Xavier Duten

List of Publications by Year
in descending order

36 papers	713 citations	516561 16 h-index	552653 26 g-index
36 all docs	36 docs citations	36 times ranked	689 citing authors

#	Article	IF	Citations
1	Microsecond Electrical Breakdown in Water: Advances Using Emission Analysis and Cavitation Bubble Theory. Molecules, 2022, 27, 662.	1.7	1
2	Amination of Cyclohexane by Dielectric Barrier Discharge Processing in a Continuous Flow Microreactor: Experimental and Simulation Studies. Plasma Chemistry and Plasma Processing, 2021, 41, 351-368.	1.1	6
3	Analysis of discharge regimes obtained by microsecond underwater electrical breakdown in regard to energy balance. Journal Physics D: Applied Physics, 2021, 54, 365202.	1.3	6
4	Plasma-Catalysis for Volatile Organic Compounds Decomposition: Complexity of the Reaction Pathways during Acetaldehyde Removal. Catalysts, 2020, 10, 1146.	1.6	6
5	Investigation of Hydrogen Peroxide Formation After Underwater Plasma Discharge. Plasma Chemistry and Plasma Processing, 2020, 40, 955-969.	1.1	9
6	Statistical analysis of a micro-pulsed electrical discharge in water. Journal Physics D: Applied Physics, 2020, 53, 335204.	1.3	12
7	Time-resolved diagnostics of a pin-to-pin pulsed discharge in water: pre-breakdown and breakdown analysis. Journal Physics D: Applied Physics, 2018, 51, 335201.	1.3	22
8	Plasma catalysis application of gold nanoparticles for acetaldehyde decomposition. Chemical Engineering Journal, 2018, 347, 913-922.	6.6	34
9	New insights in understanding plasma-catalysis reaction pathways: study of the catalytic ozonation of an acetaldehyde saturated Ag/TiO2/SiO2catalyst. EPJ Applied Physics, 2015, 71, 20805.	0.3	6
10	A Simplified Global Model to Describe the Oxidation of Acetylene Under Nanosecond Pulsed Discharges in a Complex Corona Reactor. Plasma Chemistry and Plasma Processing, 2014, 34, 343-359.	1.1	2
11	Acetaldehyde removal using an atmospheric non-thermal plasma combined with a packed bed: Role of the adsorption process. Journal of Hazardous Materials, 2014, 279, 356-364.	6.5	42
12	Organic pollutants oxidation by needle/plate plasma discharge: On the influence of the gas nature. Chemical Engineering and Processing: Process Intensification, 2014, 82, 185-192.	1.8	17
13	Degradation of 4-ChlorobenzoÃ¯c Acid in a Thin Falling Film Dielectric Barrier Discharge Reactor. Industrial & Engineering Chemistry Research, 2014, 53, 10387-10396.	1.8	6
14	Mechanisms of Pyrene Degradation during Soil Treatment in a Dielectric Barrier Discharge Reactor. Plasma Processes and Polymers, 2014, 11, 734-744.	1.6	30
15	Acetaldehyde removal using a diphasic process coupling a silver-based nano-structured catalyst and a plasma at atmospheric pressure. Catalysis Today, 2013, 208, 82-89.	2.2	28
16	Growth of Silver Nanoclusters on Monolayer Nanoparticulate Titanium-oxo-alkoxy Coatings. Journal of Physical Chemistry C, 2012, 116, 17239-17247.	1.5	20
17	Spatial and temporal evolutions of ozone in a nanosecond pulse corona discharge at atmospheric pressure. Journal Physics D: Applied Physics, 2011, 44, 415202.	1.3	3
18	Oxidation of Acetylene in Atmospheric Pressure Pulsed Corona Discharge Cell Working in the Nanosecond Regime. Plasma Chemistry and Plasma Processing, 2009, 29, 173-195.	1.1	25

#	Article	IF	Citations
19	Investigation of Discharge Dynamics and Chemical Kinetics in Microdischarges Generated in Nanosecond Multipinâ€toâ€Plane Pulsed N₂/O₂ Corona Systems. Plasma Processes and Polymers, 2009, 6, 347-359.	1.6	2
20	Spectroscopic Diagnostics of Pulsed Microwave Plasmas used for Nanocrystalline Diamond Growth. Chemical Vapor Deposition, 2008, 14, 173-180.	1.4	7
21	Space- and time-resolved diagnostics of microwave plasma process used for hydrogenated amorphous carbon film coating of PET bottles. Diamond and Related Materials, 2008, 17, 633-640.	1.8	3
22	Structural and chemical characterisation of soot particles formed in Ar/H2/CH4 microwave discharges during nanocrystalline diamond film synthesis. Diamond and Related Materials, 2006, 15, 908-912.	1.8	28
23	Overview of the different aspects in modelling moderate pressure H2and H2/CH4microwave discharges. Plasma Sources Science and Technology, 2006, 15, 117-125.	1.3	31
24	Atomic oxygen surface loss probability on silica in microwave plasmas studied by a pulsed induced fluorescence technique. Plasma Sources Science and Technology, 2006, 15, 479-488.	1.3	50
25	Effects of Pulsed Microwave Plasmas on Diamond Deposition. Journal of the Electrochemical Society, 2003, 150, C311.	1.3	20
26	Scaled-Up Nonequilibrium Air Plasmas. , 2003, , .		2
27	New driving parameters for diamond deposition reactors: pulsed mode versus continuous mode. Materials Research, 2003, 6, 25-37.	0.6	16
28	Time-resolved measurements of the gas temperature in a H2/CH4 medium pressure microwave 915 MHz pulsed plasma. Journal Physics D: Applied Physics, 2002, 35, 1939-1945.	1.3	15
29	DC and pulsed glow discharges in atmospheric pressure air and nitrogen. IEEE Transactions on Plasma Science, 2002, 30, 178-179.	0.6	65
30	On the hydrocarbon chemistry in a H2surface wave discharge containing methane. Plasma Sources Science and Technology, 2001, 10, 52-60.	1.3	35
31	Surface recombination of hydrogen atoms studied by a pulsed plasma excitation technique. Journal of Applied Physics, 2001, 89, 2074-2078.	1.1	35
32	Investigation of chemical kinetics and energy transfer in a pulsed microwave H2/CH4plasma. Plasma Sources Science and Technology, 2001, 10, 61-75.	1.3	53
33	A time resolved laser study of hydrocarbon chemistry in H2-CH4surface wave plasmas. Journal Physics D: Applied Physics, 2001, 34, 2336-2345.	1.3	16
34	Energy coupling efficiency of a hydrogen microwave plasma reactor. Journal of Applied Physics, 2001, 89, 1544.	1.1	12
35	Methyl Concentration Measurements During Microwave Plasma-Assisted Diamond Deposition. Plasma Chemistry and Plasma Processing, 2000, 20, 1-12.	1.1	17
36	Rotational temperature measurements of excited and ground states of C2(dâ€Š3Îgâ€™aâ€Š3Îu) transition in a H2/CH4 915 MHz microwave pulsed plasma. Journal of Applied Physics, 1999, 86, 5299-5301.	1.1	31