Panos Datskos

List of Publications by Year in Descending Order

Source: https://exaly.com/author-pdf/8632120/panos-datskos-publications-by-year.pdf
Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.
The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

119 papers	5,323 citations	35 h-index	71 g-index
135 ext. papers	5,870 ext. citations	4.6 avg, IF	5.41 L-index

#	Paper	IF	Citations
119	Standoff Imaging of Trace RDX Using Quantum Cascade Lasers. *IEEE Sensors Journal*, **2020**, 20, 149-154	4	3
118	Optically read Coriolis vibratory gyroscope based on a silicon tuning fork. *Microsystems and Nanoengineering*, **2019**, 5, 47	7.7	3
117	Evaluation of Porous Silicon Oxide on Silicon Microcantilevers for Sensitive Detection of Gaseous HF. *Analytical Chemistry*, **2017**, 89, 6272-6276	7.8	7
116	Synthesis of Half-Sphere/Half-Funnel-Shaped Silica Structures by Reagent Localization and the Role of Water in Shape Control. *Chemistry - A European Journal*, **2016**, 22, 18700-18704	4.8	4
115	Colloidosome like structures: self-assembly of silica microrods. *RSC Advances*, **2016**, 6, 26734-26737	3.7	10
114	Multi-spectral Infrared Computed Tomography. *IS&T International Symposium on Electronic Imaging*, **2016**, 2016, 1-5	1	1
113	Optically transparent and environmentally durable superhydrophobic coating based on functionalized SiO□nanoparticles. *Nanotechnology*, **2015**, 26, 055602	3.4	44
112	Control of membrane permeability in air-stable droplet interface bilayers. *Langmuir*, **2015**, 31, 4224-31	4	7
111	Strong and electrically conductive graphene-based composite fibers and laminates. *ACS Applied Materials & Interfaces*, **2015**, 7, 10702-9	9.5	48
110	In situ capping for size control of monochalcogenide (ZnS, CdS and SnS) nanocrystals produced by anaerobic metal-reducing bacteria. *Nanotechnology*, **2015**, 26, 325602	3.4	9
109	Step-by-Step Growth of Complex Oxide Microstructures. *Angewandte Chemie*, **2015**, 127, 9139-9143	3.6	7
108	Step-by-Step Growth of Complex Oxide Microstructures. *Angewandte Chemie - International Edition*, **2015**, 54, 9011-5	16.4	28
107	Synthesis of Hexagonal Boron Nitride Monolayer: Control of Nucleation and Crystal Morphology. *Chemistry of Materials*, **2015**, 27, 8041-8047	9.6	153
106	Addressable morphology control of silica structures by manipulating the reagent addition time. *RSC Advances*, **2014**, 4, 2291-2294	3.7	16
105	Air-stable droplet interface bilayers on oil-infused surfaces. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 7588-93	11.5	103
104	Synthesis of very small diameter silica nanofibers using sound waves. *Chemical Communications*, **2014**, 50, 7277-9	5.8	9
103	Scalable superhydrophobic coatings based on fluorinated diatomaceous earth: Abrasion resistance versus particle geometry. *Applied Surface Science*, **2014**, 292, 563-569	6.7	42

102	Pyroelectric Energy Scavenging Techniques for Self-Powered Nuclear Reactor Wireless Sensor Networks. *Nuclear Technology*, **2014**, 188, 172-184	1.4	9
101	Synthesis of segmented silica rods by regulation of the growth temperature. *Angewandte Chemie - International Edition*, **2014**, 53, 451-4	16.4	30
100	Synthesis of Segmented Silica Rods by Regulation of the Growth Temperature. *Angewandte Chemie* , **2014**, 126, 461-464	3.6	10
99	Low cost anti-soiling coatings for CSP collector mirrors and heliostats **2014**,		5
98	Spray-on superhydrophobic coatings with high mechanical durability for anti-corrosion and anti-soiling applications **2014**,		2
97	Enhanced Durability Transparent Superhydrophobic Anti-Soiling Coatings for CSP Applications **2014**,		4
96	Superhydrophobic analyte concentration utilizing colloid-pillar array SERS substrates. *Analytical Chemistry*, **2014**, 86, 11819-25	7.8	32
95	Spray-on anti-soiling coatings that exhibit high transparency and mechanical durability **2014**,		2
94	Graphene Nucleation Density on Copper: Fundamental Role of Background Pressure. *Journal of Physical Chemistry C*, **2013**, 117, 18919-18926	3.8	162
93	Large scale atmospheric pressure chemical vapor deposition of graphene. *Carbon*, **2013**, 54, 58-67	10.4	212
92	Infrared microcalorimetric spectroscopy using quantum cascade lasers. *Optics Letters*, **2013**, 38, 507-9	3	5
91	Review of pyroelectric thermal energy harvesting and new MEMs-based resonant energy conversion techniques **2012**,		23
90	Characterization of hydrogen responsive nanoporous palladium films synthesized via a spontaneous galvanic displacement reaction. *Nanotechnology*, **2012**, 23, 465403	3.4	6
89	Detection of electromagnetic waves using charged cantilevers. *Applied Physics Letters*, **2012**, 100, 103108	3.4	
88	Infrared imaging using arrays of SiO2 micromechanical detectors. *Optics Letters*, **2012**, 37, 3966-8	3	8
87	Electrical and thermal conductivity of low temperature CVD graphene: the effect of disorder. *Nanotechnology*, **2011**, 22, 275716	3.4	113
86	Standoff imaging of chemicals using IR spectroscopy **2011**,		10
85	Role of hydrogen in chemical vapor deposition growth of large single-crystal graphene. *ACS Nano*, **2011**, 5, 6069-76	16.7	700

84	Development of MEMS based pyroelectric thermal energy harvesters **2011**,		24
83	A Finite Element Model of Self-Resonating Bimorph Microcantilever for Fast Temperature Cycling in A Pyroelectric Energy Harvester. *Materials Research Society Symposia Proceedings*, **2011**, 1325, 159		3
82	Sensor Science for National Security. *NATO Science for Peace and Security Series C: Environmental Security*, **2009**, 461-478	0.3	
81	Sorption-induced static bending of microcantilevers coated with viscoelastic material. *Journal of Applied Physics*, **2008**, 103, 064913	2.5	31
80	Arrays of SiO2 substrate-free micromechanical uncooled infrared and terahertz detectors. *Journal of Applied Physics*, **2008**, 104, 054508	2.5	28
79	Progress with MEMS based UGS (IR/THz) **2008**,		3
78	Bimaterial Microcantilevers as a Hybrid Sensing Platform. *Advanced Materials*, **2008**, 20, 653-680	24	155
77	Facile hyphenation of gas chromatography and a microcantilever array sensor for enhanced selectivity. *Analytical Chemistry*, **2007**, 79, 364-70	7.8	23
76	Differentially ligand-functionalized microcantilever arrays for metal ion identification and sensing. *Analytical Chemistry*, **2007**, 79, 7062-8	7.8	32
75	Microcantilever sensors with chemically selective coatings of ionic liquids. *AICHE Journal*, **2007**, 53, 2726-2731	3.6	3
74	Independent component analysis of nanomechanical responses of cantilever arrays. *Analytica Chimica Acta*, **2007**, 584, 101-5	6.6	25
73	Development of a nanomechanical biosensor for analysis of endocrine disrupting chemicals. *Lab on A Chip*, **2007**, 7, 1184-91	7.2	15
72	Uncooled MEMS IR imagers with optical readout and image processing **2007**,		7
71	Rapid Detection of Analytes with Improved Selectivity Using Coated Microcantilever Chemical Sensors and Estimation Theory **2007**,		5
70	Uncooled infrared imaging using bimaterial microcantilever arrays **2006**,		4
69	Uncooled infrared imaging using bimaterial microcantilever arrays. *Applied Physics Letters*, **2006**, 89, 073114	3.8	53
68	Chemical Sensors Based on Funstionalized Microcantilever Arrays **2006**,		1
67	Analyte species and concentration identification using differentially functionalized microcantilever arrays and artificial neural networks. *Analytica Chimica Acta*, **2006**, 558, 94-101	6.6	49

66	Characterization of ligand-functionalized microcantilevers for metal ion sensing. *Analytical Chemistry*, **2005**, 77, 6601-8	7.8	33
65	Nanostructured cantilevers as nanomechanical immunosensors for cytokine detection. *Nanobiotechnology*, **2005**, 1, 237-244		10
64	Performance of uncooled microcantilever thermal detectors. *Review of Scientific Instruments*, **2004**, 75, 1134-1148	1.7	122
63	Non-contact current measurement with cobalt-coated microcantilevers. *Sensors and Actuators A: Physical*, **2004**, 112, 32-35	3.9	16
62	Cantilever transducers as a platform for chemical and biological sensors. *Review of Scientific Instruments*, **2004**, 75, 2229-2253	1.7	870
61	Micromechanical Sensors. *Nanostructure Science and Technology*, **2004**, 417-439	0.9	2
60	Response Signatures for Nanostructured, Optically-Probed, Functionalized Microcantilever Sensing Arrays. *Sensor Letters*, **2004**, 2, 238-245	0.9	14
59	Enhancing chemi-mechanical transduction in microcantilever chemical sensing by surface modification. *Ultramicroscopy*, **2003**, 97, 417-24	3.1	44
58	IR imaging using uncooled microcantilever detectors. *Ultramicroscopy*, **2003**, 97, 451-8	3.1	56
57	Detection and differentiation of biological species using microcalorimetric spectroscopy. *Ultramicroscopy*, **2003**, 97, 459-65	3.1	40
56	Feasibility of tunable MEMS photonic crystal devices. *Ultramicroscopy*, **2003**, 97, 473-9	3.1	20
55	Detection of anthrax simulants with microcalorimetric spectroscopy: Bacillus subtilis and Bacillus cereus spores. *Applied Optics*, **2003**, 42, 1757-62	1.7	26
54	Femtogram mass detection using photothermally actuated nanomechanical resonators. *Applied Physics Letters*, **2003**, 82, 2697-2699	3.4	241
53	Enantioselective sensors based on antibody-mediated nanomechanics. *Analytical Chemistry*, **2003**, 75, 2342-8	7.8	76
52	Detection of Explosive Compounds with the Use of Microcantilevers with Nanoporous Coatings. *Sensor Letters*, **2003**, 1, 25-32	0.9	34
51	An atomic force microscope-based investigation of vertical transport through GaAs/GaAlAs/InAlAs/GaAs step-barrier heterostructures. *Ultramicroscopy*, **2002**, 91, 133-8	3.1	3
50	Self-leveling uncooled microcantilever thermal detector. *Applied Physics Letters*, **2002**, 81, 1306-1308	3.4	46
49	Nanostructured microcantilevers with functionalized cyclodextrin receptor phases: self-assembled monolayers and vapor-deposited films. *Analytical Chemistry*, **2002**, 74, 3118-26	7.8	58

48	Microcantilever transducers: a new approach in sensor technology. *Analytical Chemistry*, **2002**, 74, 568A-575A	7.8	140
47	Nanocantilever signal transduction by electron transfer. *Journal of Nanoscience and Nanotechnology*, **2002**, 2, 369-73	1.3	10
46	Fabrication of quantum well microcantilever photon detectors. *Ultramicroscopy*, **2001**, 86, 191-206	3.1	18
45	Enhanced chemi-mechanical transduction at nanostructured interfaces. *Chemical Physics Letters*, **2001**, 336, 371-376	2.5	60
44	Gold Nano-Structures for Transduction of Biomolecular Interactions into Micrometer Scale Movements. *Biomedical Microdevices*, **2001**, 3, 35-44	3.7	79
43	Photomechanical chemical microsensors. *Sensors and Actuators B: Chemical*, **2001**, 76, 393-402	8.5	45
42	Sensing and actuating functionality of hybrid MEMS combining enhanced chemi-mechanical transduction with surface-enhanced Raman spectroscopy **2001**,		3
41	Chemical detection based on adsorption-induced and photoinduced stresses in microelectromechanical systems devices. *Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena*, **2001**, 19, 1173		51
40	Hybrid Nanostructured Microcantilevers for Enhanced Chemimechanical Transduction and Surface Enhanced Raman Spectrocopy **2001**, 450-452		
39	Optical readout of uncooled thermal detectors **2000**, 4130, 185		2
38	Micromechanical uncooled photon detectors **2000**, 3948, 80		7
37	Selectivity of chemical sensors based on micro-cantilevers coated with thin polymer films. *Analytica Chimica Acta*, **2000**, 422, 89-99	6.6	83
36	Detection of infrared photons using the electronic stress in metal-semiconductor cantilever interfaces. *Ultramicroscopy*, **2000**, 82, 49-56	3.1	25
35	Modification of micro-cantilever sensors with sol-gels to enhance performance and immobilize chemically selective phases. *Talanta*, **2000**, 53, 599-608	6.2	36
34	Ultraresponsive thermal sensors for the detection of explosives using calorimetric spectroscopy (CalSpec) **1999**,		9
33	Detection of 2-mercaptoethanol using gold-coated micromachined cantilevers. *Sensors and Actuators B: Chemical*, **1999**, 61, 75-82	8.5	65
32	Detection of infrared photons using the electronic stress in metal-semiconductor interfaces **1999**,		5
31	Photoinduced and thermal stress in silicon microcantilevers. *Applied Physics Letters*, **1998**, 73, 2319-2321	3.4	60

30	Electron attachment to photofragments and Rydberg states in laser-irradiated CCl2F2. *Journal of Applied Physics*, **1998**, 84, 3442-3450	2.5	5
29	Electron attachment to boron trichloride. *Journal of Applied Physics*, **1998**, 84, 5805-5807	2.5	3
28	Novel photon detection based on electronically induced stress in silicon **1998**, 3379, 173		5
27	Electron attachment to thermally excited trichlorotrifluoroethane (1, 1, 2-). *Journal Physics D: Applied Physics*, **1997**, 30, 2596-2602	3	2
26	Photophysical and electron attachment properties of ArF-excimer-laser irradiated H2. *Physical Review A*, **1997**, 55, 4131-4142	2.6	29
25	Electron attachment to excited states of silane: Implications for plasma processing discharges. *Journal of Applied Physics*, **1997**, 81, 7715-7727	2.5	31
24	Optical and infrared detection using microcantilevers **1996**,		9
23	Remote optical detection using microcantilevers. *Review of Scientific Instruments*, **1996**, 67, 3434-3439	1.7	84
22	Piezoresistive microcantilever optimization for uncooled infrared detection technology **1996**, 2817, 179		2
21	Uncooled thermal imaging using a piezoresistive microcantilever. *Applied Physics Letters*, **1996**, 69, 3277-3279	3.4	74
20	Novel technique for real-time monitoring of electron attachment to laser-excited molecules. *Journal of Chemical Physics*, **1996**, 104, 8382-8392	3.9	12
19	Remote infrared radiation detection using piezoresistive microcantilevers. *Applied Physics Letters*, **1996**, 69, 2986-2988	3.4	81
18	Photodetachment of SF6. *Chemical Physics Letters*, **1995**, 239, 38-43	2.5	30
17	Photodetachment in the gaseous, liquid, and solid states of matter. *Journal of Chemical Physics*, **1994**, 101, 6728-6742	3.9	23
16	Response to "Comment on "Temperature-enhanced electron detachment from C6F6 negative ions" [J. Chem. Phys. 100, 6981 (1994)]. *Journal of Chemical Physics*, **1994**, 100, 6983-6983	3.9	
15	Effect of Temperature on the Electron Attachment and Detachment Properties of c-C4F6 **1994**, 13-20		
14	Attachment of Low Energy Electrons to "Hot" SF6 Molecules **1994**, 23-30		1
13	Electron Attachment to Excited Molecules. *NATO ASI Series Series B: Physics*, **1994**, 415-442		4

12	Temperature dependence of electron attachment and detachment in SF6 and c-C4F6. *Journal of Chemical Physics*, **1993**, 99, 8607-8616	3.9	39
11	Temperature-enhanced electron detachment from C6F6 negative ions. *Journal of Chemical Physics*, **1993**, 98, 7875-7882	3.9	26
10	Effect of temperature on the attachment of slow (1 eV) electrons to CH3Br. *Journal of Chemical Physics*, **1992**, 97, 9031-9035	3.9	35
9	Ionization coefficients in selected gas mixtures of interest to particle detectors. *Journal of Applied Physics*, **1992**, 71, 15-21	2.5	24
8	Effect of Temperature on the Dissociative and Nondissociative Electron Attachment to Freons. *Zeitschrift Fur Elektrotechnik Und Elektrochemie*, **1992**, 96, 448-450		5
7	Temperature-enhanced autodetachment from c-C4F8*. *Chemical Physics Letters*, **1992**, 195, 329-332	2.5	6
6	Effect of vibrational excitation on electron transport in gases. *Chemical Physics Letters*, **1991**, 186, 11-14	2.5	9
5	Temperature Dependence of the Dissociative Electron Attachment to CH3Cl and C2H5Cl **1991**, 35-42		1
4	Temperature-enhanced electron attachment to CH3Cl. *Chemical Physics Letters*, **1990**, 168, 324-329	2.5	30
3	The ionization threshold of N,N,N′,N′-tetramethyl-p-phenylenediamine in dense fluid ethane; effects of fluid density and temperature. *Journal of Chemical Physics*, **1989**, 90, 6619-6626	3.9	14
2	Variation with temperature of the electron attachment to SO2F2. *Journal of Chemical Physics*, **1989**, 90, 2626-2630	3.9	17
1	Variation of the electron attachment to n-C4F10 with temperature. *Journal of Chemical Physics*, **1987**, 86, 1982-1990	3.9	24