Jean-Michel Pouvesle

List of Publications by Year
in descending order

126	3,974	147801 31	123424 61
papers	citations	h-index	g-index

130	130	130	2565
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	ROS implication in a new antitumor strategy based on nonâ€thermal plasma. International Journal of Cancer, 2012, 130, 2185-2194.	5.1	520
2	Antitumor Effect of Plasma Treatment on U87 Glioma Xenografts: Preliminary Results. Plasma Processes and Polymers, 2010, 7, 264-273.	3.0	236
3	Clinical experience with cold plasma in the treatment of locally advanced head and neck cancer. Clinical Plasma Medicine, 2018, 9, 6-13.	3.2	236
4	Effects of a Non Thermal Plasma Treatment Alone or in Combination with Gemcitabine in a MIA PaCa2-luc Orthotopic Pancreatic Carcinoma Model. PLoS ONE, 2012, 7, e52653.	2.5	207
5	New insights on the propagation of pulsed atmospheric plasma streams: From single jet to multi jet arrays. Physics of Plasmas, 2015, 22, .	1.9	159
6	Numerical and experimental study of the dynamics of aÎ¼s helium plasma gun discharge with various amounts of N₂admixture. Plasma Sources Science and Technology, 2016, 25, 035002.	3.1	140
7	[OH(X)] measurements by resonant absorption spectroscopy in a pulsed dielectric barrier discharge. Journal of Applied Physics, 1999, 85, 7070-7075.	2.5	131
8	LIF and fast imaging plasma jet characterization relevant for NTP biomedical applications. Journal Physics D: Applied Physics, 2014, 47, 275401.	2.8	121
9	Rotational temperature measurements in atmospheric pulsed dielectric barrier discharge - gas temperature and molecular fraction effects. Journal Physics D: Applied Physics, 2000, 33, 1493-1498.	2.8	119
10	Response of Human Glioma U87 Xenografted on Mice to Non Thermal Plasma Treatment. Plasma Medicine, 2011, 1, 27-43.	0.6	115
11	Experimental study of a DBD surface discharge for the active control of subsonic airflow. Journal Physics D: Applied Physics, 2008, 41, 155201.	2.8	111
12	Modeling of the charge transfer afterglow excited by intense electrical discharges in high pressure helium nitrogen mixtures. Journal of Chemical Physics, 1982, 77, 817-825.	3.0	103
13	NOx remediation in oxygen-rich exhaust gas using atmospheric pressure non-thermal plasma generated by a pulsed nanosecond dielectric barrier discharge. Journal Physics D: Applied Physics, 2002, 35, 1491-1498.	2.8	96
14	Perspectives of endoscopic plasma applications. Clinical Plasma Medicine, 2013, 1, 8-16.	3.2	96
15	The emerging potential of cold atmospheric plasma in skin biology. Free Radical Biology and Medicine, 2020, 161, 290-304.	2.9	96
16	Plasma jet-induced tissue oxygenation: potentialities for new therapeutic strategies. Plasma Sources Science and Technology, 2014, 23, 012005.	3.1	90
17	Reaction kinetics of a high pressure helium fast discharge afterglow. Journal of Chemical Physics, 1982, 76, 4006-4015.	3.0	82
18	Plasma action on helium flow in cold atmospheric pressure plasma jet experiments. Plasma Sources Science and Technology, 2017, 26, 105001.	3.1	73

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19	Atmospheric-pressure plasma transfer across dielectric channels and tubes. Journal Physics D: Applied Physics, 2013, 46, 155203.	2.8	59
20	Dynamics of ionization wave splitting and merging of atmospheric-pressure plasmas in branched dielectric tubes and channels. Journal Physics D: Applied Physics, 2012, 45, 275201.	2.8	55
21	Cold Atmospheric Plasma Parameters Investigation for Efficient Drug Delivery in HeLa Cells. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 109-115.	3.7	47
22	New insights on molecular internalization and drug delivery following plasma jet exposures. International Journal of Pharmaceutics, 2020, 589, 119874.	5.2	47
23	Anti-Bacterial Action of Plasma Multi-Jets in the Context of Chronic Wound Healing. Applied Sciences (Switzerland), 2021, 11, 9598.	2.5	46
24	Cell Electropermeabilisation Enhancement by Non-Thermal-Plasma-Treated PBS. Cancers, 2020, 12, 219.	3.7	44
25	Plasma and Aerosols: Challenges, Opportunities and Perspectives. Applied Sciences (Switzerland), 2019, 9, 3861.	2.5	43
26	Innovative non-thermal plasma disinfection process inside sealed bags: Assessment of bactericidal and sporicidal effectiveness in regard to current sterilization norms. PLoS ONE, 2017, 12, e0180183.	2.5	43
27	Study of twoâ€body and threeâ€body channels for the reaction of metastable helium atoms with selected atomic and molecular species. Journal of Chemical Physics, 1988, 88, 3061-3071.	3.0	38
28	A DC corona discharge on a flat plate to induce air movement. Journal of Electrostatics, 2007, 65, 655-659.	1.9	38
29	Cold atmospheric single plasma jet for RONS delivery on large biological surfaces. Plasma Sources Science and Technology, 2020, 29, 105002.	3.1	38
30	Theoretical study of the electronic structure of Ar++2. Journal of Chemical Physics, 1992, 96, 6085-6092.	3.0	37
31	Study of a fast ablative capillary discharge dedicated to soft x-ray production. Review of Scientific Instruments, 2000, 71, 15-19.	1.3	34
32	Tunable synchrotron radiation used to induce Î³-emission from the 31 year isomer of 178 Hf. Europhysics Letters, 2002, 57, 677-682.	2.0	31
33	Splitting and Mixing of High-Velocity Ionization-Wave-Sustained Atmospheric-Pressure Plasmas Generated With a Plasma Gun. IEEE Transactions on Plasma Science, 2011, 39, 2356-2357.	1.3	31
34	Î³emission from the 31-yr isomer of178Hfinduced by x-ray irradiation. Physical Review C, 2000, 61, .	2.9	30
35	High repetition rate compact source of nanosecond pulses of 5â€“100 keV x-ray photons. Review of Scientific Instruments, 1997, 68, 2292-2297.	1.3	27
36	Ionization wave propagation in an atmospheric pressure plasma multi-jet. Plasma Sources Science and Technology, 2019, 28, 125009.	3.1	26

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37	Fluorescence of high-pressure argon excited by an energetic flash X-ray source. Journal Physics D: Applied Physics, 1990, 23, 984-986.	2.8	24
38	Theoretical study of the Rydberg excited electronic states of Ar+2. Journal of Chemical Physics, 1992, 96, 6093-6103.	3.0	24
39	Time-resolved spectroscopy of high pressure rare gases excited by an energetic flash X-ray source. Optics Communications, 1995, 117, 179-188.	2.1	23
40	Title is missing!. Plasma Chemistry and Plasma Processing, 1997, 17, 393-407.	2.4	23
41	A novel fast capillary discharge system emitting intense EUV radiation. Microelectronic Engineering, 2003, 65, 47-59.	2.4	23
42	Cold atmospheric plasma-induced acidification of tissue surface: visualization and quantification using agarose gel models. Journal Physics D: Applied Physics, 2019, 52, 24LT01.	2.8	22
43	Spectroscopic study of the afterglow excited by intense electrical discharges in highâ€pressure helium hydrogen mixtures. Journal of Chemical Physics, 1985, 83, 1095-1100.	3.0	21
44	Changes in Oxygen Level Upon Cold Plasma Treatments: Consequences for RONS Production. IEEE Transactions on Radiation and Plasma Medical Sciences, 2018, 2, 147-152.	3.7	20
45	Reactivity of metastable helium molecules in atmospheric pressure afterglows. Journal of Chemical Physics, 1985, 83, 2836-2839.	3.0	19
46	Gamma-Ray Transitions Induced in Nuclear Spin Isomers by X-Rays. Hyperfine Interactions, 2001, 135, 51-70.	0.5	19
47	Helical Plasma Propagation of Microsecond Plasma Gun Discharges. IEEE Transactions on Plasma Science, 2014, 42, 2506-2507.	1.3	19
48	Study of twoâ€body and threeâ€body channels for the reaction of metastable helium atoms with nitrogen. Journal of Chemical Physics, 1985, 82, 2274-2279.	3.0	18
49	Third continuum of argon in high pressure plasmas excited by dielectric controlled discharge. Optics Communications, 1990, 79, 41-44.	2.1	18
50	Unexpected Plasma Plume Shapes Produced by a Microsecond Plasma Gun Discharge. IEEE Transactions on Plasma Science, 2014, 42, 2504-2505.	1.3	17
51	Nuclear resonance spectroscopy of the 31-yr isomer of Hf-178. Laser Physics Letters, 2005, 2, 162-167.	1.4	15
52	Compact flash xâ€ray source producing high average powers in nanosecond pulses. Review of Scientific Instruments, 1993, 64, 2320-2325.	1.3	14
53	Evidence, origin and impact of liquid flows in plasma medicine in vitro treatments with APPJs. Plasma Sources Science and Technology, 2021, 30, 015002.	3.1	13
54	The importance of three-body processes to reaction kinetics at atmospheric pressures--I: Archetype reactions of He species with N<inf>2</inf>. IEEE Journal of Quantum Electronics, 1986, 22, 38-46.	1.9	12

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55	Flash x-ray radiography of argon jets in ambient air. Measurement Science and Technology, 1998, 9, 1537-1542.	2.6	12
56	Energy deposition effect on the NOx remediation in oxidative media using atmospheric non thermal plasmas. EPJ Applied Physics, 2006, 33, 195-198.	0.7	12
57	Study of pulsed neonâ€“xenon VUV radiating low pressure plasmas for mercury free fluorescent sign optimization. Journal Physics D: Applied Physics, 2010, 43, 135202.	2.8	12
58	Time-resolved spatial distribution of an ablative capillary discharge obtained with a pinhole camera. Journal Physics D: Applied Physics, 2000, 33, 1837-1842.	2.8	11
59	Spectroscopic and electrical study of rare-gas-based, hollow cathode luminescent discharges: Application to the lifetime and efficiency enhancement of mercury-free signs. Pure and Applied Chemistry, 2005, 77, 463-474.	1.9	11
60	Plasmaâ€“liquid interactions. Journal of Applied Physics, 2021, 130, .	2.5	11
61	Study of the gamma emission from the 31-yr isomer of 178Hf induced by x-ray irradiation. Physics of Atomic Nuclei, 2000, 63, 2067-2072.	0.4	10
62	Discharge-based sources of XUV-X radiations: development and applications. Plasma Sources Science and Technology, 2003, 12, S43-S50.	3.1	9
63	Experimental Study of a Gas Jet Generated by an Atmospheric Microcavity Discharge. IEEE Transactions on Plasma Science, 2012, 40, 2817-2821.	1.3	7
64	Modeling of high-pressure rare gas plasmas excited by an energetic flash X-ray source. IEEE Journal of Quantum Electronics, 1997, 33, 2119-2127.	1.9	6
65	<title>Spectroscopic and energetic investigation of capillary discharges devoted to EUV production for new lithography generation</title>. , 2001, 4343, 566.		6
66	Simultaneous flash x-ray induced fluorescence imaging and radiography of argon jets in ambient air. Measurement Science and Technology, 1999, 10, 789-795.	2.6	5
67	Time resolved diagnostics of plasmas in polyacetal ablative capillary discharges. Physics Letters, Section A: General, Atomic and Solid State Physics, 2002, 299, 571-576.	2.1	5
68	CAPELLA: a kHz and low-debris capillary discharge EUV source. , 2002, 4688, 672.		4
69	Ozone Production by an Ultra-Short Triggered Dielectric Barrier Discharge.. Ozone: Science and Engineering, 2002, 24, 203-213.	2.5	4
70	Recent progress in EUV source development at GREMI. Microelectronic Engineering, 2002, 61-62, 179-185.	2.4	4
71	Investigations of silicon oxide UV emission in a non-thermal atmospheric plasmaâ€”comparison with synthetic spectra. Journal Physics D: Applied Physics, 2003, 36, 2060-2066.	2.8	4
72	Absolute silicon monoxide density measurement by self-absorbed spectroscopy in a non-thermal atmospheric plasma. Journal Physics D: Applied Physics, 2004, 37, 1750-1758.	2.8	4

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73	The importance of three-body processes to reaction kinetics at atmospheric pressures. III. Reactions of He/sub 2/+/sup +/ with selected atomic and molecular reactants. IEEE Journal of Quantum Electronics, 1988, 24, 568-572.	1.9	3
74	Applications thÃ©rapeutiques des plasmas froids atmosphÃ©riques. , 2013, , 17-22.	0.1	3
75	The importance of three-body processes to reaction kinetics at atmospheric pressures--II: Occlusive effects of discharge morphology. IEEE Journal of Quantum Electronics, 1986, 22, 47-50.	1.9	2
76	Reactions of He(2â€‰3S) with argon at atmospheric pressures. Journal of Chemical Physics, 1986, 85, 2338-2340.	3.0	2
77	Capillary discharge sources of hard UV radiation. Plasma Sources Science and Technology, 2002, 11, A64-A68.	3.1	2
78	Non Thermal Plasma NOx Remediation: From Binary Gas Mixture to Lean-Burn Gasoline and Diesel Engine Exhaust. Journal of Advanced Oxidation Technologies, 2005, 8, .	0.5	2
79	Experimental Study Of An Ultra-Fast Atmospheric Pressure Air Discharge In A Pin-To-Plate Geometry. , 2017, , .		2
80	Palliative Treatment of Head and Neck Cancer. , 2018, , 185-195.		2
81	Sources flash X compactes Ã haut taux de rÃ©pÃ©tition. European Physical Journal Special Topics, 1996, 06, C4-747-C4-753.	0.2	2
82	X-ray diagnostics of the near injector zone of cryogenic nitrogen jets at supercritical pressures. , 2003, , .		2
83	Dynamics and Emission Characteristics of Xenon Capillary Discharge. AIP Conference Proceedings, 2002, , .	0.4	1
84	Time-resolved postdischarge absolute silicon monoxide density measurement by resonant absorption spectroscopy in a nonthermal atmospheric plasma. Journal of Applied Physics, 2006, 100, 093301.	2.5	1
85	Potentialities of neon xenon pulsed discharges for publicity and architectural lighting. , 2008, , .		1
86	Experimental study of ultra-fast electric field in an atmospheric pressure discharge in a pin-to-plate geometry. , 2016, , .		1
87	Guest Editorial The Third Special Issue on Atmospheric Pressure Plasma Jets and Their Applications. IEEE Transactions on Plasma Science, 2019, 47, 4773-4773.	1.3	1
88	CaractÃ©risation d'une dÃ©charge rapide dans Hg pur. Annales De Physique, 1992, 17, 73-75.	0.2	1
89	Source flash X compacte impulsionnelle Ã haut taux de rÃ©pÃ©tition. Annales De Physique, 1994, 19, C1-167-C1-168.	0.2	1
90	Impulsions nanosecondes de rayons X durs Ã haut taux de rÃ©currence et en mode rafale Ã partir d'un systÃ¨me compact et facilement transportable. European Physical Journal Special Topics, 1999, 09, Pr5-45-Pr5-46.	0.2	1

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91	CaractÃ©risation du seuil d'ablation des parois dans les sources de rayonnement EUV par dÃ©charge capillaire. European Physical Journal Special Topics, 2005, 127, 157-162.	0.2	1
92	The use of selected monochromatic X-rays to induce a cascade of gamma transitions from the 31-year nuclear isomer to the 4 second isomeric state of Hf-178. European Physical Journal Special Topics, 2005, 127, 163-168.	0.2	1
93	Mesure de la concentration absolue de SiO parÂspectroscopie d'absorption UV. European Physical Journal Special Topics, 2003, 108, 131-134.	0.2	1
94	Characterization and optimization of a flash-X-ray source for diagnostic of dense sprays. , 2009, , .		1
95	Fluorescence des gaz rares Ã haute pression excitÃ©s par flash X rapide. Annales De Physique, 1994, 19, C1-9-C1-16.	0.2	1
96	Approche de l'interaction laser UV - cible liquide par ombroscopie X. Annales De Physique, 1994, 19, C1-47-C1-48.	0.2	1
97	Mesure de la densitÃ© de 'OH(X) par Absorption d'un Rayonnement UV ExtÃ©rieur Auto-accordÃ© (AREA). European Physical Journal Special Topics, 1999, 09, PR5-121-PR5-122.	0.2	0
98	Molecular-ion continua of the radiation emitted by rare gas plasmas. Quantum Electronics, 1999, 29, 989-994.	1.0	0
99	Spectroscopic study of an ablative capillary discharge dedicated to the development of a soft x-ray amplifier. , 1999, , .		0
100	Development of a Blumlein generator dedicated to a fast-capillary discharge XUV source. , 1999, , .		0
101	Comparative study of x-ray-flash-, e-beam-, and ion-beam-induced molecular ion continua fluorescence of rare gases. , 2000, 4071, 240.		0
102	<title>Spray and gaseous jet diagnostics using x-ray-induced fluorescence imaging and flash radiography</title>. , 2001, , .		0
103	Development of a 10-kHz capillary discharge EUV lamp. , 2003, , .		0
104	Experimental study and development of a single-focus-burst x-ray flash. , 2003, 4948, 598.		0
105	Ã‰tude thÃ©orique et expÃ©rimentale d'une source EUV par dÃ©charge capillaire. European Physical Journal Special Topics, 2003, 108, 263-266.	0.2	0
106	Energetic Photons From Transient Plasma Discharges. AIP Conference Proceedings, 2008, , .	0.4	0
107	CAPELLA : A versatile laboratory soft X-ray source. European Physical Journal Special Topics, 2003, 104, 135-135.	0.2	0
108	CAPELLA : une source de rayonnement extrÃªme UV Ã 13.5 nm par dÃ©charge capillaire. European Physical Journal Special Topics, 2003, 108, 259-262.	0.2	0

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109	Ã‰tude et dÃ©veloppement d'un flash X rafale Ã foyer unique. European Physical Journal Special Topics, 2003, 108, 183-186.	0.2	0
110	Diagnostic X de la zone proche injecteur d'un jet cryogÃ©nique d'azote sous haute pression. European Physical Journal Special Topics, 2003, 108, 187-190.	0.2	0
111	Source par dÃ©charge capillaire pour la lithographie EUV. European Physical Journal Special Topics, 2003, 108, 169-172.	0.2	0
112	INVESTIGATION OF A SURFACE DIELECTRIC BARRIER DISCHARGE DEDICATED TO BOUNDARY LAYER CONTROL. High Temperature Material Processes, 2009, 13, 93-105.	0.6	0
113	Abstract 2839: Antitumor activity on colorectal and pancreatic tumors of a new strategy based on ROS generation by non-thermal plasma. , 2012, , .		0
114	Continu d'Ã©mission UV-VUV du nÃ©on dans des plasmas Ã haute pression. Annales De Physique, 1992, 17, 77-78.	0.2	0
115	Etude, caractÃ©risation et optimisation de lampes flash microseconde et submicroseconde dans le domaine 200-300 nm. Annales De Physique, 1992, 17, 79-80.	0.2	0
116	GÃ©nÃ©ration d'UV-X mous par dÃ©charge Ã©lectrique. Annales De Physique, 1992, 17, 229-230.	0.2	0
117	CaractÃ©risation spectroscopique d'un plasma de CH₄+CO₂ obtenu par dÃ©charge Ã barriÃ¨re diÃ©lectrique. Annales De Physique, 1994, 19, C1-157-C1-158.	0.2	0
118	GÃ©nÃ©ration de rayonnement X cohÃ©rent et incohÃ©rent par dÃ©charges et micro-dÃ©charges capillaires : progrÃ¨s rÃ©cents et perspectives. Annales De Physique, 1997, 22, C1-53-C1-60.	0.2	0
119	DÃ©pÃ´t d'Ã©nergie par rayonnement X dans les gaz rares Ã haute pression. Annales De Physique, 1997, 22, C1-135-C1-136.	0.2	0
120	Ã‰tude paramÃ©trique d'une source X impulsionnelle crÃ©Ã©e par dÃ©charge rapide THT dans le vide ou dans les gaz basse pression. Annales De Physique, 1997, 22, C1-71-C1-72.	0.2	0
121	SPHINX : gÃ©nÃ©rateur de rayons X pulsÃ©s, ultra-compact Ã cadence Ã©levÃ©e. Annales De Physique, 1997, 22, C1-77-C1-78.	0.2	0
122	Mesure de la tempÃ©rature rotationnelle de OH par spectroscopie UV dans une D.B.D. T.H.T. impulsionnelle. Annales De Physique, 1997, 22, C1-129-C1-130.	0.2	0
123	Effets de l'action synchronisÃ©e d'une source VUV et d'une dÃ©charge DBD impulsionnelles dÃ©clenchÃ©es sur la production d'espÃ¨ces oxydantes. European Physical Journal Special Topics, 1999, 09, Pr5-85-Pr5-86.	0.2	0
124	DÃ©charges capillaires pour la production de rayonnement X-mou cohÃ©rent et incohÃ©rent. European Physical Journal Special Topics, 1999, 09, Pr5-35-Pr5-38.	0.2	0
125	CaractÃ©risation de jets gazeux par radiographie Ã©clair et Fluorescence Induite par flash X (F.I.X.). European Physical Journal Special Topics, 1999, 09, Pr5-83-Pr5-84.	0.2	0
126	Production d'impulsions de photons dans l'UV-VUV. European Physical Journal Special Topics, 1999, 09, Pr5-13-Pr5-14.	0.2	0