

Shinya Kano

List of Publications by Year in descending order

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48
papers

1,023
citations

623188

14
h-index

454577

30
g-index

48
all docs

48
docs citations

48
times ranked

1397
citing authors

#	ARTICLE	IF	CITATIONS
1	Fast-Response and Flexible Nanocrystal-Based Humidity Sensor for Monitoring Human Respiration and Water Evaporation on Skin. ACS Sensors, 2017, 2, 828-833.	4.0	224
2	Nanoparticle characterization based on STM and STS. Chemical Society Reviews, 2015, 44, 970-987.	18.7	82
3	Logic Operations of Chemically Assembled Single-Electron Transistor. ACS Nano, 2012, 6, 2798-2803.	7.3	79
4	Size-Dependence of Acceptor and Donor Levels of Boron and Phosphorus Codoped Colloidal Silicon Nanocrystals. Nano Letters, 2016, 16, 2615-2620.	4.5	69
5	Gap separation-controlled nanogap electrodes by molecular ruler electroless gold plating. RSC Advances, 2015, 5, 22160-22167.	1.7	67
6	All-Painting Process To Produce Respiration Sensor Using Humidity-Sensitive Nanoparticle Film and Graphite Trace. ACS Sustainable Chemistry and Engineering, 2018, 6, 12217-12223.	3.2	57
7	Silica Nanoparticle-Based Portable Respiration Sensor for Analysis of Respiration Rate, Pattern, and Phase During Exercise. , 2018, 2, 1-4.		40
8	Room-Temperature Coulomb Blockade from Chemically Synthesized Au Nanoparticles Stabilized by Acid-Base Interaction. Applied Physics Express, 2010, 3, 105003.	1.1	38
9	Respiratory Monitoring by Ultrafast Humidity Sensors with Nanomaterials: A Review. Sensors, 2022, 22, 1251.	2.1	29
10	Size-dependent donor and acceptor states in codoped Si nanocrystals studied by scanning tunneling spectroscopy. Nanoscale, 2017, 9, 17884-17892.	2.8	27
11	Ideal Discrete Energy Levels in Synthesized Au Nanoparticles for Chemically Assembled Single-Electron Transistors. ACS Nano, 2012, 6, 9972-9977.	7.3	24
12	Surface Structure and Current Transport Property of Boron and Phosphorus Co-Doped Silicon Nanocrystals. Journal of Physical Chemistry C, 2016, 120, 195-200.	1.5	23
13	Silicon quantum dots with heavily boron and phosphorus codoped shell. Chemical Communications, 2018, 54, 4375-4389.	2.2	23
14	Nonporous Inorganic Nanoparticle-Based Humidity Sensor: Evaluation of Humidity Hysteresis and Response Time. Sensors, 2020, 20, 3858.	2.1	20
15	Control of charging energy in chemically assembled nanoparticle single-electron transistors. Nanotechnology, 2015, 26, 045702.	1.3	19
16	Chemically assembled double-dot single-electron transistor analyzed by the orthodox model considering offset charge. Journal of Applied Physics, 2015, 118, .	1.1	14
17	Characterization of thiol-functionalized oligo(phenylene-ethynylene)-protected Au nanoparticles by scanning tunneling microscopy and spectroscopy. Applied Physics Letters, 2012, 101, 083115.	1.5	13
18	Random telegraph signals by alkanethiol-protected Au nanoparticles in chemically assembled single-electron transistors. Journal of Applied Physics, 2013, 114, .	1.1	13

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19	Three-input gate logic circuits on chemically assembled single-electron transistors with organic and inorganic hybrid passivation layers. <i>Science and Technology of Advanced Materials</i> , 2017, 18, 374-380.	2.8	13
20	Solution Processing of Hydrogen-Terminated Silicon Nanocrystal for Flexible Electronic Device. <i>ACS Applied Materials & Interfaces</i> , 2018, 10, 20672-20678.	4.0	13
21	Combined analysis of energy band diagram and equivalent circuit on nanocrystal solid. <i>Journal of Applied Physics</i> , 2016, 119, 215304.	1.1	12
22	Respiratory rate on exercise measured by nanoparticle-based humidity sensor. , 2019, 2019, 3567-3570.		12
23	Electrically Stimulated Synaptic Resistive Switch in Solution-Processed Silicon Nanocrystal Thin Film: Formation Mechanism of Oxygen Vacancy Filament for Synaptic Function. <i>ACS Applied Electronic Materials</i> , 2019, 1, 2664-2670.	2.0	11
24	Radio-frequency capacitance spectroscopy of metallic nanoparticles. <i>Scientific Reports</i> , 2015, 5, 10858.	1.6	10
25	Room-temperature single molecular memory. <i>Applied Physics Letters</i> , 2012, 100, 053101.	1.5	9
26	Silicon Nitride-Passivated Bottom-Up Single-Electron Transistors. <i>Japanese Journal of Applied Physics</i> , 2013, 52, 110101.	0.8	9
27	Technology and characterization of MIS structures with co-doped silicon nanocrystals (Si-NCs) embedded in hafnium oxide (HfO ₂) ultra-thin layers. <i>Microelectronic Engineering</i> , 2017, 178, 298-303.	1.1	9
28	Capillary-condensed water in nonporous nanoparticle films evaluated by impedance analysis for nanoparticle devices. <i>Nanotechnology</i> , 2020, 31, 455701.	1.3	8
29	Integration of colloidal silicon nanocrystals on metal electrodes in single-electron transistor. <i>Applied Physics Letters</i> , 2016, 109, .	1.5	6
30	Conversion efficiency of an energy harvester based on resonant tunneling through quantum dots with heat leakage. <i>Nanotechnology</i> , 2017, 28, 095403.	1.3	6
31	Surface Potential of 1,10-Decanedithiol Molecules Inserted into Octanethiol Self-Assembled Monolayers on Au(111). <i>Journal of Physical Chemistry C</i> , 2010, 114, 8120-8125.	1.5	5
32	Forming-free resistive switching in solution-processed silicon nanocrystal thin film. <i>Journal of Applied Physics</i> , 2018, 124, 085113.	1.1	5
33	Preliminary comparison of respiratory signals using acceleration on neck and humidity in exhaled air. <i>Microsystem Technologies</i> , 2021, 27, 1-9.	1.2	5
34	Monodispersed sodium hyaluronate microcapsules for transdermal drug delivery systems. <i>Materials Advances</i> , 0, , .	2.6	5
35	Coulomb blockade behaviors in individual Au nanoparticles as observed through noncontact atomic force spectroscopy at room temperature. <i>Nanotechnology</i> , 2012, 23, 185704.	1.3	4
36	Water-dispersible near-infrared luminescent silicon nanocrystals -immobilization on substrate. <i>MRS Communications</i> , 2016, 6, 429-436.	0.8	4

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37	Battery-powered wearable respiration sensor chip with nanocrystal thin film. , 2017, , .		3
38	Proton transport over nanoparticle surface in insulating nanoparticle film-based humidity sensor. Japanese Journal of Applied Physics, 2022, 61, SE1011.	0.8	3
39	Liquid-dependent impedance induced by vapor condensation and percolation in nanoparticle film. Nanotechnology, 2022, 33, 105702.	1.3	2
40	High Resolution Patterning of Silica Nanoparticle-Based Ionogels by Reverse-offset Printing and its Characterization. Flexible and Printed Electronics, 0, , .	1.5	2
41	Digital image analysis for measuring nanogap distance produced by adhesion lithography. Nanotechnology, 2019, 30, 285303.	1.3	1
42	Respiratory and Cardiac Signal From Accelerometer Gently Contacting on Torso. , 2020, , .		1
43	Droplet Handling for Chemical Reactors Using a Digital Microfluidic Device. Chemistry Letters, 2021, 50, 213-216.	0.7	1
44	Colloidal solution of boron and phosphorus codoped silicon quantum dots -from material development to applications. Japanese Journal of Applied Physics, 0, , .	0.8	1
45	All-inorganic water-dispersible silicon quantum dots. SPIE Newsroom, 0, , .	0.1	1
46	Noncontact Rapid Vapor Sensor Using Capillary Condensation to Monitor Ethanol in Sanitizer. IEEE Electron Device Letters, 2022, 43, 1323-1326.	2.2	1
47	Characterization of Nanoparticle Adsorption on Polydimethylsiloxane-Based Microchannels. Sensors, 2021, 21, 1978.	2.1	0
48	Force Sensor Using Ionic Liquid Capillary Bridge. , 2021, , .		0