

# Xiaoxing Zhang

## List of Publications by Year in descending order

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271  
papers

8,668  
citations

50276

46  
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71685

76  
g-index

276  
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276  
docs citations

276  
times ranked

3134  
citing authors

#	ARTICLE	IF	CITATIONS
1	Rh-doped MoSe <sub>2</sub> as a toxic gas scavenger: a first-principles study. <i>Nanoscale Advances</i> , 2019, 1, 772-780.	4.6	261
2	First-principles insight into Ni-doped InN monolayer as a noxious gases scavenger. <i>Applied Surface Science</i> , 2019, 494, 859-866.	6.1	250
3	Pd-doped MoS <sub>2</sub> monolayer: A promising candidate for DGA in transformer oil based on DFT method. <i>Applied Surface Science</i> , 2019, 470, 1035-1042.	6.1	248
4	Partial discharge recognition through an analysis of SF <sub>6</sub> decomposition products part 1: decomposition characteristics of SF <sub>6</sub> under four different partial discharges. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2012, 19, 29-36.	2.9	217
5	Experimental Sensing and Density Functional Theory Study of H <sub>2</sub> S and SOF <sub>2</sub> Adsorption on Au-Modified Graphene. <i>Advanced Science</i> , 2015, 2, 1500101.	11.2	213
6	Ru-InN Monolayer as a Gas Scavenger to Guard the Operation Status of SF <sub>6</sub> Insulation Devices: A First-Principles Theory. <i>IEEE Sensors Journal</i> , 2019, 19, 5249-5255.	4.7	158
7	Pristine and Cu decorated hexagonal InN monolayer, a promising candidate to detect and scavenge SF <sub>6</sub> decompositions based on first-principle study. <i>Journal of Hazardous Materials</i> , 2019, 363, 346-357.	12.4	146
8	First-principles study of SF <sub>6</sub> decomposed gas adsorbed on Au-decorated graphene. <i>Applied Surface Science</i> , 2016, 367, 259-269.	6.1	141
9	Partial discharge recognition through an analysis of SF <sub>6</sub> decomposition products part 2: feature extraction and decision tree-based pattern recognition. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2012, 19, 37-44.	2.9	128
10	Correlation analysis between formation process of SF <sub>6</sub> decomposed components and partial discharge qualities. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2013, 20, 864-875.	2.9	127
11	Decomposition Properties of C <sub>4</sub> F <sub>7</sub> N <sub>2</sub> Gas Mixture: An Environmentally Friendly Gas to Replace SF <sub>6</sub> . <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 5173-5182.	3.7	126
12	Pt & Pd decorated CNT as a workable media for SOF <sub>2</sub> sensing: A DFT study. <i>Applied Surface Science</i> , 2019, 471, 335-341.	6.1	125
13	Nanomaterials-based gas sensors of SF <sub>6</sub> decomposed species for evaluating the operation status of high-voltage insulation devices. <i>High Voltage</i> , 2019, 4, 242-258.	4.7	124
14	Adsorption of SF <sub>6</sub> decomposition components over Pd (1 $\times$ 1 $\times$ 1): A density functional theory study. <i>Applied Surface Science</i> , 2019, 465, 172-179.	6.1	112
15	Adsorption mechanism of SF <sub>6</sub> decomposed species on pyridine-like PtN <sub>3</sub> embedded CNT: A DFT study. <i>Applied Surface Science</i> , 2018, 447, 594-598.	6.1	110
16	TiO <sub>2</sub> Nanotube Array Sensor for Detecting the SF <sub>6</sub> Decomposition Product SO <sub>2</sub> . <i>Sensors</i> , 2012, 12, 3302-3313.	3.8	107
17	Noble metal (Pt or Au)-doped monolayer MoS <sub>2</sub> as a promising adsorbent and gas-sensing material to SO <sub>2</sub> , SOF <sub>2</sub> and SO <sub>2</sub> F <sub>2</sub> : a DFT study. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	2.3	105
18	Analysis of adsorption properties of typical partial discharge gases on Ni-SWCNTs using density functional theory. <i>Applied Surface Science</i> , 2016, 379, 47-54.	6.1	104

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19	Dissolved gas analysis in transformer oil using Pd catalyst decorated MoSe <sub>2</sub> monolayer: A first-principles theory. Sustainable Materials and Technologies, 2019, 20, e00094.	3.3	99
20	Adsorption of SF <sub>6</sub> decomposition components on Pt <sub>3</sub> -TiO <sub>2</sub> (110) surface: A DFT study. Applied Surface Science, 2018, 459, 242-248.	6.1	90
21	A First-Principles Study of the SF <sub>6</sub> Decomposed Products Adsorbed Over Defective WS <sub>2</sub> Monolayer as Promising Gas Sensing Device. IEEE Transactions on Device and Materials Reliability, 2019, 19, 473-483.	2.0	90
22	A DFT study of SO <sub>2</sub> and H <sub>2</sub> S gas adsorption on Au-doped single-walled carbon nanotubes. Physica Scripta, 2014, 89, 065803.	2.5	86
23	Decomposition Mechanism of C <sub>5</sub> F <sub>10</sub> O: An Environmentally Friendly Insulation Medium. Environmental Science & Technology, 2017, 51, 10127-10136.	10.0	83
24	Assessment on the toxicity and application risk of C <sub>4</sub> F <sub>7</sub> N: A new SF <sub>6</sub> alternative gas. Journal of Hazardous Materials, 2019, 368, 653-660.	12.4	78
25	Decomposition characteristics of SF <sub>6</sub> under thermal fault for temperatures below 400°C. IEEE Transactions on Dielectrics and Electrical Insulation, 2014, 21, 995-1004.	2.9	77
26	Mechanism and Application of Carbon Nanotube Sensors in SF <sub>6</sub> Decomposed Production Detection: a Review. Nanoscale Research Letters, 2017, 12, 177.	5.7	74
27	The sensing mechanism of N-doped SWCNTs toward SF <sub>6</sub> decomposition products: A first-principle study. Applied Surface Science, 2018, 440, 846-852.	6.1	72
28	Decomposition mechanism of the C <sub>5</sub> -PFK/CO <sub>2</sub> gas mixture as an alternative gas for SF <sub>6</sub> . Chemical Engineering Journal, 2018, 336, 38-46.	12.7	72
29	A simulation of Pd-doped SWCNTs used to detect SF <sub>6</sub> decomposition components under partial discharge. Applied Surface Science, 2014, 315, 196-202.	6.1	71
30	Adsorption behavior of CO <sub>2</sub> and CF <sub>4</sub> gas on the MoS <sub>2</sub> monolayer doped with Ni: A first-principles study. Applied Surface Science, 2018, 443, 274-279.	6.1	70
31	Theoretical Study of Monolayer PtSe <sub>2</sub> as Outstanding Gas Sensor to Detect SF <sub>6</sub> Decompositions. IEEE Electron Device Letters, 2018, 39, 1405-1408.	3.9	67
32	Application of C <sub>6</sub> F <sub>12</sub> O/CO <sub>2</sub> mixture in 10kV medium-voltage switchgear. IET Science, Measurement and Technology, 2019, 13, 1225-1230.	1.6	59
33	Dissolved Gas Analysis in Transformer Oil Using Pt-Doped WSe <sub>2</sub> Monolayer Based on First Principles Method. IEEE Access, 2019, 7, 72012-72019.	4.2	58
34	AC Breakdown and Decomposition Characteristics of Environmental Friendly Gas C <sub>5</sub> F <sub>10</sub> O/Air and C <sub>5</sub> F <sub>10</sub> O/N <sub>2</sub> . IEEE Access, 2019, 7, 73954-73960.	4.2	56
35	Theoretical Calculation of the Gas-Sensing Properties of Pt-Decorated Carbon Nanotubes. Sensors, 2013, 13, 15159-15171.	3.8	55
36	Gas Sensitivity and Sensing Mechanism Studies on Au-Doped TiO <sub>2</sub> Nanotube Arrays for Detecting SF <sub>6</sub> Decomposed Components. Sensors, 2014, 14, 19517-19532.	3.8	54

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37	Exploring single atom catalysts of transition-metal doped phosphorus carbide monolayer for HER: A first-principles study. <i>Journal of Energy Chemistry</i> , 2021, 52, 155-162.	12.9	54
38	Adsorption performance of Rh decorated SWCNT upon SF <sub>6</sub> decomposed components based on DFT method. <i>Applied Surface Science</i> , 2017, 420, 825-832.	6.1	53
39	Recent advances in decomposition of the most potent greenhouse gas SF <sub>6</sub> . <i>Critical Reviews in Environmental Science and Technology</i> , 2017, 47, 1763-1782.	12.8	52
40	Synergistic Effects of Boron Nitride (BN) Nanosheets and Silver (Ag) Nanoparticles on Thermal Conductivity and Electrical Properties of Epoxy Nanocomposites. <i>Polymers</i> , 2020, 12, 426.	4.5	52
41	Effect of Plasma Treatment on Multi-Walled Carbon Nanotubes for the Detection of H <sub>2</sub> S and SO <sub>2</sub> . <i>Sensors</i> , 2012, 12, 9375-9385.	3.8	51
42	Detecting Decompositions of Sulfur Hexafluoride Using MoS <sub>2</sub> Monolayer as Gas Sensor. <i>IEEE Sensors Journal</i> , 2019, 19, 39-46.	4.7	51
43	Computational screening of homo and hetero transition metal dimer catalysts for reduction of CO <sub>2</sub> to C <sub>2</sub> products with high activity and low limiting potential. <i>Journal of Materials Chemistry A</i> , 2020, 8, 21241-21254.	10.3	51
44	Theoretical study of the decomposition mechanism of environmentally friendly insulating medium C <sub>3</sub> F <sub>7</sub> CN in the presence of H <sub>2</sub> O in a discharge. <i>Journal Physics D: Applied Physics</i> , 2017, 50, 325201.	2.8	50
45	Computational Thermomechanical Properties of Silica-Epoxy Nanocomposites by Molecular Dynamic Simulation. <i>Polymers</i> , 2017, 9, 430.	4.5	50
46	Insight into the decomposition mechanism of C <sub>6</sub> F <sub>12</sub> O-CO <sub>2</sub> gas mixture. <i>Chemical Engineering Journal</i> , 2019, 360, 929-940.	12.7	50
47	Plasma-Catalytic Methanol Synthesis from CO <sub>2</sub> Hydrogenation over a Supported Cu Cluster Catalyst: Insights into the Reaction Mechanism. <i>ACS Catalysis</i> , 2022, 12, 1326-1337.	11.2	50
48	Fourier transform infrared spectroscopy quantitative analysis of SF <sub>6</sub> partial discharge decomposition components. <i>Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy</i> , 2015, 136, 884-889.	3.9	48
49	Insulation Strength and Decomposition Characteristics of a C <sub>6</sub> F <sub>12</sub> O and N <sub>2</sub> Gas Mixture. <i>Energies</i> , 2017, 10, 1170.	3.1	48
50	A review on SF <sub>6</sub> substitute gases and research status of CF <sub>3</sub> CF <sub>2</sub> CF <sub>3</sub> gases. <i>Energy Reports</i> , 2021, 7, 1170-1180.	5.1	47
51	Study on the influence mechanism of trace H <sub>2</sub> O on SF <sub>6</sub> thermal decomposition characteristic components. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2015, 22, 766-774.	2.9	46
52	Density functional theory study of small Ag cluster adsorbed on graphyne. <i>Applied Surface Science</i> , 2019, 465, 93-102.	6.1	46
53	Preparation and Application of TiO <sub>2</sub> Nanotube Array Gas Sensor for SF <sub>6</sub> -Insulated Equipment Detection: a Review. <i>Nanoscale Research Letters</i> , 2016, 11, 302.	5.7	45
54	Dissociative adsorption of environment-friendly insulating medium C <sub>3</sub> F <sub>7</sub> CN on Cu(111) and Al(111) surface: A theoretical evaluation. <i>Applied Surface Science</i> , 2018, 434, 549-560.	6.1	45

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55	Experimental study on the partial discharge and AC breakdown properties of C <sub>4</sub> F <sub>7</sub> N/CO <sub>2</sub> mixture. High Voltage, 2019, 4, 12-17.	4.7	45
56	Kernel statistical uncorrelated optimum discriminant vectors algorithm for GIS PD recognition. IEEE Transactions on Dielectrics and Electrical Insulation, 2009, 16, 206-213.	2.9	43
57	A review of hyperspectral imaging for nanoscale materials research. Applied Spectroscopy Reviews, 2019, 54, 285-305.	6.7	43
58	Nanosecond-pulsed microbubble plasma reactor for plasma-activated water generation and bacterial inactivation. Plasma Processes and Polymers, 2022, 19, .	3.0	43
59	Characteristics of the Concentration Ratio of $\text{SO}_2$ to $\text{SOF}_2$ as the Decomposition Products of $\text{SF}_6$ Under Corona Discharge. IEEE Transactions on Plasma Science, 2012, 40, 56-62.	1.3	42
60	A DFT study of SF <sub>6</sub> decomposed gas adsorption on an anatase (101) surface. Applied Surface Science, 2013, 286, 47-53.	6.1	42
61	A first principle simulation of competitive adsorption of SF <sub>6</sub> decomposition components on nitrogen-doped anatase TiO <sub>2</sub> (101) surface. Applied Surface Science, 2017, 422, 331-338.	6.1	42
62	First-Principles Insight into Pd-Doped ZnO Monolayers as a Promising Scavenger for Dissolved Gas Analysis in Transformer Oil. ACS Omega, 2020, 5, 17801-17807.	3.5	40
63	Study on the thermal decomposition characteristics of C <sub>4</sub> F <sub>7</sub> Nâ€‘CO <sub>2</sub> mixture as eco-friendly gas-insulating medium. High Voltage, 2020, 5, 46-52.	4.7	40
64	Experimental studies on power frequency breakdown voltage of CF <sub>3</sub> I/N <sub>2</sub> mixed gas under different electric fields. Applied Physics Letters, 2016, 108, .	3.3	39
65	Transition metal-N embedded black phosphorus carbide as a high-performance bifunctional electrocatalyst for ORR/OER. Nanoscale, 2020, 12, 18721-18732.	5.6	39
66	Research status of replacement gases for SF <sub>6</sub> in power industry. AIP Advances, 2020, 10, .	1.3	39
67	Feature parameters extraction of gis partial discharge signal with multifractal detrended fluctuation analysis. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 3037-3045.	2.9	38
68	Synthesis of Graphene-Based Sensors and Application on Detecting SF <sub>6</sub> Decomposing Products: A Review. Sensors, 2017, 17, 363.	3.8	38
69	Theoretical Study on Decomposition Mechanism of Insulating Epoxy Resin Cured by Anhydride. Polymers, 2017, 9, 341.	4.5	38
70	A Transformer Partial Discharge Measurement System Based on Fluorescent Fiber. Energies, 2012, 5, 1490-1502.	3.1	37
71	A Pt-Doped TiO <sub>2</sub> Nanotube Arrays Sensor for Detecting SF <sub>6</sub> Decomposition Products. Sensors, 2013, 13, 14764-14776.	3.8	37
72	Relationship between decomposition gas ratios and partial discharge energy in GIS, and the influence of residual water and oxygen. IEEE Transactions on Dielectrics and Electrical Insulation, 2014, 21, 1226-1234.	2.9	37

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73	A Ni-Doped Carbon Nanotube Sensor for Detecting Oil-Dissolved Gases in Transformers. <i>Sensors</i> , 2015, 15, 13522-13532.	3.8	37
74	Experimental Study on Compatibility of Eco-Friendly Insulating Medium C <sub>5</sub> F <sub>10</sub> O/CO <sub>2</sub> Gas Mixture With Copper and Aluminum. <i>IEEE Access</i> , 2019, 7, 83994-84002.	4.2	37
75	Using Pd-Doped <sup>13</sup> C-Graphyne to Detect Dissolved Gases in Transformer Oil: A Density Functional Theory Investigation. <i>Nanomaterials</i> , 2019, 9, 1490.	4.1	37
76	Influence regularity of trace H <sub>2</sub> O on SF <sub>6</sub> decomposition characteristics under partial discharge of needle-plate electrode. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2015, 22, 287-295.	2.9	36
77	Reactive molecular dynamics study of the decomposition mechanism of the environmentally friendly insulating medium C <sub>3</sub> F <sub>7</sub> CN. <i>RSC Advances</i> , 2017, 7, 50663-50671.	3.6	36
78	Decomposition characteristics of C <sub>5</sub> F <sub>10</sub> /air mixture as substitutes for SF <sub>6</sub> to reduce global warming. <i>Journal of Fluorine Chemistry</i> , 2018, 208, 65-72.	1.7	36
79	Borophene: a promising adsorbent material with strong ability and capacity for SO <sub>2</sub> adsorption. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	2.3	36
80	The adsorption performance of harmful gas on Cu doped WS <sub>2</sub> : A first-principle study. <i>Materials Today Communications</i> , 2021, 28, 102488.	1.9	36
81	Abatement of SF <sub>6</sub> in the presence of NH <sub>3</sub> by dielectric barrier discharge plasma. <i>Journal of Hazardous Materials</i> , 2018, 360, 341-348.	12.4	35
82	Ladder-wise calculation method for <i>z</i> -coordinate of transformer PD source based on planar layout UHF antenna sensors. <i>IEEJ Transactions on Electrical and Electronic Engineering</i> , 2020, 15, 340-345.	1.4	35
83	SnO <sub>2</sub> nanoparticles based highly sensitive gas sensor for detection of C <sub>4</sub> F <sub>7</sub> N: A new eco-friendly gas insulating medium. <i>Journal of Hazardous Materials</i> , 2022, 422, 126882.	12.4	34
84	Influence of oxygen on dielectric and decomposition properties of C <sub>4</sub> F <sub>7</sub> N-N <sub>2</sub> -O <sub>2</sub> mixture. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2019, 26, 1279-1286.	2.9	33
85	Theoretical screening into Ru-doped MoS <sub>2</sub> monolayer as a promising gas sensor upon SO <sub>2</sub> and SOF <sub>2</sub> in SF <sub>6</sub> insulation devices. <i>Molecular Physics</i> , 2022, 120, .	1.7	33
86	Adsorption characteristic of Pd-4 cluster carbon nanotube towards transformer oil dissolved components: A simulation. <i>Applied Surface Science</i> , 2017, 419, 802-810.	6.1	32
87	Understanding of SF <sub>6</sub> decompositions adsorbed on cobalt-doped SWCNT: A DFT study. <i>Applied Surface Science</i> , 2017, 420, 371-382.	6.1	32
88	Adsorption and dissociation mechanism of SO <sub>2</sub> and H <sub>2</sub> S on Pt decorated graphene: a DFT-D3 study. <i>Applied Physics A: Materials Science and Processing</i> , 2018, 124, 1.	2.3	32
89	Study on the thermal interaction mechanism between C <sub>4</sub> F <sub>7</sub> N-N <sub>2</sub> and copper, aluminum. <i>Corrosion Science</i> , 2019, 153, 32-46.	6.6	32
90	Adsorption behaviour of SO <sub>2</sub> and SOF <sub>2</sub> gas on Rh-doped BNNT: a DFT study. <i>Molecular Physics</i> , 2020, 118, e1580394.	1.7	32

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91	The sensitivity of $C_4F_7N$ to electric field and its influence to environment-friendly insulating gas mixture $C_4F_7N/CO_2$ . Journal Physics D: Applied Physics, 2021, 54, 055501.	2.8	32
92	Experimental analysis of the feasibility of $CF_3I/CO_2$ substituting $SF_6$ as insulation medium using needle-plate electrodes. IEEE Transactions on Dielectrics and Electrical Insulation, 2014, 21, 1895-1900.	2.9	31
93	Adsorption of gases from $SF_6$ decomposition on aluminum-doped SWCNTs: a density functional theory study. European Physical Journal D, 2015, 69, 1.	1.3	31
94	Adsorption behaviour of $SF_6$ decomposed species onto $Pd_4$ -decorated single-walled CNT: a DFT study. Molecular Physics, 2018, 116, 1749-1755.	1.7	31
95	Theoretical study on the interaction between $C_5-PFK$ and $Al(11\bar{1})$ , $Ag(11\bar{1})$ : A comparative study. Applied Surface Science, 2019, 464, 586-596.	6.1	31
96	Cantilever enhanced photoacoustic spectrometry: Quantitative analysis of the trace $H_2S$ produced by $SF_6$ decomposition. Infrared Physics and Technology, 2016, 78, 31-39.	2.9	30
97	Assessment of PD severity in gas-insulated switchgear with an SSAE. IET Science, Measurement and Technology, 2017, 11, 423-430.	1.6	30
98	Electronic structure and $H_2S$ adsorption property of $Pt_3$ cluster decorated (8, 0) SWCNT. Applied Surface Science, 2018, 428, 82-88.	6.1	30
99	Study on the Dielectric Properties of $C_4F_7N/N_2$ Mixture Under Highly Non-Uniform Electric Field. IEEE Access, 2018, 6, 42868-42876.	4.2	30
100	Theoretical study of the interaction of $SF_6$ molecule on $Ag(11\bar{1})$ surfaces: A DFT study. Applied Surface Science, 2018, 457, 745-751.	6.1	30
101	Sensing properties of Ni-doped boron nitride nanotube to $SF_6$ decomposed components: A DFT study. AIP Advances, 2019, 9, .	1.3	30
102	Influence regularity of $O_2$ on dielectric and decomposition properties of $C_4F_7N-CO_2-O_2$ gas mixture for medium-voltage equipment. High Voltage, 2020, 5, 256-263.	4.7	30
103	Effects of micro-water on decomposition of the environment-friendly insulating medium $C_5F_{10}$ . AIP Advances, 2017, 7, .	1.3	29
104	Quantitative detection of $H_2S$ and $CS_2$ mixed gases based on UV absorption spectrometry. RSC Advances, 2017, 7, 50889-50898.	3.6	29
105	Adsorption of $SF_6$ decomposed gas on anatase (101) and (001) surfaces with oxygen defect: A density functional theory study. Scientific Reports, 2014, 4, 4762.	3.3	28
106	Theoretical and experimental study on competitive adsorption of $SF_6$ decomposed components on Au-modified anatase (101) surface. Applied Surface Science, 2016, 387, 437-445.	6.1	28
107	Theoretical study of the adsorption of $SF_6$ decomposition components on $Ni(11\bar{1})$ surface. Computational Materials Science, 2018, 152, 248-255.	3.0	28
108	Experimental and simulation analysis on by-products of treatment of $SF_6$ using dielectric barrier discharge. IEEE Transactions on Dielectrics and Electrical Insulation, 2017, 24, 1617-1624.	2.9	27

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109	Experimental Study on Power Frequency Breakdown Characteristics of $C_4F_7N/CO_2$ Gas Mixture Under Quasi-Homogeneous Electric Field. IEEE Access, 2019, 7, 19100-19108.	4.2	27
110	Dissolved gas analysis in transformer oil using Ni-Doped GaN monolayer: A DFT study. Superlattices and Microstructures, 2021, 159, 107055.	3.1	27
111	Analysis of the feasibility of $CF_3/CO_2$ used in C-GIS by partial discharge inception voltages in positive half cycle and breakdown voltages. IEEE Transactions on Dielectrics and Electrical Insulation, 2015, 22, 3234-3243.	2.9	26
112	Quantitative analysis of $SO_2$ , $H_2S$ and $CS_2$ mixed gases based on ultraviolet differential absorption spectrometry. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2019, 215, 187-195.	3.9	26
113	Using Single-Layer $HfS_2$ as Prospective Sensing Device Toward Typical Partial Discharge Gas in $SF_6$ -Based Gas-Insulated Switchgear. IEEE Transactions on Electron Devices, 2019, 66, 689-695.	3.0	26
114	Influence of humidity on the decomposition products and insulating characteristics of $CF_3I$ . IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 819-828.	2.9	25
115	Insight Into the Compatibility Between $C_6F_{12}O$ and Metal Materials: Experiment and Theory. IEEE Access, 2018, 6, 58154-58160.	4.2	25
116	Sulfur dioxide adsorbed on pristine and Au dimer decorated $\hat{I}^3$ -graphyne: A density functional theory study. Applied Surface Science, 2018, 458, 781-789.	6.1	25
117	Geometric structure and $SO_2$ adsorption behavior of $Pt_n$ ( $n=1-4$ ) clustered (8, 0) single-walled CNT using density functional theory. Journal of Fluorine Chemistry, 2018, 211, 148-153.	1.7	25
118	Theoretical study on the interaction between $SF_6$ molecule and $BaTiO_3(001)$ surface: A DFT study. Applied Surface Science, 2019, 483, 409-416.	6.1	25
119	Highly sensitive and selective polyaniline thin-film sensors for detecting $SF_6$ decomposition products at room temperature. Synthetic Metals, 2015, 200, 74-79.	3.9	24
120	Investigation of partial discharge between moving charged metal particles and electrodes in insulating oil under flow state and AC condition. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 1099-1105.	2.9	24
121	Formation mechanism of $CF_3I$ discharge components and effect of oxygen on decomposition. Journal Physics D: Applied Physics, 2017, 50, 155601.	2.8	24
122	Ni-CNT Chemical Sensor for $SF_6$ Decomposition Components Detection: A Combined Experimental and Theoretical Study. Sensors, 2018, 18, 3493.	3.8	24
123	The influence of oxygen on thermal decomposition characteristics of epoxy resins cured by anhydride. Polymer Degradation and Stability, 2018, 156, 125-131.	5.8	23
124	Research on Transformer Partial Discharge UHF Pattern Recognition Based on Cnn-lstm. Energies, 2020, 13, 61.	3.1	23
125	Design of a New Built-in UHF Multi-Frequency Antenna Sensor for Partial Discharge Detection in High-Voltage Switchgears. Sensors, 2016, 16, 1170.	3.8	22
126	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



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127	Ultraviolet Spectral Analysis and Quantitative Detection of Heptafluoroisobutyronitrile (C <sub>4</sub> F <sub>7</sub> N) in a C <sub>4</sub> F <sub>7</sub> N+“Carbon Dioxide (CO <sub>2</sub> ) Gas Mixture. Applied Spectroscopy, 2019, 73, 917-926.	2.2	21
128	High Selective SO <sub>2</sub> Gas Sensor Based on Monolayer $\eta$ -As <sub>2</sub> S <sub>3</sub> to Detect SF <sub>6</sub> Decompositions. IEEE Sensors Journal, 2019, 19, 1215-1223.	4.7	21
129	Effects of background gas on sulfur hexafluoride removal by atmospheric dielectric barrier discharge plasma. AIP Advances, 2016, 6, .	1.3	20
130	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
131	On-Line Monitoring of Partial Discharge of Less-Oil Immersed Electric Equipment Based on Pressure and UHF. IEEE Access, 2019, 7, 11178-11186.	4.2	20
132	Detection of decomposition products of C <sub>4</sub> F <sub>7</sub> N-CO <sub>2</sub> gas mixture based on infrared spectroscopy. Vibrational Spectroscopy, 2020, 110, 103114.	2.2	20
133	Reconstructing and extracting information on SF <sub>6</sub> decomposition characteristic components induced by partial overthermal fault in GIE. IEEE Transactions on Dielectrics and Electrical Insulation, 2016, 23, 183-193.	2.9	19
134	Theoretical evaluation of the interaction between C <sub>5</sub> -PFK molecule and Cu (1 1 1). Journal of Fluorine Chemistry, 2018, 208, 48-54.	1.7	19
135	Insights into the interaction between C <sub>4</sub> F <sub>7</sub> N decomposition products and Cu (1 1 1), Ag (1 1 1) surface. Journal of Fluorine Chemistry, 2018, 213, 24-30.	1.7	19
136	Detection of Ozone and Nitric Oxide in Decomposition Products of Air-Insulated Switchgear Using Ultraviolet Differential Optical Absorption Spectroscopy (UV-DOAS). Applied Spectroscopy, 2018, 72, 1244-1251.	2.2	19
137	Adsorption mechanism of SF <sub>6</sub> decomposition components onto N, F-co-doped TiO <sub>2</sub> : A DFT study. Journal of Fluorine Chemistry, 2018, 213, 18-23.	1.7	19
138	Ab Initio Study of SOF <sub>2</sub> and SO <sub>2</sub> F <sub>2</sub> Adsorption on Co-MoS <sub>2</sub> . ACS Omega, 2019, 4, 2517-2522.	3.5	19
139	Experimental research on insulation properties of C <sub>6</sub> F <sub>12</sub> O/N <sub>2</sub> and C <sub>6</sub> F <sub>12</sub> O/CO <sub>2</sub> gas mixtures. IET Generation, Transmission and Distribution, 2019, 13, 417-422.	2.5	19
140	Investigation of Gas-Sensing Property of Acid-Deposited Polyaniline Thin-Film Sensors for Detecting H <sub>2</sub> S and SO <sub>2</sub> . Sensors, 2016, 16, 1889.	3.8	18
141	Optical technology for detecting the decomposition products of SF <sub>6</sub> : a review. Optical Engineering, 2018, 57, 1.	1.0	18
142	Research on infrared spectrum characteristics and detection technology of environmental-friendly insulating medium C <sub>5</sub> F <sub>10</sub> O. Vibrational Spectroscopy, 2022, 118, 103336.	2.2	18
143	Use of hydroxyl-modified carbon nanotubes for detecting SF <sub>6</sub> decomposition products under partial discharge in gas insulated switchgear. IEEE Transactions on Dielectrics and Electrical Insulation, 2013, 20, 2246-2253.	2.9	17
144	Study on the Thermal and Dielectric Properties of SrTiO <sub>3</sub> /Epoxy Nanocomposites. Energies, 2017, 10, 692.	3.1	17

#	ARTICLE	IF	CITATIONS
145	Plasma-assisted abatement of SF <sub>6</sub> in a dielectric barrier discharge reactor: investigation of the effect of packing materials. <i>Journal Physics D: Applied Physics</i> , 2020, 53, 025205.	2.8	17
146	Interaction Mechanism between the C <sub>4</sub> F <sub>7</sub> Nâ€“CO <sub>2</sub> Gas Mixture and the EPDM Seal Ring. <i>ACS Omega</i> , 2020, 5, 5911-5920.	3.5	17
147	Insulation Performance and Electrical Field Sensitivity Properties of HFO-1336mzz(E)/CO <sub>2</sub> : A New Eco-friendly Gas Insulating Medium. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2021, 28, 1938-1948.	2.9	17
148	Influence regularity of trace O <sub>6</sub> on SF <sub>6</sub> decomposition characteristics and its mathematical amendment under partial discharge. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2014, 21, 105-115.	2.9	16
149	AC breakdown characteristics of CF <sub>3</sub> I/N <sub>2</sub> in a non-uniform electric field. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2016, 23, 2649-2656.	2.9	16
150	Secure smart grid communications and information integration based on digital watermarking in wireless sensor networks. <i>Enterprise Information Systems</i> , 2017, 11, 223-249.	4.7	16
151	Experimental studies on the powerâ€“frequency breakdown voltage of CF <sub>3</sub> I/N <sub>2</sub> /CO <sub>2</sub> gas mixture. <i>Journal of Applied Physics</i> , 2017, 121, .	2.5	16
152	Interaction of CO and CH <sub>4</sub> Adsorption with Noble Metal (Rh, Pd, and Pt)-Decorated N <sub>3</sub> -CNTs: A First-Principles Study. <i>ACS Omega</i> , 2018, 3, 16892-16898.	3.5	16
153	Adsorption and decomposition of SF <sub>6</sub> molecule on $\hat{\pm}$ -Al <sub>2</sub> O <sub>3</sub> (0 0 0 1) surface: a DFT study. <i>Adsorption</i> , 2019, 25, 1625-1632.	3.0	16
154	Adsorption behaviour of CF <sub>4</sub> and COF <sub>2</sub> gas on the GaN monolayer doped with Pt catalytic: A first-principles study. <i>Surface Science</i> , 2022, 719, 122032.	1.9	16
155	Detecting decompositions of sulfur hexafluoride using reduced graphene oxide decorated with Pt nanoparticles. <i>Journal Physics D: Applied Physics</i> , 2018, 51, 185304.	2.8	15
156	Effect of oxygen on power frequency breakdown voltage and decomposition characteristics of the C <sub>5</sub> F <sub>10</sub> O/N <sub>2</sub> /O <sub>2</sub> gas mixture. <i>RSC Advances</i> , 2019, 9, 18963-18970.	3.6	15
157	Thermal Compatibility Between Perfluoroisobutyronitrile-CO <sub>2</sub> Gas Mixture With Copper and Aluminum Switchgear. <i>IEEE Access</i> , 2019, 7, 19792-19800.	4.2	15
158	Plasma-assisted abatement of SF <sub>6</sub> in a packed bed plasma reactor: understanding the effect of gas composition. <i>Plasma Science and Technology</i> , 2020, 22, 055502.	1.5	15
159	Sensitivity Characteristic Analysis of Adsorbent-Mixed Carbon Nanotube Sensors for the Detection of SF <sub>6</sub> Decomposition Products under PD Conditions. <i>Sensors</i> , 2013, 13, 15209-15220.	3.8	14
160	Pt-doped TiO <sub>2</sub> -based sensors for detecting SF <sub>6</sub> decomposition components. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2015, 22, 1559-1566.	2.9	14
161	Study on the characteristic decomposition components of air-insulated switchgear cabinet under partial discharge. <i>AIP Advances</i> , 2016, 6, .	1.3	14
162	A DFT Calculation of Fluoride-Doped TiO <sub>2</sub> Nanotubes for Detecting SF <sub>6</sub> Decomposition Components. <i>Sensors</i> , 2017, 17, 1907.	3.8	14

#	ARTICLE	IF	CITATIONS
163	Feature Selection for Partial Discharge Severity Assessment in Gas-Insulated Switchgear Based on Minimum Redundancy and Maximum Relevance. <i>Energies</i> , 2017, 10, 1516.	3.1	14
164	On the Feasibility of Gap Detection of Power Transformer Partial Discharge UHF Signals: Gap Propagation Characteristics of Electromagnetic Waves. <i>Energies</i> , 2017, 10, 1531.	3.1	14
165	Study on Degradation of SF <sub>6</sub> in the Presence of H <sub>2</sub> O and O <sub>2</sub> Using Dielectric Barrier Discharge. <i>IEEE Access</i> , 2018, 6, 72748-72756.	4.2	14
166	Repairing the N-vacancy in an InN monolayer using NO molecules: a first-principles study. <i>Nanoscale Advances</i> , 2019, 1, 2003-2008.	4.6	14
167	Insight into the compatibility between C4F7N and silver: Experiment and theory. <i>Journal of Physics and Chemistry of Solids</i> , 2019, 126, 105-111.	4.0	14
168	Thermal Decomposition Properties of Epoxy Resin in SF <sub>6</sub> /N <sub>2</sub> Mixture. <i>Materials</i> , 2019, 12, 75.	2.9	14
169	Partial discharge decomposition characteristics of typical defects in the gas chamber of SF <sub>6</sub> insulated ring network cabinet. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2017, 24, 1794-1801.	2.9	13
170	Antipodal Vivaldi Antenna to Detect UHF Signals That Leaked Out of the Joint of a Transformer. <i>International Journal of Antennas and Propagation</i> , 2017, 2017, 1-13.	1.2	13
171	Pt-doped single-walled CNT as a superior media for evaluating the operation status of insulation devices: A first-principle study. <i>AIP Advances</i> , 2018, 8, .	1.3	13
172	Simulation and experiment on the catalytic degradation of high-concentration SF <sub>6</sub> on TiO <sub>2</sub> surface under UV light. <i>AIP Advances</i> , 2018, 8, .	1.3	13
173	Effect of Nickel Doping on Adsorption of SF <sub>6</sub> Decomposition Products over MoS <sub>2</sub> Surface. <i>Jom</i> , 2019, 71, 3971-3979.	1.9	13
174	Experimental study on the effect of O <sub>2</sub> on the discharge decomposition products of C <sub>5</sub> -PFK/N <sub>2</sub> mixtures. <i>Journal of Materials Science: Materials in Electronics</i> , 2019, 30, 19353-19361.	2.2	13
175	Compatibility and Interaction Mechanism between EPDM Rubber and a SF <sub>6</sub> Alternative Gas C <sub>4</sub> F <sub>7</sub> N/CO <sub>2</sub> /O <sub>2</sub> . <i>ACS Omega</i> , 2021, 6, 13293-13299.	3.5	13
176	Gas-Sensing Simulation of Single-Walled Carbon Nanotubes Applied to Detect Gas Decomposition Products of SF <sub>6</sub> . <i>Journal of Computational and Theoretical Nanoscience</i> , 2012, 9, 1096-1100.	0.4	12
177	Detection of Partial Discharge in SF <sub>6</sub> Decomposition Gas Based on Modified Carbon Nanotubes Sensors. <i>Procedia Engineering</i> , 2012, 29, 4107-4111.	1.2	12
178	Theoretical Study on Pt-Doped Carbon Nanotubes Used to Detect Typical Exhaled Gases of Lung Cancer. <i>Journal of Computational and Theoretical Nanoscience</i> , 2015, 12, 3412-3417.	0.4	12
179	Adsorptions of SO <sub>2</sub> , SOF <sub>2</sub> , and SO <sub>2</sub> F <sub>2</sub> on Pt-modified anatase (101) surface: Sensing mechanism study. <i>Applied Surface Science</i> , 2015, 353, 662-669.	6.1	12
180	Influence of humidity and voltage on characteristic decomposition components under needle-plate discharge model. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2016, 23, 2633-2640.	2.9	12

#	ARTICLE	IF	CITATIONS
181	Theoretical study of SF <sub>6</sub> decomposition on the MoS <sub>2</sub> monolayer doped with Ag, Ni, Au, Pt: a first-principles study. <i>Adsorption</i> , 2019, 25, 225-233.	3.0	12
182	Thermal compatibility properties of C <sub>6</sub> F <sub>12</sub> O-air gas mixture with metal materials. <i>AIP Advances</i> , 2019, 9, .	1.3	12
183	Effect of Oxygen and Temperature on Thermal Decomposition Characteristics of C <sub>4</sub> F <sub>7</sub> N/CO <sub>2</sub> /O <sub>2</sub> Gas Mixture for MV Equipment. <i>IEEE Access</i> , 2020, 8, 221004-221012.	4.2	12
184	The influence of Cu, Al, or Fe on the insulating capacity of CF <sub>3</sub> I. <i>Physics of Plasmas</i> , 2016, 23, .	1.9	11
185	The Influence of O <sub>2</sub> on Decomposition Characteristics of c-C <sub>4</sub> F <sub>8</sub> /N <sub>2</sub> Environmental Friendly Insulating Gas. <i>Processes</i> , 2018, 6, 174.	2.8	11
186	Facile Fabrication of Au Nanoparticles/Tin Oxide/Reduced Graphene Oxide Ternary Nanocomposite and Its High-Performance SF <sub>6</sub> Decomposition Components Sensing. <i>Frontiers in Chemistry</i> , 2019, 7, 476.	3.6	11
187	Overheating decomposition characteristics of epoxy dielectrics in SF <sub>6</sub> atmosphere. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2019, 26, 1411-1417.	2.9	11
188	Research on C <sub>4</sub> F <sub>7</sub> N gas mixture detection based on infrared spectroscopy. <i>Sensors and Actuators A: Physical</i> , 2019, 294, 126-132.	4.1	11
189	Different doping of penta-graphene as adsorbent and gas sensing material for scavenging and detecting SF <sub>6</sub> decomposed species. <i>Sustainable Materials and Technologies</i> , 2019, 21, e00100.	3.3	11
190	Simultaneous Detection of Câ,Hâ,, and CO Based on Cantilever-Enhanced Photoacoustic Spectroscopy. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021, 70, 1-10.	4.7	11
191	Adsorption of SF <sub>6</sub> Decomposition Products by the S Vacancy Structure and Edge Structure of SnS <sub>2</sub> : A Density Functional Theory Study. <i>ACS Omega</i> , 2021, 6, 28131-28139.	3.5	11
192	Effects of Reduced Electric Field on Sulfur Hexafluoride Removal for a Double Dielectric Barrier Discharge Reactor. <i>IEEE Transactions on Plasma Science</i> , 2018, 46, 563-570.	1.3	10
193	Synergistic treatment of SF <sub>6</sub> by dielectric barrier discharge/ $\gamma$ -Al <sub>2</sub> O <sub>3</sub> catalysis. <i>AIP Advances</i> , 2018, 8, .	1.3	10
194	A Promising Gas Sensor Based on Monolayer $\alpha$ -SbN to Detect SO <sub>2</sub> Among SF <sub>6</sub> Decompositions. , 2018, 2, 1-4.		10
195	Effect of Oxygen on Power Frequency Breakdown Characteristics and Decomposition Properties of C <sub>5</sub> -PFK/CO <sub>2</sub> Gas Mixture. <i>IEEE Transactions on Dielectrics and Electrical Insulation</i> , 2021, 28, 373-380.	2.9	10
196	Application of SA-SVM Incremental Algorithm in GIS PD Pattern Recognition. <i>Journal of Electrical Engineering and Technology</i> , 2016, 11, 192-199.	2.0	10
197	Adsorption Properties of Typical Lung Cancer Breath Gases on Ni-SWCNTs through Density Functional Theory. <i>Journal of Sensors</i> , 2017, 2017, 1-8.	1.1	9
198	Adsorption of SF <sub>6</sub> Decomposed Products over ZnO(101 $\bar{1}$ 0): Effects of O and Zn Vacancies. <i>ACS Omega</i> , 2018, 3, 18739-18752.	3.5	9

#	ARTICLE	IF	CITATIONS
199	Partial discharge characteristics of C6F12O/CO2 mixed gas at power frequency AC voltage. AIP Advances, 2019, 9, .	1.3	9
200	Theoretical calculation of total electron-impact ionization cross section of C6F12O. AIP Advances, 2020, 10, 035217.	1.3	9
201	Study of compatibility between eco-friendly insulating medium C6F12O and sealing material EPDM. Journal of Molecular Structure, 2021, 1244, 130949.	3.6	9
202	Ultraviolet differential optical absorption spectrometry: quantitative analysis of the CS <sub>2</sub> produced by SF <sub>6</sub> decomposition. Measurement Science and Technology, 2017, 28, 115102.	2.6	8
203	Study on localization of transformer partial discharge source with planar arrangement UHF sensors based on singular value elimination. AIP Advances, 2018, 8, 105232.	1.3	8
204	Influence of Oxygen on the Thermal Decomposition Properties of C <sub>4</sub> F <sub>7</sub> N <sub>2</sub> O <sub>2</sub> as an Eco-Friendly Gas Insulating Medium. ACS Omega, 2019, 4, 18616-18626.	3.5	8
205	Thermal decomposition properties of fluoronitriles-N <sub>2</sub> gas mixture as alternative gas for SF <sub>6</sub> . Journal of Fluorine Chemistry, 2020, 229, 109434.	1.7	8
206	Acute toxicity and health effect of perfluoroisobutyronitrile on mice: a promising substitute gas-insulating medium to SF <sub>6</sub> . Journal of Environmental Science and Health - Part A Toxic/Hazardous Substances and Environmental Engineering, 2020, 55, 1646-1658.	1.7	8
207	Adsorption of SF <sub>6</sub> Decomposed Products on ZnO-Modified C <sub>3</sub> N: A Theoretical Study. Nanoscale Research Letters, 2020, 15, 186.	5.7	8
208	The application of fluorescent optical fiber in partial discharge detection of Ring Main Unit. Measurement: Journal of the International Measurement Confederation, 2021, 174, 108979.	5.0	8
209	AC Breakdown Strength and Its By-Products of Eco-Friendly Perfluoroisobutyronitrile/O <sub>2</sub> /N <sub>2</sub> Gas Mixture at High Pressure for HV Equipment. IEEE Transactions on Dielectrics and Electrical Insulation, 2021, 28, 1020-1027.	2.9	8
210	Effect of O <sub>2</sub> on AC Partial Discharge and Decomposition Behavior of C <sub>4</sub> F <sub>7</sub> N/CO <sub>2</sub> /O <sub>2</sub> Gas Mixture. IEEE Transactions on Dielectrics and Electrical Insulation, 2021, 28, 1440-1448.	2.9	8
211	Detection of SF <sub>6</sub> decomposition components by pristine and Cr-doped GaN based on the first-principles theory. Computational and Theoretical Chemistry, 2021, 1205, 113431.	2.5	8
212	Study on the Compatibility of Eco-Friendly Insulating Gas C <sub>5</sub> F <sub>10</sub> /N <sub>2</sub> and C <sub>5</sub> F <sub>10</sub> /Air with Copper Materials in Gas-Insulated Switchgears. Applied Sciences (Switzerland), 2021, 11, 197.	2.5	8
213	Study on Photoacoustic Spectroscopy Detection of CO in Gas Insulation Equipment. IEEE Transactions on Dielectrics and Electrical Insulation, 2022, 29, 1498-1505.	2.9	8
214	Application of Hydroxylated Single-Walled Carbon Nanotubes for the Detection of C<sub>1</sub>S<sub>2</sub>/H<sub>2</sub> Gases in Transformer Oil. Journal of Computational and Theoretical Nanoscience, 2013, 10, 399-404.	0.4	7
215	Decomposition Characteristics of SF <sub>6</sub> under Flashover Discharge on the Epoxy Resin Surface. Materials, 2019, 12, 1408.	2.9	7
216	SF <sub>6</sub> abatement in a packed bed plasma reactor: study towards the effect of O <sub>2</sub> concentration. RSC Advances, 2019, 9, 34827-34836.	3.6	7

#	ARTICLE	IF	CITATIONS
217	Effects of Glass Beads Packing on SF <sub>6</sub> Abatement by Packed Bed Plasma. Plasma Chemistry and Plasma Processing, 2020, 40, 43-59.	2.4	7
218	The effect of the photoacoustic Field-Photoacoustic cell coupling term on the performance of the gas detection system. Optics and Laser Technology, 2022, 153, 108211.	4.6	7
219	Arc decomposition behavior of C <sub>4</sub> F <sub>7</sub> N/Air gas mixture and biosafety evaluation of its by-products. High Voltage, 2022, 7, 856-865.	4.7	7
220	Suppressing white-noise in partial discharge measurements part 2: the optimal de-noising scheme. European Transactions on Electrical Power, 2010, 20, 811-821.	1.0	6
221	Partial Discharge Detection in Transformer Based on Optical Method. , 2018, , .		6
222	Insights on decomposition process of c-C <sub>4</sub> F <sub>8</sub> and c-C <sub>4</sub> F <sub>8</sub> /N <sub>2</sub> mixture as substitutes for SF <sub>6</sub> . Royal Society Open Science, 2018, 5, 181104.	2.4	6
223	Thermal and mechanical properties study of boron nitride nanosheets decorated by silver/epoxy nanocomposites. SN Applied Sciences, 2020, 2, 1.	2.9	6
224	Flexible Planar Monopole Built-in GIS PD Sensor Based on Meandering Technology. Sensors, 2022, 22, 4134.	3.8	6
225	Infrared Spectrum Analysis and Quantitative Detection of SF <sub>6</sub> Characteristic Decomposition Components SO <sub>2</sub> F <sub>2</sub> and SOF <sub>2</sub> . IEEE Transactions on Dielectrics and Electrical Insulation, 2022, 29, 1316-1323.	2.9	6
226	Application of TiO <sub>2</sub> Nanotubes Gas Sensors in Online Monitoring of SF <sub>6</sub> Insulated Equipment. , 2017, , .		5
227	Study on the influence of O <sub>2</sub> on the breakdown voltage and self-recovery characteristics of c-C <sub>4</sub> F <sub>8</sub> /N <sub>2</sub> mixture. AIP Advances, 2018, 8, 085121.	1.3	5
228	Photoacoustic spectroscopy: Trace CO detection by using 10 mW near-infrared laser and cantilever beam. AIP Advances, 2020, 10, .	1.3	5
229	Real-Time Measurement of SO <sub>2</sub> , H <sub>2</sub> S, and CS <sub>2</sub> Mixed Gases Using Ultraviolet Spectroscopy and a Least Squares Algorithm. Applied Spectroscopy, 2021, 75, 265-273.	2.2	5
230	SF <sub>6</sub> abatement in a packed bed plasma reactor: Role of zirconia size and optimization using RSM. Journal of Industrial and Engineering Chemistry, 2021, 94, 205-216.	5.8	5
231	PD Flexible Built-In High-Sensitivity Elliptical Monopole Antenna Sensor. Sensors, 2022, 22, 4982.	3.8	5
232	Gas-sensing simulation of single-walled carbon nanotubes applied to detect gas decomposition products of SF <sub>6</sub> in PD. , 2011, , .		4
233	DFT studies on the interaction of Pt <sub>x</sub> Ru <sub>y</sub> M <sub>z</sub> (M = Fe, Ni, Cu, Mo,) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T 5 Physics. 2015. 113, 854-865.	1.7	4
234	Mono- and Bi-Molecular Adsorption of SF <sub>6</sub> Decomposition Products on Pt Doped Graphene: A First-Principles Investigation. Applied Sciences (Switzerland), 2018, 8, 2010.	2.5	4

#	ARTICLE	IF	CITATIONS
235	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
236	Corrections to Ru-InN Monolayer as a Gas Scavenger to Guard the Operation Status of SF <sub>6</sub> Insulation Devices: A First-Principles Theory [Jul 19 5249-5255]. IEEE Sensors Journal, 2020, 20, 562-562.	4.7	4
237	Ultraviolet differential spectroscopy quantitative analysis of SF <sub>6</sub> decomposition component SO <sub>2</sub> . IET Science, Measurement and Technology, 2018, 12, 328-334.	1.6	4
238	Adsorption Properties of ZSM-5 Molecular Sieve for Perfluoroisobutyronitrile Mixtures and Its Fluorocarbon Decomposition Products. Chemosensors, 2022, 10, 121.	3.6	4
239	Detecting oil dissolved gases using carbon nanotubes sensor. , 2010, , .		3
240	Research on transformer fault diagnosis: Based on improved firefly algorithm optimized LPboost classification and regression tree. IET Generation, Transmission and Distribution, 2021, 15, 2926-2942.	2.5	3
241	Compatibility of eco-friendly insulating medium C <sub>6</sub> F <sub>12</sub> O and sealing material NBR. AIP Advances, 2022, 12, .	1.3	3
242	Study on insulation defect discharge features of dry-type reactor based on audible acoustic. AIP Advances, 2022, 12, 025210.	1.3	3
243	Experimental studies on air humidity affecting partial discharge in switchgear. , 2013, , .		2
244	Experimental Analysis of Modified CNTs-Based Gas Sensor. , 0, , .		2
245	Influence of trace water on decomposition mechanism of c-C <sub>4</sub> F <sub>8</sub> as environmental friendly insulating gas at high temperature. AIP Advances, 2018, 8, 125202.	1.3	2
246	Adsorption Mechanism of Typical Gases Exhaled by Lung Cancer Patients on the Anatase TiO <sub>2</sub> (101) Surface. Journal of Sensors, 2018, 2018, 1-7.	1.1	2
247	Optimized sleeve monopole antenna for detection of electrostatic discharge radiation of spacecraft solar array. Review of Scientific Instruments, 2019, 90, 015008.	1.3	2
248	Thermodynamic simulations of SrTiO <sub>3</sub> /epoxy nanocomposites with different mass fractions. SN Applied Sciences, 2019, 1, 1.	2.9	2
249	A scientific writing pedagogy and mixed methods assessment for engineering education using open-coding and multi-dimensional scaling. International Journal of Technology and Design Education, 2020, 30, 413-426.	2.6	2
250	The detection and quantification of heptafluoroisobutyronitrile(C <sub>4</sub> F <sub>7</sub> N) and its decomposition products by infrared spectroscopy and chemometrics. Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy, 2020, 233, 118161.	3.9	2
251	Research on Pressure-based Detection Technology for Partial Overheat Insulation Defect of Oil-less Power Equipment. IOP Conference Series: Earth and Environmental Science, 2021, 632, 042009.	0.3	2
252	A MATLAB GUI teaching application for ferroresonance simulation. Computer Applications in Engineering Education, 2021, 29, 1757-1770.	3.4	2

#	ARTICLE	IF	CITATIONS
253	Photoacoustic Spectrum Detection of CO Based on Optimizing Non-resonant Photoacoustic Pool. , 2020, , .		2
254	Experimental study on the effect of O <sub>2</sub> on the decomposition characteristics of C <sub>6</sub> F <sub>12</sub> O/CO <sub>2</sub> gas mixture. AIP Advances, 2021, 11, .	1.3	1
255	Study on the Reaction Mechanism of Ethylene Propylene Diene Monomer Sealing Material and C <sub>5</sub> F <sub>10</sub> Oâ€œCO <sub>2</sub> Gas Mixture. ACS Omega, 2021, 6, 28770-28778.	3.5	1
256	Study on partial discharge characteristics of C <sub>6</sub> F <sub>12</sub> O mixed gas. Scientific Reports, 2022, 12, 6265.	3.3	1
257	The sensitive characteristics study of SF <sub>6</sub> decomposed gases using a graphene sensor. , 2014, , .		0
258	Improving electrical properties of SrTiO <sub>3</sub> /epoxy nanocomposites with high thermal conductivity. , 2016, , .		0
259	Application of Graphene Gas Sensors in Online Monitoring of SF <sub>6</sub> Insulated Equipment. , 0, , .		0
260	Comparative Study of Materials to SF <sub>6</sub> Decomposition Components. , 0, , .		0
261	Application of CNTs Gas Sensor in Online Monitoring of SF <sub>6</sub> Insulated Equipment. , 0, , .		0
262	Optimization of PD Ultra High Frequency Antenna Sensor Based on Simplified Real Frequency Method. , 2018, , .		0
263	Detecting decompositions of sulfur hexafluoride using Ge modified SWCNT: a theoretical evaluation. , 2018, , .		0
264	Correction to â€œThermal Compatibility Between Perfluoroisobutyronitrile-CO <sub>2</sub> Gas Mixture With Copper, Aluminum Switchgearâ€• IEEE Access, 2019, 7, 56770-56771.	4.2	0
265	Research on the selection and layout of the cantilever sensor based on photoacoustic spectroscopy gas detection technology. Engineering Research Express, 2021, 3, 025005.	1.6	0
266	Pt Decorating Effect on CNT Surface Towards Adsorption of SF <sub>6</sub> Decomposed Components. Minerals, Metals and Materials Series, 2018, , 921-928.	0.4	0
267	Research Status of Insulation Detection Technology for Less Oil-Immersed Power Equipment. , 2020, , .		0
268	Method of Multi-Sample Maximum Correlation Wavelet High Energy Scale on Location Time Difference Calculation of Partial Discharge Source. , 2020, , .		0
269	Study on the Thermal Decomposition Characteristics of C <sub>5</sub> F <sub>10</sub> O/N <sub>2</sub> Gas Mixture. , 2020, , .		0
270	Effect of O <sub>2</sub> on The AC Breakdown Characteristics Of C <sub>5</sub> F <sub>10</sub> O/CO <sub>2</sub> . , 2020, , .		0



#	ARTICLE	IF	CITATIONS
271	Effect of O <sub>2</sub> on Partial Discharge Characteristic of C <sub>5</sub> F <sub>10</sub> O/CO <sub>2</sub> Gas Mixture. , 2021, , .		0