Dingxin Liu

List of Publications by Year
in descending order

90	1,672	304743	345221
papers	citations	22 h-index	36 g-index

93	93	93	1284
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mechanism of Virus Inactivation by Cold Atmospheric-Pressure Plasma and Plasma-Activated Water. Applied and Environmental Microbiology, 2018, 84, .	3.1	182
2	Plasma-activated water: An alternative disinfectant for S protein inactivation to prevent SARS-CoV-2 infection. Chemical Engineering Journal, 2021, 421, 127742.	12.7	109
3	1-D fluid model of atmospheric-pressure rf He+O2 cold plasmas: Parametric study and critical evaluation. Physics of Plasmas, 2011, 18, .	1.9	64
4	Production of simplex RNS and ROS by nanosecond pulse N₂/O₂plasma jets with homogeneous shielding gas for inducing myeloma cell apoptosis. Journal Physics D: Applied Physics, 2017, 50, 195204.	2.8	56
5	Investigation on the placement effect of UHF sensor and propagation characteristics of PD-induced electromagnetic wave in GIS based on FDTD method. IEEE Transactions on Dielectrics and Electrical Insulation, 2014, 21, 1015-1025.	2.9	53
6	Dielectric breakdown properties of hot SF6-CO2 mixtures at temperatures of 300â€“3500â€‰K and pressures of 0.01â€“1.0â€‰MPa. Physics of Plasmas, 2014, 21, .	1.9	51
7	The effects of cold atmospheric plasma on cell adhesion, differentiation, migration, apoptosis and drug sensitivity of multiple myeloma. Biochemical and Biophysical Research Communications, 2016, 473, 1125-1132.	2.1	49
8	Spatialâ€temporal distributions of ROS in model tissues treated by a He+O₂ plasma jet. Plasma Processes and Polymers, 2018, 15, 1800057.	3.0	43
9	Mode transition of air surface micro-discharge and its effect on the water activation and antibacterial activity. Plasma Sources Science and Technology, 2020, 29, 095013.	3.1	42
10	Gas Plasma Pre-treatment Increases Antibiotic Sensitivity and Persister Eradication in Methicillin-Resistant Staphylococcus aureus. Frontiers in Microbiology, 2018, 9, 537.	3.5	41
11	Main species and chemical pathways in cold atmospheric-pressure Ar + H₂O plasmas. Plasma Sources Science and Technology, 2017, 26, 045009.	3.1	39
12	Analysis of the production mechanism of H₂O₂ in water treated by helium DC plasma jets. Journal Physics D: Applied Physics, 2018, 51, 325201.	2.8	39
13	A â€˜tissue modelâ€™ to study the barrier effects of living tissues on the reactive species generated by surface air discharge. Journal Physics D: Applied Physics, 2016, 49, 205204.	2.8	38
14	Plasma-activated thermosensitive biogel as an exogenous ROS carrier for post-surgical treatment of cancer. Biomaterials, 2021, 276, 121057.	11.4	37
15	Contrasting characteristics of aqueous reactive species induced by cross-field and linear-field plasma jets. Journal Physics D: Applied Physics, 2017, 50, 245201.	2.8	32
16	Decoupling analysis of the production mechanism of aqueous reactive species induced by a helium plasma jet. Plasma Sources Science and Technology, 2019, 28, 025001.	3.1	32
17	The mechanism of plasma-assisted penetration of NO2â˜ in model tissues. Applied Physics Letters, 2017, 111, .	3.3	28
18	Quantifying the concentration and penetration depth of long-lived RONS in plasma-activated water by UV absorption spectroscopy. AIP Advances, 2019, 9, .	1.3	28

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19	Cold atmospheric plasma as a potential tool for multiple myeloma treatment. Oncotarget, 2018, 9, 18002-18017.	1.8	28
20	A dominant role of oxygen additive on cold atmospheric-pressure He + O2 plasmas. Physics of Plasmas, 2014, 21, .	1.9	26
21	Global model of an atmospheric-pressure capacitive discharge in helium with air impurities from 100 to 10 000 ppm. Plasma Sources Science and Technology, 2019, 28, 035006.	3.1	26
22	Comparison between the water activation effects by pulsed and sinusoidal helium plasma jets. Physics of Plasmas, 2018, 25, .	1.9	22
23	Aqueous Reactive Oxygen Species Induced by HeÂ+ÂO2 Plasmas: Chemistry Pathways and Dosage Control Approaches. Plasma Chemistry and Plasma Processing, 2018, 38, 89-105.	2.4	22
24	Two modes of interfacial pattern formation by atmospheric pressure helium plasma jet-ITO interactions under positive and negative polarity. Journal Physics D: Applied Physics, 2017, 50, 195203.	2.8	21
25	Production and correlation of reactive oxygen and nitrogen species in gas- and liquid-phase generated by helium plasma jets under different pulse widths. Physics of Plasmas, 2018, 25, 013528.	1.9	21
26	Effects of the Pulse Polarity on Helium Plasma Jets: Discharge Characteristics, Key Reactive Species, and Inactivation of Myeloma Cell. Plasma Chemistry and Plasma Processing, 2018, 38, 953-968.	2.4	21
27	Investigation on the RONS and bactericidal effects induced by He + O2 cold plasma jets: In open air and in an airtight chamber. Physics of Plasmas, 2018, 25, .	1.9	18
28	Evaluation of the anticancer effects induced by cold atmospheric plasma in 2D and 3D cellâ€culture models. Plasma Processes and Polymers, 2019, 16, 1900072.	3.0	18
29	The effect of gas additives on reactive species and bacterial inactivation by a helium plasma jet. Plasma Science and Technology, 2019, 21, 115502.	1.5	17
30	Investigation ofÂthe chemical characteristics and anticancer effect of plasmaâ€activated water: The effect of liquid temperature. Plasma Processes and Polymers, 2022, 19, .	3.0	17
31	A novel designed 3D multi-microhole plasma jet device driven by nanosecond pulse at atmospheric pressure. Plasma Sources Science and Technology, 2022, 31, 05LT03.	3.1	16
32	Variable radio-frequency cold atmospheric He + O₂discharges: from electron-heating mechanism to reactive species delivery. Journal Physics D: Applied Physics, 2013, 46, 415201.	2.8	15
33	NO2- and NO3- enhance cold atmospheric plasma induced cancer cell death by generation of ONOO-. AIP Advances, 2018, 8, 105219.	1.3	15
34	Eradication of methicillin-resistantStaphylococcus aureusbiofilms by surface discharge plasmas with various working gases. Journal Physics D: Applied Physics, 2019, 52, 425202.	2.8	15
35	Surface air discharge used for biomedicine: the positive correlation among gaseous NO₃, aqueous O₂ ^{â^'}/ONOO^{â^'} and biological effects. Journal Physics D: Applied Physics, 2021, 54, 495201.	2.8	15
36	Combination of NO_x mode and O₃ mode air discharges for water activation to produce a potent disinfectant. Plasma Sources Science and Technology, 2022, 31, 05LT01.	3.1	15

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37	Discharge Plasma-Activated Saline Protects Against Abdominal Sepsis by Promoting Bacterial Clearance. Shock, 2019, 52, 92-101.	2.1	14
38	Using cold atmospheric plasma treated-air for COVID-19 disinfection in cold-chain environment. Journal Physics D: Applied Physics, 2021, 54, 40LT01.	2.8	14
39	Inactivation of myeloma cancer cells by helium and argon plasma jets: The effect comparison and the key reactive species. Physics of Plasmas, 2018, 25, .	1.9	13
40	The bactericidal effects of plasma-activated saline prepared by the combination of surface discharge plasma and plasma jet. Journal Physics D: Applied Physics, 2021, 54, 385202.	2.8	13
41	A New Plasma Jet Array Source: Discharge Characteristics and Mechanism. IEEE Transactions on Plasma Science, 2016, 44, 2648-2652.	1.3	12
42	Discharge characteristics and bactericidal mechanism of Ar plasma jet with ethanol and oxygen gas admixtures. Plasma Sources Science and Technology, 2019, 28, 125005.	3.1	12
43	Reactive species in cold atmospheric-pressure He+Air plasmas: The influence of humidity. Physics of Plasmas, 2019, 26, .	1.9	11
44	Dynamic analysis of absorbance behavior and peak shift of RONS in plasma-activated water by UV absorption spectroscopy: dependency on gas impurity, pulse polarity, and solution pH. Journal Physics D: Applied Physics, 2021, 54, 015202.	2.8	11
45	A New Surface Discharge Source: Plasma Characteristics and Delivery of Reactive Species. IEEE Transactions on Plasma Science, 2016, 44, 3295-3301.	1.3	10
46	The mechanism of plasma plume termination for pulse-excited plasmas in a quartz tube. Applied Physics Letters, 2017, 111, .	3.3	10
47	Investigation of mode interconversion for interfacial pattern formation through plasmaâ€“surface interaction. Plasma Processes and Polymers, 2019, 16, 1900108.	3.0	10
48	Transportation of ROS in model tissues treated by an Arâ€‰â€‰+â€‰â€‰O₂ plasma jet. Journal Physics D: Applied Physics, 2019, 52, 045204.	2.8	10
49	1D fluid model of RF-excited cold atmospheric plasmas in helium with air gas impurities. Physics of Plasmas, 2020, 27, .	1.9	10
50	Synergistic anticancer effects of different combinations of He+O 2 plasma jet and doxorubicin on A375 melanoma cells. Plasma Processes and Polymers, 2021, 18, 2000239.	3.0	10
51	Modeling study of the indirect treatment of phosphate buffered saline in surface air plasma. Journal Physics D: Applied Physics, 2021, 54, 065203.	2.8	10
52	The effect of ethanol gas impurity on the discharge mode and discharge products of argon plasma jet at atmospheric pressure. Plasma Sources Science and Technology, 2018, 27, 055001.	3.1	9
53	Nitrox surface discharge used for water activation: the reactive species and their correlation to the bactericidal effect. Journal Physics D: Applied Physics, 2022, 55, 265203.	2.8	9
54	Experimental investigation of behavior of bullets dynamics and production of RONS in helium APPJs-liquid interaction: The effect of additive gas components. Physics of Plasmas, 2019, 26, .	1.9	8

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55	Numerical simulation of the Trichel pulse characteristics in SF₆/N₂ gas mixtures. Physics of Plasmas, 2020, 27, 113508.	1.9	8
56	Study of the anticancer effects of a helium plasma jet combined with four anticancer drugs on 3D bladder tumour spheroids. Plasma Processes and Polymers, 2021, 18, 2000226.	3.0	8
57	Antitumor effects of hyperthermia with plasmaâ€treated solutions on 3D bladder tumor spheroids. Plasma Processes and Polymers, 2021, 18, 2100070.	3.0	8
58	Discharge mode transition in a He/Ar atmospheric pressure plasma jet and its inactivation effect against tumor cells in vitro. Journal of Applied Physics, 2021, 130, .	2.5	8
59	Fluid model of plasmaâ€“liquid interaction: The effect of interfacial boundary conditions and Henryâ€™s law constants. AIP Advances, 2021, 11, .	1.3	7
60	Study on the anticancer effects of a 7 Î¼m sized helium plasma jet on micro-tumors. Journal Physics D: Applied Physics, 2021, 54, 385203.	2.8	7
61	Detection and analysis of spark discharge products of C₅F₁₀O by electron attachment mass spectrometry. Journal Physics D: Applied Physics, 2021, 54, 045201.	2.8	7
62	Investigation of different solutions activated by air plasma jet and their anticancer effect. Applied Physics Letters, 2022, 120, .	3.3	7
63	Numerical study on helium-oxygen dielectric barrier discharges: From single-breakdown to multi-breakdowns per half-cycle. Physics of Plasmas, 2018, 25, 073508.	1.9	6
64	Contrasting Characteristics of Gasâ€“Liquid Reactive Species Induced by Pulse-Modulated RF and kHz Sinusoidal Plasma Jets. IEEE Transactions on Plasma Science, 2019, 47, 1336-1344.	1.3	6
65	Surface patterns of reactive species on model tissue treated by a surface air discharge. Journal Physics D: Applied Physics, 2019, 52, 20LT01.	2.8	6
66	trans â€Stilbene epoxidation by He+O 2 atmospheric pressure plasma: Epoxidation without oxidant waste stream. Plasma Processes and Polymers, 2020, 17, 1900162.	3.0	6
67	Microbial inactivation in model tissues treated by surface discharge plasma. Journal Physics D: Applied Physics, 2020, 53, 015205.	2.8	5
68	Differential sensitivities of HeLa and MCF-7 cells at G1-, S-, G2- and M-phase of the cell cycle to cold atmospheric plasma. Journal Physics D: Applied Physics, 2020, 53, 125202.	2.8	5
69	Study on the anticancer area and depth of a He plasma jet based on 2D monolayer cells and 3D tumor spheroids. Journal Physics D: Applied Physics, 2020, 53, 175201.	2.8	5
70	Plasma-surface interaction: dynamic evolution of interfacial pattern modes during transformation process from dielectric to metallic substrate. Journal Physics D: Applied Physics, 2021, 54, 395202.	2.8	5
71	Discharge characteristics of a microsecond pulse power supply driven air plasma jet and its anticancer cell effect. Physics of Plasmas, 2022, 29, 013504.	1.9	5
72	Response of reactive species generation and biological inactivation to electromagnetically assisted cold plasma jets. Physics of Plasmas, 2021, 28, .	1.9	5

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73	Effects of oxygen concentration on helium-oxygen dielectric barrier discharges: From multi-breakdowns to single-breakdown per half-cycle. Physics of Plasmas, 2018, 25, 103511.	1.9	4
74	Plasma enhance drug sensitivity to bortezomib by inhibition of cyp1a1 in myeloma cells. Translational Cancer Research, 2019, 8, 2841-2847.	1.0	4
75	Global model of cold atmospheric He + air plasmas: A comparison of Maxwellian and non-Maxwellian EEDFs. Physics of Plasmas, 2019, 26, .	1.9	4
76	Interfacial current distribution between helium plasma jet and water solution. Plasma Sources Science and Technology, 2020, 29, 065007.	3.1	4
77	The investigation of RONS permeation in plasmaâ€activated oilâ€“water mixed system. Plasma Processes and Polymers, 2021, 18, 2100038.	3.0	4
78	An integrated device for preparation of plasmaâ€activated media with bactericidal properties: An in vitro and in vivo study. Contributions To Plasma Physics, 0, , e202100125.	1.1	4
79	Bactericidal effect of surface plasma under different discharge modes. Physics of Plasmas, 2021, 28, .	1.9	4
80	Plasma re-activation: a promising approach to enhance chemical activity for plasma activated water. Journal Physics D: Applied Physics, 2022, 55, 185202.	2.8	4
81	Effects of DC bias voltages on the RF-excited plasmaâ€“tissue interaction. Journal Physics D: Applied Physics, 2016, 49, 415201.	2.8	3
82	Optimization of Space Between Nearby Needles on Multineedle to Plane Barrier Discharge. IEEE Transactions on Plasma Science, 2008, 36, 1350-1351.	1.3	2
83	Comparison of the Anticancer Effects of Pulsed Electric Field and Heâ€‰+â€‰O2 Plasma Jet. Plasma Chemistry and Plasma Processing, 2021, 41, 973-987.	2.4	2
84	Comparison of the anticancer effects between helium plasma jets and electrochemical treatment (EChT). Plasma Processes and Polymers, 2021, 18, 2100087.	3.0	2
85	Simplification of plasma chemistry by means of vital nodes identification. Journal of Applied Physics, 2021, 130, .	2.5	2
86	Decomposition Products and Mechanism of C₅F₁₀O/N₂ Gas Mixture by Electron Attachment Mass Spectrometry. IEEE Transactions on Dielectrics and Electrical Insulation, 2022, 29, 1127-1134.	2.9	2
87	Stimulation of lidocaine penetration into model tissues by an argon plasma jet. Journal Physics D: Applied Physics, 2019, 52, 465202.	2.8	1
88	Comparison of the physicochemical properties and inactivation against tumor cells of PAW induced by underwater single-hole and multi-hole bubble plasma. Journal Physics D: Applied Physics, 2022, 55, 295202.	2.8	1
89	Study on mechanical fault recognition of circuit breaker in 550kV GIS based on improved SVM. WIT Transactions on Engineering Sciences, 2012, , .	0.0	0
90	1D fluid model of the interaction between helium APPJ and deionized water. Journal Physics D: Applied Physics, 2022, 55, 255204.	2.8	0