

# Keping Yan

## List of Publications by Year in descending order

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111  
papers

2,331  
citations

186209

28  
h-index

265120

42  
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112  
all docs

112  
docs citations

112  
times ranked

1479  
citing authors

#	ARTICLE	IF	CITATIONS
1	From Chemical Kinetics to Streamer Corona Reactor and Voltage Pulse Generator. Plasma Chemistry and Plasma Processing, 2001, 21, 107-137.	1.1	109
2	Corona induced non-thermal plasmas: Fundamental study and industrial applications. Journal of Electrostatics, 1998, 44, 17-39.	1.0	90
3	Removal of dilute VOCs in air by post-plasma catalysis over Ag-based composite oxide catalysts. Catalysis Today, 2013, 211, 39-43.	2.2	89
4	Impact of applied current on sulfate-rich wastewater treatment and microbial biodiversity in the cathode chamber of microbial electrolysis cell (MEC) reactor. Chemical Engineering Journal, 2017, 307, 150-158.	6.6	83
5	Tar removal from biomass-derived fuel gas by pulsed corona discharges. Fuel Processing Technology, 2003, 84, 161-173.	3.7	81
6	Long lifetime, triggered, spark-gap switch for repetitive pulsed power applications. Review of Scientific Instruments, 2005, 76, 085107.	0.6	71
7	Oxidation and Reduction Processes During NO <sub>x</sub> Removal with Corona-Induced Nonthermal Plasma. Plasma Chemistry and Plasma Processing, 1999, 19, 421-443.	1.1	69
8	Characteristics of Back Corona Discharge in a Honeycomb Catalyst and Its Application for Treatment of Volatile Organic Compounds. Environmental Science & Technology, 2015, 49, 6831-6837.	4.6	68
9	Temporal development and chemical efficiency of positive streamers in a large scale wire-plate reactor as a function of voltage waveform parameters. Journal Physics D: Applied Physics, 2006, 39, 3010-3017.	1.3	60
10	Analysis of streamer properties in air as function of pulse and reactor parameters by ICCD photography. Journal Physics D: Applied Physics, 2008, 41, 234001.	1.3	58
11	An Industrial Streamer Corona Plasma System for Gas Cleaning. IEEE Transactions on Plasma Science, 2006, 34, 2426-2433.	0.6	53
12	Electrostatic precipitation of fine particles with a bipolar pre-charger. Journal of Electrostatics, 2010, 68, 174-178.	1.0	48
13	Pulsed Corona Discharges for Tar Removal from Biomass Derived Fuel Gas. Plasmas and Polymers, 2003, 8, 209-224.	1.5	44
14	A high-voltage pulse generator for corona plasma generation. IEEE Transactions on Industry Applications, 2002, 38, 866-872.	3.3	42
15	A high-temperature pulsed corona plasma system for fuel gas cleaning. Journal of Electrostatics, 2004, 61, 117-127.	1.0	42
16	Evaluation of pulse voltage generators. IEEE Transactions on Industry Applications, 1995, 31, 507-512.	3.3	41
17	Chemical Processes in Tar Removal from Biomass Derived Fuel Gas by Pulsed Corona Discharges. Plasma Chemistry and Plasma Processing, 2003, 23, 665-680.	1.1	40
18	A triggered spark-gap switch for high-repetition rate high-voltage pulse generation. Journal of Electrostatics, 2003, 57, 29-33.	1.0	40

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19	Electrode geometry optimization in wire-plate electrostatic precipitator and its impact on collection efficiency. <i>Journal of Electrostatics</i> , 2016, 80, 76-84.	1.0	40
20	Effects of high-voltage power sources on fine particle collection efficiency with an industrial electrostatic precipitator. <i>Journal of Electrostatics</i> , 2012, 70, 285-291.	1.0	37
21	Fundamentals and Environmental Applications of Non-thermal Plasmas: Multi-pollutants Emission Control from Coal-Fired Flue Gas. <i>Plasma Chemistry and Plasma Processing</i> , 2014, 34, 579-603.	1.1	37
22	Tar Removal from Biomass-Derived Fuel Gas by Pulsed Corona Discharges. A Chemical Kinetic Study. <i>Industrial &amp; Engineering Chemistry Research</i> , 2004, 43, 1649-1658.	1.8	35
23	The electro-acoustic transition process of pulsed corona discharge in conductive water. <i>Journal Physics D: Applied Physics</i> , 2014, 47, 255204.	1.3	35
24	Heterogeneous reactions in non-thermal plasma flue gas desulfurization. <i>Chemical Engineering Science</i> , 1998, 53, 1529-1540.	1.9	34
25	Aerosol formation from styrene removal with an AC/DC streamer corona plasma system in air. <i>Chemical Engineering Journal</i> , 2013, 232, 527-533.	6.6	34
26	Streamer corona plasma for fuel gas cleaning: comparison of energization techniques. <i>Journal of Electrostatics</i> , 2005, 63, 1105-1114.	1.0	33
27	A semi-wet technological process for flue gas desulfurization by corona discharges at an industrial scale. <i>Chemical Engineering Journal</i> , 2006, 116, 139-147.	6.6	32
28	NO removal characteristics of a corona radical shower system under DC and AC/DC superimposed operations. <i>IEEE Transactions on Industry Applications</i> , 2001, 37, 1499-1504.	3.3	30
29	Evaluation of Corona Plasma Techniques for Industrial Applications: HPPS and DC/AC Systems. <i>Plasma Processes and Polymers</i> , 2005, 2, 232-237.	1.6	29
30	Elements of pulsed corona induced non-thermal plasmas for pollution control and sustainable development. <i>Journal of Electrostatics</i> , 2001, 51-52, 218-224.	1.0	28
31	Non-thermal plasma generation by using back corona discharge on catalyst. <i>Journal of Electrostatics</i> , 2013, 71, 179-184.	1.0	27
32	A novel microbial electrolysis cell (MEC) reactor for biological sulfate-rich wastewater treatment using intermittent supply of electric field. <i>Biochemical Engineering Journal</i> , 2017, 125, 10-17.	1.8	26
33	A 10 kW high-voltage pulse generator for corona plasma generation. <i>Review of Scientific Instruments</i> , 2001, 72, 2443-2447.	0.6	25
34	Pulsed corona tar cracker. <i>IEEE Transactions on Plasma Science</i> , 2000, 28, 1571-1575.	0.6	23
35	Pulsed corona generation using a diode-based pulsed power generator. <i>Review of Scientific Instruments</i> , 2003, 74, 4361-4365.	0.6	23
36	Control of flow stabilized positive corona discharge modes and NO removal characteristics in dry air by CO <sub>2</sub> injections. <i>Journal of Electrostatics</i> , 1999, 46, 207-219.	1.0	22

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37	A novel circuit topology for pulsed power generation. <i>Journal of Electrostatics</i> , 2003, 58, 221-228.	1.0	22
38	Tar Removal from Biomass Derived Fuel Gas by Pulsed Corona Discharges:â€™% Chemical Kinetic Study II. <i>Industrial &amp; Engineering Chemistry Research</i> , 2005, 44, 1734-1741.	1.8	22
39	A comparison study of toluene removal by two-stage DBD-catalyst systems loading with MnO <sub>x</sub> , CeMnO <sub>x</sub> , and CoMnO <sub>x</sub> . <i>Environmental Science and Pollution Research</i> , 2015, 22, 19240-19250.	2.7	22
40	<i>Escherichia Coli</i> Inactivation in Water Using Pulsed Discharge. <i>IEEE Transactions on Plasma Science</i> , 2016, 44, 938-943.	0.6	22
41	Comparative study of different nitrogen-containing plasma modifications applied on 3D porous PCL scaffolds and 2D PCL films. <i>Applied Surface Science</i> , 2020, 516, 146067.	3.1	22
42	A numerical model for predicting particle collection efficiency of electrostatic precipitators. <i>Powder Technology</i> , 2019, 347, 170-178.	2.1	20
43	An Efficient, Repetitive Nanosecond Pulsed Power Generator with Ten Synchronized Spark Gap Switches. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2009, 16, 918-925.	1.8	19
44	Comparison of styrene removal in air by positive and negative DC corona discharges. <i>International Journal of Environmental Science and Technology</i> , 2013, 10, 1377-1382.	1.8	18
45	Toluene Decomposition by a Two-stage Hybrid Plasma Catalyst System in Dry Air. <i>IEEE Transactions on Plasma Science</i> , 2014, 42, 3529-3538.	0.6	18
46	Multiple-gap spark gap switch. <i>Review of Scientific Instruments</i> , 2006, 77, 073501.	0.6	17
47	A high-voltage pulse transformer with a modular ferrite core. <i>Review of Scientific Instruments</i> , 2008, 79, 015104.	0.6	17
48	Characteristics of Styrene Removal With an AC/DC Streamer Corona Plasma System. <i>IEEE Transactions on Plasma Science</i> , 2011, 39, 1482-1488.	0.6	17
49	Electrostatic precipitation of airborne bio-aerosols. <i>Journal of Electrostatics</i> , 2013, 71, 204-207.	1.0	17
50	Electroacoustic Process Study of Plasma Sparker Under Different Water Depth. <i>IEEE Journal of Oceanic Engineering</i> , 2015, 40, 947-956.	2.1	17
51	Development of a simple model for predicting the spark-induced bubble behavior under different ambient pressures. <i>Journal of Applied Physics</i> , 2016, 120, .	1.1	17
52	Luminescence flash and temperature determination of the bubble generated by underwater pulsed discharge. <i>Applied Physics Letters</i> , 2017, 110, .	1.5	16
53	Synchronization of multiple spark-gap switches by a transmission line transformer. <i>Review of Scientific Instruments</i> , 2005, 76, 113507.	0.6	15
54	Novel multiple-switch Blumlein generator. <i>Review of Scientific Instruments</i> , 2006, 77, 033502.	0.6	15

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55	Degradation of aqueous Rhodamine B by plasma generated along the water surface and its enhancement using nanocrystalline Fe-, Mn-, and Ce-doped TiO <sub>2</sub> films. <i>Environmental Science and Pollution Research</i> , 2014, 21, 9948-9958.	2.7	15
56	Experimental Study of the Electric Pulse-Width Effect on the Acoustic Pulse of a Plasma Sparker. <i>IEEE Journal of Oceanic Engineering</i> , 2016, 41, 724-730.	2.1	15
57	Promoted bioelectrocatalytic activity of microbial electrolysis cell (MEC) in sulfate removal through the synergy between neutral red and graphite felt. <i>Chemical Engineering Journal</i> , 2017, 327, 183-192.	6.6	15
58	Matching a Pulsed-Power Modulator to a Streamer Plasma Reactor. <i>IEEE Transactions on Plasma Science</i> , 2008, 36, 243-252.	0.6	14
59	Water disinfection by pulsed atmospheric air plasma along water surface. <i>AIChE Journal</i> , 2013, 59, 1458-1467.	1.8	14
60	Experimental observation of the luminescence flash at the collapse phase of a bubble produced by pulsed discharge in water. <i>Applied Physics Letters</i> , 2015, 107, 184104.	1.5	14
61	The Influence of Water Characteristics on Plasma-Containing Bubble Dynamics. <i>IEEE Transactions on Plasma Science</i> , 2015, 43, 3256-3259.	0.6	12
62	Electrode configurations inside an electrostatic precipitator and their impact on collection efficiency and flow pattern. <i>European Physical Journal D</i> , 2016, 70, 1.	0.6	12
63	Pulsed cold plasma-induced blood coagulation and its pilot application in stanching bleeding during rat hepatectomy. <i>Plasma Science and Technology</i> , 2018, 20, 044005.	0.7	12
64	A pilot investigation on oxidation of ammonium sulfite by streamer corona plasma. <i>Chemical Engineering Journal</i> , 2008, 139, 469-474.	6.6	11
65	The Plasma-Containing Bubble Behavior Under Pulsed Discharge of Different Polarities. <i>IEEE Transactions on Plasma Science</i> , 2015, 43, 567-571.	0.6	11
66	Sensitivity analysis on the maximum ash resistivity in terms of its compositions and gaseous water concentration. <i>Journal of Electrostatics</i> , 2012, 70, 83-90.	1.0	10
67	Degradation of Aqueous Rhodamine B With Gaseous Streamer Corona Plasma. <i>IEEE Transactions on Plasma Science</i> , 2015, 43, 828-835.	0.6	9
68	Experimental study on bacteria disinfection using a pulsed cold plasma jet with helium/oxygen mixed gas. <i>Plasma Science and Technology</i> , 2018, 20, 115503.	0.7	9
69	The degradation of PCDD/Fs in fly ash using dielectric barrier discharge in a lab-scale reactor. <i>Chemical Engineering Journal</i> , 2020, 387, 124005.	6.6	9
70	Fog Droplet Collection by Corona Discharge in a Needle-Cylinder Electrostatic Precipitator with a Water Cooling System. <i>Separations</i> , 2022, 9, 169.	1.1	9
71	Transmission line transformers for up to 100 kW pulsed power generation. , 0, , .		8
72	Investigations of dynamics of a single spark-induced bubble in saline water. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 075203.	1.3	8

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73	Matching Repetitive Pulsed Power to Industrial Processes. IEEJ Transactions on Fundamentals and Materials, 2004, 124, 607-612.	0.2	7
74	Characteristics of source wavelets generated by two sparkers. Journal of Applied Geophysics, 2019, 170, 103819.	0.9	7
75	Ultrastructural changes in hepatocellular carcinoma cells induced by exponential pulses of nanosecond duration delivered via a transmission line. Bioelectrochemistry, 2020, 135, 107548.	2.4	7
76	The effect of the configuration of a single electrode corona discharge on its acoustic characteristics. Plasma Science and Technology, 2017, 19, 075403.	0.7	6
77	A 2.0 kW pulsed corona system for inducing chemical reactions. , 0, , .		5
78	Heavy-duty high-repetition-rate generators. IEEE Transactions on Plasma Science, 2002, 30, 1627-1631.	0.6	5
79	ADS and CDS Streamer Generation as Function of Pulse Parameters. IEEE Transactions on Plasma Science, 2008, 36, 926-927.	0.6	5
80	A Microsecond-Pulsed Cold Plasma Jet for Medical Application. Plasma Medicine, 2016, 6, 179-191.	0.2	5
81	Characterization of electrohydrodynamic flow in a plate-plate electrostatic precipitator with a wire-cylinder pre-charger by data-driven vortex and residence time analysis. Powder Technology, 2022, 397, 117015.	2.1	5
82	Multi-electrode electrohydraulic discharge for sterilization and disinfection. , 2009, , .		4
83	Rapid Disinfection Performance of a Touchable Pulsed SDBD Nonthermal Plasma. IEEE Transactions on Plasma Science, 2016, 44, 2667-2672.	0.6	4
84	Discharge electrode configuration effects on the performance of a plasma sparker. Plasma Science and Technology, 2017, 19, 095401.	0.7	4
85	Electrical control of electrostatic precipitation. Journal Physics D: Applied Physics, 2018, 51, 304005.	1.3	4
86	A repetitive high-voltage pulse source for pulsed corona treatment of gases. , 2000, , .		3
87	Evaluation of Pulsed Power Sources for Plasma Generation. Journal of Advanced Oxidation Technologies, 2004, 7, .	0.5	3
88	Matching a pulsed power modulator to a corona plasma reactor. , 2007, , .		3
89	Plasma induced toluene decomposition on alumina-supported Mn-based composite oxides catalysts. Journal of Physics: Conference Series, 2013, 418, 012116.	0.3	3
90	Fresh water disinfection by pulsed low electric field. Journal of Physics: Conference Series, 2013, 418, 012113.	0.3	3

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91	Performance comparison between micro and electro micro cyclone. Journal of Electrostatics, 2019, 101, 103368.	1.0	3
92	Comparing medium pressure dielectric barrier discharge (DBD) plasmas and classic methods of surface cleaning/activation of pure Mg for biomedical applications. Surface and Coatings Technology, 2021, 410, 126934.	2.2	3
93	Degradation of aniline in water with gaseous streamer corona plasma. Royal Society Open Science, 2021, 8, 202314.	1.1	3
94	Low Temperature Plasma Treatment of Rat Blood is Accompanied by Platelet Aggregation. Plasma Chemistry and Plasma Processing, 2021, 41, 955.	1.1	3
95	Decontamination of 2-Chloroethyl ethyl sulfide on the surface by atmospheric pressure plasma jet. Journal of Hazardous Materials, 2022, 424, 127536.	6.5	3
96	Introduction and simulation of a small electro cyclone for collecting indoor pollen particles. Advanced Powder Technology, 2022, 33, 103384.	2.0	3
97	NO removal characteristics of a corona radical shower system under DC and AC/DC superimposed operations. , 0, , .		2
98	Matching a Pulsed Power Modulator to a Corona Plasma Reactor. , 2007, , .		2
99	Plasma-Generated Multibubbles in Water and Their Dynamics. IEEE Transactions on Plasma Science, 2011, 39, 2656-2657.	0.6	2
100	Aerosol emission and collection in styrene-contaminated air remediation with a multi-stage plasma system. Journal of Electrostatics, 2015, 76, 31-38.	1.0	2
101	High Temperature Pulsed Corona Processing of Fuel Gas. Journal of Advanced Oxidation Technologies, 2004, 7, .	0.5	1
102	A Repetitive Pulser with Four Spark Gap Switches. International Power Modulator Symposium and High-Voltage Workshop, 2006, , .	0.0	1
103	A pulsed power generator with a 20 stage transmission-line-transformer and 20 spark-gap switches. , 2011, , .		1
104	Pulse-width-modulated plasma sound source. , 2015, , .		1
105	Evaluation of pulse voltage generators. , 0, , .		0
106	A Simplified Model of Desulfurization from Flue Gas by Low Temperature Plasmas. Combustion Science and Technology, 1998, 136, 1-12.	1.2	0
107	Investigation on a Novel Multiple-Switch Pulsed Power Technology. , 2005, , .		0
108	Comparison of two-type corona plasma energization techniques: ultra-short and DC/AC power sources. , 0, , .		0

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109	Experimental studies on electro-optical characteristics of pulsed streamer discharge on water surface. , 2015, , .		0
110	Recent advances of power conditions for streamer corona plasma applications. , 2004, , 112-115.		0
111	A Multiple-switch Technology for High-power Pulse Discharging. , 2009, , 704-708.		0