2327-2333.	0.3	89
8	Probing structures of soot formed in premixed flames of methane, ethylene and benzene. Proceedings of the Combustion Institute, 2013, 34, 1885-1892.	2.4	80
9	Mass spectrometric analysis of large PAH in a fuel-rich ethylene flame. Proceedings of the Combustion Institute, 2007, 31, 547-553.	2.4	78
10	Spectroscopic and compositional signatures of pah-loaded mixtures in the soot inception region of a premixed ethylene flame. Proceedings of the Combustion Institute, 1998, 27, 1481-1487.	0.3	74
11	Aromatic structures of carbonaceous materials and soot inferred by spectroscopic analysis. Carbon, 2004, 42, 1583-1589.	5.4	70
12	Hydrogen-enriched methane Mild Combustion in a well stirred reactor. Experimental Thermal and Fluid Science, 2007, 31, 469-475.	1.5	69
13	Dehydrogenation and growth of soot in premixed flames. Proceedings of the Combustion Institute, 2015, 35, 1803-1809.	2.4	64
14	Fluorescence Spectroscopy of Complex Aromatic Mixtures. Analytical Chemistry, 2004, 76, 2138-2143.	3.2	56
15	Structural Characterization of Large Polycyclic Aromatic Hydrocarbons. Part 1: The Case of Coal Tar Pitch and Naphthalene-Derived Pitch. Energy & Fuels, 2015, 29, 5714-5722.	2.5	55
16	Experimental and kinetic modeling study of sooting atmospheric-pressure cyclohexane flame. Proceedings of the Combustion Institute, 2009, 32, 585-591.	2.4	51
17	Effect of after-treatment systems on particulate matter emissions in diesel engine exhaust. Experimental Thermal and Fluid Science, 2020, 116, 110107.	1.5	51
18	Structural Characterization of Large Polycyclic Aromatic Hydrocarbons. Part 2: Solvent-Separated Fractions of Coal Tar Pitch and Naphthalene-Derived Pitch. Energy & Fuels, 2016, 30, 2574-2583.	2.5	47

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19	Optical properties of organic carbon and soot produced in an inverse diffusion flame. Carbon, 2017, 124, 372-379.	5.4	47
20	HRTEM and EELS investigations of flame-formed soot nanostructure. Fuel, 2018, 225, 218-224.	3.4	47
21	Effect of Fuel/Air Ratio and Aromaticity on Sooting Behavior of Premixed Heptane Flames. Energy & Fuels, 2007, 21, 2655-2662.	2.5	45
22	Effect of fuel/air ratio and aromaticity on the molecular weight distribution of soot in premixed n-heptane flames. Proceedings of the Combustion Institute, 2009, 32, 803-810.	2.4	45
23	Fluorescence spectroscopy of aromatic species produced in rich premixed ethylene flames. Chemosphere, 2001, 42, 835-841.	4.2	43
24	Comparative analysis of the structure of carbon materials relevant in combustion. Chemosphere, 2003, 51, 1063-1069.	4.2	41
25	Formation of low- and high-molecular-weight hydrocarbon species in sooting ethylene flames. Combustion Science and Technology, 2002, 174, 309-324.	1.2	40
26	Investigation on chemical and structural properties of coal- and petroleum-derived pitches and implications on physico-chemical properties (solubility, softening and coking). Fuel, 2019, 245, 478-487.	3.4	37
27	The relation between ultraviolet-excited fluorescence spectroscopy and aromatic species formed in rich laminar ethylene flames. Combustion and Flame, 2001, 125, 1225-1229.	2.8	36
28	Correlations of the Spectroscopic Properties with the Chemical Composition of Flame-Formed Aromatic Mixtures. Combustion Science and Technology, 2000, 153, 19-32.	1.2	35
29	DYNAMIC BEHAVIOR OF METHANE OXIDATION IN PREMIXED FLOW REACTOR. Combustion Science and Technology, 2004, 176, 769-783.	1.2	34
30	Distribution of Soot Molecular Weight/Size along Premixed Flames as Inferred by Size Exclusion Chromatography. Energy & Fuels, 2007, 21, 136-140.	2.5	31
31	Experimental and modeling study on the molecular weight distribution and properties of carbon particles in premixed sooting flames. Proceedings of the Combustion Institute, 2011, 33, 633-640.	2.4	31
32	The effect of temperature on the condensed phases formed in fuel-rich premixed benzene flames. Combustion and Flame, 2012, 159, 2233-2242.	2.8	31
33	Laser-induced structural modifications of differently aged soot investigated by HRTEM. Combustion and Flame, 2019, 204, 13-22.	2.8	31
34	Study on the contribution of different molecular weight species to the absorption UVâ€“Visible spectra of flame-formed carbon species. Proceedings of the Combustion Institute, 2013, 34, 3661-3668.	2.4	30
35	Size Exclusion Chromatography of Particulate Produced in Fuel-Rich Combustion of Different Fuels. Energy & Fuels, 2003, 17, 565-570.	2.5	29
36	Spectral Analysis in the UV-Visible Range for Revealing the Molecular Form of Combustion-Generated Carbonaceous Species. Combustion Science and Technology, 2012, 184, 1219-1231.	1.2	27

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37	Optical band gap analysis of soot and organic carbon in premixed ethylene flames: Comparison of in-situ and ex-situ absorption measurements. Carbon, 2020, 158, 89-96.	5.4	26
38	Similarities and dissimilarities in n-hexane and benzene sooting premixed flames. Proceedings of the Combustion Institute, 2007, 31, 585-591.	2.4	24
39	The formation of aromatic carbon in sooting ethylene flames. Proceedings of the Combustion Institute, 1994, 25, 679-685.	0.3	19
40	Spectral Signatures of Carbon Particulate Evolution in Methane Flames. Combustion Science and Technology, 2010, 182, 683-691.	1.2	19
41	SPECTRAL PROPERTIES OF SOOT IN THE UV-VISIBLE RANGE. Combustion Science and Technology, 2007, 179, 371-385.	1.2	17
42	Sooting structure of a premixed toluene-doped methane flame. Combustion and Flame, 2018, 190, 252-259.	2.8	16
43	PAHs and fullerenes as structural and compositional motifs tracing and distinguishing organic carbon from soot. Fuel, 2022, 309, 122356.	3.4	16
44	Depletion of Fuel Aromatic Components and Formation of Aromatic Species in a Spray Flame as Characterized by Fluorescence Spectroscopy. Energy & Fuels, 2001, 15, 987-995.	2.5	14
45	Monitoring of fuel consumption and aromatics formation in a kerosene spray flame as characterized by fluorescence spectroscopy. Chemosphere, 2003, 51, 1097-1102.	4.2	13
46	The Effect of Temperature on Soot Properties in Premixed Ethylene Flames. Combustion Science and Technology, 2019, 191, 1558-1570.	1.2	11
47	Thermophoretic sampling of large PAH (CÂâ‰¥Â22â€“24) formed in flames. Fuel, 2020, 263, 116722.	3.4	11
48	Spectroscopic behavior of oxygenated combustion by-products. Chemosphere, 2003, 51, 1071-1077.	4.2	10
49	On-line fast analysis of light hydrocarbons, PAH and radicals by molecular-beam time of flight mass spectrometry. Chemosphere, 2021, 276, 130174.	4.2	6
50	Ensemble and time resolved light scattering measurements in isothermal and burning heavy oil sprays. Proceedings of the Combustion Institute, 1992, 24, 1549-1555.	0.3	5
51	DILUTION EFFECTS IN NATURAL GAS MILD COMBUSTION. Clean Air, 2006, 7, 127-139.	0.0	4
52	Light Absorption Coefficient and Hydrogen Content as Key Properties for Inferring Structural Features of Soot. Combustion Science and Technology, 2014, 186, 634-643.	1.2	2
53	Study on the separation and thin film deposition of tarry aromatics mixtures (soot extract and) Tj ETQq1 1 0.784314 rgBT /Overlock 10	3.4	2
54	Soot and PAH Formation in Rapeseed Oil Spray Combustion. Clean Air, 2002, 3, 53-68.	0.0	2

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55	The Angular Polarization Ratio for the Characterization of Small Droplets in Oil Sprays. Particle and Particle Systems Characterization, 1993, 10, 19-25.	1.2	1