

James A Covington

List of Publications by Year in descending order

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176
papers

4,427
citations

94381

37
h-index

138417

58
g-index

178
all docs

178
docs citations

178
times ranked

4844
citing authors

#	ARTICLE	IF	CITATIONS
1	CMOS Interfacing for Integrated Gas Sensors: A Review. IEEE Sensors Journal, 2010, 10, 1833-1848.	2.4	175
2	Detection of Colorectal Cancer (CRC) by Urinary Volatile Organic Compound Analysis. PLoS ONE, 2014, 9, e108750.	1.1	124
3	Analog VLSI Circuit Implementation of an Adaptive Neuromorphic Olfaction Chip. IEEE Transactions on Circuits and Systems Part 1: Regular Papers, 2007, 54, 60-73.	0.1	122
4	Review article: next generation diagnostic modalities in gastroenterology – gas phase volatile compound biomarker detection. Alimentary Pharmacology and Therapeutics, 2014, 39, 780-789.	1.9	111
5	Design and simulations of SOI CMOS micro-hotplate gas sensors. Sensors and Actuators B: Chemical, 2001, 78, 180-190.	4.0	105
6	Field-effect mobility temperature modeling of 4H-SiC metal-oxide-semiconductor transistors. Journal of Applied Physics, 2006, 100, 114508.	1.1	105
7	Development and application of a new electronic nose instrument for the detection of colorectal cancer. Biosensors and Bioelectronics, 2015, 67, 733-738.	5.3	104
8	A polymer gate FET sensor array for detecting organic vapours. Sensors and Actuators B: Chemical, 2001, 77, 155-162.	4.0	103
9	Ultrasensitive Detection of Dopamine Using a Carbon Nanotube Network Microfluidic Flow Electrode. Analytical Chemistry, 2013, 85, 163-169.	3.2	102
10	ZnO nanowires grown on SOI CMOS substrate for ethanol sensing. Sensors and Actuators B: Chemical, 2010, 146, 559-565.	4.0	101
11	Pd-doped reduced graphene oxide sensing films for H ₂ detection. Sensors and Actuators B: Chemical, 2013, 183, 478-487.	4.0	95
12	Novel design and characterisation of SOI CMOS micro-hotplates for high temperature gas sensors. Sensors and Actuators B: Chemical, 2007, 127, 260-266.	4.0	88
13	A miniature flow sensor fabricated by micro-stereolithography employing a magnetite/acrylic nanocomposite resin. Sensors and Actuators A: Physical, 2011, 168, 66-71.	2.0	85
14	Fabrication of Versatile Channel Flow Cells for Quantitative Electroanalysis Using Prototyping. Analytical Chemistry, 2010, 82, 3124-3131.	3.2	77
15	The Interplay of the Gut Microbiome, Bile Acids, and Volatile Organic Compounds. Gastroenterology Research and Practice, 2015, 2015, 1-6.	0.7	72
16	The application of FAIMS gas analysis in medical diagnostics. Analyst, The, 2015, 140, 6775-6781.	1.7	71
17	Combined electronic nose and tongue for a flavour sensing system. Sensors and Actuators B: Chemical, 2011, 156, 832-839.	4.0	69
18	A Novel Tool for Noninvasive Diagnosis and Tracking of Patients with Inflammatory Bowel Disease. Inflammatory Bowel Diseases, 2013, 19, 999-1003.	0.9	68

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19	Micro-gas-sensor with conducting polymers. <i>Sensors and Actuators B: Chemical</i> , 2002, 84, 66-71.	4.0	66
20	Differentiating Coeliac Disease from Irritable Bowel Syndrome by Urinary Volatile Organic Compound Analysis – A Pilot Study. <i>PLoS ONE</i> , 2014, 9, e107312.	1.1	66
21	Application of a Novel Tool for Diagnosing Bile Acid Diarrhoea. <i>Sensors</i> , 2013, 13, 11899-11912.	2.1	65
22	Conducting Nanocomposite Polymer Foams from Ice-Crystal-Templated Assembly of Mixtures of Colloids. <i>Advanced Materials</i> , 2009, 21, 2894-2898.	11.1	63
23	Characterization and modeling of n-SiC heterojunction diodes. <i>Journal of Applied Physics</i> , 2007, 102, .	1.1	58
24	Design and Development of a Low-Cost, Portable Monitoring Device for Indoor Environment Quality. <i>Journal of Sensors</i> , 2018, 2018, 1-14.	0.6	54
25	Noninvasive Diagnosis of Pancreatic Cancer Through Detection of Volatile Organic Compounds in Urine. <i>Gastroenterology</i> , 2018, 154, 485-487.e1.	0.6	53
26	Risk stratification of symptomatic patients suspected of colorectal cancer using faecal and urinary markers. <i>Colorectal Disease</i> , 2018, 20, O335-O342.	0.7	53
27	Non-invasive exhaled volatile organic biomarker analysis to detect inflammatory bowel disease (IBD). <i>Digestive and Liver Disease</i> , 2016, 48, 148-153.	0.4	50
28	The Effect of Film Thickness on the Gas Sensing Properties of Ultra-Thin TiO ₂ Films Deposited by Atomic Layer Deposition. <i>Sensors</i> , 2018, 18, 735.	2.1	49
29	Insights into “fermentomics”: evaluation of volatile organic compounds (VOCs) in human disease using an electronic “e-nose”. <i>Journal of Medical Engineering and Technology</i> , 2011, 35, 87-91.	0.8	48
30	Volatile organic compounds (VOCs) for the non-invasive detection of pancreatic cancer from urine. <i>Talanta</i> , 2021, 221, 121604.	2.9	46
31	Artificial Olfaction in the 21 st Century. <i>IEEE Sensors Journal</i> , 2021, 21, 12969-12990.	2.4	46
32	The Detection of Patients at Risk of Gastrointestinal Toxicity during Pelvic Radiotherapy by Electronic Nose and FAIMS: A Pilot Study. <i>Sensors</i> , 2012, 12, 13002-13018.	2.1	45
33	Breath Analysis Using eNose and Ion Mobility Technology to Diagnose Inflammatory Bowel Disease – A Pilot Study. <i>Biosensors</i> , 2019, 9, 55.	2.3	43
34	An electronic nose employing dual-channel odour separation columns with large chemosensor arrays for advanced odour discrimination. <i>Sensors and Actuators B: Chemical</i> , 2009, 141, 134-140.	4.0	40
35	GasFETs incorporating conducting polymers as gate materials. <i>Sensors and Actuators B: Chemical</i> , 2000, 65, 253-256.	4.0	39
36	Non-Invasive Diagnosis of Diabetes by Volatile Organic Compounds in Urine Using FAIMS and Fox4000 Electronic Nose. <i>Biosensors</i> , 2018, 8, 121.	2.3	38

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37	Humidity-Tolerant Ultrathin NiO Gas-Sensing Films. ACS Sensors, 2020, 5, 1389-1397.	4.0	38
38	Early identification of potato storage disease using an array of metal-oxide based gas sensors. Postharvest Biology and Technology, 2016, 116, 50-58.	2.9	37
39	The use of an electronic nose to detect early signs of soft-rot infection in potatoes. Biosystems Engineering, 2018, 167, 137-143.	1.9	37
40	Identifying volatile metabolite signatures for the diagnosis of bacterial respiratory tract infection using electronic nose technology: A pilot study. PLoS ONE, 2017, 12, e0188879.	1.1	36
41	Analysis of Al/Ti, Al/Ni multiple and triple layer contacts to p-type 4H-SiC. Solid-State Electronics, 2007, 51, 797-801.	0.8	35
42	Development of a Compact, IoT-Enabled Electronic Nose for Breath Analysis. Electronics (Switzerland), 2020, 9, 84.	1.8	35
43	A novel, low-cost, portable PID sensor for the detection of volatile organic compounds. Sensors and Actuators B: Chemical, 2018, 275, 10-15.	4.0	34
44	Development of Amino-oxazoline and Amino-thiazoline Organic Catalysts for the Ring-Opening Polymerisation of Lactide. Chemistry - A European Journal, 2010, 16, 6099-6105.	1.7	33
45	Breath-based non-invasive diagnosis of Alzheimer's disease: a pilot study. Journal of Breath Research, 2020, 14, 026003.	1.5	33
46	Nutrient (C, N and P) enrichment induces significant changes in the soil metabolite profile and microbial carbon partitioning. Soil Biology and Biochemistry, 2022, 172, 108779.	4.2	33
47	Dual electrode micro-channel flow cell for redox titrations: Kinetics and analysis of homogeneous ascorbic acid oxidation. Journal of Electroanalytical Chemistry, 2013, 692, 72-79.	1.9	32
48	A microstereolithography resin based on thiol-ene chemistry: towards biocompatible 3D extracellular constructs for tissue engineering. Biomaterials Science, 2014, 2, 472-475.	2.6	32
49	Faecal volatile organic compounds analysis using field asymmetric ion mobility spectrometry: non-invasive diagnostics in paediatric inflammatory bowel disease. Journal of Breath Research, 2018, 12, 016006.	1.5	32
50	Si-SiC Heterojunctions Fabricated by Direct Wafer Bonding. Electrochemical and Solid-State Letters, 2008, 11, H306.	2.2	31
51	Evaluation of gut bacterial populations using an electronic e-nose and field asymmetric ion mobility spectrometry: further insights into "fermentonomics". Journal of Medical Engineering and Technology, 2012, 36, 333-337.	0.8	31
52	Fabrication of 3-Dimensional Cellular Constructs via Microstereolithography Using a Simple, Three-Component, Poly(Ethylene Glycol) Acrylate-Based System. Biomacromolecules, 2013, 14, 186-192.	2.6	31
53	Detection of Potato Storage Disease via Gas Analysis: A Pilot Study Using Field Asymmetric Ion Mobility Spectrometry. Sensors, 2014, 14, 15939-15952.	2.1	31
54	A simple breath test for tuberculosis using ion mobility: A pilot study. Tuberculosis, 2016, 99, 143-146.	0.8	30

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55	Rapid, Accurate, and On-Site Detection of <i>C. difficile</i> in Stool Samples. <i>American Journal of Gastroenterology</i> , 2015, 110, 588-594.	0.2	29
56	Variation in Gas and Volatile Compound Emissions from Human Urine as It Ages, Measured by an Electronic Nose. <i>Biosensors</i> , 2016, 6, 4.	2.3	29
57	Optimized Sampling Conditions for Fecal Volatile Organic Compound Analysis by Means of Field Asymmetric Ion Mobility Spectrometry. <i>Analytical Chemistry</i> , 2018, 90, 7972-7981.	3.2	28
58	Post-CMOS wafer level growth of carbon nanotubes for low-cost microsensors—a proof of concept. <i>Nanotechnology</i> , 2010, 21, 485301.	1.3	27
59	Breathomics—exhaled volatile organic compound analysis to detect hepatic encephalopathy: a pilot study. <i>Journal of Breath Research</i> , 2016, 10, 016012.	1.5	27
60	Late-onset Sepsis in Preterm Infants Can Be Detected Preclinically by Fecal Volatile Organic Compound Analysis: A Prospective, Multicenter Cohort Study. <i>Clinical Infectious Diseases</i> , 2019, 68, 70-77.	2.9	27
61	The pathophysiology of bile acid diarrhoea: differences in the colonic microbiome, metabolome and bile acids. <i>Scientific Reports</i> , 2020, 10, 20436.	1.6	27
62	High doped MBE Si—n and —n heterojunction diodes on 4H-SiC. <i>Microelectronics Journal</i> , 2007, 38, 1233-1237.	1.1	26
63	Si/SiC bonded wafer: A route to carbon free SiO ₂ on SiC. <i>Applied Physics Letters</i> , 2009, 94, .	1.5	26
64	Analysis of inhomogeneous Ge/SiC heterojunction diodes. <i>Journal of Applied Physics</i> , 2009, 106, .	1.1	26
65	Exploratory Study Using Urinary Volatile Organic Compounds for the Detection of Hepatocellular Carcinoma. <i>Molecules</i> , 2021, 26, 2447.	1.7	26
66	Towards a truly biomimetic olfactory microsystem: an artificial olfactory mucosa. <i>IET Nanobiotechnology</i> , 2007, 1, 15.	1.9	24
67	Sniffing Out Urinary Tract Infection—Diagnosis Based on Volatile Organic Compounds and Smell Profile. <i>Biosensors</i> , 2020, 10, 83.	2.3	23
68	Urinary Volatiles and Chemical Characterisation for the Non-Invasive Detection of Prostate and Bladder Cancers. <i>Biosensors</i> , 2021, 11, 437.	2.3	22
69	Portable e-Mucosa System: Mimicking the biological olfactory. <i>Procedia Chemistry</i> , 2009, 1, 991-994.	0.7	21
70	An improved machine learning pipeline for urinary volatiles disease detection: Diagnosing diabetes. <i>PLoS ONE</i> , 2018, 13, e0204425.	1.1	21
71	Development of a Tuneable NDIR Optical Electronic Nose. <i>Sensors</i> , 2020, 20, 6875.	2.1	21
72	Non-Invasive Detection and Staging of Colorectal Cancer Using a Portable Electronic Nose. <i>Sensors</i> , 2021, 21, 5440.	2.1	21

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73	Non-Invasive Distinction of Non-Alcoholic Fatty Liver Disease using Urinary Volatile Organic Compound Analysis: Early Results. <i>Journal of Gastrointestinal and Liver Diseases</i> , 2020, 24, 197-201.	0.5	21
74	Review of low-cost sensors for indoor air quality: Features and applications. <i>Applied Spectroscopy Reviews</i> , 2022, 57, 747-779.	3.4	21
75	Towards an artificial olfactory mucosa for improved odour classification. <i>Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences</i> , 2007, 463, 1713-1728.	1.0	19
76	Differentiation Between Pediatric Irritable Bowel Syndrome and Inflammatory Bowel Disease Based on Fecal Scent: Proof of Principle Study. <i>Inflammatory Bowel Diseases</i> , 2018, 24, 2468-2475.	0.9	19
77	Time-lapse synchrotron X-ray diffraction to monitor conservation coatings for heritage lead in atmospheres polluted with oak-emitted volatile organic compounds. <i>Corrosion Science</i> , 2014, 82, 280-289.	3.0	18
78	Design and simulation of resistive SOI CMOS micro-heaters for high temperature gas sensors. <i>Journal of Physics: Conference Series</i> , 2005, 15, 27-32.	0.3	17
79	Identification of Different Vapors Using a Single Temperature Modulated Polymer Sensor With a Novel Signal Processing Technique. <i>IEEE Sensors Journal</i> , 2009, 9, 314-328.	2.4	17
80	Cross-modal affects of smell on the real-time rendering of grass. , 2009, , .		17
81	Dissolution Kinetics of Polycrystalline Calcium Sulfate-Based Materials: Influence of Chemical Modification. <i>ACS Applied Materials & Interfaces</i> , 2011, 3, 3528-3537.	4.0	17
82	The Detection of Wound Infection by Ion Mobility Chemical Analysis. <i>Biosensors</i> , 2020, 10, 19.	2.3	17
83	Nickel-Oxide Based Thick-Film Gas Sensors for Volatile Organic Compound Detection. <i>Chemosensors</i> , 2021, 9, 247.	1.8	17
84	Multi-field simulations and characterization of CMOS-MEMS high-temperature smart gas sensors based on SOI technology. <i>Journal of Micromechanics and Microengineering</i> , 2008, 18, 075010.	1.5	16
85	Interface characteristics of n-n and p-n Ge/SiC heterojunction diodes formed by molecular beam epitaxy deposition. <i>Journal of Applied Physics</i> , 2010, 107, .	1.1	16
86	Development of a Portable, Multichannel Olfactory Display Transducer. <i>IEEE Sensors Journal</i> , 2018, 18, 4969-4974.	2.4	16
87	Faecal Scent as a Novel Non-Invasive Biomarker to Discriminate between Coeliac Disease and Refractory Coeliac Disease: A Proof of Principle Study. <i>Biosensors</i> , 2019, 9, 69.	2.3	16
88	Mimicking the biological olfactory system: a Portable electronic Mucosa. <i>IET Nanobiotechnology</i> , 2012, 6, 45.	1.9	14
89	Application of MOS Gas Sensors Coupled with Chemometrics Methods to Predict the Amount of Sugar and Carbohydrates in Potatoes. <i>Molecules</i> , 2022, 27, 3508.	1.7	14
90	Identification and quantification of different vapours using a single polymer chemoresistor and the novel dual transient temperature modulation technique. <i>Sensors and Actuators B: Chemical</i> , 2009, 141, 370-380.	4.0	13

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91	The use of gas phase detection and monitoring of potato soft rot infection in store. <i>Postharvest Biology and Technology</i> , 2018, 145, 15-19.	2.9	13
92	The measurement of volatile organic compounds in faeces of piglets as a tool to assess gastrointestinal functionality. <i>Biosystems Engineering</i> , 2019, 184, 122-129.	1.9	13
93	High Temperature SQUID CMOS Tungsten Micro-Heaters. , 2006, , .		12
94	Static and Dynamic Analysis of Split-Gate RESURF Stepped Oxide (RSO) MOSFETs for 35 V Applications. , 2009, , .		12
95	Pre-analytical and analytical variables that influence urinary volatile organic compound measurements. <i>PLoS ONE</i> , 2020, 15, e0236591.	1.1	12
96	Conductive polymer gate FET devices for vapour sensing. <i>IET Circuits, Devices and Systems</i> , 2004, 151, 326.	0.6	11
97	Electronic nose versus canine nose: clash of the titans. <i>Gut</i> , 2011, 60, 1768-1768.	6.1	11
98	Resistance-Capacitance Gas Sensor Based on Fractal Geometry. <i>Chemosensors</i> , 2019, 7, 31.	1.8	11
99	Velocity-optimized diffusion for ultra-fast polymer-based resistive gas sensors. <i>IET Science, Measurement and Technology</i> , 2006, 153, 94-100.	0.7	10
100	Simultaneous Assessment of Urinary and Fecal Volatile Organic Compound Analysis in De Novo Pediatric IBD. <i>Sensors</i> , 2019, 19, 4496.	2.1	10
101	Characterization of n-n Ge/SiC heterojunction diodes. <i>Applied Physics Letters</i> , 2008, 93, 112104.	1.5	9
102	Zinc Oxide Nanowire Based Hydrogen Sensor On SOI CMOS Platform. <i>Procedia Engineering</i> , 2011, 25, 1473-1476.	1.2	9
103	Detection of Group B Streptococcus in pregnancy by vaginal volatile organic compound analysis: a prospective exploratory study. <i>Translational Research</i> , 2020, 216, 23-29.	2.2	9
104	The faecal scent of inflammatory bowel disease: Detection and monitoring based on volatile organic compound analysis. <i>Digestive and Liver Disease</i> , 2020, 52, 745-752.	0.4	9
105	Integration of HfO ₂ on Si/SiC heterojunctions for the gate architecture of SiC power devices. <i>Applied Physics Letters</i> , 2010, 97, 013506.	1.5	8
106	SQUID-CMOS based single crystal silicon micro-heaters for gas sensors. , 2006, , .		7
107	A chamber for the perfusion of in vitro tissue with multiple solutions. <i>Journal of Neurophysiology</i> , 2013, 110, 269-277.	0.9	7
108	Editorial: metabolomic analysis of breath volatile organic compounds – a new scent for inflammatory bowel disease. <i>Alimentary Pharmacology and Therapeutics</i> , 2014, 40, 732-733.	1.9	7

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109	Low Cost Optical Electronic Nose for Biomedical Applications. Proceedings (mdpi), 2017, 1, .	0.2	7
110	Oxygen Sensors Based on Screen Printed Platinum and Palladium Doped Indium Oxides. Proceedings (mdpi), 2017, 1, 401.	0.2	7
111	AACVD Grown WO ₃ Nanoneedles Decorated With Ag/Ag ₂ O Nanoparticles for Oxygen Measurement in a Humid Environment. IEEE Sensors Journal, 2019, 19, 826-832.	2.4	7
112	Volatile organic compound analysis, a new tool in the quest for preterm birth predictionâ€”an observational cohort study. Scientific Reports, 2020, 10, 12153.	1.6	7
113	Development of a Thermal-Based Olfactory Display for Aroma Sensory Training. IEEE Sensors Journal, 2020, 20, 631-636.	2.4	7
114	Direct <i>in situ</i> spectroscopic evidence of the crucial role played by surface oxygen vacancies in the O ₂ -sensing mechanism of SnO ₂ . Chemical Science, 2022, 13, 6089-6097.	3.7	7
115	Urinary Volatile Organic Compound Testing in Fast-Track Patients with Suspected Colorectal Cancer. Cancers, 2022, 14, 2127.	1.7	7
116	SiC MOSFET Channel Mobility Dependence on Substrate Doping and Temperature Considering High Density of Interface Traps. Materials Science Forum, 2007, 556-557, 835-838.	0.3	6
117	Non-Invasive Detection of Anastomotic Leakage Following Esophageal and Pancreatic Surgery by Urinary Analysis. Digestive Surgery, 2019, 36, 173-180.	0.6	6
118	Preclinical Detection of Non-catheter Related Late-onset Sepsis in Preterm Infants by Fecal Volatile Compounds Analysis. Pediatric Infectious Disease Journal, 2020, 39, 330-335.	1.1	6
119	Development of Gas Sensor Based on Fractal Substrate Structures. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-7.	2.4	6
120	Silicon-based Neuromorphic Implementation of the Olfactory Pathway. , 0, , .		5
121	Investigation of Si/4H-SiC Hetero-Junction Growth and Electrical Properties. Materials Science Forum, 2009, 615-617, 443-446.	0.3	5
122	Continuous-channel flow linear dichroism. Analytical Methods, 2012, 4, 3169.	1.3	5
123	Tungsten Oxide Based Sensor for Oxygen Detection. Proceedings (mdpi), 2018, 2, .	0.2	5
124	A Multi-MOx Sensor Approach to Measure Oxidizing and Reducing Gases. Proceedings (mdpi), 2019, 14, 50.	0.2	5
125	Development of a Personalised Environmental Quality Monitoring System (PONG). IEEE Sensors Journal, 2021, , 1-1.	2.4	5
126	Investigation on split-gate RSO MOSFET for 30 V breakdown. , 2008, , .		5

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127	A Universal Calibration Method for Electronic Nose Based on Projection on to Convex Sets. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-12.	2.4	5
128	Applying Convolution-Based Processing Methods To A Dual-Channel, Large Array Artificial Olfactory Mucosa. , 2009, , .		4
129	CMOS Alcohol Sensor Employing ZnO Nanowire Sensing Films. , 2009, , .		4
130	A novel monolithic microactuator fabricated by 3D rapid direct manufacture. Procedia Chemistry, 2009, 1, 1163-1166.	0.7	4
131	Nanowire hydrogen gas sensor employing CMOS micro-hotplate. , 2009, , .		4
132	Rapid manufacture of monolithic micro-actuated forceps inspired by echinoderm pedicellariae. Bioinspiration and Biomimetics, 2012, 7, 044001.	1.5	4
133	Investigation of paediatric PKU breath malodour, comparing glycomacropptide with phenylalanine free L-amino acid supplements. Journal of Breath Research, 2020, 14, 016001.	1.5	4
134	Prediction of Inflammatory Bowel Disease Course Based on Fecal Scent. Sensors, 2022, 22, 2316.	2.1	4
135	<title>Conducting polymer FET devices for vapor sensing</title>. , 1999, 3673, 296.		3
136	Nanotubes and Nanorods on CMOS Substrates for Gas Sensing. , 2009, , .		3
137	Characterization of fabricated three dimensional scaffolds of bioceramic-polymer composite via microstereolithography technique. AIP Conference Proceedings, 2014, , .	0.3	3
138	Comparative study of spin-coated and vapour deposited nickel oxides for detecting VOCs. , 2020, , .		3
139	Minimal Gluten Exposure Alters Urinary Volatile Organic Compounds in Stable Coeliac Disease. Sensors, 2022, 22, 1290.	2.1	3
140	Detection of the fungal infection in post-harvest onions by an electronic nose. , 2022, , .		3
141	Development of Low Resistance Al/Ti Stacked Metal Contacts to p-Type 4H-SiC. Materials Science Forum, 2007, 556-557, 697-700.	0.3	2
142	Identification of vapours using a single carbon black/polymer composite sensor and a novel temperature modulation technique. , 2007, , .		2
143	Carbon Nanomaterial Polymer Composite ChemFET and Chemoresistors For Vapour Sensing. , 2009, , .		2
144	Detecting inflammatory bowel disease through an electronic nose. Gastrointestinal Nursing, 2010, 8, 44-47.	0.0	2

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145	A High Temperature SOI CMOS NO ₂ Sensor. , 2011, , .		2
146	A simple, portable, computer-controlled odour generator. , 2017, , .		2
147	Deep Learning Investigation of Mass Spectrometry Analysis from Melanoma Samples. , 2019, , .		2
148	Electronic Mucosa. , 0, , 257-274.		2
149	ZnO/MoO ₃ Heterojunction Thick Films to Detect ppb Level Volatile Organic Compounds. IEEE Sensors Journal, 2022, 22, 10353-10360.	2.4	2
150	<title>Design and coupled-effect simulations of CMOS micro gas sensors built on SOI thin membranes</title>. , 2001, , .		1
151	Towards a truly biomimetic olfactory microsystem: an artificial olfactory mucosa. , 2006, , 105.		1
152	Enhanced Discrimination of Complex Odours Based upon Spatio-Temporal signals from a Micro-Mucosa. , 2007, , .		1
153	Novel gas chromatographic microsystem with very large sensor arrays for advanced odour discrimination. , 2007, , .		1
154	Silicon-on-SiC, a Novel Semiconductor Structure for Power Devices. Materials Science Forum, 2010, 645-648, 1243-1246.	0.3	1
155	Deposition of tungsten oxide and silver decorated tungsten oxide for use in oxygen gas sensing. , 2017, , .		1
156	A Novel, Low-Cost, Portable PID Sensor for Detection of VOC. Proceedings (mdpi), 2017, 1, .	0.2	1
157	OWE-021â€¦Describing the gut microbiome and metabolomic changes in bile acid diarrhoea. , 2018, , .		1
158	Breath analysis using eNose technology to diagnose inflammatory bowel disease â€“ early results. Future Healthcare Journal, 2019, 6, 79-79.	0.6	1
159	Wine Aroma Sensory Training Game Employing a Thermal Based Olfactory Display. , 2019, , .		1
160	Prediction of mortality in severe acute malnutrition in hospitalized children by faecal volatile organic compound analysis: proof of concept. Scientific Reports, 2020, 10, 18785.	1.6	1
161	Finite Element Simulation of a Biomimetic Olfactory Microsystem for Spatio-temporal Signal Generation. Communications in Computer and Information Science, 2007, , 216-226.	0.4	1
162	Electronic Nose for Bladder Cancer Detection. Chemistry Proceedings, 2021, 5, .	0.1	1

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163	Ultrafast chemical-sensing microsystem employing resistive nanomaterials. , 2004, , .		0
164	Molecular beam epitaxy Si/4H-SiC heterojunction diodes. , 2007, , .		0
165	Novel dual transient temperature modulation technique for multi-vapour detection. , 2009, , .		0
166	Germanium “ Silicon Carbide Heterojunction Diodes “ A Study in Device Characteristics with Increasing Layer Thickness and Deposition Temperature. Materials Science Forum, 2010, 645-648, 889-892.	0.3	0
167	Characterisation of HfO ₂ /Si/SiC MOS Capacitors. Materials Science Forum, 0, 679-680, 674-677.	0.3	0
168	Towards an Analogue Neuromorphic VLSI Instrument for the Sensing of Complex Odours. , 2011, , .		0
169	LBPS 01-22 VOLATILE ORGANIC COMPOUNDS. Journal of Hypertension, 2016, 34, e180.	0.3	0
170	PTU-071“Risk stratification of symptomatic patients using faecal biomarkers and urinary volatile organic compounds. , 2018, , .		0
171	Semiconducting Indium Oxide Sensor for Oxygen Detection. , 2021, , .		0
172	Classification of Field Asymmetric Ion Mobility Spectrometry Data for Detection of Bowel Bacteria. , 2012, , .		0
173	Fused deposition modelling for the fabrication of metal oxide based gas sensor. AIP Conference Proceedings, 2021, , .	0.3	0
174	Humidity Dependence of Commercial Thick and Thin-Film MOX Gas Sensors under UV Illumination. , 2021, 10, .		0
175	A Portable Personalised Environmental Quality Monitoring System (PONG) Ver. 2. , 2022, , .		0
176	A Stand-alone Multi-scent Olfactory Display with a Sliding Scent Switching Mechanism. , 2022, , .		0