

# Shuai Zhang

## List of Publications by Year in descending order

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112  
papers

2,710  
citations

186254

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223791

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115  
docs citations

115  
times ranked

2957  
citing authors

#	ARTICLE	IF	CITATIONS
1	Sustainable Ammonia Synthesis from Nitrogen and Water by One-Step Plasma Catalysis. <i>Energy and Environmental Materials</i> , 2023, 6, .	12.8	20
2	Numerical modeling and mechanism investigation of nanosecond-pulsed DBD plasma-catalytic CH <sub>4</sub> dry reforming. <i>Journal Physics D: Applied Physics</i> , 2022, 55, 035202.	2.8	12
3	Optical emission spectroscopy measurement of plasma parameters in a nanosecond pulsed spark discharge for CO <sub>2</sub> /CH <sub>4</sub> dry reforming. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2022, 267, 120590.	3.9	10
4	Numerical investigation on the heterogeneous pulsed dielectric barrier discharge plasma catalysis for CO <sub>2</sub> hydrogenation at atmospheric pressure: Effects of Ni and Cu catalysts on the selectivity conversions to CH <sub>4</sub> and CH <sub>3</sub> OH. <i>Plasma Processes and Polymers</i> , 2022, 19, e2100111.	3.0	14
5	Re-engineering the inner surface of ferritin nanocage enables dual drug payloads for synergistic tumor therapy. <i>Theranostics</i> , 2022, 12, 1800-1815.	10.0	30
6	Sustainable nitrogen fixation with nanosecond pulsed spark discharges: insights into free-radical-chain reactions. <i>Green Chemistry</i> , 2022, 24, 1534-1544.	9.0	21
7	CO <sub>x</sub> -free co-cracking of n-decane and CH <sub>4</sub> to hydrogen and acetylene using pulsed spark plasma. <i>Chemical Engineering Journal</i> , 2022, 436, 135190.	12.7	17
8	Design, synthesis and biological evaluation of colchicine glycoconjugates as tubulin polymerization inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , 2022, 58, 116671.	3.0	3
9	Preparation of Exfoliated Organo-Montmorillonite and Its Effect on Flame Retardancy and Mechanical Properties of Polypropylene. <i>ChemistrySelect</i> , 2022, 7, .	1.5	1
10	Dry reforming of methane by microsecond pulsed dielectric barrier discharge plasma: Optimizing the reactor structures. <i>High Voltage</i> , 2022, 7, 718-729.	4.7	41
11	Research on the self-supporting capacity of sand and pebble stratum based on tunnel model test and discrete-continuous coupling method. <i>Arabian Journal of Geosciences</i> , 2022, 15, 1.	1.3	3
12	Remediation of Coal Tar-Contaminated Soil by Smoldering Combustion Using Vegetable Oils as Supplemental Fuel. <i>Journal of Environmental Engineering, ASCE</i> , 2022, 148, .	1.4	4
13	Coupling bimetallic Ni-Fe catalysts and nanosecond pulsed plasma for synergistic low-temperature CO <sub>2</sub> methanation. <i>Chemical Engineering Journal</i> , 2021, 420, 127693.	12.7	56
14	Facile synthesis of nitrogen-doped and boron-doped reduced graphene oxide using radio-frequency plasma for supercapacitors. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 265501.	2.8	10
15	Bioengineered Dual-Targeting Protein Nanocage for Stereoscopic Loading of Synergistic Hydrophilic/Hydrophobic Drugs to Enhance Anticancer Efficacy. <i>Advanced Functional Materials</i> , 2021, 31, 2102004.	14.9	18
16	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.	1.5	26
17	Efficient Nitrogen Fixation to Ammonia through Integration of Plasma Oxidation with Electrocatalytic Reduction. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 14131-14137.	13.8	190
18	Efficient Nitrogen Fixation to Ammonia through Integration of Plasma Oxidation with Electrocatalytic Reduction. <i>Angewandte Chemie</i> , 2021, 133, 14250-14256.	2.0	44

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19	Special issue on selected papers from HVDP 2020. Plasma Science and Technology, 2021, 23, 060101.	1.5	0
20	Synergistic Chemotherapy: Bioengineered Dual-Targeting Protein Nanocage for Stereoscopic Loading of Synergistic Hydrophilic/Hydrophobic Drugs to Enhance Anticancer Efficacy (Adv. Funct. Mater.) Tj ETQq0 0 0 rgBT4.0verlook 10 Tf 50	4.0	10
21	Liquefied Natural Gas for Superconducting Energy Pipelines: A Feasibility Study on Electrical Insulation. Energy & Fuels, 2021, 35, 13930-13936.	5.1	4
22	Screening and Identification of Antidepressant Active Ingredients from Puerariae Radix Extract and Study on Its Mechanism. Oxidative Medicine and Cellular Longevity, 2021, 2021, 1-18.	4.0	8
23	Design, synthesis and bioevaluation of 2,7-diaryl-pyrazolo[1,5-a]pyrimidines as tubulin polymerization inhibitors. Bioorganic Chemistry, 2021, 115, 105220.	4.1	10
24	Design, synthesis and bioevaluation of 6-aryl-1-(3,4,5-trimethoxyphenyl)-1H-benzo[d]imidazoles as tubulin polymerization inhibitors. European Journal of Medicinal Chemistry, 2021, 226, 113826.	5.5	18
25	Temperature-independent, nonoxidative methane conversion in nanosecond repetitively pulsed DBD plasma. Sustainable Energy and Fuels, 2021, 5, 787-800.	4.9	24
26	Temporal evolution of electron energy distribution function and its correlation with hydrogen radical generation in atmospheric-pressure methane needle-plane discharge plasmas. Journal Physics D: Applied Physics, 2021, 54, 095202.	2.8	12
27	Post-Intensive Care Syndrome in Children: A Concept Analysis. Journal of Pediatric Nursing, 2021, 61, 417-423.	1.5	7
28	Plasma-Enabled CO <sub>2</sub> /CH <sub>4</sub> Conversion into Liquid Chemicals: Effect of Valence States and Microstructure of the Catalysts. , 2021, , .		0
29	Plasma enhanced anti-coking performance of Pd/CeO <sub>2</sub> catalysts for the conversion of methane. Sustainable Energy and Fuels, 2021, 6, 98-109.	4.9	20
30	Template synthesis of structure-controlled 3D hollow nickel-cobalt phosphides microcubes for high-performance supercapacitors. Journal of Colloid and Interface Science, 2020, 561, 23-31.	9.4	50
31	Photoprotective effect of Astragalus membranaceus polysaccharide on UVA-induced damage in HaCaT cells. PLoS ONE, 2020, 15, e0235515.	2.5	12
32	Template Construction of Porous CoP/COP <sub>2</sub> Microflowers Threaded with Carbon Nanotubes toward High-Efficiency Oxygen Evolution and Hydrogen Evolution Electrocatalysts. Inorganic Chemistry, 2020, 59, 12232-12239.	4.0	13
33	MOF-Derived Hierarchical CoSe <sub>2</sub> with Sheetlike Nanoarchitectures as an Efficient Bifunctional Electrocatalyst. Inorganic Chemistry, 2020, 59, 12778-12787.	4.0	27
34	Electro-Fenton Based Technique to Enhance Cell Harvest and Lipid Extraction from Microalgae. Energies, 2020, 13, 3813.	3.1	9
35	A Composite Uncertainty Forecasting Model for Unstable Time Series: Application of Wind Speed and Streamflow Forecasting. IEEE Access, 2020, 8, 209251-209266.	4.2	15
36	The PVP-assisted construction of a Co <sub>3</sub> V <sub>2</sub> O <sub>8</sub> @NiCo LDH hierarchical structure for high-performance lithium-ion batteries. New Journal of Chemistry, 2020, 44, 10918-10923.	2.8	16

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37	Atmospheric-pressure plasma jet deposition of bumpy coating improves polypropylene surface flashover performance in vacuum. <i>Surface and Coatings Technology</i> , 2020, 387, 125511.	4.8	27
38	Surface modification of aramid fibers with CaCl <sub>2</sub> treatment and secondary functionalization of silane coupling agents. <i>Journal of Applied Polymer Science</i> , 2020, 137, 49159.	2.6	8
39	Protective effect of d-tetramannuronic acid tetrasodium salt on UVA-induced photo-aging in HaCaT cells. <i>Biomedicine and Pharmacotherapy</i> , 2020, 126, 110094.	5.6	14
40	Synthesis of cobalt-doped V <sub>2</sub> O <sub>3</sub> with a hierarchical yolk-shell structure for high-performance lithium-ion batteries. <i>CrystEngComm</i> , 2020, 22, 1705-1711.	2.6	19
41	Energy pooling mechanism for catalyst-free methane activation in nanosecond pulsed non-thermal plasmas. <i>Chemical Engineering Journal</i> , 2020, 396, 125185.	12.7	41
42	Cutting performance investigation based on the variable friction model by considering sliding velocity and limiting stress. <i>Proceedings of the Institution of Mechanical Engineers, Part B: Journal of Engineering Manufacture</i> , 2020, 234, 1113-1123.	2.4	2
43	Protective Effect of l-Hexaguluroic Acid Hexasodium Salt on UVA-Induced Photo-Aging in HaCaT Cells. <i>International Journal of Molecular Sciences</i> , 2020, 21, 1201.	4.1	12
44	Microsecond Pulsed Spark Discharge Plasma Treatment on Heavy Oil Model Compounds for Hydrogen Production. , 2020, , .		0
45	Efficient Conversion of Greenhouse Gas into Value-Added Chemicals with Non-Thermal Nanosecond Pulsed Plasma. , 2020, , .		0
46	Title is missing!. , 2020, 15, e0235515.		0
47	Title is missing!. , 2020, 15, e0235515.		0
48	Title is missing!. , 2020, 15, e0235515.		0
49	Title is missing!. , 2020, 15, e0235515.		0
50	Plasma bullet propagation and reflection from metallic and dielectric targets. <i>Plasma Sources Science and Technology</i> , 2019, 28, 095006.	3.1	42
51	The Effect of Accumulated Charges and Fluid Dynamics on the Helium Plasma Jet Array Behavior. <i>IEEE Transactions on Plasma Science</i> , 2019, 47, 4861-4867.	1.3	11
52	Porous Structure, Carbon Dioxide Capture, and Separation in Cross-Linked Porphyrin-Based Polyimides Networks. <i>Industrial &amp; Engineering Chemistry Research</i> , 2019, 58, 14146-14153.	3.7	15
53	A Sentiment-Aware Trading Volume Prediction Model for P2P Market Using LSTM. <i>IEEE Access</i> , 2019, 7, 81934-81944.	4.2	13
54	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.	3.0	39

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55	Nanosecond pulsed plasma assisted dry reforming of CH <sub>4</sub> : The effect of plasma operating parameters. <i>Applied Energy</i> , 2019, 243, 132-144.	10.1	111
56	Measurement of optical spectrum and mass spectrum in vacuum surface flashover for polymeric materials. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2019, 26, 593-600.	2.9	6
57	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.	2.9	13
58	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.	3.9	21
59	Strong Exciton-Photon Coupling in Hybrid Inorganic-Organic Perovskite Micro/Nanowires. <i>Advanced Optical Materials</i> , 2018, 6, 1701032.	7.3	114
60	Deposition of SiC <sub>x</sub> H <sub>y</sub> O <sub>z</sub> thin film on epoxy resin by nanosecond pulsed APPJ for improving the surface insulating performance. <i>Plasma Science and Technology</i> , 2018, 20, 025504.	1.5	42
61	Deficiency of Î³T cells protects against abdominal aortic aneurysms by regulating phosphoinositide 3-kinase/AKT signaling. <i>Journal of Vascular Surgery</i> , 2018, 67, 899-908.e1.	1.1	16
62	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.	2.9	22
63	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.	2.8	35
64	Highly efficient conversion of methane using microsecond and nanosecond pulsed spark discharges. <i>Applied Energy</i> , 2018, 226, 534-545.	10.1	99
65	Bio-Oil Heavy Fraction as a Feedstock for Hydrogen Generation via Chemical Looping Process: Reactor Design and Hydrodynamic Analysis. <i>International Journal of Chemical Reactor Engineering</i> , 2017, 15, .	1.1	2
66	Structure analysis and microwave dielectric properties of germanium ion-doped ZnZrNb <sub>2</sub> O <sub>8</sub> ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2017, 28, 9755-9762.	2.2	5
67	Large-scale 2D PbI <sub>2</sub> monolayers: experimental realization and their indirect band-gap related properties. <i>Nanoscale</i> , 2017, 9, 3736-3741.	5.6	98
68	Berberine modulates amyloid-Î² peptide generation by activating AMP-activated protein kinase. <i>Neuropharmacology</i> , 2017, 125, 408-417.	4.1	42
69	Uniformity optimization and dynamic studies of plasma jet array interaction in argon. <i>Physics of Plasmas</i> , 2017, 24, .	1.9	56
70	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.	2.8	93
71	Characterization of circRNA-Associated-ceRNA Networks in a Senescence-Accelerated Mouse Prone 8 Brain. <i>Molecular Therapy</i> , 2017, 25, 2053-2061.	8.2	109
72	Nanosecond pulsed dielectric barrier discharge plasma-catalytic removal of HCHO in humid air. <i>EPJ Applied Physics</i> , 2017, 78, 20803.	0.7	7

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73	Analyses of mRNA Profiling through RNA Sequencing on a SAMP8 Mouse Model in Response to Ginsenoside Rg1 and Rb1 Treatment. <i>Frontiers in Pharmacology</i> , 2017, 8, 88.	3.5	18
74	A New Hemihydrate of Valacyclovir Hydrochloride. <i>Crystals</i> , 2017, 7, 140.	2.2	1
75	Propagation of Surface Ionization Wave in NS-Pulse Dielectric Barrier Discharge in Atmospheric Pressure Air. , 2017, , .		0
76	The Properties of HgCdTe/graphene Composite Thin Film with Different Layer Graphene. , 2017, , .		0
77	Vertical, capacitive microelectromechanical switches produced via direct writing of copper wires. <i>Microsystems and Nanoengineering</i> , 2016, 2, 16010.	7.0	20
78	Sulfonated polyimide/chitosan composite membranes for a vanadium redox flow battery: influence of the sulfonation degree of the sulfonated polyimide. <i>Polymer Journal</i> , 2016, 48, 905-918.	2.7	19
79	Ginsenoside Re reduces $A\beta^{2}$ production by activating PPAR $\gamma^{3}$ to inhibit BACE1 in N2a/APP695 cells. <i>European Journal of Pharmacology</i> , 2016, 793, 101-108.	3.5	72
80	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	10
81	Plasma cracking methane for hydrogen production in a pulsed dielectric barrier discharge. , 2016, , .		0
82	Spectroscopic and electrical characters of SBD plasma excited by bipolar nanosecond pulse in atmospheric air. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2016, 161, 186-194.	3.9	16
83	The OES Diagnosis in Removal of HCHO by the Uniform Bipolar Nanosecond-Pulsed DBD Using Wire-Cylinder Electrode Configuration in Atmospheric N <sub>2</sub> . <i>IEEE Transactions on Plasma Science</i> , 2016, 44, 3001-3008.	1.3	2
84	Deficiency of IL-12p35 improves cardiac repair after myocardial infarction by promoting angiogenesis. <i>Cardiovascular Research</i> , 2016, 109, 249-259.	3.8	47
85	Phase constitution, microstructures and microwave dielectric properties of CaxZn1-xZr0.8Sn0.2Nb2O8 ceramics. <i>Journal of Materials Science: Materials in Electronics</i> , 2016, 27, 1232-1238.	2.2	2
86	Sulfonated poly(imide-siloxane) membrane as a low vanadium ion permeable separator for a vanadium redox flow battery. <i>Polymer Journal</i> , 2015, 47, 701-708.	2.7	20
87	CdSe quantum dots/molecular cobalt catalyst co-grafted open porous NiO film as a photocathode for visible light driven H <sub>2</sub> evolution from neutral water. <i>Journal of Materials Chemistry A</i> , 2015, 3, 18852-18859.	10.3	72
88	Sulfonated polyimide/AlOOH composite membranes with decreased vanadium permeability and increased stability for vanadium redox flow battery. <i>Journal of Solid State Electrochemistry</i> , 2014, 18, 3479-3490.	2.5	39
89	Novel sulfonated polyimide/ZrO <sub>2</sub> composite membrane as a separator of vanadium redox flow battery. <i>Polymers for Advanced Technologies</i> , 2014, 25, 1610-1615.	3.2	42
90	Atmospheric air diffuse array-needles dielectric barrier discharge excited by positive, negative, and bipolar nanosecond pulses in large electrode gap. <i>Journal of Applied Physics</i> , 2014, 116, .	2.5	19

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91	Overexpression of Heme Oxygenase 1 Causes Cognitive Decline and Affects Pathways for Tauopathy in Mice. <i>Journal of Alzheimer's Disease</i> , 2014, 43, 519-534.	2.6	34
92	An uniform DBD plasma excited by bipolar nanosecond pulse using wire-cylinder electrode configuration in atmospheric air. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 122, 107-112.	3.9	19
93	The influencing factors of nanosecond pulse homogeneous dielectric barrier discharge in air. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 117, 535-540.	3.9	18
94	A large-area diffuse air discharge plasma excited by nanosecond pulse under a double hexagon needle-array electrode. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 121, 698-703.	3.9	11
95	Electrical and optical characteristics of diffuse nanosecond pulsed discharge plasma using a needle-array electrode in atmospheric air. <i>Journal of Applied Physics</i> , 2014, 115, .	2.5	10
96	Atmospheric Pressure Gas-Liquid Diffuse Nanosecond Pulse Discharge Used for Sterilization in Sewage. <i>Plasma Processes and Polymers</i> , 2014, 11, 842-849.	3.0	25
97	Optical and application study of gas-liquid discharge excited by bipolar nanosecond pulse in atmospheric air. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2014, 131, 571-576.	3.9	8
98	Multiple current peaks in room-temperature atmospheric pressure homogenous dielectric barrier discharge plasma excited by high-voltage tunable nanosecond pulse in air. <i>Applied Physics Letters</i> , 2013, 102, .	3.3	40
99	Effect of dielectric material on bipolar nanosecond pulse diffuse dielectric barrier discharge in air at atmospheric pressure. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2013, 112, 223-227.	3.9	7
100	Processes of Raising Voltage and Reducing Voltage in Needle-Plate Dielectric Barrier Discharge. <i>IEEE Transactions on Plasma Science</i> , 2013, 41, 2527-2531.	1.3	1
101	Comparison of atmospheric air plasmas excited by high-voltage nanosecond pulsed discharge and sinusoidal alternating current discharge. <i>Journal of Applied Physics</i> , 2013, 114, .	2.5	44
102	Atmospheric air homogenous DBD plasma excited by bipolar nanosecond pulse used for improving the hydrophilic property of polypropylene. <i>Europhysics Letters</i> , 2013, 102, 65001.	2.0	20
103	Rotational, Vibrational, and Excitation Temperatures in Bipolar Nanosecond-Pulsed Diffuse Dielectric-Barrier-Discharge Plasma at Atmospheric Pressure. <i>IEEE Transactions on Plasma Science</i> , 2013, 41, 350-354.	1.3	24
104	The effect of dielectric thickness on diffuse nanosecond dielectric barrier discharges using a needle array-plate electrode configuration in air at atmospheric pressure. <i>Journal of Applied Physics</i> , 2013, 113, 233305.	2.5	15
105	An atmospheric air gas-liquid diffuse discharge excited by bipolar nanosecond pulse in quartz container used for water sterilization. <i>Applied Physics Letters</i> , 2013, 103, .	3.3	25
106	Determination of Fluorine, Chlorine and Bromine in Household Products by means of Oxygen Bomb Combustion and Ion Chromatography. <i>Journal of Chromatographic Science</i> , 2013, 51, 65-69.	1.4	22
107	A Total Solution to Baseline Separation of 20 Brominated Flame Retardant Additives in Electronic Products with Automated Soxhlet Hot Extraction and Gas Chromatography-Mass Spectrometry. <i>Journal of the Chinese Chemical Society</i> , 2013, 60, 440-446.	1.4	0
108	Atmospheric-Pressure Diffuse Dielectric-Barrier-Discharge Plasma Generated by Bipolar Nanosecond Pulse in Nitrogen and Air. <i>IEEE Transactions on Plasma Science</i> , 2012, 40, 2191-2197.	1.3	4

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109	Experimental research of diffuse bi-directional pulsed dielectric barrier discharge plasma. Journal of Electrostatics, 2012, 70, 356-362.	1.9	11
110	Notice of Retraction: Optical-Damage-Resistant MgO-Diffused Near-Stoichiometric $\text{Ti}_{1-x}\text{LiNbO}_3$ Strip Waveguides. IEEE Photonics Technology Letters, 2012, 24, 491-493.	2.5	6
111	A homogeneous dielectric barrier discharge plasma excited by a bipolar nanosecond pulse in nitrogen and air. Plasma Sources Science and Technology, 2012, 21, 035004.	3.1	68
112	Optical Diagnosis of Atmospheric Pressure Gas-Liquid Diffuse Discharge Excited by Nanosecond Pulse Voltage. Advanced Materials Research, 0, 1058, 158-161.	0.3	0