Gaku Imamura

List of Publications by Year
in descending order

36 papers	661 citations	623188 14 h-index	580395 25 g-index
38 all docs	38 docs citations	38 times ranked	1022 citing authors

#	Article	IF	Citations
1	Identification of gas species and their concentrations by using sorption kinetics of viscoelastic film. , 2022, , .		1
2	Amorphous thin-film oxide power devices operating beyond bulk single-crystal silicon limit. Scientific Reports, 2021, 11, 9435.	1.6	2
3	Statistical Evaluation of Total Expiratory Breath Samples Collected throughout a Year: Reproducibility and Applicability toward Olfactory Sensor-Based Breath Diagnostics. Sensors, 2021, 21, 4742.	2.1	5
4	Odor-Based Nanomechanical Discrimination of Fuel Oils Using a Single Type of Designed Nanoparticles with Nonlinear Viscoelasticity. ACS Omega, 2021, 6, 23389-23398.	1.6	5
5	2-step reaction kinetics for hydrogen absorption into bulk material via dissociative adsorption on the surface. Scientific Reports, 2021, 11, 18836.	1.6	4
6	Graphene Oxide as a Sensing Material for Gas Detection Based on Nanomechanical Sensors in the Static Mode. Chemosensors, 2020, 8, 82.	1.8	17
7	Development of a Mobile Device for Odor Identification and Optimization of Its Measurement Protocol Based on the Free-Hand Measurement. Sensors, 2020, 20, 6190.	2.1	5
8	Nanomechanical Gas Sensing with Laser Treated 2D Nanomaterials. Advanced Materials Technologies, 2020, 5, 2000704.	3.0	9
9	Nanomechanical Recognition and Discrimination of Volatile Molecules by Au Nanocages Deposited on Membrane-Type Surface Stress Sensors. ACS Applied Nano Materials, 2020, 3, 4061-4068.	2.4	10
10	Hydrogen detection using membrane-type surface stress sensor. Journal of Physics Communications, 2020, 4, 025005.	0.5	5
11	Free-hand gas identification based on transfer function ratios without gas flow control. Scientific Reports, 2019, 9, 9768.	1.6	21
12	Membrane-type Surface stress Sensor (MSS) for artificial olfactory system. , 2019, , 27-38.		2
13	Membrane-type Surface Stress Sensor (MSS) for Artificial Olfaction. , 2019, , .		1
14	Pattern recognition of solid materials by multiple probe gases. Materials Horizons, 2019, 6, 580-586.	6.4	11
15	Humidity and VOC Sensing Performance of a PVP and PVP/ZSM5 Composite. , 2019, , .		2
16	Effects of Center Metals in Porphines on Nanomechanical Gas Sensing. Sensors, 2018, 18, 1640.	2.1	24
17	Analysis of nanomechanical sensing signals; physical parameter estimation for gas identification. AIP Advances, 2018, 8, .	0.6	19
18	Functional Nanoparticles-Coated Nanomechanical Sensor Arrays for Machine Learning-Based Quantitative Odor Analysis. ACS Sensors, 2018, 3, 1592-1600.	4.0	38

#	Article	IF	Citations
19	New Data Analysis Methods for Sensing Signals Toward Pump-Free Olfactory Sensors. Journal of Japan Association on Odor Environment, 2018, 49, 315-322.	0.1	0
20	Highly Networked Capsular Silicaâ€“Porphyrin Hybrid Nanostructures as Efficient Materials for Acetone Vapor Sensing. ACS Applied Materials & Interfaces, 2017, 9, 9945-9954.	4.0	58
21	Data-driven nanomechanical sensing: specific information extraction from a complex system. Scientific Reports, 2017, 7, 3661.	1.6	43
22	Fabrication of Silica-Protein Hierarchical Nanoarchitecture with Gas-Phase Sensing Activity. Journal of Nanoscience and Nanotechnology, 2017, 17, 5908-5917.	0.9	12
23	Machine Learning Independent of Population Distributions for Measurement. , 2017, , .		2
24	Finite Element Analysis on Nanomechanical Detection of Small Particles: Toward Virus Detection. Frontiers in Microbiology, 2016, 7, 488.	1.5	9
25	Finite Element Analysis on Nanomechanical Sensing of Cellular Forces. Analytical Sciences, 2016, 32, 1189-1194.	0.8	6
26	Smell identification of spices using nanomechanical membrane-type surface stress sensors. Japanese Journal of Applied Physics, 2016, 55, 1102B3.	0.8	29
27	Growth of N-doped graphene from nitrogen containing aromatic compounds: the effect of precursors on the doped site. RSC Advances, 2016, 6, 13392-13398.	1.7	29
28	Nanomechanical Sensors. , 2016, , 177-196.		3
29	The influence of source molecule structure on the low temperature growth of nitrogen-doped graphene. Physical Chemistry Chemical Physics, 2015, 17, 14115-14121.	1.3	11
30	Effect of UV light-induced nitrogen doping on the field effect transistor characteristics of graphene. RSC Advances, 2015, 5, 70522-70526.	1.7	10
31	Modification of Graphene/SiO₂ Interface by UV-Irradiation: Effect on Electrical Characteristics. ACS Applied Materials & Interfaces, 2015, 7, 2439-2443.	4.0	42
32	Control of work function of graphene by plasma assisted nitrogen doping. Applied Physics Letters, 2014, 104, .	1.5	72
33	Interlayer Interaction in the UV Irradiated Defect Formation of Graphene. Journal of Physical Chemistry C, 2014, 118, 11842-11848.	1.5	11
34	UV-irradiation induced defect formation on graphene on metals. Chemical Physics Letters, 2013, 587, 56-60.	1.2	18
35	Electronic Structure and Graphenization of Hexaphenylborazine. Journal of Physical Chemistry C, 2012, 116, 16305-16310.	1.5	20
36	Synthesis of Nitrogen-Doped Graphene on Pt(111) by Chemical Vapor Deposition. Journal of Physical Chemistry C, 2011, 115, 10000-10005.	1.5	105