Kota Shiba

List of Publications by Year
in descending order

65 papers	963 citations	394421 19 h-index	526287 27 g-index
69 all docs	69 docs citations	69 times ranked	854 citing authors

#	Article	IF	Citations
1	Identification of gas species and their concentrations by using sorption kinetics of viscoelastic film. , 2022, , .		1
2	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
3	Sorption-induced static mode nanomechanical sensing with viscoelastic receptor layers for multistep injection-purge cycles. Journal of Applied Physics, 2021, 129, .	2.5	9
4	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
5	Determination of quasi-primary odors by endpoint detection. Scientific Reports, 2021, 11, 12070.	3.3	11
6	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
7	Microchannel measurements of viscosity for both gases and liquids. Lab on A Chip, 2021, 21, 2805-2811.	6.0	8
8	Graphene Oxide as a Sensing Material for Gas Detection Based on Nanomechanical Sensors in the Static Mode. Chemosensors, 2020, 8, 82.	3.6	17
9	Strain-based chemical sensing using metalâ€“organic framework nanoparticles. Journal of Materials Chemistry A, 2020, 8, 18007-18014.	10.3	29
10	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
11	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
12	Free-hand gas identification based on transfer function ratios without gas flow control. Scientific Reports, 2019, 9, 9768.	3.3	21
13	Membrane-type Surface stress Sensor (MSS) for artificial olfactory system. , 2019, , 27-38.		2
14	Membrane-type Surface Stress Sensor (MSS) for Artificial Olfaction. , 2019, , .		1
15	Pattern recognition of solid materials by multiple probe gases. Materials Horizons, 2019, 6, 580-586.	12.2	11
16	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
17	Humidity and VOC Sensing Performance of a PVP and PVP/ZSM5 Composite. , 2019, , .		2
18	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

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19	Precise Synthesis of Wellâ€Defined Inorganicâ€Organic Hybrid Particles. Chemical Record, 2018, 18, 950-968.	5.8	14
20	Nanomechanical Sensors (MSS/AMA) for Odor/Mass Analyses. Journal of the Mass Spectrometry Society of Japan, 2018, 66, 25-29.	0.1	1
21	Discrimination of structurally similar odorous molecules with various concentrations by using a nanomechanical sensor. Analytical Methods, 2018, 10, 3720-3726.	2.7	23
22	An investigation into nanohybrid states of europium (III) complex with hydroxyapatite nanocrystals. Optical Materials, 2018, 84, 252-258.	3.6	9
23	Effects of Center Metals in Porphines on Nanomechanical Gas Sensing. Sensors, 2018, 18, 1640.	3.8	24
24	Analysis of nanomechanical sensing signals; physical parameter estimation for gas identification. AIP Advances, 2018, 8, .	1.3	19
25	Functional Nanoparticles-Coated Nanomechanical Sensor Arrays for Machine Learning-Based Quantitative Odor Analysis. ACS Sensors, 2018, 3, 1592-1600.	7.8	38
26	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
27	Surface-engineered mesoporous silica particles with luminescent, cytocompatible and targeting properties for cancer cell imaging. RSC Advances, 2017, 7, 13643-13652.	3.6	8
28	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
29	Hybrid preparation of terbium(<scp>iii</scp>)-doped mesoporous silica particles with calcium phosphates. RSC Advances, 2017, 7, 19479-19485.	3.6	9
30	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
31	Data-driven nanomechanical sensing: specific information extraction from a complex system. Scientific Reports, 2017, 7, 3661.	3.3	43
32	Fabrication of Silica-Protein Hierarchical Nanoarchitecture with Gas-Phase Sensing Activity. Journal of Nanoscience and Nanotechnology, 2017, 17, 5908-5917.	0.9	12
33	Finite Element Analysis on Nanomechanical Detection of Small Particles: Toward Virus Detection. Frontiers in Microbiology, 2016, 7, 488.	3.5	9
34	Finite Element Analysis on Nanomechanical Sensing of Cellular Forces. Analytical Sciences, 2016, 32, 1189-1194.	1.6	6
35	Aero-Thermo-Dynamic Mass Analysis. Scientific Reports, 2016, 6, 28849.	3.3	6
36	Smell identification of spices using nanomechanical membrane-type surface stress sensors. Japanese Journal of Applied Physics, 2016, 55, 1102B3.	1.5	29

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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	Mesoporous silica coated silicaâ€“titania spherical particles: from impregnation to coreâ€“shell formation. Dalton Transactions, 2016, 45, 18742-18749.	3.3	8
39	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
40	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
41	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
42	Nanomechanical Sensors. , 2016, , 177-196.		3
43	Preparation of luminescent titania/dye hybrid nanoparticles and their dissolution properties for controlling cellular environments. RSC Advances, 2015, 5, 104343-104353.	3.6	6
44	Controlled growth of silicaâ€“titania hybrid functional nanoparticles through a multistep microfluidic approach. Chemical Communications, 2015, 51, 15854-15857.	4.1	32
45	Effective Surface Functionalization of Carbon Fibers for Fiber/Polymer Composites with Tailorâ€Made Interfaces. ChemPlusChem, 2014, 79, 197-210.	2.8	21
46	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
47	Focus on the interlude between topographic transition and cell response on shape-memory surfaces. Polymer, 2014, 55, 5961-5968.	3.8	34
48	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
49	Synthesis of Cytocompatible Luminescent Titania/Fluorescein Hybrid Nanoparticles. ACS Applied Materials & Interfaces, 2014, 6, 6825-6834.	8.0	12
50	Effective preparation of graphite nanoparticles using mechanochemical solid-state reactions. Solid State Communications, 2014, 190, 28-32.	1.9	13
51	Frontispiece: Effective Surface Functionalization of Carbon Fibers for Fiber/Polymer Composites with Tailorâ€Made Interfaces. ChemPlusChem, 2014, 79, .	2.8	0
52	Preparation of nanoporous titania spherical nanoparticles. Journal of Solid State Chemistry, 2013, 199, 317-325.	2.9	10
53	Double-Side-Coated Nanomechanical Membrane-Type Surface Stress Sensor (MSS) for One-Chipâ€“One-Channel Setup. Langmuir, 2013, 29, 7551-7556.	3.5	19
54	Mesoporous Silica Spherical Particles. Journal of Nanoscience and Nanotechnology, 2013, 13, 2483-2494.	0.9	26

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55	Oxide-based inorganic/organic and nanoporous spherical particles: synthesis and functional properties. Science and Technology of Advanced Materials, 2013, 14, 023002.	6.1	24
56	Two Dimensional Array of Piezoresistive Nanomechanical Membrane-Type Surface Stress Sensor (MSS) with Improved Sensitivity. Sensors, 2012, 12, 15873-15887.	3.8	66
57	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
58	Chemical Etching Route to Prepare Nanometer-size Spherical Titaniaâ€“Octadecylamine Hybrid Particles. Chemistry Letters, 2012, 41, 479-481.	1.3	4
59	Preparation of well-defined titaniaâ€˜silica spherical particles. Journal of Materials Chemistry, 2012, 22, 9963.	6.7	21
60	Preparation of mono-dispersed titanium oxideâ€“octadecylamine hybrid spherical particles in the submicron size range. RSC Advances, 2012, 2, 1343-1349.	3.6	16
61	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
62	Size-Controlled Syntheses of Nanoporous Silica Spherical Particles through a Microfluidic Approach. Industrial & Engineering Chemistry Research, 2010, 49, 8180-8183.	3.7	17
63	Microfluidic syntheses of well-defined sub-micron nanoporous titania spherical particles. Chemical Communications, 2009, , 6851.	4.1	36
64	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
65	Particulate Titania Coating on Poly(Dimethylsiloxane) Films for Improving Osteoconductive Ability. Key Engineering Materials, 0, 782, 151-157.	0.4	0