Yi Li

List of Publications by Year in descending order

62 papers	2,302 citations	172457 29 h-index	223800 46 g-index
63 all docs	63 docs citations	63 times ranked	1027 citing authors

#	Article	IF	Citations
1	Arc decomposition behavior of C ₄ F ₇ N/Air gas mixture and biosafety evaluation of its byâ€products. High Voltage, 2022, 7, 856-865.	4.7	7
2	Breathable Nanogenerators for an On-Plant Self-Powered Sustainable Agriculture System. ACS Nano, 2021, 15, 5307-5315.	14.6	99
3	Printable elastomeric electrodes with sweat-enhanced conductivity for wearables. Science Advances, 2021, 7, .	10.3	50
4	Simultaneous Detection of Câ„Hâ„ and CO Based on Cantilever-Enhanced Photoacoustic Spectroscopy. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-10.	4.7	11
5	The sensitivity of C₄F₇N to electric field and its influence to environment-friendly insulating gas mixture C₄F₇N/CO₂. Journal Physics D: Applied Physics, 2021, 54, 055501.	2.8	32
6	Study on the Compatibility of Eco-Friendly Insulating Gas C5F10O/N2 and C5F10O/Air with Copper Materials in Gas-Insulated Switchgears. Applied Sciences (Switzerland), 2021, 11, 197.	2.5	8
7	Thermal decomposition properties of fluoronitriles-N2 gas mixture as alternative gas for SF6. Journal of Fluorine Chemistry, 2020, 229, 109434.	1.7	8
8	Effect of Oxygen and Temperature on Thermal Decomposition Characteristics of C₄F₇N/CO₂/O₂ Gas Mixture for MV Equipment. IEEE Access, 2020, 8, 221004-221012.	4.2	12
9	Dynamics of surface charge and electric field distributions on basinâ€type insulator in GIS/GIL due to voltage polarity reversal. High Voltage, 2020, 5, 151-159.	4.7	42
10	Research status of replacement gases for SF6 in power industry. AIP Advances, 2020, 10, .	1.3	39
11	Interaction Mechanism between the C₄F₇Nâ€“CO₂ Gas Mixture and the EPDM Seal Ring. ACS Omega, 2020, 5, 5911-5920.	3.5	17
12	Study on the thermal decomposition characteristics of C ₄ F ₇ Nâ€“CO ₂ mixture as ecoâ€friendly gasâ€insulating medium. High Voltage, 2020, 5, 46-52.	4.7	40
13	Influence regularity of O ₂ on dielectric and decomposition properties of C ₄ F ₇ Nâ€“CO ₂ â€“O ₂ gas mixture for mediumâ€voltage equipment. High Voltage, 2020, 5, 256-263.	4.7	30
14	First-principles insight into Ni-doped InN monolayer as a noxious gases scavenger. Applied Surface Science, 2019, 494, 859-866.	6.1	250
15	High selectivity n-type InSe monolayer toward decomposition products of sulfur hexafluoride: A density functional theory study. Applied Surface Science, 2019, 479, 852-862.	6.1	20
16	Assessment on the toxicity and application risk of C4F7N: A new SF6 alternative gas. Journal of Hazardous Materials, 2019, 368, 653-660.	12.4	78
17	Effect of oxygen on power frequency breakdown voltage and decomposition characteristics of the C₅F₁₀O/N₂/O₂ gas mixture. RSC Advances, 2019, 9, 18963-18970.	3.6	15
18	Research on C4F7N gas mixture detection based on infrared spectroscopy. Sensors and Actuators A: Physical, 2019, 294, 126-132.	4.1	11

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19	A First-Principles Study of the SF₆Decomposed Products Adsorbed Over Defective WS₂Monolayer as Promising Gas Sensing Device. IEEE Transactions on Device and Materials Reliability, 2019, 19, 473-483.	2.0	90
20	Study on the thermal interaction mechanism between C4F7N-N2 and copper, aluminum. Corrosion Science, 2019, 153, 32-46.	6.6	32
21	Different doping of penta-graphene as adsorbent and gas sensing material for scavenging and detecting SF6 decomposed species. Sustainable Materials and Technologies, 2019, 21, e00100.	3.3	11
22	Theoretical study of SF6 decomposition on the MoS2 monolayer doped with Ag, Ni, Au, Pt: a first-principles study. Adsorption, 2019, 25, 225-233.	3.0	12
23	Application of C ₆ F ₁₂ O/CO ₂ mixture in 10ÂkV mediumâ€voltage switchgear. IET Science, Measurement and Technology, 2019, 13, 1225-1230.	1.6	59
24	Influence of Oxygen on the Thermal Decomposition Properties of C₄F₇Nâ€“N₂â€“O₂ as an Eco-Friendly Gas Insulating Medium. ACS Omega, 2019, 4, 18616-18626.	3.5	8
25	Partial discharge characteristics of C6F12O/CO2 mixed gas at power frequency AC voltage. AIP Advances, 2019, 9, .	1.3	9
26	Thermal compatibility properties of C6F12O-air gas mixture with metal materials. AIP Advances, 2019, 9, .	1.3	12
27	Theoretical study on the interaction of heptafluoro-iso-butyronitrile decomposition products with Al (1 1 1). Molecular Physics, 2019, 117, 218-227.	1.7	4
28	Density functional theory study of small Ag cluster adsorbed on graphyne. Applied Surface Science, 2019, 465, 93-102.	6.1	46
29	Theoretical study on the interaction between C5-PFK and Al (1â€¯1â€¯1), Ag (1â€¯1â€¯1): A comparative study. Applied Surface Science, 2019, 464, 586-596.	6.1	31
30	Experimental study on the partial discharge and AC breakdown properties of C ₄ F ₇ N/CO ₂ mixture. High Voltage, 2019, 4, 12-17.	4.7	45
31	Using Single-Layer HfS₂ as Prospective Sensing Device Toward Typical Partial Discharge Gas in SF₆-Based Gas-Insulated Switchgear. IEEE Transactions on Electron Devices, 2019, 66, 689-695.	3.0	26
32	Insight into the compatibility between C4F7N and silver: Experiment and theory. Journal of Physics and Chemistry of Solids, 2019, 126, 105-111.	4.0	14
33	Insight into the decomposition mechanism of C6F12O-CO2 gas mixture. Chemical Engineering Journal, 2019, 360, 929-940.	12.7	50
34	Detecting Decompositions of Sulfur Hexafluoride Using MoS₂ Monolayer as Gas Sensor. IEEE Sensors Journal, 2019, 19, 39-46.	4.7	51
35	High Selective SO₂ Gas Sensor Based on Monolayer <inline-formula> <tex-math notation="LaTeX">eta </tex-math> </inline-formula>-AsSb to Detect SF₆ Decompositions. IEEE Sensors Journal, 2019, 19, 1215-1223.	4.7	21
36	Adsorption behavior of COF2 and CF4 gas on the MoS2 monolayer doped with Ni: A first-principles study. Applied Surface Science, 2018, 443, 274-279.	6.1	70

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37	Detecting decompositions of sulfur hexafluoride using reduced graphene oxide decorated with Pt nanoparticles. Journal Physics D: Applied Physics, 2018, 51, 185304.	2.8	15
38	Decomposition characteristics of C5F10O/air mixture as substitutes for SF6 to reduce global warming. Journal of Fluorine Chemistry, 2018, 208, 65-72.	1.7	36
39	Noble metal (Pt or Au)-doped monolayer MoS2 as a promising adsorbent and gas-sensing material to SO2, SOF2 and SO2F2: a DFT study. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	105
40	Theoretical evaluation of the interaction between C5-PFK molecule and Cu (1 1 1). Journal of Fluorine Chemistry, 2018, 208, 48-54.	1.7	19
41	Adsorption and dissociation mechanism of SO2 and H2S on Pt decorated graphene: a DFT-D3 study. Applied Physics A: Materials Science and Processing, 2018, 124, 1.	2.3	32
42	Decomposition Properties of C₄F₇N/N₂ Gas Mixture: An Environmentally Friendly Gas to Replace SF₆. Industrial & Engineering Chemistry Research, 2018, 57, 5173-5182.	3.7	126
43	Dissociative adsorption of environment-friendly insulating medium C3F7CN on Cu(111) and Al(111) surface: A theoretical evaluation. Applied Surface Science, 2018, 434, 549-560.	6.1	45
44	Decomposition mechanism of the C5-PFK/CO2 gas mixture as an alternative gas for SF6. Chemical Engineering Journal, 2018, 336, 38-46.	12.7	72
45	The Influence of O2 on Decomposition Characteristics of c-C4F8/N2 Environmental Friendly Insulating Gas. Processes, 2018, 6, 174.	2.8	11
46	Influence of trace water on decomposition mechanism of c-C4F8 as environmental friendly insulating gas at high temperature. AIP Advances, 2018, 8, 125202.	1.3	2
47	Insights on decomposition process of c-C ₄ F ₈ and c-C ₄ F ₈ /N ₂ mixture as substitutes for SF ₆. Royal Society Open Science, 2018, 5, 181104.	2.4	6
48	Insights into the interaction between C4F7N decomposition products and Cu (1 1 1), Ag (1 1 1) surface. Journal of Fluorine Chemistry, 2018, 213, 24-30.	1.7	19
49	Study on the Dielectric Properties of C₄F₇N/N₂ Mixture Under Highly Non-Uniform Electric Field. IEEE Access, 2018, 6, 42868-42876.	4.2	30
50	Theoretical study of the interaction of SF6 molecule on Ag(1â€¯1â€¯1) surfaces: A DFT study. Applied Surface Science, 2018, 457, 745-751.	6.1	30
51	Sulfur dioxide adsorbed on pristine and Au dimer decorated Î³-graphyne: A density functional theory study. Applied Surface Science, 2018, 458, 781-789.	6.1	25
52	Study on the influence of O2 on the breakdown voltage and self-recovery characteristics of c-C4F8/N2 mixture. AIP Advances, 2018, 8, 085121.	1.3	5
53	Abatement of SF6 in the presence of NH3 by dielectric barrier discharge plasma. Journal of Hazardous Materials, 2018, 360, 341-348.	12.4	35
54	Formation mechanism of CF₃I discharge components and effect of oxygen on decomposition. Journal Physics D: Applied Physics, 2017, 50, 155601.	2.8	24

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55	Experimental studies on the powerâ€“frequency breakdown voltage of CF3I/N2/CO2 gas mixture. Journal of Applied Physics, 2017, 121, .	2.5	16
56	Effects of micro-water on decomposition of the environment-friendly insulating medium C5F10O. AIP Advances, 2017, 7, .	1.3	29
57	Theoretical study of the decomposition mechanism of environmentally friendly insulating medium C₃F₇CN in the presence of H₂O in a discharge. Journal Physics D: Applied Physics, 2017, 50, 325201.	2.8	50
58	Decomposition Mechanism of C₅F₁₀O: An Environmentally Friendly Insulation Medium. Environmental Science & Technology, 2017, 51, 10127-10136.	10.0	83
59	Reactive molecular dynamics study of the decomposition mechanism of the environmentally friendly insulating medium C₃F₇CN. RSC Advances, 2017, 7, 50663-50671.	3.6	36
60	The influence of Cu, Al and Fe free metal particles on the insulating performance of SF6 in C-GIS. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 2299-2305.	2.9	21
61	Insulation Strength and Decomposition Characteristics of a C6F12O and N2 Gas Mixture. Energies, 2017, 10, 1170.	3.1	48
62	Review on decomposition characteristics of eco-friendly gas insulating medium for high voltage gas insulated equipment. Journal Physics D: Applied Physics, 0, , .	2.8	22