Bart van Grinsven

List of Publications by Year
in descending order

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70 papers	1,772 citations	270111 25 h-index	325983 40 g-index
70 all docs	70 docs citations	70 times ranked	1712 citing authors

#	Article	IF	Citations
1	Reviewing the use of chitosan and polydopamine for electrochemical sensing. Current Opinion in Electrochemistry, 2022, 32, 100885.	2.5	6
2	Polyphosphate-Based Hydrogels as Drug-Loaded Wound Dressing: An In Vitro Study. ACS Applied Polymer Materials, 2022, 4, 2871-2879.	2.0	13
3	Imprinted Polydimethylsiloxane-Graphene Oxide Composite Receptor for the Biomimetic Thermal Sensing of Escherichia coli. ACS Sensors, 2022, 7, 1467-1475.	4.0	8
4	Diagnostic Performance of Electronic Noses in Cancer Diagnoses Using Exhaled Breath. JAMA Network Open, 2022, 5, e2219372.	2.8	24
5	Modular Science Kit as a support platform for STEM learning in primary and secondary school. Journal of Chemical Education, 2021, 98, 439-444.	1.1	6
6	Imprinted Polymers as Synthetic Receptors in Sensors for Food Safety. Biosensors, 2021, 11, 46.	2.3	17
7	Colorimetric Sensing of Amoxicillin Facilitated by Molecularly Imprinted Polymers. Polymers, 2021, 13, 2221.	2.0	15
8	Identifying Potential Machine Learning Algorithms for the Simulation of Binding Affinities to Molecularly Imprinted Polymers. Computation, 2021, 9, 103.	1.0	6
9	Biomimetic sensing of Escherichia coli at the solid-liquid interface: From surface-imprinted polymer synthesis toward real sample sensing in food safety. Microchemical Journal, 2021, 169, 106554.	2.3	25
10	Topographical Vacuum Sealing of 3D-Printed Multiplanar Microfluidic Structures. Biosensors, 2021, 11, 395.	2.3	4
11	Thermal Detection of Glucose in Urine Using a Molecularly Imprinted Polymer as a Recognition Element. ACS Sensors, 2021, 6, 4515-4525.	4.0	26
12	Searching for a common origin of heat-transfer effects in bio- and chemosensors: A study on thiols as a model system. Sensors and Actuators B: Chemical, 2020, 310, 127627.	4.0	6
13	Point of Care Diagnostics in Resource-Limited Settings: A Review of the Present and Future of PoC in Its Most Needed Environment. Biosensors, 2020, 10, 133.	2.3	57
14	MIPs for commercial application in low-cost sensors and assays â€“ An overview of the current status quo. Sensors and Actuators B: Chemical, 2020, 325, 128973.	4.0	130
15	A Molecularly Imprinted Polymer-based Dye Displacement Assay for the Rapid Visual Detection of Amphetamine in Urine. Molecules, 2020, 25, 5222.	1.7	14
16	Rapid Colorimetric Screening of Elevated Phosphate in Urine: A Charge-Transfer Interaction. ACS Omega, 2020, 5, 21054-21066.	1.6	6
17	The Liberalization of Microfluidics: Form 2 Benchtop 3D Printing as an Affordable Alternative to Established Manufacturing Methods. Physica Status Solidi (A) Applications and Materials Science, 2020, 217, 1900935.	0.8	15
18	Thermistors coated with molecularly imprinted nanoparticles for the electrical detection of peptides and proteins. Analyst, The, 2020, 145, 5419-5424.	1.7	9

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19	Surface grafted molecularly imprinted polymeric receptor layers for thermal detection of the New Psychoactive substance 2-methoxphenidine. Sensors and Actuators A: Physical, 2019, 295, 586-595.	2.0	24
20	Thermal Detection of Cardiac Biomarkers Heart-Fatty Acid Binding Protein and ST2 Using a Molecularly Imprinted Nanoparticle-Based Multiplex Sensor Platform. ACS Sensors, 2019, 4, 2838-2845.	4.0	50
21	Studying the Effect of Adhesive Layer Composition on MIPâ€Based Thermal Biosensing. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800941.	0.8	5
22	Biomimetic Bacterial Identification Platform Based on Thermal Transport Analysis Through Surface Imprinted Polymers: From Proof of Principle to Proof of Application. Physica Status Solidi (A) Applications and Materials Science, 2019, 216, 1800688.	0.8	5
23	Recent Advances in Electrosynthesized Molecularly Imprinted Polymer Sensing Platforms for Bioanalyte Detection. Sensors, 2019, 19, 1204.	2.1	154
24	Substrate displacement colorimetry for the detection of diarylethylamines. Sensors and Actuators B: Chemical, 2019, 282, 137-144.	4.0	19
25	Development of a Flexible MIP-Based Biosensor Platform for the Thermal Detection of Neurotransmitters. MRS Advances, 2018, 3, 1569-1574.	0.5	5
26	A novel thermal detection method based on molecularly imprinted nanoparticles as recognition elements. Nanoscale, 2018, 10, 2081-2089.	2.8	53
27	SIPâ€Based Thermal Detection Platform for the Direct Detection of Bacteria Obtained from a Contaminated Surface. Physica Status Solidi (A) Applications and Materials Science, 2018, 215, 1700777.	0.8	3
28	Real-time analysis of microbial growth by means of the Heat-Transfer Method (HTM) using Saccharomyces cerevisiae as model organism. Physics in Medicine, 2018, 6, 1-8.	0.6	14
29	A Novel Biomimetic Tool for Assessing Vitamin K Status Based on Molecularly Imprinted Polymers. Nutrients, 2018, 10, 751.	1.7	15
30	Development of a novel flexible polymer-based biosensor platform for the thermal detection of noradrenaline in aqueous solutions. Chemical Engineering Journal, 2017, 315, 459-468.	6.6	53
31	Optimization and characterization of a flow cell for heat-transfer-based biosensing. Physica Status Solidi (A) Applications and Materials Science, 2017, 214, 1600758.	0.8	8
32	Biomimetic Bacterial Identification Platform Based on Thermal Wave Transport Analysis (TWTA) through Surface-Imprinted Polymers. ACS Infectious Diseases, 2017, 3, 388-397.	1.8	33
33	Label-Free Detection of Small Organic Molecules by Molecularly Imprinted Polymer Functionalized Thermocouples: Toward In Vivo Applications. ACS Sensors, 2017, 2, 583-589.	4.0	31
34	Heat Transfer as a New Sensing Technique for the Label-Free Detection of Biomolecules. Springer Series on Chemical Sensors and Biosensors, 2017, , 383-407.	0.5	1
35	Evaluating the potential of thermal readâ€out techniques combined with molecularly imprinted polymers for the sensing of lowâ€weight organic molecules. Journal of Molecular Recognition, 2017, 30, e2563.	1.1	6
36	Studying the Drug Delivery Kinetics of a Nanoporous Matrix Using a MIP-Based Thermal Sensing Platform. Polymers, 2017, 9, 560.	2.0	4

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37	Single-Shot Detection of Neurotransmitters in Whole-Blood Samples by Means of the Heat-Transfer Method in Combination with Synthetic Receptors. Sensors, 2017, 17, 2701.	2.1	16
38	Introducing Thermal Wave Transport Analysis (TWTA): A Thermal Technique for Dopamine Detection by Screen-Printed Electrodes Functionalized with Molecularly Imprinted Polymer (MIP) Particles. Molecules, 2016, 21, 552.	1.7	32
39	Application of electrodeposited piezoâ€resistive polypyrrole for a pressureâ€sensitive bruxism sensor. Physica Status Solidi (A) Applications and Materials Science, 2016, 213, 1505-1509.	0.8	5
40	Label-Free Detection of Escherichia coli Based on Thermal Transport through Surface Imprinted Polymers. ACS Sensors, 2016, 1, 1140-1147.	4.0	64
41	Heat-transfer based characterization of DNA on synthetic sapphire chips. Sensors and Actuators B: Chemical, 2016, 230, 260-271.	4.0	10
42	Phase Transitions of Binary Lipid Mixtures: A Combined Study by Adiabatic Scanning Calorimetry and Quartz Crystal Microbalance with Dissipation Monitoring. Advances in Condensed Matter Physics, 2015, 2015, 1-14.	0.4	27
43	Heat-Transfer-Method-Based Cell Culture Quality Assay through Cell Detection by Surface Imprinted Polymers. Langmuir, 2015, 31, 2043-2050.	1.6	29
44	Improving the sensitivity of the heatâ€transfer method (HTM) for cancer cell detection with optimized sensor chips. Physica Status Solidi (A) Applications and Materials Science, 2015, 212, 1320-1326.	0.8	13
45	Label-free Protein Detection Based on the Heat-Transfer Methodâ€"A Case Study with the Peanut Allergen Ara h 1 and Aptamer-Based Synthetic Receptors. ACS Applied Materials & Interfaces, 2015, 7, 10316-10323.	4.0	32
46	Heat-transfer-based detection of SNPs in the PAH gene of PKU patients. International Journal of Nanomedicine, 2014, 9, 1629.	3.3	9
47	Array Formatting of the Heat-Transfer Method (HTM) for the Detection of Small Organic Molecules by Molecularly Imprinted Polymers. Sensors, 2014, 14, 11016-11030.	2.1	23
48	Photonic detection and characterization of DNA using sapphire microspheres. Journal of Biomedical Optics, 2014, 19, 097006.	1.4	7
49	Phase transitions in lipid vesicles detected by a complementary set of methods: heatâ€transfer measurements, adiabatic scanning calorimetry, and dissipationâ€mode quartz crystal microbalance. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1377-1388.	0.8	41
50	Integration of heat-transfer resistance measurements onto a digital microfluidic platform towards the miniaturized and automated label-free detection of biomolecular interactions. , 2014, , .		0
51	Heat transfer resistance as a tool to quantify hybridization efficiency of DNA on a nanocrystalline diamond surface. Diamond and Related Materials, 2014, 48, 32-36.	1.8	8
52	Rapid fabrication of micronâ€sized CVDâ€diamond structures by microfluidic contact printing. Physica Status Solidi (A) Applications and Materials Science, 2014, 211, 1448-1454.	0.8	4
53	Thermal detection of histamine with a graphene oxide based molecularly imprinted polymer platform prepared by reversible additionâ€"fragmentation chain transfer polymerization. Sensors and Actuators B: Chemical, 2014, 203, 527-535.	4.0	59
54	The Heat-Transfer Method: A Versatile Low-Cost, Label-Free, Fast, and User-Friendly Readout Platform for Biosensor Applications. ACS Applied Materials & Interfaces, 2014, 6, 13309-13318.	4.0	59

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55	Heat-Transfer Resistance Measurement Method (HTM)-Based Cell Detection at Trace Levels Using a Progressive Enrichment Approach with Highly Selective Cell-Binding Surface Imprints. Langmuir, 2014, 30, 3631-3639.	1.6	26
56	Heat-transfer-based detection of l-nicotine, histamine, and serotonin using molecularly imprinted polymers as biomimetic receptors. Analytical and Bioanalytical Chemistry, 2013, 405, 6453-6460.	1.9	45
57	Selective Identification of Macrophages and Cancer Cells Based on Thermal Transport through Surface-Imprinted Polymer Layers. ACS Applied Materials & Interfaces, 2013, 5, 7258-7267.	4.0	69
58	Impedimetric Detection of Histamine in Bowel Fluids Using Synthetic Receptors with pH-Optimized Binding Characteristics. Analytical Chemistry, 2013, 85, 1475-1483.	3.2	54
59	Implementing heat transfer resistivity as a key element in a nanocrystalline diamond based single nucleotide polymorphism detection array. Diamond and Related Materials, 2013, 38, 45-51.	1.8	12
60	Surface plasmon resonanceâ€based <scp>DNA</scp> microarrays: Comparison of thiol and phosphorothioate modified oligonucleotides. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 918-925.	0.8	3
61	Optimizing the Thermal Read-Out Technique for MIP-Based Biomimetic Sensors: Towards Nanomolar Detection Limits. Sensors, 2013, 13, 9148-9159.	2.1	26
62	Combining Electrochemical Impedance Spectroscopy and Surface Plasmon Resonance into one Simultaneous Read-Out System for the Detection of Surface Interactions. Sensors, 2013, 13, 14650-14661.	2.1	7
63	Electronic monitoring of chemical <scp>DNA</scp> denaturation on nanocrystalline diamond electrodes with different molarities and flow rates. Physica Status Solidi (A) Applications and Materials Science, 2013, 210, 911-917.	0.8	3
64	MIP-based biomimetic sensor for the electronic detection of serotonin in human blood plasma. Sensors and Actuators B: Chemical, 2012, 171-172, 602-610.	4.0	58
65	Heat-Transfer Resistance at Solidâ€“Liquid Interfaces: A Tool for the Detection of Single-Nucleotide Polymorphisms in DNA. ACS Nano, 2012, 6, 2712-2721.	7.3	74
66	Miniaturised eightâ€channel impedance spectroscopy unit as sensor platform for biosensor applications. Physica Status Solidi (A) Applications and Materials Science, 2011, 208, 1357-1363.	0.8	22
67	Optimization of a Boron Doped Nanocrystalline Diamond Temperature Regulator for Sensing Applications. Materials Research Society Symposia Proceedings, 2011, 1282, 123.	0.1	0
68	Rapid assessment of the stability of DNA duplexes by impedimetric real-time monitoring of chemically induced denaturation. Lab on A Chip, 2011, 11, 1656.	3.1	35
69	Customized impedance spectroscopy device as possible sensor platform for biosensor applications. Physica Status Solidi (A) Applications and Materials Science, 2010, 207, 919-923.	0.8	20
70	Impact of Sampling Rate Reduction on Automatic ECG Delineation. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2007, 2007, 2587-90.	0.5	10