Pi-Guey Su

List of Publications by Year
in descending order

91 papers	3,777 citations	109264 35 h-index	133188 59 g-index
91 all docs	91 docs citations	91 times ranked	4249 citing authors

#	Article	IF	Citations
1	A novel SnO2 gas sensor doped with carbon nanotubes operating at room temperature. Sensors and Actuators B: Chemical, 2004, 101, 81-89.	4.0	358
2	Humidity sensors based on TiO2 nanoparticles/polypyrrole composite thin films. Sensors and Actuators B: Chemical, 2007, 123, 501-507.	4.0	198
3	The application of CNT/Nafion composite material to low humidity sensing measurement. Sensors and Actuators B: Chemical, 2005, 104, 80-84.	4.0	179
4	NH 3 gas sensor based on Pd/SnO 2 /RGO ternary composite operated at room-temperature. Sensors and Actuators B: Chemical, 2016, 223, 202-208.	4.0	163
5	Fabrication of a room-temperature H2S gas sensor based on PPy/WO3 nanocomposite films by in-situ photopolymerization. Sensors and Actuators B: Chemical, 2014, 193, 637-643.	4.0	138
6	Fabrication and NO2 gas-sensing properties of reduced graphene oxide/WO3 nanocomposite films. Talanta, 2015, 132, 398-405.	2.9	136
7	Flexible humidity sensor based on TiO2 nanoparticles-polypyrrole-poly-[3-(methacrylamino)propyl] trimethyl ammonium chloride composite materials. Sensors and Actuators B: Chemical, 2008, 129, 538-543.	4.0	119
8	Novel flexible resistive-type humidity sensor. Sensors and Actuators B: Chemical, 2007, 123, 1071-1076.	4.0	101
9	Electrical and humidity-sensing properties of reduced graphene oxide thin film fabricated by layer-by-layer with covalent anchoring on flexible substrate. Sensors and Actuators B: Chemical, 2014, 200, 9-18.	4.0	94
10	Flexible NO2 sensors fabricated by layer-by-layer covalent anchoring and in situ reduction of graphene oxide. Sensors and Actuators B: Chemical, 2014, 190, 865-872.	4.0	91
11	Fabrication of flexible NO2 sensors by layer-by-layer self-assembly of multi-walled carbon nanotubes and their gas sensing properties. Sensors and Actuators B: Chemical, 2009, 139, 488-493.	4.0	85
12	A low humidity sensor made of quartz crystal microbalance coated with multi-walled carbon nanotubes/Nafion composite material films. Sensors and Actuators B: Chemical, 2006, 115, 338-343.	4.0	84
13	Low-humidity sensor based on a quartz-crystal microbalance coated with polypyrrole/Ag/TiO2 nanoparticles composite thin films. Sensors and Actuators B: Chemical, 2008, 129, 915-920.	4.0	74
14	Humidity sensor based on PMMA simultaneously doped with two different salts. Sensors and Actuators B: Chemical, 2006, 113, 883-886.	4.0	69
15	Use of poly(2-acrylamido-2-methylpropane sulfonate) modified with tetraethyl orthosilicate as sensing material for measurement of humidity. Analytica Chimica Acta, 2001, 449, 103-109.	2.6	65
16	Flexibility and electrical and humidity-sensing properties of diamine-functionalized graphene oxide films. Sensors and Actuators B: Chemical, 2015, 211, 157-163.	4.0	65
17	Flexible NH3 sensors fabricated by in situ self-assembly of polypyrrole. Talanta, 2009, 80, 763-769.	2.9	64
18	In situ synthesized composite thin films of MWCNTs/PMMA doped with KOH as a resistive humidity sensor. Sensors and Actuators B: Chemical, 2007, 124, 303-308.	4.0	59

#	Article	IF	Citations
19	Flexible humidity sensor based on Au nanoparticles/graphene oxide/thiolated silica solâ€“gel film. Sensors and Actuators B: Chemical, 2015, 216, 467-475.	4.0	57
20	Fabrication of a room-temperature NO2 gas sensor based on WO3 films and WO3/MWCNT nanocomposite films by combining polyol process with metal organic decomposition method. Materials Chemistry and Physics, 2011, 125, 351-357.	2.0	55
21	Fully transparent and flexible humidity sensors fabricated by layer-by-layer self-assembly of thin film of poly(2-acrylamido-2-methylpropane sulfonate) and its salt complex. Sensors and Actuators B: Chemical, 2011, 153, 29-36.	4.0	51
22	Humidity sensing and electrical properties of a composite material of nano-sized SiO2 and poly(2-acrylamido-2-methylpropane sulfonate). Sensors and Actuators B: Chemical, 2004, 100, 417-422.	4.0	50
23	Nanogold on powdered cobalt oxide for carbon monoxide sensor. Sensors and Actuators B: Chemical, 2003, 96, 596-601.	4.0	49
24	Simple one-pot polyol synthesis of Pd nanoparticles, TiO2 microrods and reduced graphene oxide ternary composite for sensing NH3 gas at room temperature. Sensors and Actuators B: Chemical, 2018, 254, 1125-1132.	4.0	49
25	Determination of organophosphorus pesticides in water by solid-phase microextraction. Talanta, 1999, 49, 393-402.	2.9	47
26	Novel fully transparent and flexible humidity sensor. Sensors and Actuators B: Chemical, 2009, 137, 496-500.	4.0	47
27	Electrical and humidity sensing properties of carbon nanotubes-SiO2-poly(2-acrylamido-2-methylpropane sulfonate) composite material. Sensors and Actuators B: Chemical, 2006, 113, 142-149.	4.0	44
28	Low-pressure plasma enhanced immobilization of chitosan on low-density polyethylene for bio-medical applications. Applied Surface Science, 2015, 328, 1-12.	3.1	41
29	A resistive-type humidity sensor using composite films prepared from poly(2-acrylamido-2-methylpropane sulfonate) and dispersed organic silicon sol. Talanta, 2005, 66, 1247-1253.	2.9	40
30	Flexible H2 sensors fabricated by layer-by-layer self-assembly thin film of multi-walled carbon nanotubes and modified in situ with Pd nanoparticles. Sensors and Actuators B: Chemical, 2010, 145, 521-526.	4.0	40
31	In situ copolymerization of copolymer of methyl methacrylate and [3-(methacrylamino)propyl] trimethyl ammonium chloride on an alumina substrate for humidity sensing. Sensors and Actuators B: Chemical, 2005, 107, 317-322.	4.0	39
32	Enhanced NO2 gas-sensing properties of Au-Ag bimetal decorated MWCNTs/WO3 composite sensor under UV-LED irradiation. Sensors and Actuators A: Physical, 2020, 303, 111718.	2.0	39
33	Flexible H2 sensor fabricated by layer-by-layer self-assembly of thin films of polypyrrole and modified in situ with Pt nanoparticles. Sensors and Actuators B: Chemical, 2011, 157, 275-281.	4.0	38
34	Influence of non-thermal plasma forming gases on improvement of surface properties of low density polyethylene (LDPE). Applied Surface Science, 2014, 307, 109-119.	3.1	38
35	Fabrication of a highly sensitive flexible humidity sensor based on Pt/polythiophene/reduced graphene oxide ternary nanocomposite films using a simple one-pot method. Sensors and Actuators B: Chemical, 2020, 324, 128728.	4.0	37
36	Electrical and sensing properties of a flexible humidity sensor made of polyamidoamine dendrimer-Au nanoparticles. Sensors and Actuators B: Chemical, 2012, 165, 151-156.	4.0	35

#	Article	IF	Citations
37	Novel low humidity sensor made of TiO2 nanowires/poly(2-acrylamido-2-methylpropane sulfonate) composite material film combined with quartz crystal microbalance. Talanta, 2006, 69, 946-951.	2.9	34
38	A micromachined resistive-type humidity sensor with a composite material as sensitive film. Sensors and Actuators B: Chemical, 2006, 113, 837-842.	4.0	33
39	In situ prepared polypyrrole for low humidity QCM sensor and related theoretical calculation. Talanta, 2007, 73, 857-861.	2.9	32
40	Influence of operating parameters on surface properties of RF glow discharge oxygen plasma treated TiO2/PET film for biomedical application. Materials Science and Engineering C, 2014, 36, 309-319.	3.8	32
41	Low-humidity sensing properties of carbon nanotubes measured by a quartz crystal microbalance. Sensors and Actuators B: Chemical, 2009, 135, 506-511.	4.0	31
42	Evaluation of mechanism of non-thermal plasma effect on the surface of polypropylene films for enhancement of adhesive and hemo compatible properties. Applied Surface Science, 2015, 347, 336-346.	3.1	30
43	Fabrication and electrical and humidity-sensing properties of a flexible and stretchable textile humidity sensor. Journal of the Taiwan Institute of Chemical Engineers, 2018, 87, 36-43.	2.7	30
44	Direct and simultaneous determination of molybdenum and vanadium in sea-water using a multielement electrothermal atomic absorption spectrometer. Journal of Analytical Atomic Spectrometry, 1998, 13, 641-645.	1.6	28
45	Use of 4-(2-pyridylazo)resocinol or 2-(2-pyridylazo)-5-dimethylaminophenol as chelating agent for determination of cadmium in seawater by atomic absorption spectrometry with on-line flow-injection sorbent extraction. Analytica Chimica Acta, 1998, 376, 305-311.	2.6	25
46	Uncertainty of humidity sensors testing by means of divided-flow generator. Measurement: Journal of the International Measurement Confederation, 2004, 36, 21-27.	2.5	25
47	Detection of Cu(II) ion by an electrochemical sensor made of 5,17-bis(4â€²-nitrophenylazo)-25,26,27,28-tetrahydroxycalix[4]arene-electromodified electrode. Sensors and Actuators B: Chemical, 2014, 191, 364-370.	4.0	25
48	Fabrication of a flexible single-yarn NH3 gas sensor by layer-by-layer self-assembly of graphene oxide. Materials Chemistry and Physics, 2019, 224, 349-356.	2.0	24
49	Simple and rapid differentiation of toxic gases using a quartz crystal microbalance sensor array coupled with principal component analysis. Sensors and Actuators A: Physical, 2017, 263, 1-7.	2.0	23
50	Room-temperature ppb-level SO₂ gas sensors based on RGO/WO₃ and MWCNTs/WO₃ nanocomposites. Analytical Methods, 2021, 13, 782-788.	1.3	23
51	Direct and simultaneous determination of copper and manganese in seawater with a multielement graphite furnace atomic absorption spectrometer. Spectrochimica Acta, Part B: Atomic Spectroscopy, 1998, 53, 699-708.	1.5	22
52	Humidity sensing and electrical properties of Na- and K-montmorillonite. Sensors and Actuators B: Chemical, 2008, 129, 380-385.	4.0	22
53	Recognition of binary mixture of NO2 and NO gases using a chemiresistive sensors array combined with principal component analysis. Sensors and Actuators A: Physical, 2021, 331, 112980.	2.0	22
54	Laminating two-layer thick films structure tin oxide-based butane gas sensor operating at low temperature. Sensors and Actuators B: Chemical, 2004, 99, 304-309.	4.0	21

#	Article	IF	Citations
55	Poly(l-lactide) stabilized gold nanoparticles based QCM sensor for low humidity detection. Sensors and Actuators B: Chemical, 2007, 126, 441-446.	4.0	20
56	Self-assembly of polyelectrolytic multilayer thin films of polyelectrolytes on quartz crystal microbalance for detecting low humidity. Sensors and Actuators B: Chemical, 2009, 142, 123-129.	4.0	20
57	Humidity sensing properties of calix[4]arene and functionalized calix[4]arene measured using a quartz-crystal microbalance. Sensors and Actuators B: Chemical, 2013, 181, 795-801.	4.0	19
58	Low-humidity sensing properties of carboxylic acid functionalized carbon nanomaterials measured by a quartz crystal microbalance. Sensors and Actuators A: Physical, 2014, 205, 126-132.	2.0	19
59	Tailoring the surface properties of polypropylene films through cold atmospheric pressure plasma (CAPP) assisted polymerization and immobilization of biomolecules for enhancement of anti-coagulation activity. Applied Surface Science, 2016, 370, 545-556.	3.1	18
60	One-pot synthesis of AuNPs/RGO/WO 3 nanocomposite for simultaneously sensing hydroquinone and catechol. Materials Chemistry and Physics, 2018, 215, 293-298.	2.0	18
61	Effect of cold atmospheric pressure plasma gas composition on the surface and cyto-compatible properties of low density polyethylene (LDPE) films. Current Applied Physics, 2016, 16, 784-792.	1.1	17
62	Detection of ppb-level NO₂ gas using a portable gas-sensing system with a Fe₂O₃/MWCNTs/WO₃ sensor using a pulsed-UV-LED. Analytical Methods, 2019, 11, 973-979.	1.3	17
63	Layer-by-layer anchoring of copolymer of methyl methacrylate and [3-(methacrylamino)propyl] trimethyl ammonium chloride to gold surface on flexible substrate for sensing humidity. Sensors and Actuators B: Chemical, 2013, 178, 289-295.	4.0	15
64	Fabrication of a flexible H 2 sensor based on Pd nanoparticles modified polypyrrole films. Materials Chemistry and Physics, 2016, 170, 180-185.	2.0	15
65	Electrical and humidity-sensing properties of flexible metal-organic framework M050(Mg) and KOH/M050 and AuNPs/M050 composites films. Sensors and Actuators B: Chemical, 2018, 269, 110-117.	4.0	15
66	Low-humidity sensing properties of PAMAM dendrimer and PAMAMâ€“Au nanoparticles measured by a quartz-crystal microbalance. Sensors and Actuators A: Physical, 2012, 179, 44-49.	2.0	14
67	Evaluation of surface properties of low density polyethylene (LDPE) films tailored by atmospheric pressure non-thermal plasma (APNTP) assisted co-polymerization and immobilization of chitosan for improvement of antifouling properties. Materials Science and Engineering C, 2019, 94, 150-160.	3.8	13
68	Electrical and humidity sensing properties of K+-nano-mica film. Sensors and Actuators B: Chemical, 2012, 161, 838-844.	4.0	12
69	Fabrication, characterization and sensing properties of Cu(II) ion imprinted solâ€“gel thin film on QCM. Materials Chemistry and Physics, 2012, 135, 130-136.	2.0	11
70	Low-humidity sensing properties of diamine- and Î²-cyclodextrin-functionalized graphene oxide films measured using a quartz-crystal microbalance. Sensors and Actuators A: Physical, 2016, 238, 344-350.	2.0	11
71	Effect of adding Au nanoparticles and KOH on the electrical and humidity-sensing properties of WO3 particles. Sensors and Actuators B: Chemical, 2017, 252, 854-861.	4.0	11
72	Layer-by-layer assembly of mica and polyelectrolyte for use in low-humidity sensor. Sensors and Actuators B: Chemical, 2009, 137, 555-560.	4.0	10

#	Article	IF	Citations
73	Electrical and Humidity-Sensing Properties of Impedance-Type Humidity Sensors that Were Made of Ag Microwires/PPy/SnO2 Ternary Composites. Chemosensors, 2020, 8, 92.	1.8	10
74	Humidity sensing and electrical properties of hybrid films prepared from [3-(methacrylamino)propyl] trimethyl ammonium chloride, aqueous monodispersed colloidal silica and methyl methacrylate. Sensors and Actuators B: Chemical, 2006, 119, 483-489.	4.0	9
75	Effect of processing parameters on the deposition of SiOx-like coatings on the surface of polypropylene films using glow discharge plasma assisted polymerization for tissue engineering applications. Vacuum, 2017, 143, 412-422.	1.6	9
76	Flexibility and electrical and humidity-sensing properties of N-substituted pyrrole derivatives and composite films of Au nanoparticles/N-substituted pyrrole derivatives. Sensors and Actuators B: Chemical, 2016, 224, 833-840.	4.0	8
77	H₂-gas sensing and discriminating actions of a single-yarn sensor based on a Pd/GO multilayered thin film using FFT. Analytical Methods, 2020, 12, 3537-3544.	1.3	8
78	Cold atmospheric pressure (CAP) plasma assisted tailoring of LDPE film surfaces for enhancement of adhesive and cytocompatible properties: Influence of operating parameters. Vacuum, 2016, 130, 34-47.	1.6	7
79	Preparation and NH3 Gas-Sensing Properties of Double-Shelled Hollow ZnTiO3 Microrods. Sensors, 2020, 20, 46.	2.1	6
80	One-pot synthesis of plate-like CeO2 nanosheets for sensing NH3 gas at room temperature. Materials Chemistry and Physics, 2022, 277, 125453.	2.0	6
81	A room temperature NH₃ gas sensor based on a quartz crystal microbalance coated with a rGOâ€“SnO₂ composite film. Analytical Methods, 2022, 14, 1454-1461.	1.3	5
82	Electrical and humidity-sensing properties of 1-(4-carboxylic acid phenyl)-2,5-dimethyl-1H-pyrrole doped with both KOH and K2CO3 salts. Sensors and Actuators B: Chemical, 2017, 240, 595-603.	4.0	3
83	Humidity sensing and electrical properties of a composite material of SiO2 and poly-[3-(methacrylamino)propyl] trimethyl ammonium chloride. , 2005, 105, 170-170.		3
84	Investigation on Surface and Biological Properties of Silver Containing Diamond Like Carbon Films on Polyethylene Terephthalate Film Surface by Hybrid Reactive Sputtering Method. Key Engineering Materials, 0, 521, 191-205.	0.4	2
85	The Effect of the Type of Polycation Used in Mica Nanocomposite Thin Films Prepared by Layer-by-Layer Technique on Low-Humidity Sensing. Sensor Letters, 2010, 8, 848-856.	0.4	2
86	25-Alkoxy-26-benzoyloxycalix[4]arenes: the reaction mechanism of benzoyl migration. Tetrahedron Letters, 2012, 53, 3510-3513.	0.7	1
87	Modification of Gold Electrodes Using AuNPs/Î²-Cyclodextrin/Reduced Graphene Oxide Nanocomposites to Detect Simultaneously Hydroquinone and Catechol. Sensor Letters, 2016, 14, 635-641.	0.4	1
88	Electrical and Humidity-Sensing Properties of EuCl2, Eu2O3 and EuCl2/Eu2O3 Blend Films. Chemosensors, 2021, 9, 288.	1.8	1
89	Fabrication of Sno2/Reduced Graphene Oxide Nanocomposite Films for Sensing No2 Gas at Room-Temperature. International Journal of Scientific Engineering and Technology, 2015, 4, 268-272.	0.2	1
90	Detection of Bisphenol A Using Layer-by-Layer Covalent Anchoring of Polyamidoamine Dendrimer to Gold Electrodes. Sensor Letters, 2013, 11, 1894-1902.	0.4	0

#	Article	IF	Citations
91	Layer-by-Layer Covalent Immobilization of Acetylcholinesterase and Polyamidoamine Dendrimer on a Gold Electrode for Detecting Organophosphorus Pesticides. Sensor Letters, 2015, 13, 584-591.	0.4	0