

# Panos Datskos

## List of Publications by Citations

**Source:** <https://exaly.com/author-pdf/8632120/panos-datskos-publications-by-citations.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	Cantilever transducers as a platform for chemical and biological sensors. <i>Review of Scientific Instruments</i> , <b>2004</b> , 75, 2229-2253	1.7	870
118	Role of hydrogen in chemical vapor deposition growth of large single-crystal graphene. <i>ACS Nano</i> , <b>2011</b> , 5, 6069-76	16.7	700
117	Femtogram mass detection using photothermally actuated nanomechanical resonators. <i>Applied Physics Letters</i> , <b>2003</b> , 82, 2697-2699	3.4	241
116	Large scale atmospheric pressure chemical vapor deposition of graphene. <i>Carbon</i> , <b>2013</b> , 54, 58-67	10.4	212
115	Graphene Nucleation Density on Copper: Fundamental Role of Background Pressure. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 18919-18926	3.8	162
114	Bimaterial Microcantilevers as a Hybrid Sensing Platform. <i>Advanced Materials</i> , <b>2008</b> , 20, 653-680	24	155
113	Synthesis of Hexagonal Boron Nitride Monolayer: Control of Nucleation and Crystal Morphology. <i>Chemistry of Materials</i> , <b>2015</b> , 27, 8041-8047	9.6	153
112	Microcantilever transducers: a new approach in sensor technology. <i>Analytical Chemistry</i> , <b>2002</b> , 74, 568A-575A	7.5	140
111	Performance of uncooled microcantilever thermal detectors. <i>Review of Scientific Instruments</i> , <b>2004</b> , 75, 1134-1148	1.7	122
110	Electrical and thermal conductivity of low temperature CVD graphene: the effect of disorder. <i>Nanotechnology</i> , <b>2011</b> , 22, 275716	3.4	113
109	Air-stable droplet interface bilayers on oil-infused surfaces. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2014</b> , 111, 7588-93	11.5	103
108	Remote optical detection using microcantilevers. <i>Review of Scientific Instruments</i> , <b>1996</b> , 67, 3434-3439	1.7	84
107	Selectivity of chemical sensors based on micro-cantilevers coated with thin polymer films. <i>Analytica Chimica Acta</i> , <b>2000</b> , 422, 89-99	6.6	83
106	Remote infrared radiation detection using piezoresistive microcantilevers. <i>Applied Physics Letters</i> , <b>1996</b> , 69, 2986-2988	3.4	81
105	Gold Nano-Structures for Transduction of Biomolecular Interactions into Micrometer Scale Movements. <i>Biomedical Microdevices</i> , <b>2001</b> , 3, 35-44	3.7	79
104	Enantioselective sensors based on antibody-mediated nanomechanics. <i>Analytical Chemistry</i> , <b>2003</b> , 75, 2342-8	7.8	76
103	Uncooled thermal imaging using a piezoresistive microcantilever. <i>Applied Physics Letters</i> , <b>1996</b> , 69, 3277-3279	3.4	74

102	Detection of 2-mercaptoethanol using gold-coated micromachined cantilevers. <i>Sensors and Actuators B: Chemical</i> , <b>1999</b> , 61, 75-82	8.5	65
101	Enhanced chemi-mechanical transduction at nanostructured interfaces. <i>Chemical Physics Letters</i> , <b>2001</b> , 336, 371-376	2.5	60
100	Photoinduced and thermal stress in silicon microcantilevers. <i>Applied Physics Letters</i> , <b>1998</b> , 73, 2319-2321	3.4	60
99	Nanostructured microcantilevers with functionalized cyclodextrin receptor phases: self-assembled monolayers and vapor-deposited films. <i>Analytical Chemistry</i> , <b>2002</b> , 74, 3118-26	7.8	58
98	IR imaging using uncooled microcantilever detectors. <i>Ultramicroscopy</i> , <b>2003</b> , 97, 451-8	3.1	56
97	Uncooled infrared imaging using bimaterial microcantilever arrays. <i>Applied Physics Letters</i> , <b>2006</b> , 89, 073118	3.18	53
96	Chemical detection based on adsorption-induced and photoinduced stresses in microelectromechanical systems devices. <i>Journal of Vacuum Science &amp; Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , <b>2001</b> , 19, 1173		51
95	Analyte species and concentration identification using differentially functionalized microcantilever arrays and artificial neural networks. <i>Analytica Chimica Acta</i> , <b>2006</b> , 558, 94-101	6.6	49
94	Strong and electrically conductive graphene-based composite fibers and laminates. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2015</b> , 7, 10702-9	9.5	48
93	Self-leveling uncooled microcantilever thermal detector. <i>Applied Physics Letters</i> , <b>2002</b> , 81, 1306-1308	3.4	46
92	Photomechanical chemical microsensors. <i>Sensors and Actuators B: Chemical</i> , <b>2001</b> , 76, 393-402	8.5	45
91	Optically transparent and environmentally durable superhydrophobic coating based on functionalized SiO <sub>2</sub> nanoparticles. <i>Nanotechnology</i> , <b>2015</b> , 26, 055602	3.4	44
90	Enhancing chemi-mechanical transduction in microcantilever chemical sensing by surface modification. <i>Ultramicroscopy</i> , <b>2003</b> , 97, 417-24	3.1	44
89	Scalable superhydrophobic coatings based on fluorinated diatomaceous earth: Abrasion resistance versus particle geometry. <i>Applied Surface Science</i> , <b>2014</b> , 292, 563-569	6.7	42
88	Detection and differentiation of biological species using microcalorimetric spectroscopy. <i>Ultramicroscopy</i> , <b>2003</b> , 97, 459-65	3.1	40
87	Temperature dependence of electron attachment and detachment in SF <sub>6</sub> and c-C <sub>4</sub> F <sub>6</sub> . <i>Journal of Chemical Physics</i> , <b>1993</b> , 99, 8607-8616	3.9	39
86	Modification of micro-cantilever sensors with sol-gels to enhance performance and immobilize chemically selective phases. <i>Talanta</i> , <b>2000</b> , 53, 599-608	6.2	36
85	Effect of temperature on the attachment of slow (1 eV) electrons to CH <sub>3</sub> Br. <i>Journal of Chemical Physics</i> , <b>1992</b> , 97, 9031-9035	3.9	35

84	Detection of Explosive Compounds with the Use of Microcantilevers with Nanoporous Coatings. <i>Sensor Letters</i> , <b>2003</b> , 1, 25-32	0.9	34
83	Characterization of ligand-functionalized microcantilevers for metal ion sensing. <i>Analytical Chemistry</i> , <b>2005</b> , 77, 6601-8	7.8	33
82	Superhydrophobic analyte concentration utilizing colloid-pillar array SERS substrates. <i>Analytical Chemistry</i> , <b>2014</b> , 86, 11819-25	7.8	32
81	Differentially ligand-functionalized microcantilever arrays for metal ion identification and sensing. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 7062-8	7.8	32
80	Electron attachment to excited states of silane: Implications for plasma processing discharges. <i>Journal of Applied Physics</i> , <b>1997</b> , 81, 7715-7727	2.5	31
79	Sorption-induced static bending of microcantilevers coated with viscoelastic material. <i>Journal of Applied Physics</i> , <b>2008</b> , 103, 064913	2.5	31
78	Synthesis of segmented silica rods by regulation of the growth temperature. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 451-4	16.4	30
77	Photodetachment of SF <sub>6</sub> <sup>-</sup> . <i>Chemical Physics Letters</i> , <b>1995</b> , 239, 38-43	2.5	30
76	Temperature-enhanced electron attachment to CH <sub>3</sub> Cl. <i>Chemical Physics Letters</i> , <b>1990</b> , 168, 324-329	2.5	30
75	Photophysical and electron attachment properties of ArF-excimer-laser irradiated H <sub>2</sub> . <i>Physical Review A</i> , <b>1997</b> , 55, 4131-4142	2.6	29
74	Step-by-Step Growth of Complex Oxide Microstructures. <i>Angewandte Chemie - International Edition</i> , <b>2015</b> , 54, 9011-5	16.4	28
73	Arrays of SiO <sub>2</sub> substrate-free micromechanical uncooled infrared and terahertz detectors. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 054508	2.5	28
72	Detection of anthrax simulants with microcalorimetric spectroscopy: <i>Bacillus subtilis</i> and <i>Bacillus cereus</i> spores. <i>Applied Optics</i> , <b>2003</b> , 42, 1757-62	1.7	26
71	Temperature-enhanced electron detachment from C <sub>6</sub> F <sub>6</sub> <sup>-</sup> negative ions. <i>Journal of Chemical Physics</i> , <b>1993</b> , 98, 7875-7882	3.9	26
70	Independent component analysis of nanomechanical responses of cantilever arrays. <i>Analytica Chimica Acta</i> , <b>2007</b> , 584, 101-5	6.6	25
69	Detection of infrared photons using the electronic stress in metal-semiconductor cantilever interfaces. <i>Ultramicroscopy</i> , <b>2000</b> , 82, 49-56	3.1	25
68	Development of MEMS based piezoelectric thermal energy harvesters <b>2011</b> ,		24
67	Ionization coefficients in selected gas mixtures of interest to particle detectors. <i>Journal of Applied Physics</i> , <b>1992</b> , 71, 15-21	2.5	24

66	Variation of the electron attachment to n-C <sub>4</sub> F <sub>10</sub> with temperature. <i>Journal of Chemical Physics</i> , <b>1987</b> , 86, 1982-1990	3.9	24
65	Review of pyroelectric thermal energy harvesting and new MEMs-based resonant energy conversion techniques <b>2012</b> ,		23
64	Facile hyphenation of gas chromatography and a microcantilever array sensor for enhanced selectivity. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 364-70	7.8	23
63	Photodetachment in the gaseous, liquid, and solid states of matter. <i>Journal of Chemical Physics</i> , <b>1994</b> , 101, 6728-6742	3.9	23
62	Feasibility of tunable MEMS photonic crystal devices. <i>Ultramicroscopy</i> , <b>2003</b> , 97, 473-9	3.1	20
61	Fabrication of quantum well microcantilever photon detectors. <i>Ultramicroscopy</i> , <b>2001</b> , 86, 191-206	3.1	18
60	Variation with temperature of the electron attachment to SO <sub>2</sub> F <sub>2</sub> . <i>Journal of Chemical Physics</i> , <b>1989</b> , 90, 2626-2630	3.9	17
59	Addressable morphology control of silica structures by manipulating the reagent addition time. <i>RSC Advances</i> , <b>2014</b> , 4, 2291-2294	3.7	16
58	Non-contact current measurement with cobalt-coated microcantilevers. <i>Sensors and Actuators A: Physical</i> , <b>2004</b> , 112, 32-35	3.9	16
57	Development of a nanomechanical biosensor for analysis of endocrine disrupting chemicals. <i>Lab on A Chip</i> , <b>2007</b> , 7, 1184-91	7.2	15
56	The ionization threshold of N,N,N,N-tetramethyl-p-phenylenediamine in dense fluid ethane; effects of fluid density and temperature. <i>Journal of Chemical Physics</i> , <b>1989</b> , 90, 6619-6626	3.9	14
55	Response Signatures for Nanostructured, Optically-Probed, Functionalized Microcantilever Sensing Arrays. <i>Sensor Letters</i> , <b>2004</b> , 2, 238-245	0.9	14
54	Novel technique for real-time monitoring of electron attachment to laser-excited molecules. <i>Journal of Chemical Physics</i> , <b>1996</b> , 104, 8382-8392	3.9	12
53	Colloidosome like structures: self-assembly of silica microrods. <i>RSC Advances</i> , <b>2016</b> , 6, 26734-26737	3.7	10
52	Synthesis of Segmented Silica Rods by Regulation of the Growth Temperature. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 461-464	3.6	10
51	Standoff imaging of chemicals using IR spectroscopy <b>2011</b> ,		10
50	Nanostructured cantilevers as nanomechanical immunosensors for cytokine detection. <i>Nanobiotechnology</i> , <b>2005</b> , 1, 237-244		10
49	Nanocantilever signal transduction by electron transfer. <i>Journal of Nanoscience and Nanotechnology</i> , <b>2002</b> , 2, 369-73	1.3	10

48	In situ capping for size control of monochalcogenide (ZnS, CdS and SnS) nanocrystals produced by anaerobic metal-reducing bacteria. <i>Nanotechnology</i> , <b>2015</b> , 26, 325602	3.4	9
47	Synthesis of very small diameter silica nanofibers using sound waves. <i>Chemical Communications</i> , <b>2014</b> , 50, 7277-9	5.8	9
46	Pyroelectric Energy Scavenging Techniques for Self-Powered Nuclear Reactor Wireless Sensor Networks. <i>Nuclear Technology</i> , <b>2014</b> , 188, 172-184	1.4	9
45	Optical and infrared detection using microcantilevers <b>1996</b> ,		9
44	Ultraresponsive thermal sensors for the detection of explosives using calorimetric spectroscopy (CalSpec) <b>1999</b> ,		9
43	Effect of vibrational excitation on electron transport in gases. <i>Chemical Physics Letters</i> , <b>1991</b> , 186, 11-14	2.5	9
42	Infrared imaging using arrays of SiO <sub>2</sub> micromechanical detectors. <i>Optics Letters</i> , <b>2012</b> , 37, 3966-8	3	8
41	Evaluation of Porous Silicon Oxide on Silicon Microcantilevers for Sensitive Detection of Gaseous HF. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 6272-6276	7.8	7
40	Control of membrane permeability in air-stable droplet interface bilayers. <i>Langmuir</i> , <b>2015</b> , 31, 4224-31	4	7
39	Step-by-Step Growth of Complex Oxide Microstructures. <i>Angewandte Chemie</i> , <b>2015</b> , 127, 9139-9143	3.6	7
38	Uncooled MEMS IR imagers with optical readout and image processing <b>2007</b> ,		7
37	Micromechanical uncooled photon detectors <b>2000</b> , 3948, 80		7
36	Characterization of hydrogen responsive nanoporous palladium films synthesized via a spontaneous galvanic displacement reaction. <i>Nanotechnology</i> , <b>2012</b> , 23, 465403	3.4	6
35	Temperature-enhanced autodetachment from c-C <sub>4</sub> F <sub>8</sub> *. <i>Chemical Physics Letters</i> , <b>1992</b> , 195, 329-332	2.5	6
34	Low cost anti-soiling coatings for CSP collector mirrors and heliostats <b>2014</b> ,		5
33	Infrared microcalorimetric spectroscopy using quantum cascade lasers. <i>Optics Letters</i> , <b>2013</b> , 38, 507-9	3	5
32	Rapid Detection of Analytes with Improved Selectivity Using Coated Microcantilever Chemical Sensors and Estimation Theory <b>2007</b> ,		5
31	Electron attachment to photofragments and Rydberg states in laser-irradiated CCl <sub>2</sub> F <sub>2</sub> . <i>Journal of Applied Physics</i> , <b>1998</b> , 84, 3442-3450	2.5	5

30	Novel photon detection based on electronically induced stress in silicon <b>1998</b> , 3379, 173		5
29	Detection of infrared photons using the electronic stress in metal-semiconductor interfaces <b>1999</b> ,		5
28	Effect of Temperature on the Dissociative and Nondissociative Electron Attachment to Freons. <i>Zeitschrift Fur Elektrotechnik Und Elektrochemie</i> , <b>1992</b> , 96, 448-450		5
27	Synthesis of Half-Sphere/Half-Funnel-Shaped Silica Structures by Reagent Localization and the Role of Water in Shape Control. <i>Chemistry - A European Journal</i> , <b>2016</b> , 22, 18700-18704	4.8	4
26	Enhanced Durability Transparent Superhydrophobic Anti-Soiling Coatings for CSP Applications <b>2014</b> ,		4
25	Uncooled infrared imaging using bimaterial microcantilever arrays <b>2006</b> ,		4
24	Electron Attachment to Excited Molecules. <i>NATO ASI Series Series B: Physics</i> , <b>1994</b> , 415-442		4
23	Optically read Coriolis vibratory gyroscope based on a silicon tuning fork. <i>Microsystems and Nanoengineering</i> , <b>2019</b> , 5, 47	7.7	3
22	A Finite Element Model of Self-Resonating Bimorph Microcantilever for Fast Temperature Cycling in A Pyroelectric Energy Harvester. <i>Materials Research Society Symposia Proceedings</i> , <b>2011</b> , 1325, 159		3
21	Progress with MEMS based UGS (IR/THz) <b>2008</b> ,		3
20	Microcantilever sensors with chemically selective coatings of ionic liquids. <i>AIChE Journal</i> , <b>2007</b> , 53, 2726-2731		3
19	An atomic force microscope-based investigation of vertical transport through GaAs/GaAlAs/InAlAs/GaAs step-barrier heterostructures. <i>Ultramicroscopy</i> , <b>2002</b> , 91, 133-8	3.1	3
18	Sensing and actuating functionality of hybrid MEMS combining enhanced chemi-mechanical transduction with surface-enhanced Raman spectroscopy <b>2001</b> ,		3
17	Electron attachment to boron trichloride. <i>Journal of Applied Physics</i> , <b>1998</b> , 84, 5805-5807	2.5	3
16	Standoff Imaging of Trace RDX Using Quantum Cascade Lasers. <i>IEEE Sensors Journal</i> , <b>2020</b> , 20, 149-154	4	3
15	Spray-on superhydrophobic coatings with high mechanical durability for anti-corrosion and anti-soiling applications <b>2014</b> ,		2
14	Spray-on anti-soiling coatings that exhibit high transparency and mechanical durability <b>2014</b> ,		2
13	Electron attachment to thermally excited trichlorotrifluoroethane (1, 1, 2-). <i>Journal Physics D: Applied Physics</i> , <b>1997</b> , 30, 2596-2602	3	2

12	Micromechanical Sensors. <i>Nanostructure Science and Technology</i> , <b>2004</b> , 417-439	0.9	2
11	Optical readout of uncooled thermal detectors <b>2000</b> , 4130, 185		2
10	Piezoresistive microcantilever optimization for uncooled infrared detection technology <b>1996</b> , 2817, 179		2
9	Chemical Sensors Based on Functionalized Microcantilever Arrays <b>2006</b> ,		1
8	Attachment of Low Energy Electrons to Hot $C_6F_6$ Molecules <b>1994</b> , 23-30		1
7	Multi-spectral Infrared Computed Tomography. <i>IS&amp;T International Symposium on Electronic Imaging</i> , <b>2016</b> , 2016, 1-5	1	1
6	Temperature Dependence of the Dissociative Electron Attachment to $CH_3Cl$ and $C_2H_5Cl$ <b>1991</b> , 35-42		1
5	Detection of electromagnetic waves using charged cantilevers. <i>Applied Physics Letters</i> , <b>2012</b> , 100, 103108	3.4	
4	Response to Comment on Temperature-enhanced electron detachment from $C_6F_6$ negative ions [J. Chem. Phys. 100, 6981 (1994)]. <i>Journal of Chemical Physics</i> , <b>1994</b> , 100, 6983-6983	3.9	
3	Hybrid Nanostructured Microcantilevers for Enhanced Chemimechanical Transduction and Surface Enhanced Raman Spectroscopy <b>2001</b> , 450-452		
2	Effect of Temperature on the Electron Attachment and Detachment Properties of $c-C_4F_6$ <b>1994</b> , 13-20		
1	Sensor Science for National Security. <i>NATO Science for Peace and Security Series C: Environmental Security</i> , <b>2009</b> , 461-478	0.3	