

# Thomas G Thundat

## List of Publications by Year in descending order

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439  
papers

19,010  
citations

9786

73  
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18130

120  
g-index

441  
all docs

441  
docs citations

441  
times ranked

17395  
citing authors

#	ARTICLE	IF	CITATIONS
1	Palladium Nanosheet-Based Dual Gas Sensors for Sensitive Room-Temperature Hydrogen and Carbon Monoxide Detection. ACS Sensors, 2022, 7, 225-234.	7.8	25
2	Standoff and Point Detection of Thin Polymer Layers Using Microcantilever Photothermal Spectroscopy. Journal of the Electrochemical Society, 2022, 169, 037501.	2.9	2
3	Ultrathin Palladium Nanowires for Fast and Hysteresis-Free H <sub>2</sub> Sensing. ACS Applied Nano Materials, 2022, 5, 5895-5905.	5.0	9
4	Photoinduced Multistable Resonance Frequency Switching of Phase Change Microstring at Room Temperature. Advanced Electronic Materials, 2022, 8, 2100819.	5.1	2
5	Localized anisotropic stress in the sodiation of antimony anode. Nano Energy, 2022, 98, 107349.	16.0	1
6	Pd Alloy Nanosheet Inks for Inkjet-Printable H <sub>2</sub> Sensors on Paper. Advanced Materials Interfaces, 2022, 9, .	3.7	3
7	Microcantilever: An Unique Apparatus to Revolve the Mechanical Stress in Batteries. ECS Meeting Abstracts, 2022, MA2022-01, 106-106.	0.0	0
8	Optimal floc structure for effective dewatering of polymer treated oil sands tailings. Minerals Engineering, 2021, 160, 106688.	4.3	5
9	Toward a mechanically stable solid electrolyte interphase. Matter, 2021, 4, 2119-2122.	10.0	4
10	Reduced Graphene Oxide-Wrapped Palladium Nanowires Coated with a Layer of Zeolitic Imidazolate Framework-8 for Hydrogen Sensing. ACS Applied Nano Materials, 2021, 4, 8081-8093.	5.0	17
11	Standoff Detection of Plastics. ECS Meeting Abstracts, 2021, MA2021-02, 1663-1663.	0.0	0
12	Micro-Fuel Cell Sensor-Based Transcutaneous Anesthesia Monitoring Systems (TAMS). ECS Meeting Abstracts, 2021, MA2021-02, 1673-1673.	0.0	0
13	Solving Power and Control Using Wireless Transmission Systems for Hard to Access Electrochemical Sensors. ECS Meeting Abstracts, 2021, MA2021-02, 1588-1588.	0.0	0
14	Microfluidic Cantilever Dynamics and Thermomechanics of DNA Melting Transitions. ECS Meeting Abstracts, 2021, MA2021-02, 1667-1667.	0.0	0
15	(Invited) Photothermal Cantilever Sensors for Soil Health Monitoring. ECS Meeting Abstracts, 2021, MA2021-02, 1669-1669.	0.0	0
16	(Invited) Measurement of Thermophysical Properties of Liquid Analytes Using Microfluidic Resonators via Photothermal Modulation. ECS Meeting Abstracts, 2021, MA2021-02, 1668-1668.	0.0	0
17	Review "Nanomechanical Calorimetric Infrared Spectroscopy using Bi-Material Microfluidic Cantilevers. Journal of the Electrochemical Society, 2020, 167, 037504.	2.9	10
18	Consistently High <i>V<sub>oc</sub></i> Values in p-i-n Type Perovskite Solar Cells Using Ni <sup>3+</sup> -Doped NiO Nanomesh as the Hole Transporting Layer. ACS Applied Materials & Interfaces, 2020, 12, 11467-11478.	8.0	48

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19	Transparent and Flexible Thermal Insulation Window Material. <i>Cell Reports Physical Science</i> , 2020, 1, 100140.	5.6	12
20	Effect of Surface and Interfacial Tension on the Resonance Frequency of Microfluidic Channel Cantilever. <i>Sensors</i> , 2020, 20, 6459.	3.8	1
21	Flexible Ultraviolet Photodetectors Based on One-Dimensional Gallium-Doped Zinc Oxide Nanostructures. <i>ACS Applied Electronic Materials</i> , 2020, 2, 3522-3529.	4.3	82
22	Evaporation dynamics of water droplets on superhydrophobic nanogras surfaces. <i>International Journal of Heat and Mass Transfer</i> , 2020, 160, 120149.	4.8	23
23	Hydrogen Sensing at Room Temperature Using Flame-Synthesized Palladium-Decorated Crumpled Reduced Graphene Oxide Nanocomposites. <i>ACS Sensors</i> , 2020, 5, 2344-2350.	7.8	38
24	Synthesis and Characterization of Zinc Phthalocyanine-Cellulose Nanocrystal (CNC) Conjugates: Toward Highly Functional CNCs. <i>ACS Applied Materials &amp; Interfaces</i> , 2020, 12, 43992-44006.	8.0	16
25	The effect of oxygen flow rate on metal-insulator transition (MIT) characteristics of vanadium dioxide (VO <sub>2</sub> ) thin films by pulsed laser deposition (PLD). <i>Applied Surface Science</i> , 2020, 529, 146995.	6.1	25
26	Mapping the surface potential, charge density and adhesion of cellulose nanocrystals using advanced scanning probe microscopy. <i>Carbohydrate Polymers</i> , 2020, 246, 116393.	10.2	9
27	Multi-Walled Carbon Nanotubes Decorated with Silver Nanoparticles for Acetone Gas Sensing at Room Temperature. <i>Journal of the Electrochemical Society</i> , 2020, 167, 167519.	2.9	75
28	Microfluidic resonators with two parallel channels for independent sample loading and effective density tuning. <i>Micro and Nano Systems Letters</i> , 2020, 8, .	3.7	3
29	Enhanced nanoplasmonic heating in standoff sensing of explosive residues with infrared reflection-absorption spectroscopy. <i>Optics Letters</i> , 2020, 45, 2144.	3.3	4
30	Perspective—Maintaining the Quality of Life in Depopulating Communities: Expanding Smart Sensing via a Novel Power Supply. <i>Journal of the Electrochemical Society</i> , 2020, 167, 037564.	2.9	1
31	(Invited) Additive Manufacturing: Sustainable Manufacturing of Flexible Sensors, Systems and Devices. <i>ECS Meeting Abstracts</i> , 2020, MA2020-01, 2200-2200.	0.0	3
32	(Invited) Receptor-Free and Label-Free Biomolecular Sensing Using Miniature Sensors. <i>ECS Meeting Abstracts</i> , 2020, MA2020-01, 1919-1919.	0.0	0
33	Separation and Quantum Tunneling of Photo-generated Carriers Using a Tribo-Induced Field. <i>Matter</i> , 2019, 1, 650-660.	10.0	56
34	Fabrication of Phase Change Microstring Resonators via Top Down Lithographic Techniques: Incorporation of VO <sub>2</sub> /TiO <sub>2</sub> Into Conventional Processes. <i>Journal of Microelectromechanical Systems</i> , 2019, 28, 766-775.	2.5	4
35	Investigating fouling at the pore-scale using a microfluidic membrane mimic filtration system. <i>Scientific Reports</i> , 2019, 9, 10587.	3.3	19
36	Magnetoelectric Coupling in Ni-Mn-In/PLZT Artificial Multiferroic Heterostructure and Its Application in Mid-IR Photothermal Modulation by External Magnetic Field. <i>ACS Applied Electronic Materials</i> , 2019, 1, 2226-2235.	4.3	12

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37	Thermal Characterization of Liquid Analytes via Photothermal Modulation of Microfluidic Resonators. , 2019, , .		0
38	Tribo-tunneling DC Generator with Carbon Aerogel/Silicon Multi-Nanocontacts. Advanced Electronic Materials, 2019, 5, 1900464.	5.1	46
39	Scaled-up Direct-Current Generation in MoS <sub>2</sub> Multilayer-Based Moving Heterojunctions. ACS Applied Materials & Interfaces, 2019, 11, 35404-35409.	8.0	55
40	Appearance of SERS activity in single silver nanoparticles by laser-induced reshaping. Nanoscale, 2019, 11, 321-330.	5.6	25
41	Mechanistic Understanding and Nanomechanics of Multiple Hydrogen-Bonding Interactions in Aqueous Environment. Journal of Physical Chemistry C, 2019, 123, 4540-4548.	3.1	19
42	Stretchable, Injectable, and Self-Healing Conductive Hydrogel Enabled by Multiple Hydrogen Bonding toward Wearable Electronics. Chemistry of Materials, 2019, 31, 4553-4563.	6.7	321
43	Structure, morphology, and luminescent behavior of RE <sup>3+</sup> -doped GdVO <sub>4</sub> thin films. Applied Physics A: Materials Science and Processing, 2019, 125, 1.	2.3	1
44	Sample Preparation in Centrifugal Microfluidic Discs for Human Serum Metabolite Analysis by Surface Assisted Laser Desorption/Ionization Mass Spectrometry. Analytical Chemistry, 2019, 91, 7570-7577.	6.5	17
45	Thermomechanical responses of microfluidic cantilever capture DNA melting and properties of DNA premelting states using picoliters of DNA solution. Applied Physics Letters, 2019, 114, .	3.3	12
46	Polypyrrole-Doped Conductive Supramolecular Elastomer with Stretchability, Rapid Self-Healing, and Adhesive Property for Flexible Electronic Sensors. ACS Applied Materials & Interfaces, 2019, 11, 18720-18729.	8.0	135
47	Resonant hair humidity sensors for disposable applications: Revisit the hair hygrometer. Sensors and Actuators B: Chemical, 2019, 292, 1-6.	7.8	4
48	Polymer Microelectromechanical Systems: Hydrogel Microelectromechanical System (MEMS) Resonators: Beyond Cost-Effective Sensing Platform (Adv. Mater. Technol. 3/2019). Advanced Materials Technologies, 2019, 4, 1970017.	5.8	0
49	Nanophotonic enhancement and improved electron extraction in perovskite solar cells using near-horizontally aligned TiO <sub>2</sub> nanorods. Journal of Power Sources, 2019, 417, 176-187.	7.8	17
50	Interfacial friction-induced electronic excitation mechanism for tribo-tunneling current generation. Materials Horizons, 2019, 6, 1020-1026.	12.2	70
51	Photothermal Cantilever Deflection Spectroscopy. Electrochemical Society Interface, 2019, 28, 55-57.	0.4	19
52	Dual Channel Microfluidic Resonators for Simultaneous Measurements of Liquid Analytes. , 2019, , .		3
53	Anomalous interfacial stress generation during sodium intercalation/extraction in MoS <sub>2</sub> thin-film anodes. Science Advances, 2019, 5, eaav2820.	10.3	60
54	Hydrogel Microelectromechanical System (MEMS) Resonators: Beyond Cost-Effective Sensing Platform. Advanced Materials Technologies, 2019, 4, 1800597.	5.8	12

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55	Development of a 3D-printed modified Scheludko-cell: Potential application for adsorption and thin liquid film study. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , 2019, 561, 341-348.	4.7	2
56	Collapse of house-of-cards clay structures and corresponding tailings dewatering induced by alternating electric fields. <i>Drying Technology</i> , 2019, 37, 1053-1067.	3.1	8
57	Electroless deposition of Fe-Ni alloys from acidic and alkaline solutions using hypophosphite as a reducing agent. <i>Journal of the Serbian Chemical Society</i> , 2019, 84, 1199-1208.	0.8	0
58	(Invited) Multi-Material Additive Manufacturing (3D/4D printing). <i>ECS Meeting Abstracts</i> , 2019, , .	0.0	0
59	Phase transformation induced modulation of the resonance frequency of VO <sub>2</sub> /TiO <sub>2</sub> coated microcantilevers. <i>MRS Advances</i> , 2018, 3, 359-364.	0.9	8
60	Surface State-Induced Anomalous Negative Thermal Quenching of Multiferroic BiFeO <sub>3</sub> Nanowires (Phys. Status Solidi RRL 1/2018). <i>Physica Status Solidi - Rapid Research Letters</i> , 2018, 12, 1870403.	2.4	1
61	Injectable Self-Healing Zwitterionic Hydrogels Based on Dynamic Benzoxaborole-Sugar Interactions with Tunable Mechanical Properties. <i>Biomacromolecules</i> , 2018, 19, 596-605.	5.4	81
62	Hybrid micromolding of silver micro fiber doped electrically conductive elastomeric composite polymer for flexible sensors and electronic devices. <i>Microsystem Technologies</i> , 2018, 24, 4159-4164.	2.0	12
63	Fabrication of antifouling and antibacterial polyethersulfone (PES)/cellulose nanocrystals (CNC) nanocomposite membranes. <i>Journal of Membrane Science</i> , 2018, 549, 350-356.	8.2	135
64	Robust fabrication of thin film polyamide-TiO <sub>2</sub> nanocomposite membranes with enhanced thermal stability and anti-biofouling propensity. <i>Scientific Reports</i> , 2018, 8, 784.	3.3	131
65	Sustained electron tunneling at unbiased metal-insulator-semiconductor triboelectric contacts. <i>Nano Energy</i> , 2018, 48, 320-326.	16.0	103
66	Portable Nanofiber-Light Addressable Potentiometric Sensor for Rapid <i>Escherichia coli</i> Detection in Orange Juice. <i>ACS Sensors</i> , 2018, 3, 815-822.	7.8	69
67	Direct-current triboelectricity generation by a sliding Schottky nanocontact on MoS <sub>2</sub> multilayers. <i>Nature Nanotechnology</i> , 2018, 13, 112-116.	31.5	230
68	Surface State-Induced Anomalous Negative Thermal Quenching of Multiferroic BiFeO <sub>3</sub> Nanowires. <i>Physica Status Solidi - Rapid Research Letters</i> , 2018, 12, 1700352.	2.4	3
69	Microfluidic Cantilever Biosensors. , 2018, , .		1
70	Modified cantilever arrays improve sensitivity and reproducibility of nanomechanical sensing in living cells. <i>Communications Biology</i> , 2018, 1, 175.	4.4	11
71	Spin photonic forces in non-reciprocal waveguides. <i>Optics Express</i> , 2018, 26, 23898.	3.4	11
72	Review-Organic-Inorganic Hybrid Functional Materials: An Integrated Platform for Applied Technologies. <i>Journal of the Electrochemical Society</i> , 2018, 165, B3137-B3156.	2.9	282

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73	Exploiting broader dynamic range in Si-bridge modified QTFs for sensitive thermometric applications. Sensors and Actuators A: Physical, 2018, 279, 442-447.	4.1	1
74	Carbon fiber doped thermosetting elastomer for flexible sensors: physical properties and microfabrication. Scientific Reports, 2018, 8, 12313.	3.3	30
75	Sharpness and intensity modulation of the metal-insulator transition in ultrathin $\text{VO}_2$ films by interfacial structure manipulation. Physical Review Materials, 2018, 2, .	2.4	1
76	Time-of-Flow Micromechanical Mass Spectrometry and Micromechanical Infrared Spectroscopy Using Microfluidic Cantilever. ECS Meeting Abstracts, 2018, , .	0.0	0
77	Tunable Shape Memory Polymer with Adhesive Property at Body Temperature for Shape Conformable Wearable Sensor Skins. ECS Meeting Abstracts, 2018, , .	0.0	0
78	(Invited) Shape Conformable Flexible Sensors for Internet of Things (IoT): A Perspective. ECS Meeting Abstracts, 2018, , .	0.0	1
79	Synthesis and Characterization of Thermoplastic PDMS. ECS Meeting Abstracts, 2018, , .	0.0	0
80	Fabrication of Polymer Bonded Permanent Magnets. ECS Meeting Abstracts, 2018, , .	0.0	0
81	3D Printing of Electrically Conductive Hybrid Organic-Inorganic Materials. ECS Meeting Abstracts, 2018, , .	0.0	0
82	3D Printing of Molds for Soft Lithography. ECS Meeting Abstracts, 2018, , .	0.0	0
83	(Plenary) 4D Printing for Sensors and Energy Applications. ECS Meeting Abstracts, 2018, , .	0.0	0
84	Physical Properties of Carbon Fiber Doped Micropatternable Nanocomposite Polymer. ECS Meeting Abstracts, 2018, , .	0.0	0
85	Plasmonic absorbers with optical cavity for the enhancement of photothermal/opto-calorimetric infrared spectroscopy. Applied Physics Letters, 2017, 110, .	3.3	5
86	Metabolic Study of Cancer Cells Using a pH Sensitive Hydrogel Nanofiber Light Addressable Potentiometric Sensor. ACS Sensors, 2017, 2, 151-156.	7.8	63
87	Thermal graphene metamaterials and epsilon-near-zero high temperature plasmonics. Journal of Optics (United Kingdom), 2017, 19, 055101.	2.2	19
88	Thermomechanical analysis of picograms of polymers using a suspended microchannel cantilever. RSC Advances, 2017, 7, 8415-8420.	3.6	10
89	A parametric study on the synergistic impacts of chemical additives on permeation properties of thin film composite polyamide membrane. Journal of Membrane Science, 2017, 535, 248-257.	8.2	100
90	Rapid and Highly Sensitive Detection of Dopamine Using Conjugated Oxaborole-Based Polymer and Glycopolymers. ACS Applied Materials & Interfaces, 2017, 9, 15225-15231.	8.0	41

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91	A rational design for enhanced oxygen reduction: Strongly coupled silver nanoparticles and engineered perovskite nanofibers. <i>Nano Energy</i> , 2017, 38, 392-400.	16.0	60
92	Flocculation and Dewatering of Mature Fine Tailings Using Temperature-Responsive Cationic Polymers. <i>Langmuir</i> , 2017, 33, 5900-5909.	3.5	41
93	On-Chip Integration of Photodetector and Sensor: A Multimodal Photonic Device for Sensing Applications. <i>IEEE Sensors Journal</i> , 2017, 17, 4773-4780.	4.7	3
94	Ultrasensitive Detection of Cu <sup>2+</sup> Using a Microcantilever Sensor Modified with L-Cysteine Self-Assembled Monolayer. <i>Applied Biochemistry and Biotechnology</i> , 2017, 183, 555-565.	2.9	8
95	Freestanding hierarchical porous carbon film derived from hybrid nanocellulose for high-power supercapacitors. <i>Nano Research</i> , 2017, 10, 1847-1860.	10.4	55
96	Core cross-linked double hydrophilic block copolymer micelles based on multiple hydrogen-bonding interactions. <i>Polymer Chemistry</i> , 2017, 8, 3066-3073.	3.9	33
97	Bacterial Detection Using Peptide-Based Platform and Impedance Spectroscopy. <i>Methods in Molecular Biology</i> , 2017, 1572, 113-124.	0.9	1
98	Broadband Mid-Infrared Stand-Off Reflection Absorption Spectroscopy Using a Pulsed External Cavity Quantum Cascade Laser. <i>Applied Spectroscopy</i> , 2017, 71, 1494-1505.	2.2	6
99	A coupling for success: Controlled growth of Co/CoO <sub>x</sub> nanoshoots on perovskite mesoporous nanofibres as high-performance trifunctional electrocatalysts in alkaline condition. <i>Nano Energy</i> , 2017, 32, 247-254.	16.0	189
100	The role of chloride ions in plasma-activated water treatment processes. <i>Environmental Science: Water Research and Technology</i> , 2017, 3, 156-168.	2.4	15
101	Spatially resolved organic coating on clay minerals in bitumen froth revealed by atomic force microscopy adhesion mapping. <i>Fuel</i> , 2017, 191, 283-289.	6.4	23
102	Abiotic streamers in a microfluidic system. <i>Soft Matter</i> , 2017, 13, 8698-8705.	2.7	14
103	Effect of process parameters on phase stability and metal-insulator transition of vanadium dioxide (VO <sub>2</sub> ) thin films by pulsed laser deposition. <i>Acta Materialia</i> , 2017, 137, 12-21.	7.9	34
104	Transparent and highly luminescent dysprosium-doped GdVO <sub>4</sub> thin films fabricated by pulsed laser deposition. <i>Thin Solid Films</i> , 2017, 638, 332-337.	1.8	7
105	Static and dynamic operation of metal-coated hydrogel cantilever humidity sensors based on hygroscopic mismatch. , 2017, , .		4
106	Effect of interface on mid-infrared photothermal response of MoS <sub>2</sub> thin film grown by pulsed laser deposition. <i>Nano Research</i> , 2017, 10, 3571-3584.	10.4	30
107	Electrophoresis assisted time-of-flow mass spectrometry using hollow nanomechanical resonators. <i>Scientific Reports</i> , 2017, 7, 3535.	3.3	6
108	Evaluation of efficiency factors and internal resistance of thermoelectric materials. <i>International Journal of Energy Research</i> , 2017, 41, 198-206.	4.5	9

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109	Synthesis of thin film composite polyamide membranes: Effect of monohydric and polyhydric alcohol additives in aqueous solution. <i>Journal of Membrane Science</i> , 2017, 523, 336-345.	8.2	66
110	Quarter wavelength resonators for use in wireless capacitive power transfer. , 2017, , .		9
111	Microcantilever Sensors $\hat{t}$ . , 2017, , .		1
112	Self-Assembly of Human Serum Albumin: A Simplex Phenomenon. <i>Biomolecules</i> , 2017, 7, 69.	4.0	0
113	Heat capacity measurements of sub-nanoliter volumes of liquids using bimaterial microchannel cantilevers. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	19
114	Universal spin-momentum locked optical forces. <i>Applied Physics Letters</i> , 2016, 108, .	3.3	78
115	Communicationâ€™Galvanic Deposition of Gold on Silicon from Au(I) Alkaline Fluoride-Free Solutions. <i>Journal of the Electrochemical Society</i> , 2016, 163, D818-D820.	2.9	3
116	Electrical excitation of the local earth for resonant, wireless energy transfer. <i>Wireless Power Transfer</i> , 2016, 3, 117-125.	1.1	14
117	Quasi-wireless capacitive energy transfer for the dynamic charging of personal mobility vehicles. , 2016, , .		14
118	Developing high throughput thin film composite polyamide membranes for forward osmosis treatment of SAGD produced water. <i>Journal of Membrane Science</i> , 2016, 511, 29-39.	8.2	64
119	Standoff infrared spectroscopy on energetic materials using hydrogel microcantilevers. , 2016, , .		2
120	Carbonized nanocellulose sustainably boosts the performance of activated carbon in ionic liquid supercapacitors. <i>Nano Energy</i> , 2016, 25, 161-169.	16.0	133
121	Galvanic Processes on Silicon Surfaces in Cu(II) Alkaline Fluoride-Free Solutions. <i>Journal of the Electrochemical Society</i> , 2016, 163, D651-D654.	2.9	2
122	Standoff Mechanical Resonance Spectroscopy Based on Infrared-Sensitive Hydrogel Microcantilevers. <i>Analytical Chemistry</i> , 2016, 88, 9678-9684.	6.5	13
123	Strain-induced electrostatic enhancements of BiFeO <sub>3</sub> nanowire loops. <i>Physical Chemistry Chemical Physics</i> , 2016, 18, 22772-22777.	2.8	7
124	Nanomechanical sandwich assay for multiple cancer biomarkers in breast cancer cell-derived exosomes. <i>Nanoscale</i> , 2016, 8, 15137-15141.	5.6	73
125	Pulsed Laser Deposited Dysprosiumâ€Doped Gadoliniumâ€Vanadate Thin Films for Noncontact, Selfâ€Referencing Luminescence Thermometry. <i>Advanced Materials</i> , 2016, 28, 7745-7752.	21.0	115
126	In-situ probing of thermal desorption of vapor molecules on a nanowire via work function variance. <i>Nano Research</i> , 2016, 9, 3334-3345.	10.4	6



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127	Dynamics of bacterial streamers induced clogging in microfluidic devices. <i>Lab on A Chip</i> , 2016, 16, 4091-4096.	6.0	34
128	Microfluidic cantilever detects bacteria and measures their susceptibility to antibiotics in small confined volumes. <i>Nature Communications</i> , 2016, 7, 12947.	12.8	134
129	Effect of Steam-Assisted Gravity Drainage Produced Water Properties on Oil/Water Transient Interfacial Tension. <i>Energy &amp; Fuels</i> , 2016, 30, 10714-10720.	5.1	13
130	A nanostructured surface increases friction exponentially at the solid-gas interface. <i>Scientific Reports</i> , 2016, 6, 32996.	3.3	7
131	A Novel Approach Toward Fabrication of High Performance Thin Film Composite Polyamide Membranes. <i>Scientific Reports</i> , 2016, 6, 22069.	3.3	267
132	High performance triboelectric nanogenerators based on phase-inversion piezoelectric membranes of poly(vinylidene fluoride)-zinc stannate (PVDF-ZnSnO <sub>3</sub> ) and polyamide-6 (PA6). <i>Nano Energy</i> , 2016, 30, 470-480.	16.0	134
133	Thermomechanical behavior of a bimaterial microchannel cantilever subjected to periodic IR radiation. <i>Sensors and Actuators B: Chemical</i> , 2016, 235, 273-279.	7.8	9
134	Dielectric Relaxation-Based Capacitive Heating of Oil Sands. <i>Energy &amp; Fuels</i> , 2016, 30, 1987-1996.	5.1	3
135	Conduction and Dielectric Relaxation Mechanisms in Athabasca Oil Sands with Application to Electrical Heating. <i>Energy &amp; Fuels</i> , 2016, 30, 5630-5642.	5.1	15
136	The detection of Escherichia coli (E. coli) with the pH sensitive hydrogel nanofiber-light addressable potentiometric sensor (NF-LAPS). <i>Sensors and Actuators B: Chemical</i> , 2016, 226, 176-183.	7.8	64
137	Effect of annealing conditions on structural and luminescent properties of Eu <sup>3+</sup> -doped Gd <sub>2</sub> Ti <sub>2</sub> O <sub>7</sub> thin films. <i>Applied Surface Science</i> , 2016, 364, 273-279.	6.1	9
138	Hollow Microtube Resonators via Silicon Self-Assembly toward Subattogram Mass Sensing Applications. <i>Nano Letters</i> , 2016, 16, 1537-1545.	9.1	43
139	Photoluminescence of europium(III)-doped (Y <sub>1-x</sub> Sc <sub>x</sub> ) <sub>2</sub> O <sub>3</sub> nanoparticles: Linear relationship between structural and emission properties. <i>Ceramics International</i> , 2016, 42, 3899-3906.	4.8	5
140	Microwave ring resonator-based non-contact interface sensor for oil sands applications. <i>Sensors and Actuators B: Chemical</i> , 2016, 224, 632-639.	7.8	80
141	Carbonized Nanocellulose Sustainably Boosts the Performance of Activated Carbon in Ionic Liquid Supercapacitors. <i>ECS Meeting Abstracts</i> , 2016, , .	0.0	0
142	Microcantilever Chemical and Biological Sensors. , 2016, , 2137-2145.		0
143	(Keynote) Chemical Selectivity and Micro/Nano Sensors. <i>ECS Meeting Abstracts</i> , 2016, , .	0.0	0
144	Quasi-wireless surface power and control for battery-free robotics. <i>Wireless Power Transfer</i> , 2015, 2, 134-142.	1.1	8

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145	Determination of the Physical Properties of Oil Sands Components using Scanning Probe Microscopy. Materials Research Society Symposia Proceedings, 2015, 1754, 69-74.	0.1	0
146	Label-Free Rapid Detection of Pathogens with Antimicrobial Peptide Assisted Impedance Spectrometry. Materials Research Society Symposia Proceedings, 2015, 1793, 13-18.	0.1	0
147	Real-time Detection of Breast Cancer Cells Using Peptide-functionalized Microcantilever Arrays. Scientific Reports, 2015, 5, 13967.	3.3	72
148	Bacterial floc mediated rapid streamer formation in creeping flows. Scientific Reports, 2015, 5, 13070.	3.3	35
149	Detection of <i>Listeria monocytogenes</i> with Short Peptide Fragments from Class IIa Bacteriocins as Recognition Elements. ACS Combinatorial Science, 2015, 17, 156-163.	3.8	25
150	High resolution microwave microstrip resonator for sensing applications. Sensors and Actuators A: Physical, 2015, 233, 224-230.	4.1	75
151	Methane sensing at room temperature using photothermal cantilever deflection spectroscopy. Sensors and Actuators B: Chemical, 2015, 221, 564-569.	7.8	15
152	Photothermal Electrical Resonance Spectroscopy of Physisorbed Molecules on a Nanowire Resonator. Nano Letters, 2015, 15, 5658-5663.	9.1	19
153	Thin film composite polyamide membranes: parametric study on the influence of synthesis conditions. RSC Advances, 2015, 5, 54985-54997.	3.6	145
154	Enhanced photo-collection in single BiFeO <sub>3</sub> nanowire due to carrier separation from radial surface field. Nano Energy, 2015, 13, 240-248.	16.0	30
155	Wireless single contact power delivery. , 2015, , .		10
156	Electronic Nose for Recognition of Volatile Vapor Mixtures Using a Nanopore-Enhanced Opto-Calorimetric Spectroscopy. Analytical Chemistry, 2015, 87, 7125-7132.	6.5	14
157	Investigation of Polymer Dendritic Growth in Composite Material using Contact Resonance Method. Materials Research Society Symposia Proceedings, 2015, 1754, 61-67.	0.1	0
158	Opto-nanomechanical spectroscopic material characterization. Nature Nanotechnology, 2015, 10, 870-877.	31.5	34
159	Piezotransistive transduction of femtoscale displacement for photoacoustic spectroscopy. Nature Communications, 2015, 6, 7885.	12.8	43
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