Stella Vallejos

List of Publications by Year
in descending order

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72 papers	2,095 citations	236925 25 h-index	233421 45 g-index
72 all docs	72 docs citations	72 times ranked	2326 citing authors

#	Article	IF	Citations
1	Au nanoparticle-functionalised WO₃nanoneedles and their application in high sensitivity gas sensor devices. Chemical Communications, 2011, 47, 565-567.	4.1	204
2	Raman and XPS studies of ammonia sensitive polypyrrole nanorods and nanoparticles. Scientific Reports, 2019, 9, 8465.	3.3	162
3	Aerosol-Assisted CVD-Grown WO₃ Nanoneedles Decorated with Copper Oxide Nanoparticles for the Selective and Humidity-Resilient Detection of H₂S. ACS Applied Materials & Interfaces, 2015, 7, 6842-6851.	8.0	161
4	Singleâ€Step Deposition of Auâ€and Ptâ€Nanoparticleâ€Functionalized Tungsten Oxide Nanoneedles Synthesized Via Aerosolâ€Assisted CVD, and Used for Fabrication of Selective Gas Microsensor Arrays. Advanced Functional Materials, 2013, 23, 1313-1322.	14.9	143
5	AACVD Synthesis and Characterization of Iron and Copper Oxides Modified ZnO Structured Films. Nanomaterials, 2020, 10, 471.	4.1	125
6	Aerosol-Assisted CVD-Grown PdO Nanoparticle-Decorated Tungsten Oxide Nanoneedles Extremely Sensitive and Selective to Hydrogen. ACS Applied Materials & Interfaces, 2016, 8, 10413-10421.	8.0	93
7	Gold clusters on WO3 nanoneedles grown via AACVD: XPS and TEM studies. Materials Chemistry and Physics, 2012, 134, 809-813.	4.0	83
8	Nanoscale Heterostructures Based on Fe₂O₃@WO_{3-x} Nanoneedles and Their Direct Integration into Flexible Transducing Platforms for Toluene Sensing. ACS Applied Materials & Interfaces, 2015, 7, 18638-18649.	8.0	79
9	Micro-machined WO3-based sensors selective to oxidizing gases. Sensors and Actuators B: Chemical, 2008, 132, 209-215.	7.8	77
10	Ozone monitoring by micro-machined sensors with WO3 sensing films. Sensors and Actuators B: Chemical, 2007, 126, 573-578.	7.8	53
11	Micromachined gas sensors based on tungsten oxide nanoneedles directly integrated via aerosol assisted CVD. Sensors and Actuators B: Chemical, 2014, 198, 210-218.	7.8	53
12	Chemical Vapour Deposition of Gas Sensitive Metal Oxides. Chemosensors, 2016, 4, 4.	3.6	52
13	VOCs Sensing by Metal Oxides, Conductive Polymers, and Carbon-Based Materials. Nanomaterials, 2021, 11, 552.	4.1	50
14	Chemoresistive micromachined gas sensors based on functionalized metal oxide nanowires: Performance and reliability. Sensors and Actuators B: Chemical, 2016, 235, 525-534.	7.8	44
15	ZnO Rods with Exposed {100} Facets Grown via a Self-Catalyzed Vaporâ€“Solid Mechanism and Their Photocatalytic and Gas Sensing Properties. ACS Applied Materials & Interfaces, 2016, 8, 33335-33342.	8.0	42
16	Important considerations for effective gas sensors based on metal oxide nanoneedles films. Sensors and Actuators B: Chemical, 2012, 161, 406-413.	7.8	39
17	Aerosol assisted chemical vapour deposition of gas sensitive SnO2 and Au-functionalised SnO2 nanorods via a non-catalysed vapour solid (VS) mechanism. Scientific Reports, 2016, 6, 28464.	3.3	37
18	Aerosol Assisted Chemical Vapour Deposition Control Parameters for Selective Deposition of Tungsten Oxide Nanostructures. Journal of Nanoscience and Nanotechnology, 2011, 11, 8214-8220.	0.9	36

#	Article	IF	Citations
19	Gas sensitive ZnO structures with reduced humidity-interference. Sensors and Actuators B: Chemical, 2019, 301, 127054.	7.8	35
20	Detection of volatile organic compounds using flexible gas sensing devices based on tungsten oxide nanostructures functionalized with Au and Pt nanoparticles. Talanta, 2015, 139, 27-34.	5.5	34
21	Love wave sensors based on gold nanoparticle-modified polypyrrole and their properties to ammonia and ethylene. Sensors and Actuators B: Chemical, 2020, 304, 127337.	7.8	33
22	Gas sensing properties of WO3 thin films deposited by rf sputtering. Sensors and Actuators B: Chemical, 2007, 126, 400-405.	7.8	31
23	Microsensors based on Ptâ€“nanoparticle functionalised tungsten oxide nanoneedles for monitoring hydrogen sulfide. RSC Advances, 2014, 4, 1489-1495.	3.6	30
24	A novel route to Ptâ€“Bi2O3 composite thin films and their application in photo-reduction of water. Inorganica Chimica Acta, 2012, 380, 328-335.	2.4	27
25	Aerosol assisted chemical vapour deposition of gas-sensitive nanomaterials. Thin Solid Films, 2013, 548, 703-709.	1.8	26
26	Aerosolâ€Assisted CVD of SnO₂ Thin Films for Gasâ€Sensor Applications. Chemical Vapor Deposition, 2011, 17, 247-252.	1.3	25
27	Localized aerosol-assisted CVD of nanomaterials for the fabrication of monolithic gas sensor microarrays. Sensors and Actuators B: Chemical, 2015, 216, 374-383.	7.8	23
28	Cadmium telluride/polypyrrole nanocomposite based Love wave sensors highly sensitive to acetone at room temperature. Sensors and Actuators B: Chemical, 2020, 321, 128573.	7.8	21
29	p -Type PdO nanoparticles supported on n -type WO 3 nanoneedles for hydrogen sensing. Thin Solid Films, 2016, 618, 238-245.	1.8	20
30	Love Wave Sensors with Silver Modified Polypyrrole Nanoparticles for VOCs Monitoring. Sensors, 2020, 20, 1432.	3.8	20
31	UV-light activated APTES modified WO3-x nanowires sensitive to ethanol and nitrogen dioxide. Sensors and Actuators B: Chemical, 2021, 328, 129046.	7.8	20
32	Micro-machined WO3-based sensors with improved characteristics. Sensors and Actuators B: Chemical, 2009, 140, 356-362.	7.8	19
33	Selectively arranged single-wire based nanosensor array systems for gas monitoring. Nanoscale, 2018, 10, 9087-9096.	5.6	19
34	Microfabrication of flexible gas sensing devices based on nanostructured semiconducting metal oxides. Sensors and Actuators A: Physical, 2014, 219, 88-93.	4.1	16
35	Highly hydrogen sensitive micromachined sensors based on aerosol-assisted chemical vapor deposited ZnO rods. Sensors and Actuators B: Chemical, 2018, 268, 15-21.	7.8	16
36	Photoactivated materials and sensors for NO₂ monitoring. Journal of Materials Chemistry C, 2021, 9, 16804-16827.	5.5	16

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37	Cerium Oxide-Tungsten Oxide Core-Shell Nanowire-Based Microsensors Sensitive to Acetone. Biosensors, 2018, 8, 116.	4.7	14
38	Catalyst-Free Vapor-Phase Method for Direct Integration of Gas Sensing Nanostructures with Polymeric Transducing Platforms. Journal of Nanomaterials, 2014, 2014, 1-9.	2.7	11
39	ZnO Structures with Surface Nanoscale Interfaces Formed by Au, Fe2O3, or Cu2O Modifier Nanoparticles: Characterization and Gas Sensing Properties. Sensors, 2021, 21, 4509.	3.8	10
40	Micromachined Gas Sensors Based on Au-functionalized SnO 2 Nanorods Directly Integrated without Catalyst Seeds via AA-CVD. Procedia Engineering, 2016, 168, 1078-1081.	1.2	8
41	Influence of Mg Doping Levels on the Sensing Properties of SnO2 Films. Sensors, 2020, 20, 2158.	3.8	8
42	Technology of metal oxide thin film deposition with interruptions. Surface and Coatings Technology, 2007, 202, 453-459.	4.8	7
43	Characterization and gas sesing properties of intrinsic and Au-doped WO3 nanostuctures deposited by AACVD technique. Procedia Engineering, 2010, 5, 131-134.	1.2	7
44	CO and H2 Sensing with CVD-Grown Tungsten Oxide Nanoneedles Decorated with Au, Pt or Cu Nanoparticles. Procedia Engineering, 2012, 47, 904-907.	1.2	7
45	Aerosol-assisted Chemical Vapor Deposition of Metal Oxide Structures: Zinc Oxide Rods. Journal of Visualized Experiments, 2017, , .	0.3	7
46	Gas Sensors Based on Porous Ceramic Bodies of MSnO3 Perovskites (M = Ba, Ca, Zn): Formation and Sensing Properties towards Ethanol, Acetone, and Toluene Vapours. Molecules, 2022, 27, 2889.	3.8	6
47	AA-CVD growth and ethanol sensing properties of pure and metal decorated WO<SUB align="right">3 nanoneedles. International Journal of Nanotechnology, 2013, 10, 455.	0.2	4
48	Single-step co-deposition of nanostructured tungsten oxide supported gold nanoparticles using a goldâ€“phosphine cluster complex as the gold precursor. Science and Technology of Advanced Materials, 2014, 15, 065004.	6.1	4
49	Microelectrode array systems for their use in single nanowire-based gas sensor platforms. Journal of Electrical Engineering, 2017, 68, 158-162.	0.7	4
50	Polypyrrole Based Love-Wave Gas Sensor Devices with Enhanced Properties to Ammonia. Proceedings (mdpi), 2018, 2, .	0.2	4
51	Electrochemically deposited polypyrrole nanorods and study of their ammonia sensing properties. Materials Today: Proceedings, 2020, 20, 305-310.	1.8	4
52	Localized heating to tungsten oxide nanostructures deposition on gas microsensor arrays via aerosol assisted CVD. , 2013, , .		3
53	Tuning of the Humidity-Interference in Gas Sensitive Columnar ZnO Structures. Proceedings (mdpi), 2017, 1, 417.	0.2	3
54	High-Performance Ammonia Sensor at Room Temperature Based on a Love-Wave Device with Fe2O3@WO3â^'x Nanoneedles. Proceedings (mdpi), 2017, 1, .	0.2	3

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55	Sensors: Singleâ€Step Deposition of Auâ€and Ptâ€Nanoparticleâ€Functionalized Tungsten Oxide Nanoneedles Synthesized Via Aerosolâ€Assisted CVD, and Used for Fabrication of Selective Gas Microsensor Arrays (Adv. Funct. Mater. 10/2013). Advanced Functional Materials, 2013, 23, 1226-1226.	14.9	2
56	Ferric Oxide Nanoparticle-functionalized Tungsten Oxide Nanoneedles and their Gas Sensing Properties. Procedia Engineering, 2015, 120, 443-446.	1.2	2
57	ZnO-based Gas Microsensors Sensitive to CO at Room Temperature by Photoactivation. Procedia Engineering, 2016, 168, 415-418.	1.2	2
58	Gas Microsensors Based on Cerium Oxide Modified Tungsten Oxide Nanowires. , 2018, , .		2
59	Room Temperature Ethanol Microsensors Based on Silanized Tungsten Oxide Nanowires. Proceedings (mdpi), 2018, 2, 790.	0.2	2
60	One-Dimensional Metal Oxide Nanostructures for Chemical Sensors. , 0, , .		2
61	Benzene detection on nanostructured tungsten oxide MEMS based gas sensors. , 2012, , .		1
62	Pt/WO<inf>3</inf> microsensor grown by cold wall reactor Aerosol Assisted Chemical Vapor Deposition for C<inf>6</inf>H<inf>6</inf> and NO<inf>2</inf> detection. , 2014, , .		1
63	Micromachined sensors based on ZnO structures and their thermo- and photo-activated response to reducing gases. , 2017, , .		1
64	Gas Sensing Characterization of Single-Nanowire Sensor Array Systems Based on Non-Functionalized and Pt-Functionalized Tungsten Oxide. Proceedings (mdpi), 2017, 1, .	0.2	1
65	Nanosensor array systems based on single functional wires selectively integrated and their sensing properties to C2H6O and NO2. , 2017, , .		1
66	Sensors and Micro and Nano Technologies for the Food Sector. , 2013, , .		0
67	Flexible gas sensing devices with directly grown tungsten oxide nanoneedles via AACVD. , 2015, , .		0
68	VOC-sensitive structures with nanoscale heterojunctions based on WO3-x nanoneedles and Fe2O3 nanoparticles. Monatshefte FÃ¼r Chemie, 2017, 148, 1921-1927.	1.8	0
69	Gold/polypyrrole nanorods for gas sensing application. , 2017, , .		0
70	Comparative Studies of Chemoresistive Gas Sensors Based on Multiple Randomly Connected Wires and Arrays of Single-Wires. Proceedings (mdpi), 2018, 2, .	0.2	0
71	ZnO Nanorods and Their Modification with Au Nanoparticles for UV-light Activated Gas Sensing. , 2021, , .		0
72	Ga interaction with ZnO surfaces: Diffusion and melt-back etching. Applied Surface Science, 2022, 583, 152475.	6.1	0