Kota Shiba

List of Publications by Year
in descending order

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65	963	394421	526287
papers	citations	19	27
		h-index	g-index

69	69	69	854
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Two Dimensional Array of Piezoresistive Nanomechanical Membrane-Type Surface Stress Sensor (MSS) with Improved Sensitivity. Sensors, 2012, 12, 15873-15887.	3.8	66
2	Highly Networked Capsular Silicaâ€“Porphyrin Hybrid Nanostructures as Efficient Materials for Acetone Vapor Sensing. ACS Applied Materials & Interfaces, 2017, 9, 9945-9954.	8.0	58
3	Data-driven nanomechanical sensing: specific information extraction from a complex system. Scientific Reports, 2017, 7, 3661.	3.3	43
4	Effect of Cationic Surfactant Micelles on Hydroxyapatite Nanocrystal Formation: An Investigation into the Inorganicâ€“Organic Interfacial Interactions. Crystal Growth and Design, 2016, 16, 1463-1471.	3.0	41
5	Functional Nanoparticles-Coated Nanomechanical Sensor Arrays for Machine Learning-Based Quantitative Odor Analysis. ACS Sensors, 2018, 3, 1592-1600.	7.8	38
6	Microfluidic syntheses of well-defined sub-micron nanoporous titania spherical particles. Chemical Communications, 2009, , 6851.	4.1	36
7	Focus on the interlude between topographic transition and cell response on shape-memory surfaces. Polymer, 2014, 55, 5961-5968.	3.8	34
8	Controlled growth of silicaâ€“titania hybrid functional nanoparticles through a multistep microfluidic approach. Chemical Communications, 2015, 51, 15854-15857.	4.1	32
9	Smell identification of spices using nanomechanical membrane-type surface stress sensors. Japanese Journal of Applied Physics, 2016, 55, 1102B3.	1.5	29
10	Strain-based chemical sensing using metalâ€“organic framework nanoparticles. Journal of Materials Chemistry A, 2020, 8, 18007-18014.	10.3	29
11	Mesoporous Silica Spherical Particles. Journal of Nanoscience and Nanotechnology, 2013, 13, 2483-2494.	0.9	26
12	Oxide-based inorganic/organic and nanoporous spherical particles: synthesis and functional properties. Science and Technology of Advanced Materials, 2013, 14, 023002.	6.1	24
13	Effects of Center Metals in Porphines on Nanomechanical Gas Sensing. Sensors, 2018, 18, 1640.	3.8	24
14	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
15	Discrimination of structurally similar odorous molecules with various concentrations by using a nanomechanical sensor. Analytical Methods, 2018, 10, 3720-3726.	2.7	23
16	Preparation of well-defined titaniaâ€“silica spherical particles. Journal of Materials Chemistry, 2012, 22, 9963.	6.7	21
17	Effective Surface Functionalization of Carbon Fibers for Fiber/Polymer Composites with Tailorâ€Made Interfaces. ChemPlusChem, 2014, 79, 197-210.	2.8	21
18	Free-hand gas identification based on transfer function ratios without gas flow control. Scientific Reports, 2019, 9, 9768.	3.3	21

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19	Double-Side-Coated Nanomechanical Membrane-Type Surface Stress Sensor (MSS) for One-Chipâ€“One-Channel Setup. Langmuir, 2013, 29, 7551-7556.	3.5	19
20	Analysis of nanomechanical sensing signals; physical parameter estimation for gas identification. AIP Advances, 2018, 8, .	1.3	19
21	Size-Controlled Syntheses of Nanoporous Silica Spherical Particles through a Microfluidic Approach. Industrial & Engineering Chemistry Research, 2010, 49, 8180-8183.	3.7	17
22	Graphene Oxide as a Sensing Material for Gas Detection Based on Nanomechanical Sensors in the Static Mode. Chemosensors, 2020, 8, 82.	3.6	17
23	Preparation of mono-dispersed titanium oxideâ€“octadecylamine hybrid spherical particles in the submicron size range. RSC Advances, 2012, 2, 1343-1349.	3.6	16
24	Preparation of europium(III)-doped hydroxyapatite nanocrystals in the presence of cationic surfactant. Colloids and Interface Science Communications, 2016, 13, 1-5.	4.1	16
25	Precise Synthesis of Wellâ€Defined Inorganicâ€Organic Hybrid Particles. Chemical Record, 2018, 18, 950-968.	5.8	14
26	Effective preparation of graphite nanoparticles using mechanochemical solid-state reactions. Solid State Communications, 2014, 190, 28-32.	1.9	13
27	Synthesis of Cytocompatible Luminescent Titania/Fluorescein Hybrid Nanoparticles. ACS Applied Materials & Interfaces, 2014, 6, 6825-6834.	8.0	12
28	Fabrication of Silica-Protein Hierarchical Nanoarchitecture with Gas-Phase Sensing Activity. Journal of Nanoscience and Nanotechnology, 2017, 17, 5908-5917.	0.9	12
29	Pattern recognition of solid materials by multiple probe gases. Materials Horizons, 2019, 6, 580-586.	12.2	11
30	Determination of quasi-primary odors by endpoint detection. Scientific Reports, 2021, 11, 12070.	3.3	11
31	Syntheses of zirconium-containing titania particles with spherical morphology and uniform size by microfluidic reactions. Journal of the Ceramic Society of Japan, 2011, 119, 507-512.	1.1	10
32	Preparation of nanoporous titania spherical nanoparticles. Journal of Solid State Chemistry, 2013, 199, 317-325.	2.9	10
33	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
34	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
35	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.	5.0	10
36	Finite Element Analysis on Nanomechanical Detection of Small Particles: Toward Virus Detection. Frontiers in Microbiology, 2016, 7, 488.	3.5	9

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37	Preparation of Phospholipid Vesicle-Templated Calcium Phosphate Nanostructures and Their Cytocompatibility. Crystal Growth and Design, 2016, 16, 2843-2849.	3.0	9
38	Hybrid preparation of terbium(<scp>iii</scp>)-doped mesoporous silica particles with calcium phosphates. RSC Advances, 2017, 7, 19479-19485.	3.6	9
39	An investigation into nanohybrid states of europium (III) complex with hydroxyapatite nanocrystals. Optical Materials, 2018, 84, 252-258.	3.6	9
40	Sorption-induced static mode nanomechanical sensing with viscoelastic receptor layers for multistep injection-purge cycles. Journal of Applied Physics, 2021, 129, .	2.5	9
41	Preparation of Monodispersed Spherical Titaniaâ€“Octadecylamine Particles Containing Silane-Coupling Reagents. Bulletin of the Chemical Society of Japan, 2012, 85, 1040-1047.	3.2	8
42	Mesoporous silica coated silicaâ€“titania spherical particles: from impregnation to coreâ€“shell formation. Dalton Transactions, 2016, 45, 18742-18749.	3.3	8
43	Surface-engineered mesoporous silica particles with luminescent, cytocompatible and targeting properties for cancer cell imaging. RSC Advances, 2017, 7, 13643-13652.	3.6	8
44	Microchannel measurements of viscosity for both gases and liquids. Lab on A Chip, 2021, 21, 2805-2811.	6.0	8
45	Preparation of Eu(<scp>iii</scp>) acetylacetonate-doped well-defined titania particles with efficient photoluminescence properties. Dalton Transactions, 2018, 47, 1972-1980.	3.3	7
46	Preparation of luminescent titania/dye hybrid nanoparticles and their dissolution properties for controlling cellular environments. RSC Advances, 2015, 5, 104343-104353.	3.6	6
47	Finite Element Analysis on Nanomechanical Sensing of Cellular Forces. Analytical Sciences, 2016, 32, 1189-1194.	1.6	6
48	Aero-Thermo-Dynamic Mass Analysis. Scientific Reports, 2016, 6, 28849.	3.3	6
49	Designed synthesis of well-defined titania/iron(<scp>iii</scp>) acetylacetonate nanohybrids with magnetic/luminescent properties. RSC Advances, 2016, 6, 55750-55754.	3.6	6
50	Effective Composite Preparation between Graphite and Iron Particles by the Interfacial Mediation of Force-Activated Oxygen Atoms. Industrial & Engineering Chemistry Research, 2014, 53, 16736-16753.	3.7	5
51	Microfluidic Production of Autofluorescent BSA Hydrogel Microspheres and Their Sequential Trapping for Fluorescence-Based On-Chip Permanganate Sensing. Sensors, 2020, 20, 5886.	3.8	5
52	Odor-Based Nanomechanical Discrimination of Fuel Oils Using a Single Type of Designed Nanoparticles with Nonlinear Viscoelasticity. ACS Omega, 2021, 6, 23389-23398.	3.5	5
53	Chemical Etching Route to Prepare Nanometer-size Spherical Titaniaâ€“Octadecylamine Hybrid Particles. Chemistry Letters, 2012, 41, 479-481.	1.3	4
54	Preparation of Monodispersed Nanoporous Eu(III)/Titania Loaded with Ibuprofen: Optimum Loading, Luminescence, and Sustained Release. Inorganic Chemistry, 2021, 60, 8765-8776.	4.0	4

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55	Nanomechanical Sensors. , 2016, , 177-196.		3
56	Cytotoxicity and Cancer Detection Ability of the Luminescent Nanoporous Silica Spheres Immobilized with Folic Acid Derivative. Key Engineering Materials, 0, 529-530, 630-635.	0.4	2
57	Membrane-type Surface stress Sensor (MSS) for artificial olfactory system. , 2019, , 27-38.		2
58	Effects of surfactant removal processes from titania/octadecylamine hybrid particles on their nanostructures and dispersibility in phosphate buffered saline. Results in Physics, 2019, 13, 102215.	4.1	2
59	Humidity and VOC Sensing Performance of a PVP and PVP/ZSM5 Composite. , 2019, , .		2
60	Nanomechanical Sensors (MSS/AMA) for Odor/Mass Analyses. Journal of the Mass Spectrometry Society of Japan, 2018, 66, 25-29.	0.1	1
61	Membrane-type Surface Stress Sensor (MSS) for Artificial Olfaction. , 2019, , .		1
62	Identification of gas species and their concentrations by using sorption kinetics of viscoelastic film. , 2022, , .		1
63	Frontispiece: Effective Surface Functionalization of Carbon Fibers for Fiber/Polymer Composites with Tailorâ€Made Interfaces. ChemPlusChem, 2014, 79, .	2.8	0
64	Particulate Titania Coating on Poly(Dimethylsiloxane) Films for Improving Osteoconductive Ability. Key Engineering Materials, 0, 782, 151-157.	0.4	0
65	Data-driven analyses of smells-Quantitative prediction by the combination of MSS, functional nanoparticles, and machine learning-. Journal of Japan Association on Odor Environment, 2018, 49, 305-314.	0.0	0