Yingang Gui

List of Publications by Citations

75 papers	1,428 citations	23 h-index	36 g-index
77 ext. papers	1,969 ext. citations	4.3 avg, IF	5.55 L-index

#	Paper	IF	Citations
75	First-principles study of SF6 decomposed gas adsorbed on Au-decorated graphene. *Applied Surface Science*, **2016**, 367, 259-269	6.7	90
74	A DFT Study on the Adsorption of H□S and SO□on Ni Doped MoS□Monolayer. *Nanomaterials*, **2018**, 8,	5.4	86
73	Adsorption of SF6 decomposition components over Pd (1 1 1): A density functional theory study. *Applied Surface Science*, **2019**, 465, 172-179	6.7	76
72	Analysis of adsorption properties of typical partial discharge gases on Ni-SWCNTs using density functional theory. *Applied Surface Science*, **2016**, 379, 47-54	6.7	75
71	A DFT study of dissolved gas (C2H2, H2, CH4) detection in oil on CuO-modified BNNT. *Applied Surface Science*, **2020**, 500, 144030	6.7	70
70	Fabrication and characterization of highly sensitive and selective sensors based on porous NiO nanodisks. *Sensors and Actuators B: Chemical*, **2018**, 259, 604-615	8.5	69
69	The sensing mechanism of N-doped SWCNTs toward SF6 decomposition products: A first-principle study. *Applied Surface Science*, **2018**, 440, 846-852	6.7	55
68	Adsorption of SF6 decomposition components on Pt3-TiO2(1 0 1) surface: A DFT study. *Applied Surface Science*, **2018**, 459, 242-248	6.7	55
67	Adsorption properties of pristine and Co-doped TiO2(1□0□1) toward dissolved gas analysis in transformer oil. *Applied Surface Science*, **2020**, 507, 145163	6.7	53
66	Mechanism and Application of Carbon Nanotube Sensors in SF Decomposed Production Detection: a Review. *Nanoscale Research Letters*, **2017**, 12, 177	5	52
65	A simulation of Pd-doped SWCNTs used to detect SF 6 decomposition components under partial discharge. *Applied Surface Science*, **2014**, 315, 196-202	6.7	52
64	Adsorption of C2H2, CH4 and CO on Mn-doped graphene: Atomic, electronic, and gas-sensing properties. *Physica E: Low-Dimensional Systems and Nanostructures*, **2020**, 119, 113959	3	48
63	Platinum modified MoS2 monolayer for adsorption and gas sensing of SF6 decomposition products: a DFT study. *High Voltage*, **2020**, 5, 454-462	4.1	41
62	Preparation and Application of TiO2 Nanotube Array Gas Sensor for SF6-Insulated Equipment Detection: a Review. *Nanoscale Research Letters*, **2016**, 11, 302	5	36
61	Adsorption and gas-sensing properties of Pt2□GaNNTs for SF6 decomposition products. *Applied Surface Science*, **2020**, 524, 146570	6.7	35
60	Comparison of sensing and electronic properties of C2H2 on different transition metal oxide nanoparticles (Fe2O3, NiO, TiO2) modified BNNT (10, 0). *Applied Surface Science*, **2020**, 521, 146463	6.7	30
59	Gas-sensing properties and mechanism of Pd-GaNNTs for air decomposition products in ring main unit. *Applied Surface Science*, **2020**, 531, 147293	6.7	29

58	Micro-scale effects of nano-SiO modification with silane coupling agents on the cellulose/nano-SiO interface. *Nanotechnology*, **2019**, 30, 445701	3.4	26
57	Theoretical study of the adsorption of SF6 decomposition components on Ni(1 1 1) surface. *Computational Materials Science*, **2018**, 152, 248-255	3.2	24
56	Gas-sensing properties of Ptn-doped WSe2 to SF6 decomposition products. *Journal of Industrial and Engineering Chemistry*, **2021**, 97, 452-459	6.3	24
55	Morphology controllable synthesis of hierarchical WO3 nanostructures and C2H2 sensing properties. *Physica E: Low-Dimensional Systems and Nanostructures*, **2019**, 109, 253-260	3	24
54	DFT-based study on H2S and SOF2 adsorption on Si-MoS2 monolayer. *Results in Physics*, **2019**, 13, 102225	3.7	23
53	First-Principles Insight into a Ru-Doped SnS Monolayer as a Promising Biosensor for Exhale Gas Analysis. *ACS Omega*, **2020**, 5, 8919-8926	3.9	23
52	Theoretical and experimental study on competitive adsorption of SF6 decomposed components on Au-modified anatase (101) surface. *Applied Surface Science*, **2016**, 387, 437-445	6.7	21
51	Effect of Aminosilane Coupling Agents with Different Chain Lengths on Thermo-Mechanical Properties of Cross-Linked Epoxy Resin. *Nanomaterials*, **2018**, 8,	5.4	20
50	Adsorption of gases from SF6 decomposition on aluminum-doped SWCNTs: a density functional theory study. *European Physical Journal D*, **2015**, 69, 1	1.3	19
49	Palladium modified MoS2 monolayer for adsorption and scavenging of SF6 decomposition products: A DFT study. *Physica E: Low-Dimensional Systems and Nanostructures*, **2020**, 123, 114178	3	19
48	Synthesis and Characterization of Highly Sensitive Hydrogen (H) Sensing Device Based on Ag Doped SnO Nanospheres. *Materials*, **2018**, 11,	3.5	17
47	Au (n=12) cluster doped MoSe2 nanosheet as a promising gas-sensing material for C2H4 gas in oil-immersed transformer. *Applied Surface Science*, **2021**, 541, 148356	6.7	17
46	Gas Sensing Analysis of Ag-Decorated Graphene for Sulfur Hexafluoride Decomposition Products Based on the Density Functional Theory. *Sensors*, **2016**, 16,	3.8	15
45	Gas sensing of graphene and graphene oxide nanoplatelets to ClO2 and its decomposed species. *Superlattices and Microstructures*, **2019**, 135, 106248	2.8	14
44	Pt Cluster Modified h-BN for Gas Sensing and Adsorption of Dissolved Gases in Transformer Oil: A Density Functional Theory Study. *Nanomaterials*, **2019**, 9,	5.4	14
43	Identification of Power Transformer Winding Mechanical Fault Types Based on Online IFRA by Support Vector Machine. *Energies*, **2017**, 10, 2022	3.1	13
42	Ab Initio Study of SOF and SOF Adsorption on Co-MoS. *ACS Omega*, **2019**, 4, 2517-2522	3.9	12
41	Ni-CNT Chemical Sensor for SF Decomposition Components Detection: A Combined Experimental and Theoretical Study. *Sensors*, **2018**, 18,	3.8	11

40	Adsorption and sensing performances of transition metal (Ag, Pd, Pt, Rh, and Ru) modified WSe2 monolayer upon SF6 decomposition gases (SOF2 and SO2F2). *Applied Surface Science*, **2022**, 581, 152365	6.7	10
39	Adsorption properties of Ag2O□MoSe2 towards SF6 decomposed products. *Vacuum*, **2021**, 189, 110248	3.7	10
38	DFT study of SF6 decomposed products on Pd□TiO2: gas sensing mechanism study. *Adsorption*, **2019**, 25, 1643-1653	2.6	9
37	Effect of Nickel Doping on Adsorption of SF6 Decomposition Products over MoS2 Surface. *Jom*, **2019**, 71, 3971-3979	2.1	8
36	Adsorption mechanism of decomposition gas of SF6 circuit breaker on MOF-505 analogue. *Vacuum*, **2021**, 183, 109816	3.7	8
35	Pd and Pt decorated GeSe monolayers as promising materials for SOF2 and SO2F2 sensing. *Applied Surface Science*, **2021**, 560, 150028	6.7	8
34	Adsorption mechanism of hydrogen sulfide and sulfur dioxide on Au□MoS2 monolayer. *Superlattices and Microstructures*, **2019**, 135, 106280	2.8	6
33	Reactive Molecular Dynamics Study of Effects of Small-Molecule Organic Acids on PMIA Thermal Decomposition. *Journal of Physical Chemistry B*, **2018**, 122, 10384-10392	3.4	6
32	Adsorption behaviors of SF6 decomposition gas on Ni-doped ZIF-8:A first-principles study. *Vacuum*, **2021**, 187, 110131	3.7	5
31	Sensing Characteristics of Toxic C□N Decomposition Products on Metallic- Nanoparticle Co-Doped BN Monolayer: A First Principles Study. *IEEE Sensors Journal*, **2021**, 21, 13082-13089	4	5
30	Study on the characteristic decomposition components of air-insulated switchgear cabinet under partial discharge. *AIP Advances*, **2016**, 6, 075106	1.5	5
29	Adsorption of SF6Decomposition Components on Pt-Doped Graphyne Monolayer: A DFT Study. *IEEE Access*, **2019**, 7, 124026-124033	3.5	4
28	Influence of humidity and voltage on characteristic decomposition components under needle-plate discharge model. *IEEE Transactions on Dielectrics and Electrical Insulation*, **2016**, 23, 2633-2640	2.3	4
27	Au Catalyst-Modified MoS Monolayer as a Highly Effective Adsorbent for SOF Gas: A DFT Study. *ACS Omega*, **2019**, 4, 12204-12211	3.9	4
26	Adsorption property of CO, NO, and NO2 gas molecules on Co3-MoSe2 monolayer. *Sensors and Actuators A: Physical*, **2021**, 319, 112547	3.9	4
25	Adsorption and gas-sensing properties of C2H4, CH4, H2, H2O on metal oxides (CuO, NiO) modified SnS2 monolayer: A DFT study. *Results in Physics*, **2021**, 28, 104680	3.7	4
24	Adsorption characteristics of H2S, SO2, SO2F2, SOF2, and N2 on NiO□MoSe2 monolayer for gas-sensing applications. *Vacuum*, **2021**, 193, 110506	3.7	4
23	Adsorption property of Co, Rh, and Pd-embedded g-C3N4 monolayer to SO2F2 gas. *Journal of Materials Research and Technology*, **2021**, 15, 4790-4790	5.5	3

22	First-Principles Study on the Potential of Monolayer Ti2N as an Adsorbent for Dissolved H2 and C2H2 Gases in Oil. *ACS Applied Nano Materials*, **2020**, 3, 12346-12354	5.6	3
21	Theoretical Study of SF6 Decomposition Products Adsorption on Metal Oxide Cluster-modified Single-layer Graphene. *Journal of Industrial and Engineering Chemistry*, **2021**, 105, 278-278	6.3	3
20	TiO2-Doped GeSe Monolayer: A Highly Selective Gas Sensor for SF6 Decomposed Species Detection Based on DFT Method. *Applied Surface Science*, **2021**, 151212	6.7	3
19	Adsorption and gas-sensing properties of Aun (n=1-13) cluster doped MoTe2 for NH3, NO2, and SO2 gas molecules. *Surfaces and Interfaces*, **2022**, 30, 101883	4.1	3
18	First-principles study of the adsorption behavior and sensing properties of C2H4 and C2H6 molecules on (CuO/TiO2)n (n=1-3) cluster modified MoTe2 monolayer. *Surfaces and Interfaces*, **2022**, 31, 102003	4.1	3
17	Metal Oxide Nanoparticles (XO, X = Cu, Zn, Ni) Doped GeSe Monolayer: Theoretical Exploration of a Novel H2S Gas Sensor for Health and Industrial Monitoring. *IEEE Sensors Journal*, **2021**, 1-1	4	2
16	First-principle study on the structural and electronic properties of H2S and SO2 adsorption on Pd-doped MoS2 monolayer. *Molecular Physics*, **2020**, 118, e1606462	1.7	2
15	Co, Rh decorated GaNNTs for online monitoring of characteristic decomposition products in oil-immersed transformer. *Applied Surface Science*, **2021**, 561, 150072	6.7	2
14	Adsorption and sensing performances of ZnO-g-C3N4 monolayer toward SF6 decomposition products. *Physica E: Low-Dimensional Systems and Nanostructures*, **2021**, 134, 114909	3	2
13	Density functional theory study of Pd, Pt, and Au modified GeSe for adsorption and sensing of dissolved gases in transformer oil. *Surfaces and Interfaces*, **2022**, 31, 101994	4.1	2
12	Transition metal oxides (NiO, SnO2, In2O3) modified graphene: A promising candidate to detect and scavenge CO, C2H2, and CH4 gases. *Diamond and Related Materials*, **2022**, 123, 108856	3.5	1
11	Adsorption and gas-sensing properties of Pdn-GaNNTs to C2H2 and H2 gases. *Physica E: Low-Dimensional Systems and Nanostructures*, **2021**, 136, 115004	3	1
10	Gas-Sensing Properties of CuS-MoSe Nanosheets to NO and NH Gases. *ACS Omega*, **2021**, 6, 16517-16523	3.9	1
9	Adsorption behavior of Cu-doped ZIF-67 for decomposition gases of organic insulator: A first-principles study. *Journal of Physics: Conference Series*, **2021**, 1754, 012033	0.3	1
8	Adsorption and gas sensing properties of CuO modified MoSe2 to C3F7CN decomposition products. *Materials Today Communications*, **2021**, 28, 102677	2.5	1
7	First principles analysis of SO2, H2S adsorbed on Fe-ZnS surface. *Sensors and Actuators A: Physical*, **2021**, 329, 112827	3.9	1
6	A DFT calculation:Gas sensitivity of defect GeSe to air decomposition products (CO, NO and NO2). *IEEE Sensors Journal*, **2022**, 1-1	4	1
5	Theoretical Study of SOF2 Adsorption on Pd/Pt-Ni(111) Bimetallic Surfaces. *Applied Sciences (Switzerland)*, **2019**, 9, 2916	2.6	0

4	First-Principles Calculations of Gas-Sensing Properties of Pd Clusters Decorated AlNNTs to Dissolved Gases in Transformer Oil. *IEEE Access*, **2020**, 8, 162692-162700	3.5	0
3	A DFT study of adsorption properties of SO2, SOF2, and SO2F2 on ZnO/CuO doped graphene. *Diamond and Related Materials*, **2022**, 109103	3.5	0
2	Influence of Pd Clusters Doping on Gas Sensing Properties of TiO(101) Nanotubes to SF Decomposition Products. *IEEE Access*, **2020**, 8, 205282-205288	3.5	
1	Gas-Sensing Property of TM-MoTe2 Monolayer towards SO2, SOF2, and HF Gases. *Molecules*, **2022**, 27, 3176	4.8	