

# Simonetta Capone

## List of Publications by Year in descending order

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127  
papers

3,394  
citations

101543

36  
h-index

149698

56  
g-index

133  
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133  
docs citations

133  
times ranked

4210  
citing authors

#	ARTICLE	IF	CITATIONS
1	A novel human biomonitoring study by semiconductor gas sensors in Exposomics: investigation of health risk in contaminated sites. <i>Environmental Pollution</i> , 2022, 304, 119119.	7.5	11
2	Performance Analysis of an MLS-Based Interface for Impulse Response Estimation of Resistive and Capacitive Sensors. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2022, 69, 3666-3678.	5.4	3
3	An Integrated Multi-Order Digital Control Unit for Maximum Length Sequence Circulant Matrix Generation. , 2022, , .		0
4	Exhaled breath monitoring during home ventilo-therapy in COPD patients by a new distributed tele-medicine system. <i>Journal of Ambient Intelligence and Humanized Computing</i> , 2021, 12, 4419-4427.	4.9	11
5	A 296 nJ Energy-per-Measurement Relaxation Oscillator-Based Analog Front-End for Chemiresistive Sensors. <i>IEEE Transactions on Circuits and Systems I: Regular Papers</i> , 2021, 68, 1123-1133.	5.4	10
6	Human Biomonitoring of Environmental and Occupational Exposures by GC-MS and Gas Sensor Systems: A Systematic Review. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 10236.	2.6	8
7	Blood, urine and semen Volatile Organic Compound (VOC) pattern analysis for assessing health environmental impact in highly polluted areas in Italy. <i>Environmental Pollution</i> , 2021, 286, 117410.	7.5	28
8	A Flexible Data Acquisition System for Aerospace Applications. , 2021, , .		0
9	Nanogap Sensors Decorated with SnO <sub>2</sub> Nanoparticles Enable Low-Temperature Detection of Volatile Organic Compounds. <i>ACS Applied Nano Materials</i> , 2020, 3, 3337-3346.	5.0	13
10	Double Approach to Study VOC Composition in Biofluids of Young Men Living in the "Land of Fires" in Campania Region. <i>Lecture Notes in Electrical Engineering</i> , 2020, , 103-109.	0.4	2
11	A Low-Cost Breath Analyzer Module in Domiciliary Non-Invasive Mechanical Ventilation for Remote COPD Patient Monitoring. <i>Sensors</i> , 2020, 20, 653.	3.8	16
12	Remote Monitoring of COPD Patients During Non-invasive Mechanical Ventilation by a New Tele-medicine Device. <i>Lecture Notes in Electrical Engineering</i> , 2020, , 75-81.	0.4	0
13	A Simulation Study of an Optimized Impedance Spectroscopy Approach for Gas Sensors. , 2019, , .		8
14	In vitro profiling of endothelial volatile organic compounds under resting and pro-inflammatory conditions. <i>Metabolomics</i> , 2019, 15, 132.	3.0	4
15	A 450- $\mu$ s A 128-dB Dynamic Range A/D CMOS Interface for MOX Gas Sensors. <i>IEEE Sensors Journal</i> , 2019, 19, 12069-12078.	4.7	17
16	Human Organ-on-a-Chip: Around the Intestine Bends. <i>Lecture Notes in Electrical Engineering</i> , 2019, , 181-188.	0.4	1
17	Seminal VOCs Analysis Investigating Sperm Quality Decline "New Studies to Improve Male Fertility Contrasting Population Ageing. <i>Lecture Notes in Electrical Engineering</i> , 2019, , 501-508.	0.4	0
18	A Novel Tele-Medicine System to Improve Therapy Monitoring in Chronic Respiratory Diseases. <i>Lecture Notes in Electrical Engineering</i> , 2019, , 201-205.	0.4	2

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19	A Smart Breath Analyzer for Monitoring Home Mechanical Ventilated Patients. Lecture Notes in Electrical Engineering, 2019, , 465-471.	0.4	4
20	Virtual Olfactory Device In EEG And Olfactory Conditioning Task: an OERP Study. Lecture Notes in Electrical Engineering, 2018, , 315-321.	0.4	0
21	Iron Oxides Nanoparticles Langmuir-Schaeffer Multilayers for Chemoresistive Gas Sensing. Lecture Notes in Electrical Engineering, 2018, , 66-72.	0.4	0
22	Chromatographic analysis of VOC patterns in exhaled breath from smokers and nonsmokers. Biomedical Chromatography, 2018, 32, e4132.	1.7	36
23	Multi-Sensors Integration in a Human Gut-On-Chip Platform. Proceedings (mdpi), 2018, 2, 1022.	0.2	1
24	HS-SPME-GC-MS metabolomics approach for sperm quality evaluation by semen volatile organic compounds (VOCs) analysis. Biomedical Physics and Engineering Express, 2018, 5, 015006.	1.2	21
25	100 nm-Gap Fingers Dielectrophoresis Functionalized MOX Gas Sensor Array for Low Temperature VOCs Detection. Proceedings (mdpi), 2018, 2, .	0.2	1
26	A smart device for supporting mechanical ventilo-therapy. , 2018, , .		6
27	Investigation of the Gas-Sensing Performance of Electrospun TiO <sub>2</sub> Nanofiber-Based Sensors for Ethanol Sensing. IEEE Sensors Journal, 2018, 18, 7365-7374.	4.7	22
28	Breath Analysis by a GC/MS Coupled to a Gas Sensor Detector. Lecture Notes in Electrical Engineering, 2018, , 267-275.	0.4	1
29	Evaluation of the Volatile Organic Compounds Released from Peripheral Blood Mononuclear Cells and THP1 Cells Under Normal and Proinflammatory Conditions. Lecture Notes in Electrical Engineering, 2018, , 269-277.	0.4	5
30	Palladium/Î <sup>3</sup> -Fe <sub>2</sub> O <sub>3</sub> nanoparticle mixtures for acetone and NO <sub>2</sub> gas sensors. Sensors and Actuators B: Chemical, 2017, 243, 895-903.	7.8	38
31	Sensitivity and long-term stability of &#x03B3;-Fe<sup>2</sup>/<sup>3</sup>O<sup>3</sup>/<sup>4</sup> and CoFe<sup>2</sup>/<sup>3</sup>O<sup>4</sup>/<sup>4</sup> nanoparticle gas sensors for NO<sup>2</sup>/<sup>2</sup>, CO and acetone sensing &#x2014; A comparative study. , 2014, , .		1
32	Influence of autochthonous Saccharomyces cerevisiae strains on volatile profile of Negroamaro wines. LWT - Food Science and Technology, 2014, 58, 35-48.	5.2	49
33	Fe<sup>3</sup>O<sup>4</sup>/Î <sup>3</sup> -Fe<sup>2</sup>O<sup>3</sup> Nanoparticle Multilayers Deposited by the Langmuirâ€“Blodgett Technique for Gas Sensors Application. Langmuir, 2014, 30, 1190-1197.	3.5	73
34	Electrical and Morphological Characterization of TiO <sub>2</sub> Electrospun Nanofibers. Lecture Notes in Electrical Engineering, 2014, , 103-107.	0.4	2
35	Analytical characterisation of Negroamaro red wines by â€œAroma Wheelsâ€: Food Chemistry, 2013, 141, 2906-2915.	8.2	65
36	Aroma analysis by GC/MS and electronic nose dedicated to Negroamaro and Primitivo typical Italian Apulian wines. Sensors and Actuators B: Chemical, 2013, 179, 259-269.	7.8	70

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37	Effect of top-down nanomachining on electrical conduction properties of TiO <sub>2</sub> nanostructure-based chemical sensors. <i>Nanotechnology</i> , 2012, 23, 095302.	2.6	6
38	Volatile components of Negroamaro red wines produced in Apulian Salento area. <i>Food Chemistry</i> , 2012, 132, 2155-2164.	8.2	52
39	Performance of Machine Olfaction: Effect of Uniqueness of the Initial Data and Information Coding on the Discrimination Ability of Multisensor Arrays. <i>IEEE Sensors Journal</i> , 2011, 11, 649-656.	4.7	8
40	Gas microsensor array for breath analysis: An explorative study of smoking status risk. , 2011, , .		3
41	Fabrication at wafer level of miniaturized gas sensors based on SnO <sub>2</sub> nanorods deposited by PECVD and gas sensing characteristics. <i>Sensors and Actuators B: Chemical</i> , 2011, 154, 283-287.	7.8	43
42	Fabrication at wafer level of micromachined gas sensors based on SnO <sub>2</sub> nanorods deposited by PECVD and gas sensing characteristics. , 2011, , .		1
43	Odorant Binding Proteins as Sensing Layers for Novel Gas Biosensors: An Impedance Spectroscopy Characterization. <i>Lecture Notes in Electrical Engineering</i> , 2011, , 317-324.	0.4	2
44	Synthesis and gas sensing properties of ZnO quantum dots. <i>Sensors and Actuators B: Chemical</i> , 2010, 146, 111-115.	7.8	115
45	Preparation and Electrical-Functional Characterization of Gas Sensors Based on TiO <sub>2</sub> Nanometric Strips Using Impedance Spectroscopy. <i>Lecture Notes in Electrical Engineering</i> , 2010, , 71-75.	0.4	0
46	Electrical characterization of a pig odorant binding protein by Impedance Spectroscopy. , 2009, , .		5
47	167 Detection of NH <sub>3</sub> , DMA and TMA by a metal oxide gas sensor array for fish freshness evaluation. , 2009, , .		1
48	138 Electrical Impedance Spectroscopy of a Pig Odorant Binding Protein immobilized onto gold interdigitated microelectrodes: an ab-initio study. , 2009, , .		1
49	Reproducibility and Uniqueness of Information Coding as Key Factors For Array Optimization. , 2009, , .		1
50	A CMOS integrated interface circuit for metal-oxide gas sensors. <i>Sensors and Actuators B: Chemical</i> , 2009, 142, 82-89.	7.8	21
51	Wafer-Level Fabrication and Gas Sensing Properties of miniaturized gas sensors based on Inductively Coupled Plasma Deposited Tin Oxide Nanorods. <i>Procedia Chemistry</i> , 2009, 1, 196-199.	0.7	9
52	EFFECT OF $\hat{\Gamma}^3$ -Fe <sub>2</sub> O <sub>3</sub> /In <sub>2</sub> O <sub>3</sub> NANO-HETEROSTRUCTURE ON ITS SENSITIVITY TO METHANE. , 2009, , .		1
53	Metal oxide gas sensor array for the detection of diesel fuel in engine oil. <i>Sensors and Actuators B: Chemical</i> , 2008, 131, 125-133.	7.8	34
54	A portable integrated wide-range gas sensing system with smart A/D front-end. <i>Sensors and Actuators B: Chemical</i> , 2008, 130, 164-174.	7.8	37

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55	Integrated read-out and temperature control interface with digital I/O for a gas-sensing system based on a SnO <sub>2</sub> microhotplate thin film gas sensor. , 2008, , .		10
56	&lt;title&gt;Nanoparticle thin films deposited by MAPLE for sensor applications&lt;/title&gt;. Proceedings of SPIE, 2008, , .	0.8	5
57	Application of a gas sensors array to the detection of fuel as contamination defect in engine oil. , 2008, , .		4
58	FIRB "SQUARE" PROJECT: NANO-STRUCTURED SENSORS FOR THE DETECTION OF THE POLLUTING IC ENGINE EXHAUST GASES AND FOR INDOOR AIR QUALITY MONITORING. , 2008, , .		0
59	Au-NiO nanocrystalline thin films for sensor application. Journal of Physics: Conference Series, 2007, 61, 435-439.	0.4	6
60	Detection of unburned fuel as contaminant in engine oil by a gas microsensor array. , 2007, , .		0
61	Towards enhanced performances in gas sensing: SnO <sub>2</sub> based nanocrystalline oxides application. Sensors and Actuators B: Chemical, 2007, 122, 564-571.	7.8	46
62	Acetone and ethanol solid-state gas sensors based on TiO <sub>2</sub> nanoparticles thin film deposited by matrix assisted pulsed laser evaporation. Sensors and Actuators B: Chemical, 2007, 127, 426-431.	7.8	161
63	TiO <sub>2</sub> nanoparticle thin film deposition by matrix assisted pulsed laser evaporation for sensing applications. Applied Surface Science, 2007, 253, 7937-7941.	6.1	31
64	Gas-Sensor Interface Circuit Based on Calibration Free Novel Frequency Measurement Approach with 16-Bit Digital Output. , 2006, , .		0
65	Nanostructured In <sub>2</sub> O <sub>3</sub> â€“SnO <sub>2</sub> solâ€“gel thin film as material for NO <sub>2</sub> detection. Sensors and Actuators B: Chemical, 2006, 114, 646-655.	7.8	126
66	Methanol gas-sensing properties of CeO <sub>2</sub> â€“Fe <sub>2</sub> O <sub>3</sub> thin films. Sensors and Actuators B: Chemical, 2006, 114, 687-695.	7.8	98
67	Influence of electrodes ageing on the properties of the gas sensors based on SnO <sub>2</sub> . Sensors and Actuators B: Chemical, 2006, 115, 396-402.	7.8	20
68	NiO nanostructured films with Pt coating prepared by magnetron sputtering. European Physical Journal D, 2006, 56, B1192-B1198.	0.4	0
69	A novel method based on gas microsensors to analyze diesel engine oil contaminated by diluent unburned diesel fuel. , 2006, , .		0
70	Design of an Electronic Nose for Selective Phosphine Detection in Cereals. Sensor Letters, 2006, 4, 229-234.	0.4	5
71	Monitoring the drying process of lasagna pasta through a novel sensing device-based method. Journal of Food Engineering, 2005, 69, 51-59.	5.2	14
72	A study of the catalytic activity and sensitivity to different alcohols of CeO <sub>2</sub> â€“Fe <sub>2</sub> O <sub>3</sub> thin films. Sensors and Actuators B: Chemical, 2005, 111-112, 78-83.	7.8	27

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73	NO <sub>2</sub> -gas-sensing properties of mixed In <sub>2</sub> O <sub>3</sub> -SnO <sub>2</sub> thin films. Thin Solid Films, 2005, 490, 68-73.	1.8	51
74	Solid State Gas Sensors: State of the Art and Future Activities. ChemInform, 2004, 35, no.	0.0	83
75	Spin-coated thin films of metal porphyrin-phthalocyanine blend for an optochemical sensor of alcohol vapours. Sensors and Actuators B: Chemical, 2004, 100, 88-93.	7.8	78
76	Titanium dioxide thin films prepared by seeded supersonic beams for gas sensing applications. Sensors and Actuators B: Chemical, 2004, 100, 177-184.	7.8	24
77	Role of osmium in the electrical transport mechanism of polycrystalline tin oxide thin films. Applied Physics Letters, 2004, 84, 744-746.	3.3	21
78	Variation in the Optical Sensing Responses toward Vapors of a Porphyrin/Phthalocyanine Hybrid Thin Film. Chemistry of Materials, 2004, 16, 2083-2090.	6.7	46
79	Enhancement of H <sub>2</sub> sensing properties of NiO-based thin films with a Pt surface modification. Sensors and Actuators B: Chemical, 2004, 103, 300-311.	7.8	124
80	PIR fiber sensing in 4- to 18- $\mu$ m range for flexible IR imaging and process IR spectroscopy. , 2004, , .		1
81	METHANOL GAS SENSING PROPERTIES OF CeO <sub>2</sub> -Fe <sub>2</sub> O <sub>3</sub> THIN FILMS. , 2004, , .		0
82	CHARACTERIZATION AND GAS SENSING PROPERTIES OF NIO THIN FILMS. , 2004, , .		0
83	EMPLOYMENT OF PHTHALOCYANINE LB FILMS IN PIEZOELECTRIC CHEMICAL SENSORS. , 2004, , .		0
84	INFLUENCE OF ELECTRODES AGING ON THE RESPONSES OF SNO <sub>2</sub> SOL-GEL SENSORS. , 2004, , .		0
85	ELECTRONIC NOSE AS USEFUL TOOL COMPLEMENTARY TO CONVENTIONAL TECHNIQUES FOR EVALUATING FOOD QUALITY. , 2004, , .		0
86	OPTICAL SENSING PROPERTIES OF PHTHALOCYANINES THIN FILMS IN ARRAY CONFIGURATION AND THEIR APPLICATION IN VOCS DETECTION. , 2004, , .		2
87	Title is missing!. Journal of Sol-Gel Science and Technology, 2003, 26, 741-744.	2.4	40
88	Nanostructured TiO <sub>2</sub> thin films prepared by supersonic beams and their application in a sensor array for the discrimination of VOC. Sensors and Actuators B: Chemical, 2003, 92, 292-302.	7.8	23
89	Analysis of dry salami by means of an electronic nose and correlation with microbiological methods. Sensors and Actuators B: Chemical, 2003, 95, 123-131.	7.8	23
90	Metallophthalocyanines thin films in array configuration for electronic optical nose applications. Sensors and Actuators B: Chemical, 2003, 96, 489-497.	7.8	52

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91	Hall effect measurements in gas sensors based on nanosized os-doped sol-gel derived SnO <sub>2</sub> /thin films. IEEE Sensors Journal, 2003, 3, 827-834.	4.7	13
92	Growth of titanium dioxide films by cluster supersonic beams for VOC sensing applications. IEEE Sensors Journal, 2003, 3, 199-205.	4.7	23
93	NiO thin films for gas sensing applications. , 2003, , .		0
94	ZnFe <sub>2</sub> O <sub>4</sub> thin films as NO <sub>2</sub> sensors for car ventilation system control. , 2003, , .		0
95	ANALYSIS OF PEACHES RIPENESS BY AN ELECTRONIC NOSE AND NEAR-INFRARED SPECTROSCOPY. , 2002, , .		0
96	CO and NO <sub>2</sub> sensing properties of doped-Fe <sub>2</sub> O <sub>3</sub> thin films prepared by LPD. Sensors and Actuators B: Chemical, 2002, 82, 40-47.	7.8	123
97	Preparation and characterization of nanostructured materials for an artificial olfactory sensing system. Sensors and Actuators B: Chemical, 2002, 84, 55-59.	7.8	16
98	Sensing characteristics of NiO thin films as NO <sub>2</sub> gas sensor. Thin Solid Films, 2002, 418, 9-15.	1.8	238
99	Recognition of olive oils by means of an integrated sol-gel SnO <sub>2</sub> Electronic Nose. Thin Solid Films, 2002, 418, 59-65.	1.8	32
100	ANALYSIS OF DRY SALAMI BY MEANS OF AN ELECTRONIC NOSE AND CORRELATION WITH MICROBIOLOGICAL AND ANALYTICAL METHODS. , 2002, , .		2
101	Application of a semiconductor sol-gel sensor array to the discrimination of pollutants in air. Thin Solid Films, 2001, 391, 314-319.	1.8	17
102	Moisture influence and geometry effect of Au and Pt electrodes on CO sensing response of SnO <sub>2</sub> microsensors based on sol-gel thin film. Sensors and Actuators B: Chemical, 2001, 77, 503-511.	7.8	73
103	Analysis of CO and CH <sub>4</sub> gas mixtures by using a micromachined sensor array. Sensors and Actuators B: Chemical, 2001, 78, 40-48.	7.8	52
104	The influences of preparation parameters on NiO thin film properties for gas-sensing application. Sensors and Actuators B: Chemical, 2001, 78, 126-132.	7.8	111
105	SnO <sub>2</sub> sol-gel derived thin films for integrated gas sensors. Sensors and Actuators B: Chemical, 2001, 77, 496-502.	7.8	39
106	Monitoring of rancidity of milk by means of an electronic nose and a dynamic PCA analysis. Sensors and Actuators B: Chemical, 2001, 78, 174-179.	7.8	93
107	Sol-Gel Synthesis and Gas Sensing Properties of In <sub>2</sub> O <sub>3</sub> Thin Films. , 2001, , .		2
108	Analysis of vapours and foods by means of an electronic nose based on a sol-gel metal oxide sensors array. Sensors and Actuators B: Chemical, 2000, 69, 230-235.	7.8	72

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109	Gas mixture analysis by a micro-hotplates gas sensors array. , 2000, , .		1
110	Analysis of milk ageing by a sol-gel sensors array. , 2000, , .		0
111	A comparison between V <sub>2</sub> O <sub>5</sub> and WO <sub>3</sub> thin films as sensitive elements for NO detection. Thin Solid Films, 1999, 350, 264-268.	1.8	44
112	Air quality monitoring by means of sol-gel integrated tin oxide thin films. Sensors and Actuators B: Chemical, 1999, 58, 283-288.	7.8	50
113	A novel gas sensor based on SnO <sub>2</sub> /Os thin film for the detection of methane at low temperature. Sensors and Actuators B: Chemical, 1999, 58, 350-355.	7.8	76
114	Sprayed SnO <sub>2</sub> thin films for NO <sub>2</sub> sensors. Sensors and Actuators B: Chemical, 1999, 58, 370-374.	7.8	43
115	A SnO <sub>2</sub> microsensor device for sub-ppm NO <sub>2</sub> detection. Sensors and Actuators B: Chemical, 1999, 58, 552-555.	7.8	14
116	Gas Sensitivity Measurements on NO <sub>2</sub> Sensors Based on Copper(II) Tetrakis(n-butylaminocarbonyl)phthalocyanine LB Films. Langmuir, 1999, 15, 1748-1753.	3.5	89
117	Integration of SnO <sub>2</sub> sol-gel processes to gas sensor microfabrication: H <sub>2</sub> and CO sensitivity evaluation. , 1999, , .		1
118	Atomic force microscopy characterization of sputtered vanadium oxide thin films grown on Al <sub>2</sub> O <sub>3</sub> substrate. Applied Physics A: Materials Science and Processing, 1998, 66, S1175-S1178.	2.3	0
119	On the characterisation and gas sensing properties of Cu(II) tetra(alkylamino carbonyl) phthalocyanine LB films. Thin Solid Films, 1998, 327-329, 465-468.	1.8	19
120	Physical characterization of hafnium oxide thin films and their application as gas sensing devices. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1998, 16, 3564-3568.	2.1	73
121	Properties of vanadium oxide thin films for ethanol sensor. Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films, 1997, 15, 34-38.	2.1	76
122	Structural and functional properties of SnO <sub>2</sub> /sol-gel derived thin films for integrated gas sensors. , 0, , .		0
123	Nanostructured TiO <sub>2</sub> /thin films prepared by supersonic beams and their application in a sensor array for the discrimination of VOC. , 0, , .		1
124	Influence of electrodes ageing on the responses of SnO <sub>2</sub> /sol-gel sensors. , 0, , .		0
125	Gas sensing properties of SUMBE growth hybrid nanostructured thin films. , 0, , .		0
126	Nonaqueous synthesis of high-purity indium and tin oxide nanocrystals and their application as gas sensors. , 0, , .		4



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127	Novel Multisensor Miniaturized Hybrid System for Olive Oil Evaluation. , 0 , , .		0