

Genki Yoshikawa

List of Publications by Year in descending order

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Version: 2024-02-01

49
papers

966
citations

394421

19
h-index

454955

30
g-index

51
all docs

51
docs citations

51
times ranked

725
citing authors

#	ARTICLE	IF	CITATIONS
1	Nanomechanical Membrane-type Surface Stress Sensor. Nano Letters, 2011, 11, 1044-1048.	9.1	146
2	Two Dimensional Array of Piezoresistive Nanomechanical Membrane-Type Surface Stress Sensor (MSS) with Improved Sensitivity. Sensors, 2012, 12, 15873-15887.	3.8	66
3	Highly Networked Capsular Silica-Porphyrin Hybrid Nanostructures as Efficient Materials for Acetone Vapor Sensing. ACS Applied Materials & Interfaces, 2017, 9, 9945-9954.	8.0	58
4	Sub-ppm detection of vapors using piezoresistive microcantilever array sensors. Nanotechnology, 2009, 20, 015501.	2.6	47
5	Data-driven nanomechanical sensing: specific information extraction from a complex system. Scientific Reports, 2017, 7, 3661.	3.3	43
6	Materials Nanoarchitectonics for Mechanical Tools in Chemical and Biological Sensing. Chemistry - an Asian Journal, 2018, 13, 3366-3377.	3.3	40
7	Functional Nanoparticles-Coated Nanomechanical Sensor Arrays for Machine Learning-Based Quantitative Odor Analysis. ACS Sensors, 2018, 3, 1592-1600.	7.8	38
8	Mechanical analysis and optimization of a microcantilever sensor coated with a solid receptor film. Applied Physics Letters, 2011, 98, .	3.3	37
9	Focus on the interlude between topographic transition and cell response on shape-memory surfaces. Polymer, 2014, 55, 5961-5968.	3.8	34
10	Controlled growth of silica-titania hybrid functional nanoparticles through a multistep microfluidic approach. Chemical Communications, 2015, 51, 15854-15857.	4.1	32
11	Comparing membrane- and cantilever-based surface stress sensors for reproducibility. Sensors and Actuators A: Physical, 2015, 228, 9-15.	4.1	30
12	Smell identification of spices using nanomechanical membrane-type surface stress sensors. Japanese Journal of Applied Physics, 2016, 55, 1102B3.	1.5	29
13	Strain-based chemical sensing using metal-organic framework nanoparticles. Journal of Materials Chemistry A, 2020, 8, 18007-18014.	10.3	29
14	Effects of Center Metals in Porphines on Nanomechanical Gas Sensing. Sensors, 2018, 18, 1640.	3.8	24
15	Discrimination of Methanol from Ethanol in Gasoline Using a Membrane-type Surface Stress Sensor Coated with Copper(I) Complex. Bulletin of the Chemical Society of Japan, 2021, 94, 648-654.	3.2	24
16	Discrimination of structurally similar odorous molecules with various concentrations by using a nanomechanical sensor. Analytical Methods, 2018, 10, 3720-3726.	2.7	23
17	Free-hand gas identification based on transfer function ratios without gas flow control. Scientific Reports, 2019, 9, 9768.	3.3	21
18	Double-Side-Coated Nanomechanical Membrane-Type Surface Stress Sensor (MSS) for One-Chip-One-Channel Setup. Langmuir, 2013, 29, 7551-7556.	3.5	19

#	ARTICLE	IF	CITATIONS
19	Analysis of nanomechanical sensing signals; physical parameter estimation for gas identification. AIP Advances, 2018, 8, .	1.3	19
20	Graphene Oxide as a Sensing Material for Gas Detection Based on Nanomechanical Sensors in the Static Mode. Chemosensors, 2020, 8, 82.	3.6	17
21	Towards future physics and applications <i>via</i> two-dimensional material NEMS resonators. Nanoscale, 2020, 12, 22366-22385.	5.6	15
22	Membrane-Type Surface Stress Sensor with Piezoresistive Readout. Procedia Engineering, 2012, 47, 1085-1088.	1.2	12
23	Piezoresistive membrane-type surface stress sensor arranged in arrays for cancer diagnosis through breath analysis. , 2013, , .		12
24	Pattern recognition of solid materials by multiple probe gases. Materials Horizons, 2019, 6, 580-586.	12.2	11
25	Determination of quasi-primary odors by endpoint detection. Scientific Reports, 2021, 11, 12070.	3.3	11
26	Effects of Coating Materials on Two Dimensional Stress-Induced Deflection of Nanomechanical Sensors. Journal of Nanoscience and Nanotechnology, 2014, 14, 2908-2912.	0.9	10
27	Deposition of a titania layer on spherical porous silica particles and their nanostructure-induced vapor sensing properties. Nanoscale, 2017, 9, 16791-16799.	5.6	10
28	Autonomous Nanoscale Chemomechanical Oscillation on the Self-Oscillating Polymer Brush Surface by Precise Control of Graft Density. Langmuir, 2021, 37, 4380-4386.	3.5	10
29	Finite Element Analysis on Nanomechanical Detection of Small Particles: Toward Virus Detection. Frontiers in Microbiology, 2016, 7, 488.	3.5	9
30	Nanomechanical Gas Sensing with Laser Treated 2D Nanomaterials. Advanced Materials Technologies, 2020, 5, 2000704.	5.8	9
31	Finite Element Analysis of Interface Dependence on Nanomechanical Sensing. Sensors, 2020, 20, 1518.	3.8	9
32	Sorption-induced static mode nanomechanical sensing with viscoelastic receptor layers for multistep injection-purge cycles. Journal of Applied Physics, 2021, 129, .	2.5	9
33	Microchannel measurements of viscosity for both gases and liquids. Lab on A Chip, 2021, 21, 2805-2811.	6.0	8
34	Real-time gas identification on mobile platforms using a nanomechanical membrane-type surface stress sensor. EPJ Techniques and Instrumentation, 2014, 1, .	1.3	7
35	Finite Element Analysis on Nanomechanical Sensing of Cellular Forces. Analytical Sciences, 2016, 32, 1189-1194.	1.6	6
36	Aero-Thermo-Dynamic Mass Analysis. Scientific Reports, 2016, 6, 28849.	3.3	6

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37	Effects of partial attachment at the interface between receptor and substrate on nanomechanical cantilever sensing. <i>Sensors and Actuators A: Physical</i> , 2021, 319, 112533.	4.1	6
38	Development of a Mobile Device for Odor Identification and Optimization of Its Measurement Protocol Based on the Free-Hand Measurement. <i>Sensors</i> , 2020, 20, 6190.	3.8	5
39	Hydrogen detection using membrane-type surface stress sensor. <i>Journal of Physics Communications</i> , 2020, 4, 025005.	1.2	5
40	Statistical Evaluation of Total Expiratory Breath Samples Collected throughout a Year: Reproducibility and Applicability toward Olfactory Sensor-Based Breath Diagnostics. <i>Sensors</i> , 2021, 21, 4742.	3.8	5
41	Odor-Based Nanomechanical Discrimination of Fuel Oils Using a Single Type of Designed Nanoparticles with Nonlinear Viscoelasticity. <i>ACS Omega</i> , 2021, 6, 23389-23398.	3.5	5
42	Machine Learning Independent of Population Distributions for Measurement. , 2017, , .		2
43	Humidity and VOC Sensing Performance of a PVP and PVP/ZSM5 Composite. , 2019, , .		2
44	Amorphous thin-film oxide power devices operating beyond bulk single-crystal silicon limit. <i>Scientific Reports</i> , 2021, 11, 9435.	3.3	2
45	Membrane-type Surface Stress Sensor (MSS) for Artificial Olfaction. , 2019, , .		1
46	Rotaxanation as a sequestering template to preclude incidental metal insertion in complex oligochromophores. <i>Chemical Communications</i> , 2020, 56, 7447-7450.	4.1	1
47	Identification of gas species and their concentrations by using sorption kinetics of viscoelastic film. , 2022, , .		1
48	Nanomechanical Membrane-Type Surface Stress Sensor (MSS). <i>Hyomen Kagaku</i> , 2014, 35, 571-576.	0.0	0
49	Membrane-type Surface stress Sensor "MSS". <i>Journal of Japan Association on Odor Environment</i> , 2018, 49, 291-296.	0.0	0