

# Thomas G Thundat

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

394 papers	15,441 citations	68 h-index	108 g-index
441 ext. papers	17,377 ext. citations	5.8 avg, IF	6.73 L-index

#	Paper	IF	Citations
394	Palladium Nanosheet-Based Dual Gas Sensors for Sensitive Room-Temperature Hydrogen and Carbon Monoxide Detection.. <i>ACS Sensors</i> , <b>2022</b> ,	9.2	5
393	Standoff and Point Detection of Thin Polymer Layers Using Microcantilever Photothermal Spectroscopy. <i>Journal of the Electrochemical Society</i> , <b>2022</b> , 169, 037501	3.9	
392	Photoinduced Multistable Resonance Frequency Switching of Phase Change Microstring at Room Temperature. <i>Advanced Electronic Materials</i> , <b>2022</b> , 8, 2100819	6.4	1
391	Localized anisotropic stress in the sodiation of antimony anode. <i>Nano Energy</i> , <b>2022</b> , 98, 107349	17.1	
390	(Invited) Photothermal Cantilever Sensors for Soil Health Monitoring. <i>ECS Meeting Abstracts</i> , <b>2021</b> , MA2021-02, 1669-1669	0	
389	Toward a mechanically stable solid electrolyte interphase. <i>Matter</i> , <b>2021</b> , 4, 2119-2122	12.7	0
388	Optimal floc structure for effective dewatering of polymer treated oil sands tailings. <i>Minerals Engineering</i> , <b>2021</b> , 160, 106688	4.9	2
387	Reduced Graphene Oxide-Wrapped Palladium Nanowires Coated with a Layer of Zeolitic Imidazolate Framework-8 for Hydrogen Sensing. <i>ACS Applied Nano Materials</i> , <b>2021</b> , 4, 8081-8093	5.6	4
386	Synthesis and Characterization of Zinc Phthalocyanine-Cellulose Nanocrystal (CNC) Conjugates: Toward Highly Functional CNCs. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 43992-44006	9.5	4
385	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> , <b>2020</b> , 529, 146995	6.7	10
384	Multi-Walled Carbon Nanotubes Decorated with Silver Nanoparticles for Acetone Gas Sensing at Room Temperature. <i>Journal of the Electrochemical Society</i> , <b>2020</b> , 167, 167519	3.9	44
383	Microfluidic resonators with two parallel channels for independent sample loading and effective density tuning. <i>Micro and Nano Systems Letters</i> , <b>2020</b> , 8,	2	1
382	Enhanced nanoplasmonic heating in standoff sensing of explosive residues with infrared reflection-absorption spectroscopy. <i>Optics Letters</i> , <b>2020</b> , 45, 2144-2147	3	2
381	Perspective: Maintaining the Quality of Life in Depopulating Communities: Expanding Smart Sensing via a Novel Power Supply. <i>Journal of the Electrochemical Society</i> , <b>2020</b> , 167, 037564	3.9	0
380	Mapping the surface potential, charge density and adhesion of cellulose nanocrystals using advanced scanning probe microscopy. <i>Carbohydrate Polymers</i> , <b>2020</b> , 246, 116393	10.3	2
379	Consistently High Values in p-i-n Type Perovskite Solar Cells Using Ni-Doped NiO Nanomesh as the Hole Transporting Layer. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2020</b> , 12, 11467-11478	9.5	33
378	Transparent and Flexible Thermal Insulation Window Material. <i>Cell Reports Physical Science</i> , <b>2020</b> , 1, 100640	6.40	6

377	Flexible Ultraviolet Photodetectors Based on One-Dimensional Gallium-Doped Zinc Oxide Nanostructures. <i>ACS Applied Electronic Materials</i> , <b>2020</b> , 2, 3522-3529	4	35
376	Evaporation dynamics of water droplets on superhydrophobic nanoglass surfaces. <i>International Journal of Heat and Mass Transfer</i> , <b>2020</b> , 160, 120149	4.9	7
375	Hydrogen Sensing at Room Temperature Using Flame-Synthesized Palladium-Decorated Crumpled Reduced Graphene Oxide Nanocomposites. <i>ACS Sensors</i> , <b>2020</b> , 5, 2344-2350	9.2	18
374	Review Nanomechanical Calorimetric Infrared Spectroscopy using Bi-Material Microfluidic Cantilevers. <i>Journal of the Electrochemical Society</i> , <b>2020</b> , 167, 037504	3.9	4
373	Tribo-Tunneling DC Generator with Carbon Aerogel/Silicon Multi-Nanocontacts. <i>Advanced Electronic Materials</i> , <b>2019</b> , 5, 1900464	6.4	23
372	Scaled-up Direct-Current Generation in MoS Multilayer-Based Moving Heterojunctions. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 35404-35409	9.5	25
371	Mechanistic Understanding and Nanomechanics of Multiple Hydrogen-Bonding Interactions in Aqueous Environment. <i>Journal of Physical Chemistry C</i> , <b>2019</b> , 123, 4540-4548	3.8	7
370	Stretchable, Injectable, and Self-Healing Conductive Hydrogel Enabled by Multiple Hydrogen Bonding toward Wearable Electronics. <i>Chemistry of Materials</i> , <b>2019</b> , 31, 4553-4563	9.6	194
369	Structure, morphology, and luminescent behavior of RE <sup>3+</sup> -doped GdVO <sub>4</sub> thin films. <i>Applied Physics A: Materials Science and Processing</i> , <b>2019</b> , 125, 1	2.6	1
368	Sample Preparation in Centrifugal Microfluidic Discs for Human Serum Metabolite Analysis by Surface Assisted Laser Desorption/Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , <b>2019</b> , 91, 7570-7577	7.8	10
367	Thermomechanical responses of microfluidic cantilever capture DNA melting and properties of DNA premelting states using picoliters of DNA solution. <i>Applied Physics Letters</i> , <b>2019</b> , 114, 173703	3.4	6
366	Polypyrrole-Doped Conductive Supramolecular Elastomer with Stretchability, Rapid Self-Healing, and Adhesive Property for Flexible Electronic Sensors. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 18720-18729	9.5	91
365	Resonant hair humidity sensors for disposable applications: Revisit the hair hygrometer. <i>Sensors and Actuators B: Chemical</i> , <b>2019</b> , 292, 1-6	8.5	2
364	Polymer Microelectromechanical Systems: Hydrogel Microelectromechanical System (MEMS) Resonators: Beyond Cost-Effective Sensing Platform (Adv. Mater. Technol. 3/2019). <i>Advanced Materials Technologies</i> , <b>2019</b> , 4, 1970017	6.8	
363	Nanophotonic enhancement and improved electron extraction in perovskite solar cells using near-horizontally aligned TiO <sub>2</sub> nanorods. <i>Journal of Power Sources</i> , <b>2019</b> , 417, 176-187	8.9	14
362	Separation and Quantum Tunneling of Photo-generated Carriers Using a Tribo-Induced Field. <i>Matter</i> , <b>2019</b> , 1, 650-660	12.7	31
361	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> , <b>2019</b> , 28, 766-775	2.5	3
360	Investigating fouling at the pore-scale using a microfluidic membrane mimic filtration system. <i>Scientific Reports</i> , <b>2019</b> , 9, 10587	4.9	14

359	Magnetoelectric Coupling in NiMnIn/PLZT Artificial Multiferroic Heterostructure and Its Application in Mid-IR Photothermal Modulation by External Magnetic Field. <i>ACS Applied Electronic Materials</i> , <b>2019</b> , 1, 2226-2235	4	5
358	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> , <b>2019</b> , 84, 1199-1208	0.9	
357	Interfacial friction-induced electronic excitation mechanism for tribo-tunneling current generation. <i>Materials Horizons</i> , <b>2019</b> , 6, 1020-1026	14.4	46
356	Photothermal Cantilever Deflection Spectroscopy. <i>Electrochemical Society Interface</i> , <b>2019</b> , 28, 55-57	3.6	16
355	Dual Channel Microfluidic Resonators for Simultaneous Measurements of Liquid Analytes <b>2019</b> ,		1
354	Anomalous interfacial stress generation during sodium intercalation/extraction in MoS thin-film anodes. <i>Science Advances</i> , <b>2019</b> , 5, eaav2820	14.3	50
353	Hydrogel Microelectromechanical System (MEMS) Resonators: Beyond Cost-Effective Sensing Platform. <i>Advanced Materials Technologies</i> , <b>2019</b> , 4, 1800597	6.8	7
352	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> , <b>2019</b> , 561, 341-348	5.1	1
351	Collapse of house-of-cards clay structures and corresponding tailings dewatering induced by alternating electric fields. <i>Drying Technology</i> , <b>2019</b> , 37, 1053-1067	2.6	6
350	Appearance of SERS activity in single silver nanoparticles by laser-induced reshaping. <i>Nanoscale</i> , <b>2018</b> , 11, 321-330	7.7	13
349	Phase transformation induced modulation of the resonance frequency of VO <sub>2</sub> /TiO <sub>2</sub> coated microcantilevers. <i>MRS Advances</i> , <b>2018</b> , 3, 359-364	0.7	8
348	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> , <b>2018</b> , 12, 1870403	2.5	1
347	Injectable Self-Healing Zwitterionic Hydrogels Based on Dynamic Benzoxaborole-Sugar Interactions with Tunable Mechanical Properties. <i>Biomacromolecules</i> , <b>2018</b> , 19, 596-605	6.9	57
346	Hybrid micromolding of silver micro fiber doped electrically conductive elastomeric composite polymer for flexible sensors and electronic devices. <i>Microsystem Technologies</i> , <b>2018</b> , 24, 4159-4164	1.7	10
345	Fabrication of antifouling and antibacterial polyethersulfone (PES)/cellulose nanocrystals (CNC) nanocomposite membranes. <i>Journal of Membrane Science</i> , <b>2018</b> , 549, 350-356	9.6	84
344	Robust fabrication of thin film polyamide-TiO nanocomposite membranes with enhanced thermal stability and anti-biofouling propensity. <i>Scientific Reports</i> , <b>2018</b> , 8, 784	4.9	96
343	Sustained electron tunneling at unbiased metal-insulator-semiconductor triboelectric contacts. <i>Nano Energy</i> , <b>2018</b> , 48, 320-326	17.1	68
342	Portable Nanofiber-Light Addressable Potentiometric Sensor for Rapid Escherichia coli Detection in Orange Juice. <i>ACS Sensors</i> , <b>2018</b> , 3, 815-822	9.2	44

341	Review Organic-Inorganic Hybrid Functional Materials: An Integrated Platform for Applied Technologies. <i>Journal of the Electrochemical Society</i> , <b>2018</b> , 165, B3137-B3156	3.9	199
340	Exploiting broader dynamic range in Si-bridge modified QTFs for sensitive thermometric applications. <i>Sensors and Actuators A: Physical</i> , <b>2018</b> , 279, 442-447	3.9	1
339	Carbon fiber doped thermosetting elastomer for flexible sensors: physical properties and microfabrication. <i>Scientific Reports</i> , <b>2018</b> , 8, 12313	4.9	22
338	Sharpness and intensity modulation of the metal-insulator transition in ultrathin VO <sub>2</sub> films by interfacial structure manipulation. <i>Physical Review Materials</i> , <b>2018</b> , 2,	3.2	8
337	Direct-current triboelectricity generation by a sliding Schottky nanocontact on MoS <sub>2</sub> multilayers. <i>Nature Nanotechnology</i> , <b>2018</b> , 13, 112-116	28.7	146
336	Surface State-Induced Anomalous Negative Thermal Quenching of Multiferroic BiFeO <sub>3</sub> Nanowires. <i>Physica Status Solidi - Rapid Research Letters</i> , <b>2018</b> , 12, 1700352	2.5	3
335	Microfluidic Cantilever Biosensors <b>2018</b> ,		1
334	Modified cantilever arrays improve sensitivity and reproducibility of nanomechanical sensing in living cells. <i>Communications Biology</i> , <b>2018</b> , 1, 175	6.7	8
333	Spin photonic forces in non-reciprocal waveguides. <i>Optics Express</i> , <b>2018</b> , 26, 23898-23910	3.3	10
332	Plasmonic absorbers with optical cavity for the enhancement of photothermal/opto-calorimetric infrared spectroscopy. <i>Applied Physics Letters</i> , <b>2017</b> , 110, 011901	3.4	4
331	Metabolic Study of Cancer Cells Using a pH Sensitive Hydrogel Nanofiber Light Addressable Potentiometric Sensor. <i>ACS Sensors</i> , <b>2017</b> , 2, 151-156	9.2	45
330	Thermal graphene metamaterials and epsilon-near-zero high temperature plasmonics. <i>Journal of Optics (United Kingdom)</i> , <b>2017</b> , 19, 055101	1.7	15
329	Thermomechanical analysis of picograms of polymers using a suspended microchannel cantilever. <i>RSC Advances</i> , <b>2017</b> , 7, 8415-8420	3.7	6
328	A parametric study on the synergistic impacts of chemical additives on permeation properties of thin film composite polyamide membrane. <i>Journal of Membrane Science</i> , <b>2017</b> , 535, 248-257	9.6	66
327	Rapid and Highly Sensitive Detection of Dopamine Using Conjugated Oxaborole-Based Polymer and Glycopolymer Systems. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 15225-15231	9.5	28
326	A rational design for enhanced oxygen reduction: Strongly coupled silver nanoparticles and engineered perovskite nanofibers. <i>Nano Energy</i> , <b>2017</b> , 38, 392-400	17.1	44
325	Flocculation and Dewatering of Mature Fine Tailings Using Temperature-Responsive Cationic Polymers. <i>Langmuir</i> , <b>2017</b> , 33, 5900-5909	4	29
324	. <i>IEEE Sensors Journal</i> , <b>2017</b> , 17, 4773-4780	4	2

323	Ultrasensitive Detection of Cu Using a Microcantilever Sensor Modified with L-Cysteine Self-Assembled Monolayer. <i>Applied Biochemistry and Biotechnology</i> , <b>2017</b> , 183, 555-565	3.2	8
322	Freestanding hierarchical porous carbon film derived from hybrid nanocellulose for high-power supercapacitors. <i>Nano Research</i> , <b>2017</b> , 10, 1847-1860	10	43
321	Core cross-linked double hydrophilic block copolymer micelles based on multiple hydrogen-bonding interactions. <i>Polymer Chemistry</i> , <b>2017</b> , 8, 3066-3073	4.9	29
320	Bacterial Detection Using Peptide-Based Platform and Impedance Spectroscopy. <i>Methods in Molecular Biology</i> , <b>2017</b> , 1572, 113-124	1.4	1
319	Broadband Mid-Infrared Stand-Off Reflection-Absorption Spectroscopy Using a Pulsed External Cavity Quantum Cascade Laser. <i>Applied Spectroscopy</i> , <b>2017</b> , 71, 1494-1505	3.1	5
318	A coupling for success: Controlled growth of Co/CoOx nanoshoots on perovskite mesoporous nanofibres as high-performance trifunctional electrocatalysts in alkaline condition. <i>Nano Energy</i> , <b>2017</b> , 32, 247-254	17.1	153
317	The role of chloride ions in plasma-activated water treatment processes. <i>Environmental Science: Water Research and Technology</i> , <b>2017</b> , 3, 156-168	4.2	11
316	Spatially resolved organic coating on clay minerals in bitumen froth revealed by atomic force microscopy adhesion mapping. <i>Fuel</i> , <b>2017</b> , 191, 283-289	7.1	15
315	Abiotic streamers in a microfluidic system. <i>Soft Matter</i> , <b>2017</b> , 13, 8698-8705	3.6	12
314	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> , <b>2017</b> , 137, 12-21	8.4	25
313	Transparent and highly luminescent dysprosium- doped GdVO <sub>4</sub> thin films fabricated by pulsed laser deposition. <i>Thin Solid Films</i> , <b>2017</b> , 638, 332-337	2.2	4
312	<b>2017,</b>		3
311	Effect of interface on mid-infrared photothermal response of MoS <sub>2</sub> thin film grown by pulsed laser deposition. <i>Nano Research</i> , <b>2017</b> , 10, 3571-3584	10	23
310	Electrophoresis assisted time-of-flow mass spectrometry using hollow nanomechanical resonators. <i>Scientific Reports</i> , <b>2017</b> , 7, 3535	4.9	5
309	Evaluation of efficiency factors and internal resistance of thermoelectric materials. <i>International Journal of Energy Research</i> , <b>2017</b> , 41, 198-206	4.5	8
308	Synthesis of thin film composite polyamide membranes: Effect of monohydric and polyhydric alcohol additives in aqueous solution. <i>Journal of Membrane Science</i> , <b>2017</b> , 523, 336-345	9.6	48
307	Quarter wavelength resonators for use in wireless capacitive power transfer <b>2017,</b>		4
306	Microcantilever Sensors <b>2017,</b>		1

305	Pulsed Laser Deposited Dysprosium-Doped Gadolinium-Vanadate Thin Films for Noncontact, Self-Referencing Luminescence Thermometry. <i>Advanced Materials</i> , <b>2016</b> , 28, 7745-52	24	79
304	In-situ probing of thermal desorption of vapor molecules on a nanowire via work function variance. <i>Nano Research</i> , <b>2016</b> , 9, 3334-3345	10	6
303	Dynamics of bacterial streamers induced clogging in microfluidic devices. <i>Lab on A Chip</i> , <b>2016</b> , 16, 4091-4096	4026	23
302	Microfluidic cantilever detects bacteria and measures their susceptibility to antibiotics in small confined volumes. <i>Nature Communications</i> , <b>2016</b> , 7, 12947	17.4	99
301	Effect of Steam-Assisted Gravity Drainage Produced Water Properties on Oil/Water Transient Interfacial Tension. <i>Energy &amp; Fuels</i> , <b>2016</b> , 30, 10714-10720	4.1	11
300	A nanostructured surface increases friction exponentially at the solid-gas interface. <i>Scientific Reports</i> , <b>2016</b> , 6, 32996	4.9	5
299	A Novel Approach Toward Fabrication of High Performance Thin Film Composite Polyamide Membranes. <i>Scientific Reports</i> , <b>2016</b> , 6, 22069	4.9	186
298	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> , <b>2016</b> , 30, 470-480	17.1	97
297	Thermomechanical behavior of a bimaterial microchannel cantilever subjected to periodic IR radiation. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 235, 273-279	8.5	7
296	Dielectric Relaxation-Based Capacitive Heating of Oil Sands. <i>Energy &amp; Fuels</i> , <b>2016</b> , 30, 1987-1996	4.1	2
295	Conduction and Dielectric Relaxation Mechanisms in Athabasca Oil Sands with Application to Electrical Heating. <i>Energy &amp; Fuels</i> , <b>2016</b> , 30, 5630-5642	4.1	8
294	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> , <b>2016</b> , 226, 176-183	8.5	52
293	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> , <b>2016</b> , 364, 273-279	6.7	6
292	Hollow Microtube Resonators via Silicon Self-Assembly toward Subattogram Mass Sensing Applications. <i>Nano Letters</i> , <b>2016</b> , 16, 1537-45	11.5	34
291	Photoluminescence of europium(III)-doped (Y Sc <sub>1-x</sub> ) <sub>2</sub> O <sub>3</sub> nanoparticles: Linear relationship between structural and emission properties. <i>Ceramics International</i> , <b>2016</b> , 42, 3899-3906	5.1	4
290	Microwave ring resonator-based non-contact interface sensor for oil sands applications. <i>Sensors and Actuators B: Chemical</i> , <b>2016</b> , 224, 632-639	8.5	61
289	Heat capacity measurements of sub-nanoliter volumes of liquids using bimaterial microchannel cantilevers. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 211906	3.4	11
288	Universal spin-momentum locked optical forces. <i>Applied Physics Letters</i> , <b>2016</b> , 108, 061102	3.4	53

287	Galvanic Deposition of Gold on Silicon from Au(I) Alkaline Fluoride-Free Solutions. <i>Journal of the Electrochemical Society</i> , <b>2016</b> , 163, D818-D820	3.9	2
286	Electrical excitation of the local earth for resonant, wireless energy transfer. <i>Wireless Power Transfer</i> , <b>2016</b> , 3, 117-125	0.9	6
285	Quasi-wireless capacitive energy transfer for the dynamic charging of personal mobility vehicles <b>2016</b> ,		5
284	Developing high throughput thin film composite polyamide membranes for forward osmosis treatment of SAGD produced water. <i>Journal of Membrane Science</i> , <b>2016</b> , 511, 29-39	9.6	54
283	Standoff infrared spectroscopy on energetic materials using hydrogel microcantilevers <b>2016</b> ,		2
282	Carbonized nanocellulose sustainably boosts the performance of activated carbon in ionic liquid supercapacitors. <i>Nano Energy</i> , <b>2016</b> , 25, 161-169	17.1	104
281	Galvanic Processes on Silicon Surfaces in Cu(II) Alkaline Fluoride-Free Solutions. <i>Journal of the Electrochemical Society</i> , <b>2016</b> , 163, D651-D654	3.9	2
280	Standoff Mechanical Resonance Spectroscopy Based on Infrared-Sensitive Hydrogel Microcantilevers. <i>Analytical Chemistry</i> , <b>2016</b> , 88, 9678-9684	7.8	11
279	Strain-induced electrostatic enhancements of BiFeO <sub>3</sub> nanowire loops. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 22772-7	3.6	6
278	Nanomechanical sandwich assay for multiple cancer biomarkers in breast cancer cell-derived exosomes. <i>Nanoscale</i> , <b>2016</b> , 8, 15137-41	7.7	62
277	High resolution microwave microstrip resonator for sensing applications. <i>Sensors and Actuators A: Physical</i> , <b>2015</b> , 233, 224-230	3.9	50
276	Methane sensing at room temperature using photothermal cantilever deflection spectroscopy. <i>Sensors and Actuators B: Chemical</i> , <b>2015</b> , 221, 564-569	8.5	11
275	Photothermal Electrical Resonance Spectroscopy of Physisorbed Molecules on a Nanowire Resonator. <i>Nano Letters</i> , <b>2015</b> , 15, 5658-63	11.5	14
274	Thin film composite polyamide membranes: parametric study on the influence of synthesis conditions. <i>RSC Advances</i> , <b>2015</b> , 5, 54985-54997	3.7	111
273	Enhanced photo-collection in single BiFeO <sub>3</sub> nanowire due to carrier separation from radial surface field. <i>Nano Energy</i> , <b>2015</b> , 13, 240-248	17.1	24
272	Wireless single contact power delivery <b>2015</b> ,		5
271	Electronic Nose for Recognition of Volatile Vapor Mixtures Using a Nanopore-Enhanced Opto-Calorimetric Spectroscopy. <i>Analytical Chemistry</i> , <b>2015</b> , 87, 7125-32	7.8	11
270	Investigation of Polymer Dendritic Growth in Composite Material using Contact Resonance Method. <i>Materials Research Society Symposia Proceedings</i> , <b>2015</b> , 1754, 61-67		

269	Opto-nanomechanical spectroscopic material characterization. <i>Nature Nanotechnology</i> , <b>2015</b> , 10, 870-7	28.7	25
268	Piezotransistive transduction of femtoscale displacement for photoacoustic spectroscopy. <i>Nature Communications</i> , <b>2015</b> , 6, 7885	17.4	33
267	Galvanic Deposition of Gold on GaAs: A Tip-Induced Lithography Approach. <i>Journal of the Electrochemical Society</i> , <b>2015</b> , 162, D486-D489	3.9	1
266	Rapid label-free detection of E. coli using antimicrobial peptide assisted impedance spectroscopy. <i>Analytical Methods</i> , <b>2015</b> , 7, 9744-9748	3.2	16
265	Mapping and Quantifying Surface Charges on Clay Nanoparticles. <i>Langmuir</i> , <b>2015</b> , 31, 10469-76	4	25
264	Detection of Volatile Organic Compounds Using Microwave Sensors. <i>IEEE Sensors Journal</i> , <b>2015</b> , 15, 248-254	4.54	51
263	Determination of charge on asphaltene nanoaggregates in air using electrostatic force microscopy. <i>Langmuir</i> , <b>2015</b> , 31, 679-84	4	17
262	Sensitive and selective detection of hydrocarbon/water vapor mixtures with a nanoporous silicon microcantilever. <i>Sensors and Actuators B: Chemical</i> , <b>2015</b> , 206, 84-89	8.5	8
261	Quasi-wireless surface power and control for battery-free robotics. <i>Wireless Power Transfer</i> , <b>2015</b> , 2, 134-142	0.9	6
260	Determination of the Physical Properties of Oil Sands Components using Scanning Probe Microscopy. <i>Materials Research Society Symposia Proceedings</i> , <b>2015</b> , 1754, 69-74		
259	Label-Free Rapid Detection of Pathogens with Antimicrobial Peptide Assisted Impedance Spectrometry. <i>Materials Research Society Symposia Proceedings</i> , <b>2015</b> , 1793, 13-18		
258	Real-time Detection of Breast Cancer Cells Using Peptide-functionalized Microcantilever Arrays. <i>Scientific Reports</i> , <b>2015</b> , 5, 13967	4.9	58
257	Bacterial floc mediated rapid streamer formation in creeping flows. <i>Scientific Reports</i> , <b>2015</b> , 5, 13070	4.9	30
256	Detection of <i>Listeria monocytogenes</i> with short peptide fragments from class IIa bacteriocins as recognition elements. <i>ACS Combinatorial Science</i> , <b>2015</b> , 17, 156-63	3.9	21
255	Asphaltene migration and separation in presence of aggregation in electroosmotic-electrophoretic microchannel transport. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2014</b> , 446, 23-32	5.1	5
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250	Nanomechanical identification of liquid reagents in a microfluidic channel. <i>Lab on A Chip</i> , <b>2014</b> , 14, 1302-7	7.2	20
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