

Cheng Zhang

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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|-------------------|-------------------------|----------------|-----------------|
| 70 papers | 1,314 citations | 19 h-index | 33 g-index |
| 92 ext. papers | 1,617 ext. citations | 2.1 avg, IF | 4.54 L-index |

| # | Paper | IF | Citations |
|----|---|-----|-----------|
| 70 | Effects of the combination therapy of electric field stimulation and polyethylene glycol in the ex vivo spinal cord of female rats after compression. <i>Journal of Neuroscience Research</i> , 2021 , 99, 1850-1863 | 4.4 | 1 |
| 69 | Persistent moderate to severe pain and long-term cognitive decline. <i>European Journal of Pain</i> , 2021 , 25, 2065-2074 | 3.7 | 3 |
| 68 | 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 | 9.5 | 6 |
| 67 | 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 | 6.8 | 10 |
| 66 | Effect of Dielectric Barrier Discharge (DBD) Treatment on the Dielectric Properties of Poly(vinylidene fluoride)(PVDF)-Based Copolymer. <i>Polymers</i> , 2020 , 12, | 4.5 | 1 |
| 65 | 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 | 2.3 | 18 |
| 64 | Plasma jet printing for preparation of N-doped graphene electrode. <i>Journal of Materials Science: Materials in Electronics</i> , 2019 , 30, 8944-8954 | 2.1 | 4 |
| 63 | Preparation and Properties of Polystyrene Deposited with TiN Film Using Atmospheric-Pressure Plasma Jet 2019 , | | 1 |
| 62 | Spatial and Temporal Evolution of a Radial Plasma Jet Array and Its Interaction with Material. <i>Plasma Chemistry and Plasma Processing</i> , 2019 , 39, 187-203 | 3.6 | 16 |
| 61 | Atmospheric-pressure pulsed discharges and plasmas: mechanism, characteristics and applications. <i>High Voltage</i> , 2018 , 3, 14-20 | 4.1 | 143 |
| 60 | Early electrical field stimulation prevents the loss of spinal cord anterior horn motoneurons and muscle atrophy following spinal cord injury. <i>Neural Regeneration Research</i> , 2018 , 13, 869-876 | 4.5 | 6 |
| 59 | Poly(vinylidene fluoride)/Plasma-Treated BaTiO ₃ Nanocomposites with Enhanced Electroactive Phase. <i>Macromolecular Research</i> , 2018 , 26, 965-972 | 1.9 | 7 |
| 58 | Measurement of runaway electron beam current in nanosecond-pulse discharges by a Faraday cup. <i>Laser and Particle Beams</i> , 2018 , 36, 369-375 | 0.9 | 2 |
| 57 | X-ray radiation and runaway electron beams generated during discharges in atmospheric-pressure air at rise times of voltage pulse of 500 and 50 ns. <i>Laser and Particle Beams</i> , 2018 , 36, 186-194 | 0.9 | 7 |
| 56 | Thin insulating film deposition on copper by atmospheric-pressure plasmas. <i>Plasma Processes and Polymers</i> , 2017 , 14, 1600248 | 3.4 | 17 |
| 55 | 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 | 1.3 | 15 |
| 54 | Uniformity optimization and dynamic studies of plasma jet array interaction in argon. <i>Physics of Plasmas</i> , 2017 , 24, 093507 | 2.1 | 42 |

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| 53 | Factors influencing the discharge mode for microsecond-pulse gliding discharges at atmospheric pressure. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2017 , 24, 2148-2156 | 2.3 | 8 |
| 52 | Influence of electrode spacing and gas pressure on parameters of a runaway electron beam generating during the nanosecond breakdown in SF6 and nitrogen. <i>High Voltage</i> , 2017 , 2, 49-55 | 4.1 | 9 |
| 51 | 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, 123503 | 2.1 | 14 |
| 50 | A pulsed generator for synchronous discharges of high-energy plasma synthetic jet actuators. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2017 , 24, 2076-2084 | 2.3 | 8 |
| 49 | Review of supershort avalanche electron beam during nanosecond-pulse discharges in some gases. <i>Matter and Radiation at Extremes</i> , 2017 , 2, 105-116 | 4.7 | 5 |
| 48 | Aging characteristics of epoxy resin discharged by very fast transient overvoltage in SF6. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2017 , 24, 1178-1188 | 2.3 | 16 |
| 47 | The mechanism of Naringin-enhanced remyelination after spinal cord injury. <i>Neural Regeneration Research</i> , 2017 , 12, 470-477 | 4.5 | 13 |
| 46 | Experimental Study on Sound Characteristics Produced by DC Corona and Pulsed Discharges. <i>IEEE Transactions on Plasma Science</i> , 2016 , 44, 2196-2203 | 1.3 | 7 |
| 45 | 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 | 2.3 | 44 |
| 44 | Optical and illuminant characteristics of microsecond-pulse diffuse discharges in a point-to-point gap 2016 , | | 2 |
| 43 | Characteristics of microsecond-pulse surface flashover on epoxy resin surfaces in SF6. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2016 , 23, 2328-2336 | 2.3 | 18 |
| 42 | Effect of DSPE-PEG on compound action potential, injury potential and ion concentration following compression in ex vivo spinal cord. <i>Neuroscience Letters</i> , 2016 , 620, 50-6 | 3.3 | 6 |
| 41 | Discharge processes and an electrical model of atmospheric pressure plasma jets in argon. <i>European Physical Journal D</i> , 2016 , 70, 1 | 1.3 | 14 |
| 40 | 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 | 1.3 | 23 |
| 39 | Supershort avalanche electron beam in SF6 and krypton. <i>Physical Review Accelerators and Beams</i> , 2016 , 19, | 1.8 | 13 |
| 38 | Simulation of runaway electron inception and breakdown in nanosecond pulse gas discharges. <i>Laser and Particle Beams</i> , 2016 , 34, 43-52 | 0.9 | 10 |
| 37 | Modification of copper surface by runaway electrons preionized diffuse discharges at atmospheric pressure. <i>Laser and Particle Beams</i> , 2016 , 34, 202-209 | 0.9 | 5 |
| 36 | A Compact Microsecond-Pulse Generator Used for Surface Dielectric Barrier Discharges. <i>IEEE Transactions on Plasma Science</i> , 2016 , 44, 2072-2078 | 1.3 | 18 |

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| 35 | 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 | 1.3 | 10 |
| 34 | Surface modification of LDPE film by nanosecond-pulse dielectric barrier discharge at atmospheric pressure 2015 , | | 1 |
| 33 | Comparison of Atmospheric-Pressure He and Ar Plasma Jets Driven by Microsecond Pulses. <i>IEEE Transactions on Plasma Science</i> , 2015 , 43, 726-732 | 1.3 | 48 |
| 32 | Comparison of μ s- and ns-Pulse Gliding Discharges in Air Flow. <i>IEEE Transactions on Plasma Science</i> , 2014 , 42, 2354-2355 | 1.3 | 5 |
| 31 | Coaxial Diffuse Discharges Driven by Repetitive Nanosecond Pulses at Different Air Pressures. <i>IEEE Transactions on Plasma Science</i> , 2014 , 42, 2378-2379 | 1.3 | 2 |
| 30 | Diffuse Discharges in Open Air Sustained by Microsecond and Nanosecond Pulses. <i>IEEE Transactions on Plasma Science</i> , 2014 , 42, 2408-2409 | 1.3 | 5 |
| 29 | A bioelectrical impedance phase angle measuring system for assessment of nutritional status. <i>Bio-Medical Materials and Engineering</i> , 2014 , 24, 3657-64 | 1 | 11 |
| 28 | Oscillating field stimulation promotes spinal cord remyelination by inducing differentiation of oligodendrocyte precursor cells after spinal cord injury. <i>Bio-Medical Materials and Engineering</i> , 2014 , 24, 3629-36 | 1 | 11 |
| 27 | Simulation of injury potential compensation by direct current stimulation in rat spinal cord. <i>Bio-Medical Materials and Engineering</i> , 2014 , 24, 3693-700 | 1 | 1 |
| 26 | A microsecond generator based on pulse transformer and its discharge applications 2014 , | | 1 |
| 25 | Generation of super-short avalanche electron beams in SF ₆ . <i>Laser and Particle Beams</i> , 2014 , 32, 331-341 | 0.9 | 20 |
| 24 | 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 | 0.9 | 29 |
| 23 | Surface Treatment of Polyethylene Terephthalate to Improving Hydrophilicity Using Atmospheric Pressure Plasma Jet. <i>IEEE Transactions on Plasma Science</i> , 2013 , 41, 1627-1634 | 1.3 | 58 |
| 22 | 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 | 1.3 | 24 |
| 21 | Spacer flashover characteristics in SF ₆ under repetitive nanosecond pulses. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2013 , 20, 1161-1167 | 2.3 | 10 |
| 20 | Diffuse discharge produced by repetitive nanosecond pulses in open air, nitrogen, and helium. <i>Journal of Applied Physics</i> , 2013 , 113, 093301 | 2.5 | 61 |
| 19 | Extremely low-frequency magnetic exposure appears to have no effect on pathogenesis of Alzheimer's disease in aluminum-overloaded rat. <i>PLoS ONE</i> , 2013 , 8, e71087 | 3.7 | 6 |
| 18 | Electrical stimulation modulates injury potentials in rats after spinal cord injury. <i>Neural Regeneration Research</i> , 2013 , 8, 2531-9 | 4.5 | 4 |

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|----|---|-----|----|
| 17 | 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 | 1.3 | 26 |
| 16 | Study on Q-V Lissajous figures in nanosecond-pulsed surface discharge 2012 , | | 1 |
| 15 | Generation of Homogeneous Atmospheric-Pressure Dielectric Barrier Discharge in a Large-Gap Argon Gas. <i>IEEE Transactions on Plasma Science</i> , 2012 , 40, 1884-1890 | 1.3 | 8 |
| 14 | X-ray emission from a nanosecond-pulse discharge in an inhomogeneous electric field at atmospheric pressure. <i>Physics of Plasmas</i> , 2012 , 19, 123516 | 2.1 | 13 |
| 13 | A repetitive microsecond-pulse generator for plasma application 2012 , | | 2 |
| 12 | 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 | 0.9 | 33 |
| 11 | Spark discharge formation in an inhomogeneous electric field under conditions of runaway electron generation. <i>Journal of Applied Physics</i> , 2012 , 111, 023304 | 2.5 | 39 |
| 10 | Surface modification of polymers by a nanosecond-pulse plasma jet 2012 , | | 4 |
| 9 | X-ray and runaway electron generation in repetitive pulsed discharges in atmospheric pressure air with a point-to-plane gap. <i>Physics of Plasmas</i> , 2011 , 18, 053502 | 2.1 | 11 |
| 8 | Comparison of AC and Nanosecond-Pulsed DBDs in Atmospheric Air. <i>IEEE Transactions on Plasma Science</i> , 2011 , 39, 2076-2077 | 1.3 | 25 |
| 7 | 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, 083306 | 2.5 | 34 |
| 6 | 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, 021503 | 3.4 | 99 |
| 5 | 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 | 1.3 | 17 |
| 4 | Detection of x-ray emission in a nanosecond discharge in air at atmospheric pressure. <i>Review of Scientific Instruments</i> , 2010 , 81, 123501 | 1.7 | 20 |
| 3 | Repetitive nanosecond-pulse discharge in tip-grid gaps in atmospheric air 2010 , | | 1 |
| 2 | 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 | 1.3 | 50 |
| 1 | A Compact Repetitive Unipolar Nanosecond-Pulse Generator for Dielectric Barrier Discharge Application. <i>IEEE Transactions on Plasma Science</i> , 2010 , 38, 1651-1655 | 1.3 | 87 |