JÃ©rÃ´me Rossignol

List of Publications by Year
in descending order

49 papers	798 citations	567281 15 h-index	526287 27 g-index
50 all docs	50 docs citations	50 times ranked	789 citing authors

#	Article	IF	Citations
1	Detection of defects buried in metallic samples by scanning microwave microscopy. Physical Review B, 2011, 83, .	3.2	81
2	Rapid synthesis of tin (IV) oxide nanoparticles by microwave induced thermohydrolysis. Journal of Solid State Chemistry, 2008, 181, 1439-1444.	2.9	75
3	Microwave gas sensing with a microstrip interDigital capacitor: Detection of NH3 with TiO2 nanoparticles. Sensors and Actuators B: Chemical, 2016, 236, 554-564.	7.8	72
4	Differential study of substituted and unsubstituted cobalt phthalocyanines for gas sensor applications. Sensors and Actuators B: Chemical, 2011, 159, 163-170.	7.8	70
5	Development of microwave gas sensors. Sensors and Actuators B: Chemical, 2011, 157, 374-379.	7.8	56
6	Microwave-based gas sensor with phthalocyanine film at room temperature. Sensors and Actuators B: Chemical, 2013, 189, 213-216.	7.8	48
7	Enhanced chemosensing of ammonia based on the novel molecular semiconductor-doped insulator (MSDI) heterojunctions. Sensors and Actuators B: Chemical, 2011, 155, 165-173.	7.8	38
8	Detection of VOCs by microwave transduction using dealuminated faujasite DAY zeolites as gas sensitive materials. Sensors and Actuators B: Chemical, 2015, 213, 558-565.	7.8	33
9	Microwave Gas Sensing with Hematite: Shape Effect on Ammonia Detection Using Pseudocubic, Rhombohedral, and Spindlelike Particles. ACS Sensors, 2016, 1, 656-662.	7.8	32
10	Microstrip Spiral Resonator For Microwave-Based Gas Sensing. , 2017, 1, 1-4.		31
11	Passive Resonant Sensors: Trends and Future Prospects. IEEE Sensors Journal, 2021, 21, 12618-12632.	4.7	29
12	Numerical modelling of thermal ablation phenomena due to a cathodic spot. Journal Physics D: Applied Physics, 2000, 33, 2079-2086.	2.8	22
13	Feasibility of a microwave liquid sensor based on molecularly imprinted sol-gel polymer for the detection of iprodione fungicide. Sensors and Actuators B: Chemical, 2017, 244, 24-30.	7.8	22
14	Microwave signature for gas sensing: 2005 to present. Urban Climate, 2015, 14, 502-515.	5.7	16
15	Critical Influence of Dielectric Sensitive Material and Manufactured Process in Microwave Gas-Sensing: Application of Ammonia Detection with an Interdigital Sensor. ACS Omega, 2020, 5, 11507-11514.	3.5	16
16	Fluorine addition to single-wall carbon nanotubes revisited. Chemical Physics Letters, 2009, 468, 231-233.	2.6	15
17	Influence of the Design in Microwave-based Gas Sensors: Ammonia Detection with Titania Nanoparticles. Procedia Engineering, 2016, 168, 264-267.	1.2	15
18	Contribution to the assessment of the power balance at the electrodes of an electric arc in air. Plasma Sources Science and Technology, 2008, 17, 035001.	3.1	14

#	Article	IF	Citations
19	The modelling of the cathode sheath of an electrical arc in vacuum. Journal Physics D: Applied Physics, 2003, 36, 1495-1503.	2.8	13
20	Broadband microwave gas sensor: A coaxial design. Microwave and Optical Technology Letters, 2010, 52, 1739-1741.	1.4	9
21	Metal oxide-based gas sensor and microwave broad-band measurements: an innovative approach to gas sensing. Journal of Physics: Conference Series, 2007, 76, 012043.	0.4	8
22	Development of Gas Sensors by Microwave Transduction with Phthalocyanine Film. Procedia Engineering, 2012, 47, 1191-1194.	1.2	6
23	Non-destructive technique to detect local buried defects in metal sample by scanning microwave microscopy. Sensors and Actuators A: Physical, 2012, 186, 219-222.	4.1	6
24	The multimodal detection as a tool for molecular material-based gas sensing. Sensors and Actuators B: Chemical, 2013, 187, 204-208.	7.8	6
25	Assessment of Burn Depths on Organs by Microwave. Procedia Engineering, 2014, 87, 308-311.	1.2	6
26	From microwave gas sensor conditioning to ammonia concentration prediction by machine learning. Sensors and Actuators B: Chemical, 2022, 367, 132138.	7.8	6
27	VOCs Detection by Microwave Transduction Using Zeolites as Sensitive Material. Procedia Engineering, 2014, 87, 1019-1022.	1.2	5
28	Shape-controlled Synthesis of Hematite for Microwave Gas Sensing. Procedia Engineering, 2015, 120, 764-768.	1.2	5
29	A First Tentative for Simultaneous Detection of Fungicides in Model and Real Wines by Microwave Sensor Coupled to Molecularly Imprinted Sol-Gel Polymers. Sensors, 2020, 20, 6224.	3.8	5
30	Determination of burn depth in the ablation of atrial fibrillation using an open-ended coaxial probe. Sensors and Actuators B: Chemical, 2015, 209, 1097-1101.	7.8	4
31	Une nouvelle technique de dÃ©tection des endommagements dans les composites basÃ©e sur l'utilisation des micro-ondes et des circuits microrubans rÃ©sonants. Comptes Rendus - Mecanique, 2006, 334, 719-724.	2.1	3
32	Deposition and production of highly reproducible hybrid Cu[(<i>t</i>Bu)₄Pc]â€polystyrene thin layers via spin casting. Polymer Engineering and Science, 2013, 53, 524-530.	3.1	3
33	NAP-XPS Study of Ethanol Adsorption on TiO2 Surfaces and Its Impact on Microwave-Based Gas Sensors Response. Proceedings (mdpi), 2017, 1, .	0.2	3
34	A comparative study of the behaviour of silver, copper and nickel submitted to a constant high power flux density. EPJ Applied Physics, 2005, 31, 45-51.	0.7	3
35	Imaging of Located Buried Defects in Metal Samples by an Scanning Microwave Microscopy. Procedia Engineering, 2011, 25, 1637-1640.	1.2	2
36	Metal Oxide Nanoparticles Obtained by Microwave Synthesis and Application in Gas Sensing by Microwave Transduction. Key Engineering Materials, 2014, 605, 299-302.	0.4	2

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37	EXPERIMENTAL OBSERVATION OF THE INTERACTION BETWEEN A MICROSCOPIC CATHODE TIP AND ELECTRICAL ARC. High Temperature Material Processes, 2008, 12, 55-64.	0.6	2
38	Real-Time Detection of Phenylacetaldehyde in Wine: Application of a Microwave Sensor Based on Molecularly Imprinted Silica. Molecules, 2022, 27, 1492.	3.8	2
39	Influence of the tip effect of a carbon nanostructure on low current electrical arc initiation. Materials Letters, 2009, 63, 2611-2614.	2.6	1
40	In situ Pesticide Detection in Food Processing by Microwave Transduction Combined with Molecularly Imprinted Polymers. Procedia Engineering, 2016, 168, 550-552.	1.2	1
41	A FIRST ATTEMPT TO CONNECT A MICROSCOPIC VISION OF THE CATHODE FRAGMENT AND MICRO SPOT TO A MACROSCOPIC APPROACH OF THE CATHODE ARC ROOT: A MULTI-SCALE PROBLEM. High Temperature Material Processes, 2008, 12, 39-54.	0.6	1
42	Microwave microscopy applied to EMC problem: Visualisation of electromagnetic field in the vicinity of electronic circuit and effect of nanomaterial coating. Advanced Electromagnetics, 2017, 6, 33.	1.0	1
43	Thermal model of the evolution of fragments inside a microscopic spot: A multiscale approach of the interaction plasma/cathode. , 2007, , .		0
44	Experimental approach of the interaction between a sub-microscopic cathode tip and the plasma. , 2007, , .		0
45	Contribution of Nanotechnologies on the Study of the Physical Phenomena of the Arc Birth. , 2010, , .		0
46	Damage in Composite Material: A Microwave Detection. Key Engineering Materials, 0, 605, 303-305.	0.4	0
47	DÃ©tection d'endommagement dans les composites fibres/rÃ©sine Ã l'aide de la technologie micro-onde. Revue Des Composites Et Des Materiaux Avances, 2006, 16, 263-278.	0.6	0
48	Rhombohedral and pseudocubic nanocrystals of hematite were obtained via a low cost and environmentally friendly microwave route. Annales De Chimie: Science Des Materiaux, 2013, 38, 215-221.	0.4	0
49	Detection of organoleptic faults in wine by microwave sensor coupled with molecularly imprinted silica. , 2021, , .		0