Dermot Diamond

List of Publications by Citations

344 papers	13,256 citations	59 h-index	97 g-index
359 ext. papers	14,596 ext. citations	6.2 avg, IF	6.56 L-index

#	Paper	IF	Citations
344	Glucose Sensing for Diabetes Monitoring: Recent Developments. *Sensors*, **2017**, 17,	3.8	369
343	All-solid-state sodium-selective electrode based on a calixarene ionophore in a poly(vinyl chloride) membrane with a polypyrrole solid contact. *Analytical Chemistry*, **1992**, 64, 2496-2501	7.8	337
342	Smartphone-based simultaneous pH and nitrite colorimetric determination for paper microfluidic devices. *Analytical Chemistry*, **2014**, 86, 9554-62	7.8	288
341	Synthesis of electrochemically-reduced graphene oxide film with controllable size and thickness and its use in supercapacitor. *Carbon*, **2011**, 49, 3488-3496	10.4	239
340	BIOTEX--biosensing textiles for personalised healthcare management. *IEEE Transactions on Information Technology in Biomedicine*, **2010**, 14, 364-70		238
339	Chloride selective calix[4]arene optical sensor combining urea functionality with pyrene excimer transduction. *Journal of the American Chemical Society*, **2006**, 128, 8607-14	16.4	230
338	Advances in wearable chemical sensor design for monitoring biological fluids. *Sensors and Actuators B: Chemical*, **2015**, 211, 403-418	8.5	204
337	Wireless sensor networks and chemo-/biosensing. *Chemical Reviews*, **2008**, 108, 652-79	68.1	204
336	Calixarene-based sensing agents. *Chemical Society Reviews*, **1996**, 25, 15	58.5	204
335	Organic electrochemical transistor incorporating an ionogel as a solid state electrolyte for lactate sensing. *Journal of Materials Chemistry*, **2012**, 22, 4440		203
334	Development of a volatile amine sensor for the monitoring of fish spoilage. *Talanta*, **2006**, 69, 515-20	6.2	202
333	A wearable electrochemical sensor for the real-time measurement of sweat sodium concentration. *Analytical Methods*, **2010**, 2, 342	3.2	188
332	Comparison of soil pollution concentrations determined using AAS and portable XRF techniques. *Journal of Hazardous Materials*, **2009**, 171, 1168-71	12.8	171
331	Smart Nanotextiles: A Review of Materials and Applications. *MRS Bulletin*, **2007**, 32, 434-442	3.2	169
330	Screen-printed electrodes for environmental monitoring of heavy metal ions: a review. *Mikrochimica Acta*, **2016**, 183, 503-517	5.8	166
329	Bio-sensing textile based patch with integrated optical detection system for sweat monitoring. *Sensors and Actuators B: Chemical*, **2009**, 139, 231-236	8.5	161
328	Chemo/bio-sensor networks. *Nature Materials*, **2006**, 5, 421-4	27	156

327	Real-time sweat pH monitoring based on a wearable chemical barcode micro-fluidic platform incorporating ionic liquids. *Sensors and Actuators B: Chemical*, **2012**, 171-172, 1327-1334	8.5	141
326	Calixarenes: designer ligands for chemical sensors. *Analytical Chemistry*, **2001**, 73, 22A-29A	7.8	140
325	Humidity sensors based on polyaniline nanofibres. *Sensors and Actuators B: Chemical*, **2010**, 143, 530-534	8.5	132
324	Development of a biosensor for endocrine disrupting compounds based on tyrosinase entrapped within a poly(thionine) film. *Biosensors and Bioelectronics*, **2004**, 20, 367-77	11.8	130
323	Development and application of surface plasmon resonance-based biosensors for the detection of cell-ligand interactions. *Analytical Biochemistry*, **2000**, 281, 135-43	3.1	128
322	Absorbance Based Light Emitting Diode Optical Sensors and Sensing Devices. *Sensors*, **2008**, 8, 2453-2479	3.8	124
321	Determination and application of ion-selective electrode model parameters using flow injection and simplex optimization. *Analyst, The*, **1994**, 119, 749	5	123
320	Molecular Design of Light-Responsive Hydrogels, For in Situ Generation of Fast and Reversible Valves for Microfluidic Applications. *Chemistry of Materials*, **2015**, 27, 5925-5931	9.6	116
319	Electrodeposition and pseudocapacitive properties of tungsten oxide/polyaniline composite. *Journal of Power Sources*, **2011**, 196, 4842-4848	8.9	104
318	Design and development of a miniaturised total chemical analysis system for on-line lactate and glucose monitoring in biological samples. *Analytica Chimica Acta*, **1997**, 346, 341-349	6.6	100
317	Inherently conducting polymer modified polyurethane smart foam for pressure sensing. *Sensors and Actuators A: Physical*, **2005**, 119, 398-404	3.9	100
316	Ion sensors: current limits and new trends. *Analytica Chimica Acta*, **1999**, 393, 11-18	6.6	98
315	Electrochemical transistors with ionic liquids for enzymatic sensing. *Chemical Communications*, **2010**, 46, 7972-4	5.8	96
314	SWEATCH A Wearable Platform for Harvesting and Analysing Sweat Sodium Content. *Electroanalysis*, **2016**, 28, 1283-1289	3	95
313	Advances in three-dimensional rapid prototyping of microfluidic devices for biological applications. *Biomicrofluidics*, **2014**, 8, 052112	3.2	94
312	Ionogel-based light-actuated valves for controlling liquid flow in micro-fluidic manifolds. *Lab on A Chip*, **2010**, 10, 195-201	7.2	91
311	Lead-Selective Electrodes Based on Calixarene Phosphine Oxide Derivatives. *Analytical Chemistry*, **1999**, 71, 5544-5550	7.8	91
310	Sodium-selective polymeric membrane electrodes based on calix[4]arene ionophores. *Analyst, The*, **1989**, 114, 1551	5	90

309	Photo-Responsive Polymeric Structures Based on Spiropyran. *Macromolecular Materials and Engineering*, **2012**, 297, 1148-1159	3.9	87
308	A multiswitchable poly(terthiophene) bearing a spiropyran functionality: understanding photo- and electrochemical control. *Journal of the American Chemical Society*, **2011**, 133, 5453-62	16.4	86
307	A wearable patch for continuous monitoring of sweat electrolytes during exertion. *Lab on A Chip*, **2018**, 18, 2632-2641	7.2	85
306	Concept and development of an autonomous wearable micro-fluidic platform for real time pH sweat analysis. *Sensors and Actuators B: Chemical*, **2012**, 175, 263-270	8.5	85
305	Opportunities and challenges of using ion-selective electrodes in environmental monitoring and wearable sensors. *Electrochimica Acta*, **2012**, 84, 29-34	6.7	82
304	Determination of the enantiomeric composition of chiral amines based on the quenching of the fluorescence of a chiral calixarene. *Analytical Chemistry*, **1996**, 68, 3775-82	7.8	81
303	Optically addressable single-use microfluidic valves by laser printer lithography. *Lab on A Chip*, **2010** , 10, 2680-7	7.2	77
302	Spiropyran based hydrogels actuators Walking in the light. *Sensors and Actuators B: Chemical*, **2017**, 250, 608-616	8.5	75
301	Photo-regenerable surface with potential for optical sensing. *Journal of Materials Chemistry*, **2006**, 16, 1332		75
300	Caesium-selective poly(vinyl chloride) membrane electrodes based on calix[6]arene esters. *Analyst, The*, **1990**, 115, 1207	5	73
299	Self-protonating spiropyran-co-NIPAM-co-acrylic acid hydrogel photoactuators. *Soft Matter*, **2013**, 9, 8754	3.6	72
298	Chemical sensing using an integrated microfluidic system based on the Berthelot reaction. *Sensors and Actuators B: Chemical*, **2001**, 76, 235-243	8.5	72
297	Development of miniature all-solid-state potentiometric sensing system. *Sensors and Actuators B: Chemical*, **2010**, 146, 199-205	8.5	71
296	An electrochromic ionic liquid: design, characterization, and performance in a solid-state platform. *ACS Applied Materials & Interfaces*, **2013**, 5, 55-62	9.5	70
295	The increasing importance of carbon nanotubes and nanostructured conducting polymers in biosensors. *Analytical and Bioanalytical Chemistry*, **2010**, 398, 1575-89	4.4	70
294	Internet-scale sensing. *Analytical Chemistry*, **2004**, 76, 278A-286A	7.8	70
293	A low-cost optical sensing device based on paired emitter detector light emitting diodes. *Analytica Chimica Acta*, **2006**, 557, 111-116	6.6	67
292	Novel fused-LEDs devices as optical sensors for colorimetric analysis. *Talanta*, **2004**, 63, 167-73	6.2	67

291	Fast prototyping of paper-based microfluidic devices by contact stamping using indelible ink. *RSC Advances*, **2013**, 3, 18811	3.7	63
290	In Situ one-step electrochemical preparation of graphene oxide nanosheet-modified electrodes for biosensors. *ChemSusChem*, **2011**, 4, 1587-91	8.3	63
289	Spiropyran-based reversible, light-modulated sensing with reduced photofatigue. *Journal of Photochemistry and Photobiology A: Chemistry*, **2009**, 206, 109-115	4.7	63
288	Guidelines for Improving the Lower Detection Limit of Ion-Selective Electrodes: A Systematic Approach. *Electroanalysis*, **2007**, 19, 144-154	3	61
287	Digital imaging as a detector for generic analytical measurements. *TrAC - Trends in Analytical Chemistry*, **2000**, 19, 517-522	14.6	61
286	Stimuli responsive ionogels for sensing applications-an overview. *Membranes*, **2012**, 2, 16-39	3.8	60
285	Photoswitchable ratchet surface topographies based on self-protonating spiropyran-NIPAAM hydrogels. *ACS Applied Materials & Interfaces*, **2014**, 6, 7268-74	9.5	59
284	Autonomous microfluidic system for phosphate detection. *Talanta*, **2007**, 71, 1180-5	6.2	58
283	A low-cost autonomous optical sensor for water quality monitoring. *Talanta*, **2015**, 132, 520-7	6.2	57
282	Electrochemical synthesis of WO3/PANI composite for electrocatalytic reduction of iodate. *Electrochimica Acta*, **2010**, 55, 3915-3920	6.7	55
281	Spiropyran polymeric microcapillary coatings for photodetection of solvent polarity. *Langmuir*, **2013**, 29, 2790-7	4	54
280	Dual contactless conductivity and amperometric detection on hybrid PDMS/glass electrophoresis microchips. *Analyst, The*, **2010**, 135, 96-103	5	54
279	Evaluation of miniaturised solid state reference electrodes on a silicon based component. *Sensors and Actuators B: Chemical*, **1997**, 44, 389-396	8.5	54
278	Chiral resolution of the enantiomers of phenylglycinol using (S)-di-naphthylprolinol calix[4]arene by capillary electrophoresis and fluorescence spectroscopy. *Analytical Communications*, **1998**, 35, 123-125		53
277	An integrated sensing and wireless communications platform for sensing sodium in sweat. *Analytical Methods*, **2016**, 8, 64-71	3.2	52
276	A portable centrifugal analyser for liver function screening. *Biosensors and Bioelectronics*, **2014**, 56, 352-8	11.8	52
275	Integration of analytical measurements and wireless communications--current issues and future strategies. *Talanta*, **2008**, 75, 606-12	6.2	52
274	Tuning and enhancing enantioselective quenching of calixarene hosts by chiral guest amines. *Analytical Chemistry*, **2002**, 74, 59-66	7.8	52

273	Polystyrene bead-based system for optical sensing using spiropyran photoswitches. *Journal of Materials Chemistry*, **2008**, 18, 5063		51
272	The determination of phosphorus in a microfluidic manifold demonstrating long-term reagent lifetime and chemical stability utilising a colorimetric method. *Sensors and Actuators B: Chemical*, **2003**, 90, 170-174	8.5	51
271	Monitoring of headspace total volatile basic nitrogen from selected fish species using reflectance spectroscopic measurements of pH sensitive films. *Analyst, The*, **2002**, 127, 1338-41	5	51
270	Photo-chemopropulsion--light-stimulated movement of microdroplets. *Advanced Materials*, **2014**, 26, 7339-45	24	50
269	Optical sensing system based on wireless paired emitter detector diode device and ionogels for lab-on-a-disc water quality analysis. *Lab on A Chip*, **2012**, 12, 5069-78	7.2	50
268	Optical Sensor for Gaseous Ammonia With TuneableSensitivity. *Analyst, The*, **1997**, 122, 803-806	5	50
267	Photometric detection in flow analysis systems using integrated PEDDs. *Talanta*, **2005**, 66, 1340-4	6.2	50
266	Improved nitrate sensing using ion selective electrodes based on urea□alixarene ionophores. *New Journal of Chemistry*, **2007**, 31, 587-592	3.6	49
265	Monitoring of volatile bases in fish sample headspace using an acidochromic dye. *Food Chemistry*, **2000**, 69, 97-103	8.5	49
264	Modular microfluidic valve structures based on reversible thermoresponsive ionogel actuators. *Lab on A Chip*, **2014**, 14, 3530-8	7.2	48
263	pH-controlled morphological structure of polyaniline during electrochemical deposition. *Electrochimica Acta*, **2009**, 54, 6172-6177	6.7	48
262	Determination of phosphate using a highly sensitive paired emitter-detector diode photometric flow detector. *Analytica Chimica Acta*, **2007**, 597, 290-4	6.6	47
261	Monitoring chemical plumes in an environmental sensing chamber with a wireless chemical sensor network. *Sensors and Actuators B: Chemical*, **2007**, 121, 142-149	8.5	47
260	Solid-state ammonia sensor based on Berthelot□ reaction. *Sensors and Actuators B: Chemical*, **2004**, 98, 12-17	8.5	46
259	Nonlinear calibration of ion-selective electrode arrays for flow injection analysis. *Analytical Chemistry*, **1992**, 64, 1721-1728	7.8	46
258	Modeling of potentiometric electrode arrays for multicomponent analysis. *Analytical Chemistry*, **1991**, 63, 876-882	7.8	46
257	A potentiometric disposable sensor strip for measuring pH in saliva. *Electrochimica Acta*, **2014**, 132, 292-296	6.7	45
256	Towards autonomous environmental monitoring systems. *Talanta*, **2002**, 56, 355-63	6.2	45

255	Light-responsive polymers for microfluidic applications. *Lab on A Chip*, **2018**, 18, 699-709	7.2	44
254	Photo- and solvatochromic properties of nitrobenzospiropyran in ionic liquids containing the [NTf2]- anion. *Physical Chemistry Chemical Physics*, **2008**, 10, 5919-24	3.6	44
253	Direct Laser Writing of Four-Dimensional Structural Color Microactuators Using a Photonic Photoresist. *ACS Nano*, **2020**, 14, 9832-9839	16.7	43
252	Disposable solid-contact ion-selective electrodes for environmental monitoring of lead with ppb limit-of-detection. *Electrochimica Acta*, **2012**, 73, 93-97	6.7	43
251	Portable integrated microfluidic analytical platform for the monitoring and detection of nitrite. *Talanta*, **2013**, 116, 997-1004	6.2	43
250	Evaluation of Liquid- and Solid-Contact, Pb2+-Selective Polymer-Membrane Electrodes for Soil Analysis. *Electroanalysis*, **2008**, 20, 340-346	3	43
249	Point-of-need diagnosis of cystic fibrosis using a potentiometric ion-selective electrode array. *Analyst, The*, **2000**, 125, 2264-7	5	43
248	Thermoresponsive poly(ionic liquid) hydrogels. *Chemical Communications*, **2013**, 49, 10308-10	5.8	42
247	Ionic Liquid-Based, Liquid-Junction-Free Reference Electrode. *Electroanalysis*, **2011**, 23, 1881-1890	3	42
246	Thermal reversion of spirooxazine in ionic liquids containing the [NTf2]- anion. *Physical Chemistry Chemical Physics*, **2009**, 11, 5608-14	3.6	42
245	Materials science and the sensor revolution. *Materials Today*, **2010**, 13, 16-23	21.8	42
244	Performance characteristics of a polypyrrole modified polydimethylsiloxane (PDMS) membrane based microfluidic pump. *Sensors and Actuators A: Physical*, **2008**, 148, 239-244	3.9	41
243	Neural network based recognition of flow injection patterns. *Analyst, The*, **1993**, 118, 347	5	41
242	Fabrication of soft, stimulus-responsive structures with sub-micron resolution via two-photon polymerization of poly(ionic liquid)s. *Materials Today*, **2018**, 21, 807-816	21.8	41
241	A wearable sensor for the detection of sodium and potassium in human sweat during exercise. *Talanta*, **2020**, 219, 121145	6.2	40
240	An Autonomous Microfluidic Sensor for Phosphate: On-Site Analysis of Treated Wastewater. *IEEE Sensors Journal*, **2008**, 8, 508-515	4	40
239	Challenges and opportunities in wearable technology for biochemical analysis in sweat. *Current Opinion in Electrochemistry*, **2017**, 3, 46-50	7.2	39
238	Synthesis and characterisation of spiropyran-polymer brushes in micro-capillaries: Towards an integrated optical sensor for continuous flow analysis. *Sensors and Actuators B: Chemical*, **2012**, 175, 92-99	8.5	39

237	Dynamic pH mapping in microfluidic devices by integrating adaptive coatings based on polyaniline with colorimetric imaging techniques. *Lab on A Chip*, **2013**, 13, 1079-85	7.2	38
236	LED switching of spiropyran-doped polymer films. *Journal of Materials Science*, **2006**, 41, 5841-5844	4.3	38
235	Photo-patternable hybrid ionogels for electrochromic applications. *Journal of Materials Chemistry*, **2011**, 21, 8687		37
234	Biomimetic, low power pumps based on soft actuators. *Sensors and Actuators A: Physical*, **2007**, 135, 229-235	3.9	37
233	Diagnostic of functionality of polymer membrane based ion selective electrodes by impedance spectroscopy. *Analytical Methods*, **2010**, 2, 1490	3.2	36
232	Spiropyran modified micro-fluidic chip channels as photonically controlled self-indicating system for metal ion accumulation and release. *Sensors and Actuators B: Chemical*, **2009**, 140, 295-303	8.5	36
231	Characterisation and analytical potential of a photo-responsive polymeric material based on spiropyran. *Biosensors and Bioelectronics*, **2010**, 26, 1392-8	11.8	36
230	Swelling and shrinking behaviour of photoresponsive phosphonium-based ionogel microstructures. *Sensors and Actuators B: Chemical*, **2014**, 194, 105-113	8.5	35
229	Photonic modulation of surface properties: a novel concept in chemical sensing. *Journal Physics D: Applied Physics*, **2007**, 40, 7238-7244	3	35
228	Quantitative colorimetric analysis of dye mixtures using an optical photometer based on LED array. *Sensors and Actuators B: Chemical*, **2006**, 114, 819-825	8.5	35
227	Enantioselective molecular sensing of aromatic amines using tetra-(S)-di-2-naphthylprolinol calix[4]arene. *Analyst, The*, **2001**, 126, 1063-7	5	35
226	CMAS: fully integrated portable centrifugal microfluidic analysis system for on-site colorimetric analysis. *RSC Advances*, **2013**, 3, 15928	3.7	34
225	Ion selective electrodes in environmental analysis. *Journal of the Serbian Chemical Society*, **2013**, 78, 1729-1761	0.9	34
224	Inkjet printed LED based pH chemical sensor for gas sensing. *Analytica Chimica Acta*, **2009**, 652, 308-14	6.6	34
223	Trace-Level Determination of Cs+ Using Membrane-Based Ion-Selective Electrodes. *Electroanalysis*, **2006**, 18, 1379-1388	3	34
222	Low pressure ion chromatography with a low cost paired emitter-detector diode based detector for the determination of alkaline earth metals in water samples. *Analytica Chimica Acta*, **2006**, 577, 32-7	6.6	34
221	Textile-Based Wearable Sensors for Assisting Sports Performance **2009**,		33
220	Sodium-selective electrodes based on triester monoacid derivatives of p-tert-butylcalix[4]arene. Comparison with tetraester calix[4]arene ionophores. *Analytica Chimica Acta*, **1996**, 336, 1-12	6.6	33

219	Evaluation of a new solid-state reference electrode junction material for ion-selective electrodes. *Electroanalysis*, **1994**, 6, 962-971	3	33
218	Pump Less Wearable Microfluidic Device for Real Time pH Sweat Monitoring. *Procedia Chemistry*, **2009**, 1, 1103-1106		32
217	A Wearable Device for Monitoring Sweat Rates via Image Analysis. *IEEE Transactions on Biomedical Engineering*, **2016**, 63, 1672-80	5	31
216	Calixarene-based sensing agents. *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, **1994**, 19, 149-166		31
215	Controlled transport of droplets using conducting polymers. *Langmuir*, **2009**, 25, 11137-41	4	30
214	Investigating nanostructuring within imidazolium ionic liquids: a thermodynamic study using photochromic molecular probes. *Journal of Physical Chemistry B*, **2009**, 113, 15589-96	3.4	30
213	Ion-selective optode membranes using 9-(4-diethylamino-2-octadecanoatestyryl)-acridine acidochromic dye. *Analytica Chimica Acta*, **1999**, 398, 1-11	6.6	30
212	Assessment of a chromogenic calix[4]arene for the rapid colorimetric detection of trimethylamine. *Journal of Materials Chemistry*, **1994**, 4, 217		30
211	Novel chromogenic ligands for lithium and sodium based on calix[4]arene tetraesters. *Journal of the Chemical Society Chemical Communications*, **1992**, 1287		30
210	Precision control of flow rate in microfluidic channels using photoresponsive soft polymer actuators. *Lab on A Chip*, **2017**, 17, 2013-2021	7.2	29
209	Porous self-protonating spiropyran-based NIPAAm gels with improved reswelling kinetics. *Journal of Materials Science*, **2016**, 51, 1392-1399	4.3	29
208	Autonomous reagent-based microfluidic pH sensor platform. *Sensors and Actuators B: Chemical*, **2016**, 225, 369-376	8.5	29
207	Synthesis and characterisation of controllably functionalised polyaniline nanofibres. *Synthetic Metals*, **2009**, 159, 741-748	3.6	29
206	Novel integrated paired emitter-detector diode (PEDD) as a miniaturized photometric detector in HPLC. *Analyst, The*, **2006**, 131, 938-43	5	29
205	An improved Na+-selective microelectrode for intracellular measurements in plant cells. *Journal of Experimental Botany*, **2001**, 52, 1353-1359	7	29
204	Calixarenes as active agents for chemical sensors. *Sensors and Actuators B: Chemical*, **1991**, 4, 325-331	8.5	29
203	Robust estimation of selectivity coefficients using multivariate calibration of ion-selective electrode arrays. *Analytica Chimica Acta*, **1993**, 276, 75-86	6.6	29
202	Ionic liquid modulation of swelling and LCST behavior of N-isopropylacrylamide polymer gels. *Physical Chemistry Chemical Physics*, **2014**, 16, 3610-6	3.6	28

201	Electrochemical codeposition of nickel oxide and polyaniline. *Journal of Solid State Electrochemistry* , **2010**, 14, 1-7	2.6	28
200	Fully automated, low-cost ion chromatography system for in-situ analysis of nitrite and nitrate in natural waters. *Talanta*, **2020**, 216, 120955	6.2	27
199	Voltammetric detection for capillary electrophoresis. *Analytical Chemistry*, **1997**, 69, 2994-3001	7.8	27
198	Electrochemically-induced fluid movement using polypyrrole. *Synthetic Metals*, **2005**, 151, 60-64	3.6	27
197	A novel calix[4]arene tetraester with fluorescent response to complexation with alkali metal cations. *Journal of the Chemical Society Chemical Communications*, **1993**, 480-483		27
196	Tuning microfluidic flow by pulsed light oscillating spiropyran-based polymer hydrogel valves. *Sensors and Actuators B: Chemical*, **2017**, 245, 81-86	8.5	26
195	Wearable Platform for Real-time Monitoring of Sodium in Sweat. *ChemPhysChem*, **2018**, 19, 1531-1536	3.2	26
194	Probing the specific ion effects of biocompatible hydrated choline ionic liquids on lactate oxidase biofunctionality in sensor applications. *Physical Chemistry Chemical Physics*, **2014**, 16, 1841-9	3.6	26
193	The development of an autonomous sensing platform for the monitoring of ammonia in water using a simplified Berthelot method. *Analytical Methods*, **2014**, 6, 7606-7614	3.2	26
192	Self-propelled chemotactic ionic liquid droplets. *Chemical Communications*, **2015**, 51, 2342-4	5.8	26
191	Increased response/recovery lifetimes and reinforcement of polyaniline nanofiber films using carbon nanotubes. *Carbon*, **2012**, 50, 1447-1454	10.4	26
190	Evaluation of a low cost wireless chemical sensor network for environmental monitoring **2008**,		26
189	Separation of transition metals on a poly-iminodiacetic acid grafted polymeric resin column with post-column reaction detection utilising a paired emitter-detector diode system. *Journal of Chromatography A*, **2008**, 1213, 31-6	4.5	25
188	Paired emitter-detector light emitting diodes for the measurement of lead(II) and cadmium(II). *Analytica Chimica Acta*, **2006**, 569, 221-226	6.6	25
187	CO2 laser microfabrication of an integrated polymer microfluidic manifold for the determination of phosphorus. *Lab on A Chip*, **2003**, 3, 221-3	7.2	25
186	Analysis of river water samples utilising a prototype industrial sensing system for phosphorus based on micro-system technology. *Journal of Environmental Monitoring*, **2002**, 4, 767-71		25
185	Enhanced Antifouling Properties of Carbohydrate Coated Poly(ether sulfone) Membranes. *ACS Applied Materials & Interfaces*, **2015**, 7, 17238-46	9.5	24
184	Development of a low cost microfluidic sensor for the direct determination of nitrate using chromotropic acid in natural waters. *Analytical Methods*, **2015**, 7, 5396-5405	3.2	24

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182	Portable X-Ray Fluorescence as a Rapid Technique for Surveying Elemental Distributions in Soil. *Spectroscopy Letters*, **2013**, 46, 516-526	1.1	24
181	Web-based real-time temperature monitoring of shellfish catches using a wireless sensor network. *Sensors and Actuators A: Physical*, **2005**, 122, 222-230	3.9	24
180	Water based-ionic liquid carbon dioxide sensor for applications in the food industry. *Sensors and Actuators B: Chemical*, **2017**, 253, 302-309	8.5	23
179	Poly(ionic liquid) thermo-responsive hydrogel microfluidic actuators. *Sensors and Actuators B: Chemical*, **2017**, 247, 749-755	8.5	23
178	Moving Droplets in 3D Using Light. *Advanced Materials*, **2018**, 30, e1801821	24	23
177	A liquid-junction-free reference electrode based on a PEDOT solid-contact and ionogel capping membrane. *Talanta*, **2014**, 125, 58-64	6.2	23
176	In vitro optimisation of a microdialysis system with potential for on-line monitoring of lactate and glucose in biological samples. *Analyst, The*, **1997**, 122, 185-9	5	23
175	Fast electrophoretic analysis of individual mitochondria using microchip capillary electrophoresis with laser induced fluorescence detection. *Lab on A Chip*, **2006**, 6, 1007-11	7.2	23
174	Progress in sensor array research. *Electroanalysis*, **1993**, 5, 795-802	3	23
173	Poly(Ionic Liquid) Semi-Interpenetrating Network Multi-Responsive Hydrogels. *Sensors*, **2016**, 16, 219	3.8	23
172	Textile sensors to measure sweat pH and sweat-rate during exercise **2009**,		22
171	Comparison of the analytical capabilities of an amperometric and an optical sensor for the determination of nitrate in river and well water. *Analytica Chimica Acta*, **1994**, 299, 81-90	6.6	22
170	Ammonium detection using an ion-selective electrode array in flow-injection analysis. *Electroanalysis*, **1994**, 6, 9-16	3	22
169	Polymerisation and surface modification of methacrylate monoliths in polyimide channels and polyimide coated capillaries using 660 nm light emitting diodes. *Journal of Chromatography A*, **2011** , 1218, 2954-62	4.5	21
168	Photochromism of nitrobenzospiropyran in phosphonium based ionic liquids. *Physical Chemistry Chemical Physics*, **2009**, 11, 7286-91	3.6	21
167	Solid-state sodium-selective sensors based on screen-printed Ag/AgCl reference electrodes. *Electroanalysis*, **1997**, 9, 1318-1324	3	21
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165	Chromogenic ligands for lithium based on calix[4]arene tetraesters bearing nitrophenol residues. *Journal of the Chemical Society Perkin Transactions II*, **1993**, 1963		21
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163	Paper based electronic tongue - a low-cost solution for the distinction of sugar type and apple juice brand. *Analyst, The*, **2019**, 144, 2827-2832	5	20
162	Wearable Bio and Chemical Sensors **2014**, 65-83		20
161	Graphene-doped photo-patternable ionogels: tuning of conductivity and mechanical stability of 3D microstructures. *Journal of Materials Chemistry*, **2012**, 22, 10552		20
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List of Publications

3 Molecular Schizophrenics: Switchable Materials with Multiple Functions653-672

2 Emerging technologies for autonomous in-situ monitoring of water quality **2021**, 19-55

1 Stimuli-Controlled Fluid Control and Microvehicle Movement in Microfluidic Channels **2021**, 128-128