

Tao Shao

List of Publications by Year in descending order

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247
papers

7,149
citations

61857

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docs citations

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times ranked

3286
citing authors

#	ARTICLE	IF	CITATIONS
1	A Scalable, High-Throughput, and Environmentally Benign Approach to Polymer Dielectrics Exhibiting Significantly Improved Capacitive Performance at High Temperatures. <i>Advanced Materials</i> , 2018, 30, e1805672.	11.1	260
2	Atmospheric-pressure pulsed discharges and plasmas: mechanism, characteristics and applications. <i>High Voltage</i> , 2018, 3, 14-20.	2.7	258
3	Efficient Nitrogen Fixation to Ammonia through Integration of Plasma Oxidation with Electrocatalytic Reduction. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 14131-14137.	7.2	190
4	Enhanced surface flashover strength in vacuum of polymethylmethacrylate by surface modification using atmospheric-pressure dielectric barrier discharge. <i>Applied Physics Letters</i> , 2014, 105, 071607.	1.5	175
5	Surface modification of polyimide films using unipolar nanosecond-pulse DBD in atmospheric air. <i>Applied Surface Science</i> , 2010, 256, 3888-3894.	3.1	171
6	Surface modification of epoxy using an atmospheric pressure dielectric barrier discharge to accelerate surface charge dissipation. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2017, 24, 1557-1565.	1.8	170
7	The synergistic effects of the micro-BN and nano-Al ₂ O ₃ in micro-nano composites on enhancing the thermal conductivity for insulating epoxy resin. <i>Composites Science and Technology</i> , 2018, 168, 420-428.	3.8	153
8	Effect of cold plasma on blueberry juice quality. <i>Food Chemistry</i> , 2019, 290, 79-86.	4.2	132
9	Diffuse discharge, runaway electron, and x-ray in atmospheric pressure air in an inhomogeneous electrical field in repetitive pulsed modes. <i>Applied Physics Letters</i> , 2011, 98, .	1.5	128
10	Nanosecond pulsed plasma assisted dry reforming of CH ₄ : The effect of plasma operating parameters. <i>Applied Energy</i> , 2019, 243, 132-144.	5.1	111
11	A Compact Repetitive Unipolar Nanosecond-Pulse Generator for Dielectric Barrier Discharge Application. <i>IEEE Transactions on Plasma Science</i> , 2010, 38, 1651-1655.	0.6	110
12	Surface modification of polymethyl-methacrylate using atmospheric pressure argon plasma jets to improve surface flashover performance in vacuum. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2015, 22, 1747-1754.	1.8	101
13	Highly efficient conversion of methane using microsecond and nanosecond pulsed spark discharges. <i>Applied Energy</i> , 2018, 226, 534-545.	5.1	99
14	Comparison between helium and argon plasma jets on improving the hydrophilic property of PMMA surface. <i>Applied Surface Science</i> , 2016, 367, 401-406.	3.1	94
15	Plasma surface treatment to improve surface charge accumulation and dissipation of epoxy resin exposed to DC and nanosecond-pulse voltages. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 405203.	1.3	93
16	Surface ionization wave propagation in the nanosecond pulsed surface dielectric barrier discharge: the influence of dielectric material and pulse repetition rate. <i>Plasma Sources Science and Technology</i> , 2020, 29, 044001.	1.3	92
17	Experimental study of Q-V Lissajous figures in nanosecond-pulse surface discharges. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2013, 20, 1101-1111.	1.8	89
18	Effect of O ₂ additive on spatial uniformity of atmospheric-pressure helium plasma jet array driven by microsecond-duration pulses. <i>Applied Physics Letters</i> , 2014, 105, .	1.5	89

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19	Microsecond pulse driven Ar/CF ₄ plasma jet for polymethylmethacrylate surface modification at atmospheric pressure. <i>Applied Surface Science</i> , 2015, 328, 509-515.	3.1	89
20	Diffuse discharge produced by repetitive nanosecond pulses in open air, nitrogen, and helium. <i>Journal of Applied Physics</i> , 2013, 113, .	1.1	84
21	Hydrophobic treatment on polymethylmethacrylate surface by nanosecond-pulse DBDs in CF ₄ at atmospheric pressure. <i>Applied Surface Science</i> , 2014, 311, 468-477.	3.1	78
22	Surface Treatment of Polyethylene Terephthalate to Improving Hydrophilicity Using Atmospheric Pressure Plasma Jet. <i>IEEE Transactions on Plasma Science</i> , 2013, 41, 1627-1634.	0.6	73
23	Correlation between surface charge and DC surface flashover of plasma treated epoxy resin. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2018, 25, 1267-1274.	1.8	69
24	Atmospheric-pressure pulsed plasma actuators for flow control: shock wave and vortex characteristics. <i>Plasma Sources Science and Technology</i> , 2019, 28, 064001.	1.3	66
25	Hydrophobic surface modification of epoxy resin using an atmospheric pressure plasma jet array. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2016, 23, 2288-2293.	1.8	65
26	Surface Treatment of Polyethylene Terephthalate Films Using DBD Excited by Repetitive Unipolar Nanosecond Pulses in Air at Atmospheric Pressure. <i>IEEE Transactions on Plasma Science</i> , 2010, 38, 1517-1526.	0.6	61
27	Spark discharge formation in an inhomogeneous electric field under conditions of runaway electron generation. <i>Journal of Applied Physics</i> , 2012, 111, .	1.1	60
28	Surface modifications of polystyrene and their stability: A comparison of DBD plasma deposition and direct fluorination. <i>Applied Surface Science</i> , 2018, 459, 300-308.	3.1	59
29	Time behaviour of discharge current in case of nanosecond-pulse surface dielectric barrier discharge. <i>Europhysics Letters</i> , 2013, 101, 45002.	0.7	57
30	Electrical characterization of dielectric barrier discharge driven by repetitive nanosecond pulses in atmospheric air. <i>Journal of Electrostatics</i> , 2009, 67, 215-221.	1.0	56
31	Excitation of atmospheric pressure uniform dielectric barrier discharge using repetitive unipolar nanosecond-pulse generator. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2010, 17, 1830-1837.	1.8	56
32	Uniformity optimization and dynamic studies of plasma jet array interaction in argon. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	56
33	Coupling bimetallic Ni-Fe catalysts and nanosecond pulsed plasma for synergistic low-temperature CO ₂ methanation. <i>Chemical Engineering Journal</i> , 2021, 420, 127693.	6.6	56
34	Comparison of Atmospheric-Pressure He and Ar Plasma Jets Driven by Microsecond Pulses. <i>IEEE Transactions on Plasma Science</i> , 2015, 43, 726-732.	0.6	55
35	Experimental investigation of surface flashover in vacuum using nanosecond pulses. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2007, 14, 634-642.	1.8	52
36	Experimental study on conduction current of positive nanosecond-pulse diffuse discharge at atmospheric pressure. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2013, 20, 1304-1314.	1.8	52

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37	Temporal evolution of nanosecond-pulse dielectric barrier discharges in open air. <i>Europhysics Letters</i> , 2012, 97, 55005.	0.7	51
38	Application of dynamic displacement current for diagnostics of subnanosecond breakdowns in an inhomogeneous electric field. <i>Review of Scientific Instruments</i> , 2013, 84, 053506.	0.6	51
39	Two discharge modes in an atmospheric pressure plasma jet array in argon. <i>Plasma Sources Science and Technology</i> , 2016, 25, 01LT01.	1.3	51
40	A critical review on ozone and co-species, generation and reaction mechanisms in plasma induced by dielectric barrier discharge technologies for wastewater remediation. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105758.	3.3	50
41	Nano-BN encapsulated micro-AlN as fillers for epoxy composites with high thermal conductivity and sufficient dielectric breakdown strength. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2020, 27, 528-534.	1.8	49
42	The role of fast electrons in diffuse discharge formation: Monte Carlo simulation. <i>Plasma Sources Science and Technology</i> , 2017, 26, 085008.	1.3	48
43	Nanosecond-pulse gliding discharges between point-to-point electrodes in open air. <i>Plasma Sources Science and Technology</i> , 2014, 23, 035004.	1.3	47
44	Atmospheric pressure plasmas and direct fluorination treatment of Al ₂ O ₃ -filled epoxy resin: A comparison of surface charge dissipation. <i>Surface and Coatings Technology</i> , 2019, 362, 1-11.	2.2	46
45	Ionization waves in nanosecond pulsed atmospheric pressure plasma jets in argon. <i>High Voltage</i> , 2021, 6, 665-673.	2.7	46
46	Runaway electron preionized diffuse discharges in atmospheric pressure air with a point-to-plane gap in repetitive pulsed mode. <i>Journal of Applied Physics</i> , 2011, 109, .	1.1	45
47	Removal of Pharmaceutical Residues from Water and Wastewater Using Dielectric Barrier Discharge Methods—A Review. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 1683.	1.2	45
48	Efficient Nitrogen Fixation to Ammonia through Integration of Plasma Oxidation with Electrocatalytic Reduction. <i>Angewandte Chemie</i> , 2021, 133, 14250-14256.	1.6	44
49	Nanosecond-pulsed microbubble plasma reactor for plasma-activated water generation and bacterial inactivation. <i>Plasma Processes and Polymers</i> , 2022, 19, .	1.6	43
50	Electrical Model and Experimental Analysis of the Atmospheric-Pressure Homogeneous Dielectric Barrier Discharge in He. <i>IEEE Transactions on Plasma Science</i> , 2012, 40, 883-891.	0.6	42
51	Deposition of SiC _x H _y O _z thin film on epoxy resin by nanosecond pulsed APPJ for improving the surface insulating performance. <i>Plasma Science and Technology</i> , 2018, 20, 025504.	0.7	42
52	Plasma bullet propagation and reflection from metallic and dielectric targets. <i>Plasma Sources Science and Technology</i> , 2019, 28, 095006.	1.3	42
53	Runaway electrons and x-rays from a corona discharge in atmospheric pressure air. <i>New Journal of Physics</i> , 2011, 13, 113035.	1.2	41
54	Repetitive nanosecond-pulse discharge in a highly nonuniform electric field in atmospheric air: X-ray emission and runaway electron generation. <i>Laser and Particle Beams</i> , 2012, 30, 369-378.	0.4	41

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55	Effect of pulse polarity on the temporal and spatial emission of an atmospheric pressure helium plasma jet. <i>Plasma Sources Science and Technology</i> , 2016, 25, 015020.	1.3	41
56	Energy pooling mechanism for catalyst-free methane activation in nanosecond pulsed non-thermal plasmas. <i>Chemical Engineering Journal</i> , 2020, 396, 125185.	6.6	41
57	Dry reforming of methane by microsecond pulsed dielectric barrier discharge plasma: Optimizing the reactor structures. <i>High Voltage</i> , 2022, 7, 718-729.	2.7	41
58	Numerical simulation on a nanosecond-pulse surface dielectric barrier discharge actuator in near space. <i>Journal Physics D: Applied Physics</i> , 2012, 45, 145201.	1.3	40
59	Non-oxidative methane conversion in diffuse, filamentary, and spark regimes of nanosecond repetitively pulsed discharge with negative polarity. <i>Plasma Processes and Polymers</i> , 2019, 16, 1900050.	1.6	39
60	Surface modifications of polymethylmetacrylate films using atmospheric pressure air dielectric barrier discharge plasma. <i>Vacuum</i> , 2012, 86, 1305-1312.	1.6	38
61	Enhanced surface insulating performance for polystyrene by atmospheric pressure plasma jet deposition. <i>Applied Surface Science</i> , 2020, 527, 146826.	3.1	37
62	Compositional and crystallographic design of Ni-Co phosphide heterointerfaced nanowires for high-rate, stable hydrogen generation at industry-relevant electrolysis current densities. <i>Nano Energy</i> , 2022, 95, 106989.	8.2	36
63	Comparison of AC and Nanosecond-Pulsed DBDs in Atmospheric Air. <i>IEEE Transactions on Plasma Science</i> , 2011, 39, 2076-2077.	0.6	35
64	A repetitive microsecond pulse generator for atmospheric pressure plasma jets. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2015, 22, 1907-1915.	1.8	35
65	Time-resolved characteristics and chemical kinetics of non-oxidative methane conversion in repetitively pulsed dielectric barrier discharge plasmas. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 274005.	1.3	35
66	A Gliding Discharge in Open Air Sustained by High-Voltage Resonant AC Power Supply. <i>IEEE Transactions on Plasma Science</i> , 2012, 40, 2843-2849.	0.6	34
67	Effect of cathode materials on the generation of runaway electron beams and X-rays in atmospheric pressure air. <i>Laser and Particle Beams</i> , 2013, 31, 353-364.	0.4	34
68	A comparison between characteristics of atmospheric-pressure plasma jets sustained by nanosecond- and microsecond-pulse generators in helium. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	34
69	A Cascaded Microsecond-Pulse Generator for Discharge Applications. <i>IEEE Transactions on Plasma Science</i> , 2014, 42, 1721-1728.	0.6	34
70	Inorganic nanofilms for surface charge control on polymer surfaces by atmospheric-pressure plasma deposition. <i>Journal of Applied Physics</i> , 2017, 122, .	1.1	34
71	Temporal evolution of atmosphere pressure plasma jets driven by microsecond pulses with positive and negative polarities. <i>Europhysics Letters</i> , 2014, 107, 65004.	0.7	33
72	Formation of hydrophobic coating on PMMA surface using unipolar nanosecond-pulse DBD in atmospheric air. <i>Journal of Electrostatics</i> , 2013, 71, 435-439.	1.0	32

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73	Effect of surface modification of electrodes on charge injection and dielectric characteristics of propylene carbonate. <i>High Voltage</i> , 2020, 5, 15-23.	2.7	32
74	Dielectric-Barrier Discharge Excitated by Repetitive Nanosecond Pulses in Air at Atmospheric Pressure. <i>IEEE Transactions on Plasma Science</i> , 2008, 36, 1358-1359.	0.6	31
75	Effect of dielectric and conductive targets on plasma jet behaviour and thin film properties. <i>Journal Physics D: Applied Physics</i> , 2019, 52, 074002.	1.3	30
76	Dynamics of Plasma Bullets in a Microsecond-Pulse-Driven Atmospheric-Pressure He Plasma Jet. <i>IEEE Transactions on Plasma Science</i> , 2016, 44, 393-397.	0.6	29
77	Spatial–Temporal Evolution of a Radial Plasma Jet Array and Its Interaction with Material. <i>Plasma Chemistry and Plasma Processing</i> , 2019, 39, 187-203.	1.1	29
78	Breakdown Phenomena in Nitrogen Due to Repetitive Nanosecond-pulses. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2007, 14, 813-819.	1.8	28
79	Comparison of experiment and simulation on dielectric barrier discharge driven by 50Hz AC power in atmospheric air. <i>Journal of Electrostatics</i> , 2010, 68, 445-452.	1.0	28
80	Discharge characteristic of nanosecond-pulse DBD in atmospheric air using magnetic compression pulsed power generator. <i>Vacuum</i> , 2012, 86, 876-880.	1.6	28
81	A Comparative Study of Water Electrodes Versus Metal Electrodes for Excitation of Nanosecond-Pulse Homogeneous Dielectric Barrier Discharge in Open Air. <i>IEEE Transactions on Plasma Science</i> , 2013, 41, 3069-3078.	0.6	28
82	Repetitive nanosecond-pulse dielectric barrier discharge and its application on surface modification of polymers. <i>Surface and Coatings Technology</i> , 2013, 228, S578-S582.	2.2	28
83	Influence of Oxygen Content on Argon/Oxygen Dielectric Barrier Discharge Plasma Treatment of Polyethylene Terephthalate Film. <i>IEEE Transactions on Plasma Science</i> , 2017, 45, 310-317.	0.6	27
84	Atmospheric-pressure plasma jet deposition of bumpy coating improves polypropylene surface flashover performance in vacuum. <i>Surface and Coatings Technology</i> , 2020, 387, 125511.	2.2	27
85	Two-Phase-Interfaced, Graded-Permittivity Titania Electrical Insulation by Atmospheric Pressure Plasmas. <i>ACS Applied Materials & Interfaces</i> , 2022, 14, 1900-1909.	4.0	27
86	Nanosecond Repetitively Pulsed Discharge of Point–Plane Gaps in Air at Atmospheric Pressure. <i>IEEE Transactions on Plasma Science</i> , 2011, 39, 1881-1888.	0.6	26
87	Characteristics of microsecond-pulse surface flashover on epoxy resin surfaces in SF ₆ . <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2016, 23, 2328-2336.	1.8	26
88	Charge transfer in plasma assisted dry reforming of methane using a nanosecond pulsed packed-bed reactor discharge. <i>Plasma Science and Technology</i> , 2021, 23, 064007.	0.7	26
89	Detection of x-ray emission in a nanosecond discharge in air at atmospheric pressure. <i>Review of Scientific Instruments</i> , 2020, 81, 123501.	0.6	25
90	Thin insulating film deposition on copper by atmospheric–pressure plasmas. <i>Plasma Processes and Polymers</i> , 2017, 14, 1600248.	1.6	25

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91	The dynamics of discharge propagation and x-ray generation in nanosecond pulsed fast ionisation wave in 5 mbar nitrogen. <i>Plasma Sources Science and Technology</i> , 2019, 28, 095001.	1.3	25
92	Influences of oxygen content on characteristics of atmospheric pressure dielectric barrier discharge in argon/oxygen mixtures. <i>European Physical Journal D</i> , 2016, 70, 1.	0.6	24
93	Study on Surface Properties of Polyamide 66 Using Atmospheric Glow-Like Discharge Plasma Treatment. <i>Coatings</i> , 2017, 7, 123.	1.2	24
94	Revealing the active sites of the structured Ni-based catalysts for one-step CO ₂ /CH ₄ conversion into oxygenates by plasma-catalysis. <i>Journal of CO₂ Utilization</i> , 2021, 52, 101675.	3.3	24
95	Temperature-independent, nonoxidative methane conversion in nanosecond repetitively pulsed DBD plasma. <i>Sustainable Energy and Fuels</i> , 2021, 5, 787-800.	2.5	24
96	Review on atmospheric pressure pulsed DC discharge. <i>Scientia Sinica: Physica, Mechanica Et Astronomica</i> , 2011, 41, 801-815.	0.2	24
97	In-package plasma: From reactive chemistry to innovative food preservation technologies. <i>Trends in Food Science and Technology</i> , 2022, 120, 59-74.	7.8	24
98	Repetitive Nanosecond-Pulse Breakdown in Tip-Plane Gaps of Air. <i>IEEE Transactions on Plasma Science</i> , 2006, 34, 1620-1625.	0.6	23
99	Aging Characteristics on Epoxy Resin Surface Under Repetitive Microsecond Pulses in Air at Atmospheric Pressure. <i>Plasma Science and Technology</i> , 2016, 18, 325-330.	0.7	23
100	Plasma surface treatment of Cu by nanosecond-pulse diffuse discharges in atmospheric air. <i>Plasma Science and Technology</i> , 2018, 20, 014011.	0.7	23
101	A Compact Microsecond-Pulse Generator Used for Surface Dielectric Barrier Discharges. <i>IEEE Transactions on Plasma Science</i> , 2016, 44, 2072-2078.	0.6	22
102	Electrical Characteristics in Surface Dielectric Barrier Discharge Driven by Microsecond Pulses. <i>IEEE Transactions on Plasma Science</i> , 2016, 44, 2772-2778.	0.6	22
103	Effects of nanosecond pulse voltage parameters on characteristics of surface charge for epoxy resin. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2018, 25, 2058-2066.	1.8	22
104	Trap distribution of polymeric materials and its effect on surface flashover in vacuum. <i>Plasma Science and Technology</i> , 2020, 22, 044002.	0.7	22
105	Study of flow fields induced by surface dielectric barrier discharge actuator in low-pressure air. <i>Physics of Plasmas</i> , 2014, 21, .	0.7	21
106	Spots on electrodes and images of a gap during pulsed discharges in an inhomogeneous electric field at elevated pressures of air, nitrogen and argon. <i>Plasma Sources Science and Technology</i> , 2014, 23, 054018.	1.3	21
107	Deposition of SiO _x film on electrode surface by DBD to improve the lift-off voltage of metal particles. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2018, 25, 1285-1292.	1.8	21
108	Interaction of argon and helium plasma jets and jets arrays with account for gravity. <i>Physics of Plasmas</i> , 2018, 25, .	0.7	21

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109	Nanosecond pulsed uniform dielectric barrier discharge in atmospheric air: A brief spectroscopic analysis. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2019, 207, 294-300.	2.0	21
110	Sustainable nitrogen fixation with nanosecond pulsed spark discharges: insights into free-radical-chain reactions. <i>Green Chemistry</i> , 2022, 24, 1534-1544.	4.6	21
111	Nanosecond Repetitively Pulsed Dielectric Barrier Discharge in Air at Atmospheric Pressure. <i>Plasma Science and Technology</i> , 2011, 13, 591-595.	0.7	20
112	Generation of super-short avalanche electron beams in SF ₆ . <i>Laser and Particle Beams</i> , 2014, 32, 331-341.	0.4	20
113	The effects of the tube diameter on the discharge ignition and the plasma properties of atmospheric-pressure microplasma confined inside capillary. <i>Plasma Processes and Polymers</i> , 2019, 16, 1800176.	1.6	20
114	Aging characteristics of epoxy resin discharged by very fast transient overvoltage in SF ₆ . <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2017, 24, 1178-1188.	1.8	20
115	Plasma enhanced anti-coking performance of Pd/CeO ₂ catalysts for the conversion of methane. <i>Sustainable Energy and Fuels</i> , 2021, 6, 98-109.	2.5	20
116	Sustainable Ammonia Synthesis from Nitrogen and Water by One-Step Plasma Catalysis. <i>Energy and Environmental Materials</i> , 2023, 6, .	7.3	20
117	Diffuse and Filamentary Discharges in Open Air Driven by Repetitive High-Voltage Nanosecond Pulses. <i>IEEE Transactions on Plasma Science</i> , 2011, 39, 2208-2209.	0.6	19
118	Atmospheric-Pressure Plasma Jet Produced by a Unipolar Nanosecond Pulse Generator in Various Gases. <i>IEEE Transactions on Plasma Science</i> , 2011, 39, 2322-2323.	0.6	19
119	Discharge processes and an electrical model of atmospheric pressure plasma jets in argon. <i>European Physical Journal D</i> , 2016, 70, 1.	0.6	19
120	Aging characteristics of polymeric materials by repeated surface flashovers in vacuum under microsecond pulse. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2019, 26, 171-178.	1.8	19
121	Generation of Atmospheric Pressure Plasma by Repetitive Nanosecond Pulses in Air Using Water Electrodes. <i>Plasma Science and Technology</i> , 2011, 13, 735-739.	0.7	18
122	Temporal and spatial profiles of emission intensities in atmospheric pressure helium plasma jet driven by microsecond pulse: Experiment and simulation. <i>Journal of Applied Physics</i> , 2015, 118, .	1.1	18
123	Electrical and optical characteristics of surface plasma actuator based on a three-electrode geometry excited by nanosecond-pulse and DC sources. <i>Physics of Plasmas</i> , 2017, 24, .	0.7	18
124	Surface charge decay of epoxy resin treated by AP-DBD deposition and direct fluorination. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2019, 26, 768-775.	1.8	18
125	Liquid-phase methane bubble plasma discharge for heavy oil processing: Insights into free radicals-induced hydrogenation. <i>Energy Conversion and Management</i> , 2021, 250, 114896.	4.4	18
126	Abnormal polarity effect in nanosecond-pulse breakdown of SF ₆ and nitrogen. <i>Physics Letters, Section A: General, Atomic and Solid State Physics</i> , 2014, 378, 1828-1833.	0.9	17

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127	Improvement of Spatial Uniformity of Nanosecond-Pulse Diffuse Discharges in a Multi-Needle-to-Plane Gap. <i>Plasma Science and Technology</i> , 2016, 18, 230-235.	0.7	17
128	CO _x -free co-cracking of n-decane and CH ₄ to hydrogen and acetylene using pulsed spark plasma. <i>Chemical Engineering Journal</i> , 2022, 436, 135190.	6.6	17
129	ICCD Observation of Homogeneous DBD Excited by Unipolar Nanosecond Pulses in Open Air. <i>IEEE Transactions on Plasma Science</i> , 2011, 39, 2062-2063.	0.6	16
130	Effects of TiO ₂ nanoparticles and electrodes surface-modified by low-temperature plasma on impulse breakdown voltage of propylene carbonate. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2020, 27, 442-449.	1.8	16
131	Reaction mechanism in non-thermal plasma enabled methane conversion: correlation between optical emission spectroscopy and gaseous products. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 424002.	1.3	16
132	Enhancement of hydrogen radical density in atmospheric pressure plasma jet by a burst of nanosecond pulses at 1 MHz. <i>Plasma Sources Science and Technology</i> , 2022, 31, 025019.	1.3	16
133	Depositing chromium oxide film on alumina ceramics enhances the surface flashover performance in vacuum via PECVD. <i>Surface and Coatings Technology</i> , 2021, 405, 126509.	2.2	15
134	Focused Plasma- and Pure Water-Enabled, Electrode-Emerged Nanointerfaced NiCo Hydroxide "Oxide for Robust Overall Water Splitting. <i>ACS Applied Materials & Interfaces</i> , 2021, 13, 45566-45577.	4.0	15
135	X-ray emission from a nanosecond-pulse discharge in an inhomogeneous electric field at atmospheric pressure. <i>Physics of Plasmas</i> , 2012, 19, 123516.	0.7	14
136	Simulation of runaway electron inception and breakdown in nanosecond pulse gas discharges. <i>Laser and Particle Beams</i> , 2016, 34, 43-52.	0.4	14
137	Effect of rise time on nanosecond pulsed surface dielectric barrier discharge actuator. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2019, 26, 346-352.	1.8	14
138	Reconstruction of energy spectrum of runaway electrons in nanosecond-pulse discharges in atmospheric air. <i>Plasma Science and Technology</i> , 2021, 23, 064011.	0.7	14
139	Supershort avalanche electron beam in SF_6 / krypton. <i>Physical Review Accelerators and Beams</i> , 2016, 19, .		
140	Interaction of helium plasma jet with tilted targets: consequences of target permittivity, conductivity and incidence angle. <i>Plasma Sources Science and Technology</i> , 2021, 30, 115021.	1.3	14
141	Numerical investigation on the heterogeneous pulsed dielectric barrier discharge plasma catalysis for CO ₂ hydrogenation at atmospheric pressure: Effects of Ni and Cu catalysts on the selectivity conversions to CH ₄ and CH ₃ OH. <i>Plasma Processes and Polymers</i> , 2022, 19, e2100111.	1.6	14
142	Experimental study on the treatment of oil-based drill cutting by pulsed dielectric barrier discharge plasma at atmospheric pressure. <i>Journal of Cleaner Production</i> , 2022, 339, 130757.	4.6	14
143	Surface morphology and flashover performance of epoxy resin in SF ₆ after discharge aging. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2017, 24, 3395-3404.	1.8	13
144	Self-heating effect on stability of a nanosecond pulsed DBD interacting with heptane and methyl-naphthalene as heavy oil model compounds. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2019, 26, 431-438.	1.8	13

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145	Phase-Resolved Measurement of Atmospheric-Pressure Radio-Frequency Pulsed Discharges in Ar/CH ₄ /CO ₂ Mixture. <i>Plasma Chemistry and Plasma Processing</i> , 2020, 40, 937-953.	1.1	13
146	Simulations on Elastoplasticity of the Monolithic Aluminum Armature Under the Contact Force. <i>IEEE Transactions on Plasma Science</i> , 2011, 39, 426-430.	0.6	12
147	Generation of Runaway Electrons and X-rays in Repetitive Nanosecond Pulse Corona Discharge in Atmospheric Pressure Air. <i>Applied Physics Express</i> , 2011, 4, 066001.	1.1	12
148	Bent paths of a positive streamer and a cathode-directed spark leader in diffuse discharges preionized by runaway electrons. <i>Physics of Plasmas</i> , 2015, 22, .	0.7	12
149	The influences of the electrode dimension and the dielectric material on the breakdown characteristics of coplanar dielectric barrier discharge in ambient air. <i>Plasma Processes and Polymers</i> , 2017, 14, 1700112.	1.6	12
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