

# François Reniers

## List of Publications by Year in descending order

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96  
papers

2,876  
citations

147726

31  
h-index

197736

49  
g-index

100  
all docs

100  
docs citations

100  
times ranked

3006  
citing authors

#	ARTICLE	IF	CITATIONS
1	Revisiting the surface characterization of plasma-modified polymers. <i>Plasma Processes and Polymers</i> , 2022, 19, .	1.6	3
2	Cold atmospheric plasma differentially affects cell renewal and differentiation of stem cells and APC-deficient-derived tumor cells in intestinal organoids. <i>Cell Death Discovery</i> , 2022, 8, 66.	2.0	2
3	Simple and Scalable Chemical Surface Patterning via Direct Deposition from Immobilized Plasma Filaments in a Dielectric Barrier Discharge. <i>Advanced Science</i> , 2022, 9, e2200237.	5.6	4
4	NO <sub>x</sub> synthesis by atmospheric-pressure N <sub>2</sub> /O <sub>2</sub> filamentary DBD plasma over water: Physicochemical mechanisms of plasma-liquid interactions. <i>Plasma Processes and Polymers</i> , 2021, 18, 2000087.	1.6	22
5	Tuning the wicking and wettability properties of PET textiles by DBD or a remote atmospheric RF torch: A comparison. <i>Plasma Processes and Polymers</i> , 2021, 18, 2100005.	1.6	2
6	Gel models to assess distribution and diffusion of reactive species from cold atmospheric plasma: an overview for plasma medicine applications. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 463001.	1.3	8
7	Enhancing the Properties of Photocatalysts via Nonthermal Plasma Modification: Recent Advances, Treatment Variables, Mechanisms, and Perspectives. <i>Industrial &amp; Engineering Chemistry Research</i> , 2021, 60, 16813-16826.	1.8	9
8	Plasma-Catalytic Ammonia Synthesis in a DBD Plasma: Role of Microdischarges and Their Afterglows. <i>Journal of Physical Chemistry C</i> , 2020, 124, 22871-22883.	1.5	52
9	Ready-to-Use Germanium Surfaces for the Development of FTIR-Based Biosensors for Proteins. <i>Langmuir</i> , 2020, 36, 12068-12076.	1.6	16
10	Optical and Electrical Characteristics of an Endoscopic DBD Plasma Jet. <i>Plasma Medicine</i> , 2020, 10, 71-90.	0.2	17
11	Zero-dimensional modeling of unpacked and packed bed dielectric barrier discharges: the role of vibrational kinetics in ammonia synthesis. <i>Plasma Sources Science and Technology</i> , 2020, 29, 045020.	1.3	36
12	Use of remote atmospheric mass spectrometry in atmospheric plasma polymerization of hydrophilic and hydrophobic coatings. <i>Plasma Processes and Polymers</i> , 2020, 17, 1900250.	1.6	4
13	Robust hydrophobic gold, glass and polypropylene surfaces obtained through a nanometric covalently bound organic layer. <i>RSC Advances</i> , 2020, 10, 13553-13561.	1.7	9
14	Improving the atmospheric plasma deposition of crystalline inorganic coatings. <i>Thin Solid Films</i> , 2019, 688, 137437.	0.8	4
15	Atmospheric Pressure Plasma Deposition of Hydrophilic/Phobic Patterns and Thin Film Laminates on Any Surface. <i>Langmuir</i> , 2019, 35, 9677-9683.	1.6	17
16	Elaboration and Characterization of CuO Thin Films by Spray Pyrolysis Method for Gas Sensors Applications. <i>Proceedings (mdpi)</i> , 2019, 14, 55.	0.2	2
17	N-Doped TiO <sub>2</sub> Photocatalyst Coatings Synthesized by a Cold Atmospheric Plasma. <i>Langmuir</i> , 2019, 35, 7161-7168.	1.6	43
18	Ex-situ SIMS characterization of plasma-deposited polystyrene near atmospheric pressure. <i>Applied Surface Science</i> , 2019, 481, 1490-1502.	3.1	3

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19	Energetics of reactions in a dielectric barrier discharge with argon carrier gas: VII anhydrides. <i>Plasma Processes and Polymers</i> , 2019, 16, 1800186.	1.6	4
20	Atmospheric pressure plasma polymerization of organics: effect of the presence and position of double bonds on polymerization mechanisms, plasma stability and coating chemistry. <i>Thin Solid Films</i> , 2019, 671, 64-76.	0.8	14
21	Dry reforming of methane via plasma-catalysis: influence of the catalyst nature supported on alumina in a packed-bed DBD configuration. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 234002.	1.3	31
22	Atmospheric pressure dielectric barrier discharge synthesis of morphology-controllable TiO <sub>2</sub> films with enhanced photocatalytic activity. <i>Thin Solid Films</i> , 2018, 664, 90-99.	0.8	16
23	Routes to increase the conversion and the energy efficiency in the splitting of CO <sub>2</sub> by a dielectric barrier discharge. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 084004.	1.3	74
24	Chemical and physical effect of SiO <sub>2</sub> and TiO <sub>2</sub> nanoparticles on highly hydrophobic fluorocarbon hybrid coatings synthesized by atmospheric plasma. <i>Surface and Coatings Technology</i> , 2017, 315, 274-282.	2.2	13
25	Deposition of photocatalytic anatase titanium dioxide films by atmospheric dielectric barrier discharge. <i>Surface and Coatings Technology</i> , 2017, 310, 173-179.	2.2	24
26	Easy Synthesis of Ageing-Resistant Coatings with Tunable Wettability by Atmospheric Pressure Plasma. <i>Plasma Chemistry and Plasma Processing</i> , 2016, 36, 1239-1252.	1.1	13
27	How do the barrier thickness and dielectric material influence the filamentary mode and CO <sub>2</sub> conversion in a flowing DBD?. <i>Plasma Sources Science and Technology</i> , 2016, 25, 045016.	1.3	71
28	Fuel Cell Electrodes From Organometallic Platinum Precursors: An Easy Atmospheric Plasma Approach. <i>Plasma Processes and Polymers</i> , 2016, 13, 91-104.	1.6	6
29	DBD in burst mode: solution for more efficient CO <sub>2</sub> conversion?. <i>Plasma Sources Science and Technology</i> , 2016, 25, 055005.	1.3	39
30	Deposition Kinetics and Thermal Properties of Atmospheric Plasma Deposited Methacrylate-Like Films. <i>Plasma Processes and Polymers</i> , 2016, 13, 521-533.	1.6	7
31	Synthesis and texturization processes of (super)-hydrophobic fluorinated surfaces by atmospheric plasma. <i>Journal of Materials Research</i> , 2015, 30, 3177-3191.	1.2	32
32	LDPE Surface Modifications Induced by Atmospheric Plasma Torches with Linear and Showerhead Configurations. <i>Plasma Processes and Polymers</i> , 2015, 12, 771-785.	1.6	19
33	Chemical and Physical Effects of the Carrier Gas on the Atmospheric Pressure PECVD of Fluorinated Precursors. <i>Plasma Processes and Polymers</i> , 2015, 12, 1174-1185.	1.6	20
34	Chemical Analysis of Plasma-Treated Organic Surfaces and Plasma Polymers by Secondary Ion Mass Spectrometry. <i>Plasma Processes and Polymers</i> , 2015, 12, 905-918.	1.6	9
35	Epi-fluorescence Microscopy as a Tool for Relative Quantification of the Anti-Biofouling Character of Atmospheric Pressure Plasma-Polymerized Biomaterials. <i>Plasma Processes and Polymers</i> , 2015, 12, 991-1001.	1.6	6
36	Thermal Properties of Plasma Deposited Methyl Methacrylate Films in an Atmospheric DBD Reactor. <i>Plasma Processes and Polymers</i> , 2015, 12, 260-270.	1.6	7

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37	Challenges in the characterization of plasma polymers using XPS. Journal of Electron Spectroscopy and Related Phenomena, 2015, 200, 311-331.	0.8	40
38	Evaluation of the Yasuda parameter for the atmospheric plasma deposition of allyl methacrylate. RSC Advances, 2015, 5, 27449-27457.	1.7	35
39	Low-density polyethylene films treated by an atmospheric Ar/O <sub>2</sub> post-discharge: functionalization, etching, degradation and partial recovery of the native wettability state. Journal Physics D: Applied Physics, 2014, 47, 065203.	1.3	23
40	In-depth diffusion of oxygen into LDPE exposed to an Ar/O <sub>2</sub> atmospheric post-discharge: a complementary approach between Ar-XPS and ToF-SIMS techniques. Surface and Interface Analysis, 2014, 46, 164-174.	0.8	18
41	Incorporation of corrosion inhibitor in plasma polymerized allyl methacrylate coatings and evaluation of its corrosion performance. Surface and Coatings Technology, 2014, 259, 714-724.	2.2	8
42	About the Influence of Double Bonds in the APPECVD of Acrylate-Like Precursors: A Mass Spectrometry Study of the Plasma Phase. Plasma Processes and Polymers, 2014, 11, 335-344.	1.6	18
43	Understanding polyethylene surface functionalization by an atmospheric He/O <sub>2</sub> plasma through combined experiments and simulations. Journal Physics D: Applied Physics, 2014, 47, 224007.	1.3	29
44	Atmospheric plasma synthesized PEG coatings: non-fouling biomaterials showing protein and cell repulsion. Surface and Coatings Technology, 2014, 252, 126-133.	2.2	43
45	Competitive and synergistic effects between excimer VUV radiation and O radicals on the etching mechanisms of polyethylene and fluoropolymer surfaces treated by an atmospheric He/O <sub>2</sub> post-discharge. Journal Physics D: Applied Physics, 2013, 46, 315203.	1.3	18
46	Plasma polymerization of C <sub>4</sub> Cl <sub>6</sub> and C <sub>2</sub> H <sub>2</sub> Cl <sub>4</sub> at atmospheric pressure. Polymer, 2013, 54, 4085-4092.	1.8	27
47	Plasma Polymerization of a Saturated Branched Hydrocarbon. The Case of Heptamethylnonane. Plasma Processes and Polymers, 2013, 10, 51-59.	1.6	15
48	The Impact of Double Bonds in the APPECVD of Acrylate-Like Precursors. Plasma Processes and Polymers, 2013, 10, 857-863.	1.6	27
49	Surface Characterization of Atmospheric Pressure Plasma-Deposited Allyl Methacrylate and Acrylic Acid Based Coatings. Plasma Processes and Polymers, 2013, 10, 564-571.	1.6	27
50	Influence of ambient air on the flowing afterglow of an atmospheric pressure Ar/O <sub>2</sub> radiofrequency plasma. Journal of Applied Physics, 2013, 113, 093303.	1.1	14
51	Plasma diagnostics of an Ar/NH <sub>3</sub> direct-current reactive magnetron sputtering discharge for SiN <sub>x</sub> deposition. Thin Solid Films, 2012, 520, 6386-6392.	0.8	19
52	Chemical mechanisms inducing a dc current measured in the flowing post-discharge of an RF He/O <sub>2</sub> plasma torch. Plasma Sources Science and Technology, 2012, 21, 045013.	1.3	12
53	Synthesis of superhydrophobic PTFE-like thin films by self-nanostructuring in a hybrid plasma process. Surface Science, 2012, 606, 1825-1829.	0.8	32
54	Etching Processes of Polytetrafluoroethylene Surfaces Exposed to He and He/O <sub>2</sub> Atmospheric Post-discharges. Langmuir, 2012, 28, 9466-9474.	1.6	43

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55	Deposition and Characterisation of Plasma Polymerised Allyl Methacrylate Based Coatings. Plasma Processes and Polymers, 2012, 9, 799-807.	1.6	21
56	Synthesis of Membrane-Electrode Assembly for Fuel Cells by Means of (Sub)-Atmospheric Plasma Processes. Plasma Processes and Polymers, 2012, 9, 1144-1153.	1.6	8
57	PTFE Surface Etching in the Post-discharge of a Scanning RF Plasma Torch: Evidence of Ejected Fluorinated Species. Plasma Processes and Polymers, 2012, 9, 820-829.	1.6	25
58	Surface modification of PTFE using an atmospheric pressure plasma jet in argon and argon+CO <sub>2</sub> . Surface and Coatings Technology, 2012, 206, 2226-2232.	2.2	68
59	Atmospheric plasmas for thin film deposition: A critical review. Thin Solid Films, 2012, 520, 4219-4236.	0.8	245
60	Gas sensing properties of multiwall carbon nanotubes decorated with rhodium nanoparticles. Sensors and Actuators B: Chemical, 2011, 160, 974-980.	4.0	68
61	Evidence of covalent bond formation at the silane-metal interface during plasma polymerization of bis-1,2-(triethoxysilyl)ethane (BTSE) on aluminium. Chemical Physics Letters, 2010, 493, 107-112.	1.2	20
62	Comparison between wet deposition and plasma deposition of silane coatings on aluminium. Progress in Organic Coatings, 2010, 69, 126-132.	1.9	36
63	Selective detection of benzene traces at room temperature using metal decorated carbon nanotubes. Procedia Engineering, 2010, 5, 385-388.	1.2	6
64	Room-temperature, selective detection of benzene at trace levels using plasma-treated metal-decorated multiwalled carbon nanotubes. Carbon, 2010, 48, 3477-3484.	5.4	106
65	Plasma-modified polymer surfaces: Characterization using XPS. Journal of Electron Spectroscopy and Related Phenomena, 2010, 178-179, 394-408.	0.8	206
66	Poly(ethylene glycol) Films Deposited by Atmospheric Pressure Plasma Liquid Deposition and Atmospheric Pressure Plasma-Enhanced Chemical Vapour Deposition: Process, Chemical Composition Analysis and Biocompatibility. Plasma Processes and Polymers, 2010, 7, 715-725.	1.6	55
67	One Step Polymerization of Sulfonated Polystyrene Films in a Dielectric Barrier Discharge. Plasma Processes and Polymers, 2010, 7, 836-845.	1.6	39
68	How to increase the hydrophobicity of PTFE surfaces using an r.f. atmospheric-pressure plasma torch. Surface and Interface Analysis, 2010, 42, 1014-1018.	0.8	33
69	Carbon nanotubes decorated with gold, platinum and rhodium clusters by injection of colloidal solutions into the post-discharge of an RF atmospheric plasma. Nanotechnology, 2010, 21, 385603.	1.3	15
70	Evidence of the Synergetic Role of Charged Species and Atomic Oxygen in the Molecular Etching of PTFE Surfaces for Hydrophobic Surface Synthesis. Langmuir, 2010, 26, 16503-16509.	1.6	36
71	Use of a PECVD-PVD process for the deposition of copper containing organosilicon thin films on steel. Applied Surface Science, 2009, 256, S82-S85.	3.1	40
72	Synthesis of Polystyrene Thin Films by Means of an Atmospheric-Pressure Plasma Torch and a Dielectric Barrier Discharge. IEEE Transactions on Plasma Science, 2009, 37, 951-960.	0.6	39

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73	Carbon nanotubes randomly decorated with gold clusters: from nano <sup>2</sup> hybrid atomic structures to gas sensing prototypes. <i>Nanotechnology</i> , 2009, 20, 375501.	1.3	109
74	Characterization of gold nanoclusters deposited on HOPG by atmospheric plasma treatment. <i>Surface and Interface Analysis</i> , 2008, 40, 566-570.	0.8	16
75	Characterisation of the silicon nitride thin films deposited by plasma magnetron. <i>Surface and Interface Analysis</i> , 2008, 40, 754-757.	0.8	35
76	Plasma-Modified PTFE for Biological Applications: Correlation between Protein-Resistant Properties and Surface Characteristics. <i>Plasma Processes and Polymers</i> , 2008, 5, 661-671.	1.6	59
77	Auger and photoelectron relaxation energy in aluminum compounds: A cluster model. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2007, 159, 1-7.	0.8	2
78	XPS and contact angle study of N <sub>2</sub> and O <sub>2</sub> plasma-modified PTFE, PVDF and PVF surfaces. <i>Surface and Interface Analysis</i> , 2006, 38, 526-530.	0.8	76
79	New improvements in energy and spatial (x, y, z) resolution in AES and XPS applications. <i>Journal of Electron Spectroscopy and Related Phenomena</i> , 2005, 142, 1-25.	0.8	60
80	Selected Effect of the Ions and the Neutrals in the Plasma Treatment of PTFE Surfaces: An OES-AFM-Contact Angle and XPS Study. <i>Plasma Processes and Polymers</i> , 2005, 2, 493-500.	1.6	40
81	Experimental and theoretical study of CVV Auger peaks of selected aluminium and carbon compounds. <i>Surface and Interface Analysis</i> , 2004, 36, 798-800.	0.8	4
82	Surface characterization of plasma-treated PTFE surfaces: an OES, XPS and contact angle study. <i>Surface and Interface Analysis</i> , 2004, 36, 1027-1031.	0.8	31
83	Surface composition of CuAu single crystal electrodes determined by a coupled UHV electrochemical approach and a Monte-Carlo simulation. <i>Surface and Interface Analysis</i> , 2004, 36, 1078-1082.	0.8	10
84	AES analysis of nitride layers on steel with target factor analysis. <i>Surface and Interface Analysis</i> , 2004, 36, 1093-1097.	0.8	7
85	A Comparison of PE Surfaces Modified by Plasma Generated Neutral Nitrogen Species and Nitrogen Ions. <i>Plasmas and Polymers</i> , 2003, 8, 119-134.	1.5	62
86	Chemical effects in Auger electron spectra of aluminium. <i>Surface and Interface Analysis</i> , 2002, 34, 356-359.	0.8	19
87	UHV-liquid cell transfer system for Auger electron spectroscopy on electrodes. <i>Surface and Interface Analysis</i> , 2002, 34, 623-627.	0.8	6
88	On the electrochemical adsorption of KBr on gold (100); a LEIS Auger study. <i>Surface Science</i> , 1999, 433-435, 12-16.	0.8	12
89	Synthesis and characterisation of chromium carbides. <i>Applied Surface Science</i> , 1997, 120, 85-93.	3.1	52
90	Glow discharge sputtering deposition of thin films of Ag, Cr, Cu, Ni, Pd, Rh and their binary alloys onto NaCl and MgO Experimental parameters and epitaxy. <i>Applied Surface Science</i> , 1996, 92, 35-42.	3.1	39

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91	Composition and structure of reactively sputter-deposited molybdenum-carbon films. Thin Solid Films, 1996, 287, 25-31.	0.8	9
92	Use of matrix corrections in the calculation of surface composition of AgPd alloys in auger electron spectroscopy. Surface and Interface Analysis, 1995, 23, 374-380.	0.8	11
93	Factor analysis as a tool to deconvolute auger spectra of tungsten nitrides and carbides. Surface and Interface Analysis, 1994, 21, 483-489.	0.8	11
94	Deposition by glow discharge sputtering of thin epitaxial films of Ibâ€“VIII alloys (AgPd, CuPd, CuRh). Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1993, 11, 1510-1515.	0.9	5
95	Study of epitaxial films of Ag, Pd and AgPd deposited by dc sputtering. Microscopy Microanalysis Microstructures, 1990, 1, 189-197.	0.4	5
96	Preparation and characterization of epitaxial films of silver, palladium and Ag-Pd alloys deposited by glow discharge sputtering I: Onto NaCl single-crystal substrates. Thin Solid Films, 1989, 170, 41-47.	0.8	15