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	Synthesis of Nitrogen-Doped Graphene on Pt(111) by Chemical Vapor Deposition. Journal of Physical Chemistry C, 2011, 115, 10000-10005.	1.5	105
2	Control of work function of graphene by plasma assisted nitrogen doping. Applied Physics Letters, 2014, 104, .	1.5	72
3	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
4	Data-driven nanomechanical sensing: specific information extraction from a complex system. Scientific Reports, 2017, 7, 3661.	1.6	43
5	Modification of Graphene/SiO₂ Interface by UV-Irradiation: Effect on Electrical Characteristics. ACS Applied Materials & Interfaces, 2015, 7, 2439-2443.	4.0	42
6	Functional Nanoparticles-Coated Nanomechanical Sensor Arrays for Machine Learning-Based Quantitative Odor Analysis. ACS Sensors, 2018, 3, 1592-1600.	4.0	38
7	Smell identification of spices using nanomechanical membrane-type surface stress sensors. Japanese Journal of Applied Physics, 2016, 55, 1102B3.	0.8	29
8	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
9	Effects of Center Metals in Porphines on Nanomechanical Gas Sensing. Sensors, 2018, 18, 1640.	2.1	24
10	Free-hand gas identification based on transfer function ratios without gas flow control. Scientific Reports, 2019, 9, 9768.	1.6	21
11	Electronic Structure and Graphenization of Hexaphenylborazine. Journal of Physical Chemistry C, 2012, 116, 16305-16310.	1.5	20
12	Analysis of nanomechanical sensing signals; physical parameter estimation for gas identification. AIP Advances, 2018, 8, .	0.6	19
13	UV-irradiation induced defect formation on graphene on metals. Chemical Physics Letters, 2013, 587, 56-60.	1.2	18
14	Graphene Oxide as a Sensing Material for Gas Detection Based on Nanomechanical Sensors in the Static Mode. Chemosensors, 2020, 8, 82.	1.8	17
15	Fabrication of Silica-Protein Hierarchical Nanoarchitecture with Gas-Phase Sensing Activity. Journal of Nanoscience and Nanotechnology, 2017, 17, 5908-5917.	0.9	12
16	Interlayer Interaction in the UV Irradiated Defect Formation of Graphene. Journal of Physical Chemistry C, 2014, 118, 11842-11848.	1.5	11
17	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
18	Pattern recognition of solid materials by multiple probe gases. Materials Horizons, 2019, 6, 580-586.	6.4	11

#	Article	IF	Citations
19	Effect of UV light-induced nitrogen doping on the field effect transistor characteristics of graphene. RSC Advances, 2015, 5, 70522-70526.	1.7	10
20	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
21	Finite Element Analysis on Nanomechanical Detection of Small Particles: Toward Virus Detection. Frontiers in Microbiology, 2016, 7, 488.	1.5	9
22	Nanomechanical Gas Sensing with Laser Treated 2D Nanomaterials. Advanced Materials Technologies, 2020, 5, 2000704.	3.0	9
23	Finite Element Analysis on Nanomechanical Sensing of Cellular Forces. Analytical Sciences, 2016, 32, 1189-1194.	0.8	6
24	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
25	Hydrogen detection using membrane-type surface stress sensor. Journal of Physics Communications, 2020, 4, 025005.	0.5	5
26	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
27	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
28	2-step reaction kinetics for hydrogen absorption into bulk material via dissociative adsorption on the surface. Scientific Reports, 2021, 11, 18836.	1.6	4
29	Nanomechanical Sensors. , 2016, , 177-196.		3
30	Machine Learning Independent of Population Distributions for Measurement. , 2017, , .		2
31	Membrane-type Surface stress Sensor (MSS) for artificial olfactory system. , 2019, , 27-38.		2
32	Humidity and VOC Sensing Performance of a PVP and PVP/ZSM5 Composite. , 2019, , .		2
33	Amorphous thin-film oxide power devices operating beyond bulk single-crystal silicon limit. Scientific Reports, 2021, 11, 9435.	1.6	2
34	Membrane-type Surface Stress Sensor (MSS) for Artificial Olfaction. , 2019, , .		1
35	Identification of gas species and their concentrations by using sorption kinetics of viscoelastic film. , 2022, , .		1
36	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