

# Thomas Scheper

## 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.

248  
papers

5,227  
citations

36  
h-index

59  
g-index

257  
ext. papers

6,126  
ext. citations

4  
avg. IF

5.85  
L-index

#	Paper	IF	Citations
248	On-Line Monitoring of Biological Parameters in Microalgal Bioprocesses Using Optical Methods. <i>Energies</i> , <b>2022</b> , 15, 875	3.1	8
247	Stress-induced increase of monoclonal antibody production in CHO cells.. <i>Engineering in Life Sciences</i> , <b>2022</b> , 22, 427-436	3.4	0
246	Identification of Major Constituents of L. Extracts in Syria by Development of a Rapid, Simple, and Reproducible HPLC-ESI-Q-TOF MS Analysis and Their Antioxidant Activities.. <i>ACS Omega</i> , <b>2022</b> , 7, 13475-13493	3.9	6
245	Green Synthesis of Silver Nanoparticles Using Hypericum perforatum L. Aqueous Extract with the Evaluation of Its Antibacterial Activity against Clinical and Food Pathogens. <i>Pharmaceutics</i> , <b>2022</b> , 14, 1104	6.4	4
244	Paving the Way to Overcome Antifungal Drug Resistance: Current Practices and Novel Developments for Rapid and Reliable Antifungal Susceptibility Testing.. <i>Small Methods</i> , <b>2021</b> , 5, e2100713	12.8	2
243	Porous Silicon-Based Aptasensors: Toward Cancer Protein Biomarker Detection. <i>ACS Measurement Science Au</i> , <b>2021</b> , 1, 82-94		5
242	Implementing a digital infrastructure for the lab using a central laboratory server and the SiLA2 communication standard. <i>Engineering in Life Sciences</i> , <b>2021</b> , 21, 208-219	3.4	1
241	Digitalization and Bioprocessing: Promises and Challenges. <i>Advances in Biochemical Engineering/Biotechnology</i> , <b>2021</b> , 176, 57-69	1.7	4
240	In-Vitro Application of Magnetic Hybrid Niosomes: Targeted siRNA-Delivery for Enhanced Breast Cancer Therapy. <i>Pharmaceutics</i> , <b>2021</b> , 13,	6.4	13
239	Transferrin-Decorated Niosomes with Integrated InP/ZnS Quantum Dots and Magnetic Iron Oxide Nanoparticles: Dual Targeting and Imaging of Glioma. <i>International Journal of Molecular Sciences</i> , <b>2021</b> , 22,	6.3	7
238	Clinical applicability of optogenetic gene regulation. <i>Biotechnology and Bioengineering</i> , <b>2021</b> , 118, 4168-4185	4.85	2
237	A pre-conditioning protocol of peripheral blood derived endothelial colony forming cells for endothelialization of tissue engineered constructs. <i>Microvascular Research</i> , <b>2021</b> , 134, 104107	3.7	4
236	Implementation of QbD strategies in the inoculum expansion of a mAb production process. <i>Engineering in Life Sciences</i> , <b>2021</b> , 21, 196-207	3.4	4
235	Monitoring cell productivity for the production of recombinant proteins by flow cytometry: An effective application using the cold capture assay. <i>Engineering in Life Sciences</i> , <b>2021</b> , 21, 288-293	3.4	2
234	L-Mediated Green Synthesis of Silver Nanoparticles Exhibiting Antioxidant and Anticancer Activities. <i>Nanomaterials</i> , <b>2021</b> , 11,	5.4	23
233	Vascular Network Formation on Macroporous Polydioxanone Scaffolds. <i>Tissue Engineering - Part A</i> , <b>2021</b> , 27, 1239-1249	3.9	3
232	Refolding, purification, and characterization of constitutive-active human-Smad8 produced as inclusion bodies in ClearColi <sup>®</sup> BL21 (DE3). <i>Protein Expression and Purification</i> , <b>2021</b> , 184, 105878	2	1

231	Accelerated production of $\alpha$ ,8- and $\alpha$ ,9-linked polysialic acid in recombinant using high cell density cultivation. <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , <b>2020</b> , 28, e00562	5.3	
230	Process Optimization using High Throughput Automated Micro-Bioreactors in Chinese Hamster Ovary Cell Cultivation. <i>Journal of Visualized Experiments</i> , <b>2020</b> ,	1.6	1
229	Aptamers vs. antibodies as capture probes in optical porous silicon biosensors. <i>Analyst, The</i> , <b>2020</b> , 145, 4991-5003	5	32
228	Development and characterization of a fiber optical fluorescence sensor for the online monitoring of biofilms and their microenvironment. <i>Engineering in Life Sciences</i> , <b>2020</b> , 20, 252-264	3.4	4
227	Functionalized Pt(II) and Ir(III) NIR Emitters and Their Covalent Conjugates with Polymer-Based Nanocarriers. <i>Bioconjugate Chemistry</i> , <b>2020</b> , 31, 1327-1343	6.3	12
226	Bio-Inspired Amphiphilic Block-Copolymers Based on Synthetic Glycopolymer and Poly(Amino Acid) as Potential Drug Delivery Systems. <i>Polymers</i> , <b>2020</b> , 12,	4.5	16
225	Characterization of a customized 3D-printed cell culture system using clear, translucent acrylate that enables optical online monitoring. <i>Biomedical Materials (Bristol)</i> , <b>2020</b> , 15, 055007	3.5	10
224	Whole-Cell Production of Patchouli Oil Sesquiterpenes in : Metabolic Engineering and Fermentation Optimization in Solid-Liquid Phase Partitioning Cultivation. <i>ACS Omega</i> , <b>2020</b> , 5, 32436-32446	3.9	5
223	Online monitoring of the cell-specific oxygen uptake rate with an in situ combi-sensor. <i>Analytical and Bioanalytical Chemistry</i> , <b>2020</b> , 412, 2111-2121	4.4	2
222	Customizable 3D-Printed (Co-)Cultivation Systems for In Vitro Study of Angiogenesis. <i>Materials</i> , <b>2020</b> , 13,	3.5	5
221	Purification of the human fibroblast growth factor 2 using novel animal-component free materials. <i>Journal of Chromatography A</i> , <b>2020</b> , 1626, 461367	4.5	2
220	Bringing IoT to the Lab: SiLA2 and Open-Source-Powered Gateway Module for Integrating Legacy Devices into the Digital Laboratory.. <i>HardwareX</i> , <b>2020</b> , 8, e00118	2.7	5
219	Live reporting for hypoxia: Hypoxia sensor-modified mesenchymal stem cells as in vitro reporters. <i>Biotechnology and Bioengineering</i> , <b>2020</b> , 117, 3265-3276	4.9	4
218	Xeno-Free In Vitro Cultivation and Osteogenic Differentiation of hAD-MSCs on Resorbable 3D Printed RESOMER. <i>Materials</i> , <b>2020</b> , 13,	3.5	2
217	3D-Printed Flow Cells for Aptamer-Based Impedimetric Detection of Crooks Strain. <i>Sensors</i> , <b>2020</b> , 20,	3.8	11
216	Aptasensors for Point-of-Care Detection of Small Molecules. <i>Biosensors</i> , <b>2020</b> , 10,	5.9	13
215	Stronger Cytotoxicity for Cancer Cells Than for Fast Proliferating Human Stem Cells by Rationally Designed Dinuclear Complexes. <i>Inorganic Chemistry</i> , <b>2020</b> , 59, 14464-14477	5.1	2
214	Antifungal Susceptibility Testing of on Silicon Microwells by Intensity-Based Reflectometric Interference Spectroscopy. <i>ACS Infectious Diseases</i> , <b>2020</b> , 6, 2560-2566	5.5	4

213	Development of an Aptamer-Based Lateral Flow Assay for the Detection of C-Reactive Protein Using Microarray Technology as a Prescreening Platform. <i>ACS Combinatorial Science</i> , <b>2020</b> , 22, 617-629	3.9	5
212	Optimization of factors influencing enzyme activity and product selectivity and the role of proton transfer in the catalytic mechanism of patchoulol synthase. <i>Biotechnology Progress</i> , <b>2020</b> , 36, e2935	2.8	3
211	Comparative Analysis of Mesenchymal Stem Cell Cultivation in Fetal Calf Serum, Human Serum, and Platelet Lysate in 2D and 3D Systems. <i>Frontiers in Bioengineering and Biotechnology</i> , <b>2020</b> , 8, 598389	5.8	6
210	Rapid Microfluidic Preparation of Niosomes for Targeted Drug Delivery. <i>International Journal of Molecular Sciences</i> , <b>2019</b> , 20,	6.3	21
209	Gelatin-Methacryloyl (GelMA) Formulated with Human Platelet Lysate Supports Mesenchymal Stem Cell Proliferation and Differentiation and Enhances the Hydrogel's Mechanical Properties. <i>Bioengineering</i> , <b>2019</b> , 6,	5.3	19
208	Improved Production and In Situ Recovery of Sesquiterpene (+)-Zizaene from Metabolically-Engineered. <i>Molecules</i> , <b>2019</b> , 24,	4.8	8
207	Production of a Recombinant Non-Hydroxylated Gelatin Mimetic in for Biomedical Applications. <i>Journal of Functional Biomaterials</i> , <b>2019</b> , 10,	4.8	5
206	Microarray-based screening system identifies temperature-controlled activity of Connexin 26 that is distorted by mutations. <i>Scientific Reports</i> , <b>2019</b> , 9, 13543	4.9	2
205	Modulating the Precursor and Terpene Synthase Supply for the Whole-Cell Biocatalytic Production of the Sesquiterpene (+)-Zizaene in a Pathway Engineered. <i>Genes</i> , <b>2019</b> , 10,	4.2	7
204	Charged aerosol detector HPLC as a characterization and quantification application of biopharmaceutically relevant polysialic acid from E. coli K1. <i>Journal of Chromatography A</i> , <b>2019</b> , 1599, 85-94	4.5	9
203	Catalytic Specificity, Reaction Mechanisms, and Conformational Changes during Catalysis of the Recombinant SUMO (+)-Zizaene Synthase from <i>Chrysopogon zizanioides</i> . <i>ACS Omega</i> , <b>2019</b> , 4, 6199-6209	3.9	4
202	A novel LED-based 2D-fluorescence spectroscopy system for in-line bioprocess monitoring of Chinese hamster ovary cell cultivations-Part II. <i>Engineering in Life Sciences</i> , <b>2019</b> , 19, 341-351	3.4	7
201	Electroporation: A Sustainable and Cell Biology Preserving Cell Labeling Method for Adipogenic Mesenchymal Stem Cells. <i>BioResearch Open Access</i> , <b>2019</b> , 8, 32-44	2.4	6
200	Optimization of continuous purification of recombinant patchoulol synthase from <i>Escherichia coli</i> with membrane adsorbers. <i>Biotechnology Progress</i> , <b>2019</b> , 35, e2812	2.8	7
199	Determination of the Structural Integrity and Stability of Polysialic Acid during Alkaline and Thermal Treatment. <i>Molecules</i> , <b>2019</b> , 25,	4.8	2
198	Sensors for Disposable Bioreactor Systems <b>2019</b> , 69-82		3
197	Production of polycaprolactone nanoparticles with hydrodynamic diameters below 100nm. <i>Engineering in Life Sciences</i> , <b>2019</b> , 19, 658-665	3.4	10
196	High cell density transient transfection of CHO cells for TGF- $\beta$ expression. <i>Engineering in Life Sciences</i> , <b>2019</b> , 19, 730-740	3.4	4

195	Real-Time Live-Cell Imaging Technology Enables High-Throughput Screening to Verify in Vitro Biocompatibility of 3D Printed Materials. <i>Materials</i> , <b>2019</b> , 12,	3.5	15
194	Development of Aptamer-Based TID Assays Using Thermophoresis and Microarrays. <i>Biosensors</i> , <b>2019</b> , 9,	5.9	4
193	smartLAB ¶Interaktives Arbeiten in digitalisierter Laborumgebung. <i>Chemie-Ingenieur-Technik</i> , <b>2019</b> , 91, 285-293	0.8	4
192	Development and Testing of a 4-Columns Periodic Counter-Current Chromatography System Based on Membrane Adsorbers. <i>Separations</i> , <b>2019</b> , 6, 55	3.1	5
191	Membrane Adsorber for the Fast Purification of a Monoclonal Antibody Using Protein A Chromatography. <i>Membranes</i> , <b>2019</b> , 9,	3.8	5
190	Continuous purification of lipase B using 3-membrane adsorber periodic counter-current chromatography. <i>Engineering in Life Sciences</i> , <b>2018</b> , 18, 414-424	3.4	11
189	Differentiation of Human Pluripotent Stem Cells into Functional Endothelial Cells in Scalable Suspension Culture. <i>Stem Cell Reports</i> , <b>2018</b> , 10, 1657-1672	8	51
188	Solubilization and renaturation of biologically active human bone morphogenetic protein-4 from inclusion bodies. <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , <b>2018</b> , 18, e00249	5.3	2
187	Heat Shock Proteins Revisited: Using a Mutasynthetically Generated Reblastatin Library to Compare the Inhibition of Human and Leishmania Hsp90s. <i>ChemBioChem</i> , <b>2018</b> , 19, 562-574	3.8	12
186	Positive in vitro wound healing effects of functional inclusion bodies of a lipoxygenase from the Mexican axolotl. <i>Microbial Cell Factories</i> , <b>2018</b> , 17, 57	6.4	13
185	Tacrolimus inhibits angiogenesis and induces disaggregation of endothelial cells in spheroids - Toxicity testing in a 3D cell culture approach. <i>Toxicology in Vitro</i> , <b>2018</b> , 53, 10-19	3.6	4
184	Comparison of different three dimensional-printed resorbable materials: In vitro biocompatibility, In vitro degradation rate, and cell differentiation support. <i>Journal of Biomaterials Applications</i> , <b>2018</b> , 33, 281-294	2.9	3
183	Aptamer-Modified Magnetic Beads in Biosensing. <i>Sensors</i> , <b>2018</b> , 18,	3.8	23
182	Introducing a Virtual Assistant to the Lab: A Voice User Interface for the Intuitive Control of Laboratory Instruments. <i>SLAS Technology</i> , <b>2018</b> , 23, 476-482	3	24
181	Gelatin-Methacryloyl (GelMA) Hydrogels with Defined Degree of Functionalization as a Versatile Toolkit for 3D Cell Culture and Extrusion Bioprinting. <i>Bioengineering</i> , <b>2018</b> , 5,	5.3	137
180	Heparin: role in protein purification and substitution with animal-component free material. <i>Applied Microbiology and Biotechnology</i> , <b>2018</b> , 102, 8647-8660	5.7	13
179	Substrate specificity of ¶humulene synthase from Smith and determination of kinetic constants by a spectrophotometric assay. <i>Engineering in Life Sciences</i> , <b>2018</b> , 18, 654-658	3.4	
178	Aptamer-based lateral flow assays. <i>AIMS Bioengineering</i> , <b>2018</b> , 5, 78-102	3.4	23

177	Design and evaluation of split-ring resonators for aptamer-based biosensors. <i>Journal of Sensors and Sensor Systems</i> , <b>2018</b> , 7, 101-111	1.6	15
176	Development and characterisation of a new fluorescence sensor for online monitoring of bioprocesses. <i>Journal of Sensors and Sensor Systems</i> , <b>2018</b> , 7, 461-467	1.6	2
175	Development and Application of an Additively Manufactured Calcium Chloride Nebulizer for Alginate 3D-Bioprinting Purposes. <i>Journal of Functional Biomaterials</i> , <b>2018</b> , 9,	4.8	16
174	Novel Pathway for Efficient Covalent Modification of Polyester Materials of Different Design to Prepare Biomimetic Surfaces. <i>Polymers</i> , <b>2018</b> , 10,	4.5	6
173	A Portable Biosensor for 2,4-Dinitrotoluene Vapors. <i>Sensors</i> , <b>2018</b> , 18,	3.8	3
172	Primary and Stem Cell Microarrays: Application as Miniaturized Biotesting Systems. <i>Methods in Molecular Biology</i> , <b>2018</b> , 1771, 131-145	1.4	
171	An intelligent bioreactor system for the cultivation of a bioartificial vascular graft. <i>Engineering in Life Sciences</i> , <b>2017</b> , 17, 567-578	3.4	9
170	Polysialic acid production using K1 in a disposable bag reactor. <i>Engineering in Life Sciences</i> , <b>2017</b> , 17, 723-731	3.4	11
169	Rapid and label-free detection of protein a by aptamer-tethered porous silicon nanostructures. <i>Journal of Biotechnology</i> , <b>2017</b> , 257, 171-177	3.7	39
168	Surface and Mechanical Properties of Nanoparticulate Resin Coatings and Their Toxicological Characterization. <i>Chemical Engineering and Technology</i> , <b>2017</b> , 40, 376-384	2	
167	Bioproduction of Humulene in metabolically engineered and application in zerumbone synthesis. <i>Engineering in Life Sciences</i> , <b>2017</b> , 17, 900-907	3.4	9
166	Aptamer-based detection of adenosine triphosphate via qPCR. <i>Talanta</i> , <b>2017</b> , 172, 199-205	6.2	11
165	Spectroscopic sensors for in-line bioprocess monitoring in research and pharmaceutical industrial application. <i>Analytical and Bioanalytical Chemistry</i> , <b>2017</b> , 409, 651-666	4.4	71
164	Development of a microarray-based assay for efficient testing of new HSP70/DnaK inhibitors. <i>Bioorganic and Medicinal Chemistry</i> , <b>2017</b> , 25, 6345-6352	3.4	13
163	Differential Inductive Sensor for Continuous Non-Invasive Cell Growth Monitoring in Disposable Bioreactors. <i>Proceedings (mdpi)</i> , <b>2017</b> , 1, 518	0.3	2
162	Theranostic Liposome-Nanoparticle Hybrids for Drug Delivery and Bioimaging. <i>International Journal of Molecular Sciences</i> , <b>2017</b> , 18,	6.3	41
161	Turning Industrial Baker's Yeast Manufacture into a Powerful Zero Discharge Multipurpose Bioprocess. <i>Industrial Biotechnology</i> , <b>2017</b> , 13, 184-191	1.3	5
160	Additive manufactured customizable labware for biotechnological purposes. <i>Engineering in Life Sciences</i> , <b>2017</b> , 17, 931-939	3.4	11

159	A smart device application for the automated determination of colonies on agar plates. <i>Engineering in Life Sciences</i> , <b>2017</b> , 17, 959-966	3.4	17
158	Array Analysis Manager-An automated DNA microarray analysis tool simplifying microarray data filtering, bias recognition, normalization, and expression analysis. <i>Engineering in Life Sciences</i> , <b>2017</b> , 17, 841-846	3.4	1
157	Sensors for disposable bioreactors. <i>Engineering in Life Sciences</i> , <b>2017</b> , 17, 940-952	3.4	28
156	Detection of ochratoxin A by aptamer-assisted real-time PCR-based assay (Apta-qPCR). <i>Engineering in Life Sciences</i> , <b>2017</b> , 17, 923-930	3.4	9
155	Comparing two conventional methods of emulsion PCR and optimizing of Tegosoftware-based emulsion PCR. <i>Engineering in Life Sciences</i> , <b>2017</b> , 17, 953-958	3.4	6
154	On Chip Protein Pre-Concentration for Enhancing the Sensitivity of Porous Silicon Biosensors. <i>ACS Sensors</i> , <b>2017</b> , 2, 1767-1773	9.2	31
153	Tumor homing and penetrating peptide-conjugated niosomes as multi-drug carriers for tumor-targeted drug delivery. <i>RSC Advances</i> , <b>2017</b> , 7, 33378-33384	3.7	28
152	Purification of bone morphogenetic protein-2 from refolding mixtures using mixed-mode membrane chromatography. <i>Applied Microbiology and Biotechnology</i> , <b>2017</b> , 101, 123-130	5.7	11
151	New application of depth filters for the immobilization of <i>Candida antarctica</i> lipase B. <i>Applied Microbiology and Biotechnology</i> , <b>2017</b> , 101, 599-607	5.7	2
150	Aptamer-modified nanomaterials: principles and applications. <i>BioNanoMaterials</i> , <b>2017</b> , 18,		20
149	Revelation of Different Nanoparticle-Uptake Behavior in Two Standard Cell Lines NIH/3T3 and A549 by Flow Cytometry and Time-Lapse Imaging. <i>Toxics</i> , <b>2017</b> , 5,	4.7	21
148	Evaluation of CdTe/CdS/ZnS core/shell/shell quantum dot toxicity on three-dimensional spheroid cultures. <i>Toxicology Research</i> , <b>2016</b> , 5, 126-135	2.6	23
147	Monitoring of Microalgal Processes. <i>Advances in Biochemical Engineering/Biotechnology</i> , <b>2016</b> , 153, 89-142	4.7	7
146	Hydrogels based on collagen and fibrin [Frontiers and applications. <i>BioNanoMaterials</i> , <b>2016</b> , 17,		22
145	Impact of Feeding Strategies on the Scalable Expansion of Human Pluripotent Stem Cells in Single-Use Stirred Tank Bioreactors. <i>Stem Cells Translational Medicine</i> , <b>2016</b> , 5, 1289-1301	6.9	90
144	Considerations on the flow configuration of membrane chromatography devices for the purification of human basic fibroblast growth factor from crude lysates. <i>Engineering in Life Sciences</i> , <b>2016</b> , 16, 697-705	3.4	3
143	Aptamer-modified polymer nanoparticles for targeted drug delivery. <i>BioNanoMaterials</i> , <b>2016</b> , 17,		14
142	In vitro wound healing assays [State of the art. <i>BioNanoMaterials</i> , <b>2016</b> , 17,		28



141	Heterologous Expression, Purification, and Biochemical Characterization of Humulene Synthase from <i>Zingiber zerumbet</i> Smith. <i>Applied Biochemistry and Biotechnology</i> , <b>2016</b> , 178, 474-89	3.2	12
140	Online analysis of protein inclusion bodies produced in <i>E. coli</i> by monitoring alterations in scattered and reflected light. <i>Applied Microbiology and Biotechnology</i> , <b>2016</b> , 100, 4147-59	5.7	9
139	Development of living cell microarrays using non-contact micropipette printing. <i>Journal of Biotechnology</i> , <b>2016</b> , 217, 109-11	3.7	6
138	Aqueous Synthesis of PEGylated Quantum Dots with Increased Colloidal Stability and Reduced Cytotoxicity. <i>Bioconjugate Chemistry</i> , <b>2016</b> , 27, 414-26	6.3	36
137	Niosomes as Nanoparticulate Drug Carriers: Fundamentals and Recent Applications. <i>Journal of Nanomaterials</i> , <b>2016</b> , 2016, 1-13	3.2	131
136	Optimization of Cyanine Dye Stability and Analysis of FRET Interaction on DNA Microarrays. <i>Biology</i> , <b>2016</b> , 5,	4.9	3
135	Living Cell Microarrays: An Overview of Concepts. <i>Microarrays (Basel, Switzerland)</i> , <b>2016</b> , 5,		23
134	Spectroscopic methods and their applicability for high-throughput characterization of mammalian cell cultures in automated cell culture systems. <i>Engineering in Life Sciences</i> , <b>2016</b> , 16, 405-416	3.4	11
133	Smart multifunctional nanoparticles in nanomedicine. <i>BioNanoMaterials</i> , <b>2016</b> , 17,		19
132	Hydrogel-based microfluidics for vascular tissue engineering. <i>BioNanoMaterials</i> , <b>2016</b> , 17,		12
131	Aptamer mediated niosomal drug delivery. <i>RSC Advances</i> , <b>2016</b> , 6, 87910-87918	3.7	17
130	Inorganic Adsorbents in Enzymatic Processes <b>2016</b> , 251-295		
129	Toxicity, phototoxicity and biocidal activity of nanoparticles employed in photocatalysis. <i>Journal of Photochemistry and Photobiology C: Photochemistry Reviews</i> , <b>2016</b> , 29, 1-28	16.4	67
128	Industrial Application of Membrane Chromatography for the Purification of Enzymes <b>2016</b> , 297-316		
127	New, non-quinone fluorogeldanamycin derivatives strongly inhibit Hsp90. <i>ChemBioChem</i> , <b>2015</b> , 16, 302-318	3.8	13
126	Three dimensional spheroid cell culture for nanoparticle safety testing. <i>Journal of Biotechnology</i> , <b>2015</b> , 205, 120-9	3.7	55
125	PEG-salt aqueous two-phase systems: an attractive and versatile liquid-liquid extraction technology for the downstream processing of proteins and enzymes. <i>Applied Microbiology and Biotechnology</i> , <b>2015</b> , 99, 6599-616	5.7	45
124	New perspectives in shake flask pH control using a 3D-printed control unit based on pH online measurement. <i>Sensors and Actuators B: Chemical</i> , <b>2015</b> , 221, 1035-1043	8.5	25



123	Evaluation of a new mist-chamber bioreactor for biotechnological applications. <i>Biotechnology and Bioengineering</i> , <b>2015</b> , 112, 1155-64	4.9	6
122	Nanostructured Amphiphilic Star-Hyperbranched Block Copolymers for Drug Delivery. <i>Langmuir</i> , <b>2015</b> , 31, 4542-51	4	53
121	Development of an aptamer-based affinity purification method for vascular endothelial growth factor. <i>Biotechnology Reports (Amsterdam, Netherlands)</i> , <b>2015</b> , 8, 16-23	5.3	23
120	In vitro toxicological nanoparticle studies under flow exposure. <i>Journal of Nanoparticle Research</i> , <b>2015</b> , 17, 1	2.3	7
119	Characterisation of a Recombinant Patchoulol Synthase Variant for Biocatalytic Production of Terpenes. <i>Applied Biochemistry and Biotechnology</i> , <b>2015</b> , 176, 2185-201	3.2	16
118	Optimization of PEG $\beta$ alt aqueous two-phase systems by design of experiments. <i>Chemometrics and Intelligent Laboratory Systems</i> , <b>2015</b> , 149, 12-21	3.8	27
117	Steady-state biofilm cultivation of <i>Aspergillus niger</i> D15 in a ceramic capillary membrane bioreactor. <i>Pharmaceutical Bioprocessing</i> , <b>2015</b> , 3, 101-113		
116	Hydrogels for 3D mammalian cell culture: a starting guide for laboratory practice. <i>Applied Microbiology and Biotechnology</i> , <b>2015</b> , 99, 623-36	5.7	86
115	Anti-inflammatory activity of low molecular weight polysialic acid on human macrophages. <i>Scientific Reports</i> , <b>2015</b> , 5, 16800	4.9	50
114	A novel measuring chamber and automation platform for mammalian cell culture processes. <i>BMC Proceedings</i> , <b>2015</b> , 9, P30	2.3	1
113	Sensor systems for bioprocess monitoring. <i>Engineering in Life Sciences</i> , <b>2015</b> , 15, 469-488	3.4	114
112	Der Nebelkammer-Reaktor [Neuartiges Reaktorkonzept fñanspruchsvolle Kultivierungen. <i>Chemie-Ingenieur-Technik</i> , <b>2015</b> , 87, 773-780	0.8	
111	A case study on in vitro investigations of the potent biological activities of wheat germ and black cummin seed oil. <i>Turkish Journal of Chemistry</i> , <b>2015</b> , 39, 801-812	1	6
110	The Impact of Photobleaching on Microarray Analysis. <i>Biology</i> , <b>2015</b> , 4, 556-72	4.9	4
109	Iterative Cellular Screening System for Nanoparticle Safety Testing. <i>Journal of Nanomaterials</i> , <b>2015</b> , 2015, 1-16	3.2	7
108	Aptamer-based depletion of small molecular contaminants: A case study using ochratoxin A. <i>Biotechnology and Bioprocess Engineering</i> , <b>2015</b> , 20, 1016-1025	3.1	23
107	Label-free optical biosensors based on aptamer-functionalized porous silicon scaffolds. <i>Analytical Chemistry</i> , <b>2015</b> , 87, 1999-2006	7.8	75
106	Identification of the target binding site of ethanolamine-binding aptamers and its exploitation for ethanolamine detection. <i>Analytical Chemistry</i> , <b>2015</b> , 87, 677-85	7.8	33

105	One-pot aqueous synthesis of highly strained CdTe/CdS/ZnS nanocrystals and their interactions with cells. <i>RSC Advances</i> , <b>2015</b> , 5, 7485-7494	3.7	17
104	Comparison of colorimetric methods for the quantification of model proteins in aqueous two-phase systems. <i>Analytical Biochemistry</i> , <b>2015</b> , 477, 35-7	3.1	11
103	3D-printed individual labware in biosciences by rapid prototyping: A proof of principle. <i>Engineering in Life Sciences</i> , <b>2015</b> , 15, 51-56	3.4	30
102	Pushing the envelope in tissue engineering: ex vivo production of thick vascularized cardiac extracellular matrix constructs. <i>Tissue Engineering - Part A</i> , <b>2015</b> , 21, 1507-19	3.9	32
101	Non-invasive monitoring of bacterial growth and auto-induced protein production in a bioreactor with a closed-loop GC-IMS. <i>International Journal for Ion Mobility Spectrometry</i> , <b>2015</b> , 18, 9-15	1.5	11
100	3D-printed individual labware in biosciences by rapid prototyping: In vitro biocompatibility and applications for eukaryotic cell cultures. <i>Engineering in Life Sciences</i> , <b>2015</b> , 15, 57-64	3.4	28
99	Molecular Survival Strategies of Organisms: HSP and Small Molecules for Diagnostics and Drug Development. <i>Heat Shock Proteins</i> , <b>2015</b> , 323-344	0.2	2
98	Enzymatic conversion of flavonoids using bacterial chalcone isomerase and enoate reductase. <i>Angewandte Chemie - International Edition</i> , <b>2014</b> , 53, 1439-42	16.4	43
97	Analysis of aging in lager brewing yeast during serial repitching. <i>Journal of Biotechnology</i> , <b>2014</b> , 187, 60-70	3.7	12
96	Influence of Different Phase-Forming Parameters on the Phase Diagram of Several PEG&lt;math>\beta</math>alt Aqueous Two-Phase Systems. <i>Journal of Chemical &amp; Engineering Data</i> , <b>2014</b> , 59, 850-859	2.8	27
95	Noninvasive online biomass detector system for cultivation in shake flasks. <i>Engineering in Life Sciences</i> , <b>2014</b> , 14, 467-476	3.4	18
94	Biofunctional quantum dots as fluorescence probe for cell-specific targeting. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2014</b> , 114, 96-103	6	44
93	Determination of aqueous two-phase system phase-forming components in the presence of bovine serum albumin. <i>Analytical Biochemistry</i> , <b>2014</b> , 455, 10-2	3.1	8
92	Microarray-based screening of heat shock protein inhibitors. <i>Journal of Biotechnology</i> , <b>2014</b> , 180, 1-9	3.7	19
91	Mastication behavior of cis-1,4-polyisoprene as a model for natural rubber. <i>Journal of Applied Polymer Science</i> , <b>2014</b> , 131, n/a-n/a	2.9	1
90	Enzymatische Umsetzung von Flavonoiden mit einer bakteriellen Chalconisomerase und einer Enoatreduktase. <i>Angewandte Chemie</i> , <b>2014</b> , 126, 1463-1466	3.6	6
89	Application of an online-biomass sensor in an optical multisensory platform prototype for growth monitoring of biotechnical relevant microorganism and cell lines in single-use shake flasks. <i>Sensors</i> , <b>2014</b> , 14, 17390-405	3.8	30
88	In situ microscopy and MIR-spectroscopy as non-invasive optical sensors for cell cultivation process monitoring. <i>Pharmaceutical Bioprocessing</i> , <b>2014</b> , 2, 157-166		13

87	Cell assessment by at-line microscopy. <i>Methods in Molecular Biology</i> , <b>2014</b> , 1104, 343-53	1.4	1
86	Cultivation of shear stress sensitive microorganisms in disposable bag reactor systems. <i>Journal of Biotechnology</i> , <b>2013</b> , 167, 370-6	3.7	21
85	Aptamers: versatile probes for flow cytometry. <i>Applied Microbiology and Biotechnology</i> , <b>2013</b> , 97, 7097-109	3.9	38
84	In situ microscopy for in-line monitoring of the enzymatic hydrolysis of cellulose. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 8121-6	7.8	11
83	Monitoring of microalgal cultivations with on-line, flow-through microscopy. <i>Algal Research</i> , <b>2013</b> , 2, 253-257	5	31
82	Functionalized PLGA-doped zirconium oxide ceramics for bone tissue regeneration. <i>Biomedical Microdevices</i> , <b>2013</b> , 15, 1055-66	3.7	11
81	Tubular membrane bioreactors for biotechnological processes. <i>Applied Microbiology and Biotechnology</i> , <b>2013</b> , 97, 929-37	5.7	8
80	From invisible structures of SWCNTs toward fluorescent and targeting architectures for cell imaging. <i>Biomacromolecules</i> , <b>2013</b> , 14, 3532-41	6.9	26
79	Sustainability of industrial yeast serial repitching practice studied by gene expression and correlation analysis. <i>Journal of Biotechnology</i> , <b>2013</b> , 168, 718-28	3.7	11
78	Downstream processing of high chain length polysialic acid using membrane adsorbers and clay minerals for application in tissue engineering. <i>Engineering in Life Sciences</i> , <b>2013</b> , 13, 140-148	3.4	10
77	Reaktive Absorption von Kohlenstoffdioxid in helikalen Hohlfasermembrankontaktoren. <i>Chemie-Ingenieur-Technik</i> , <b>2013</b> , 85, 476-483	0.8	6
76	Folic acid-modified clay: targeted surface design for cell culture applications. <i>Journal of Materials Chemistry B</i> , <b>2013</b> , 1, 522-528	7.3	29
75	One-step-purification of penicillin G amidase from cell lysate using ion-exchange membrane adsorbers. <i>Journal of Membrane Science</i> , <b>2013</b> , 444, 359-364	9.6	10
74	A new mathematical model for the enzymatic kinetic resolution of racemates. <i>Journal of Mathematical Chemistry</i> , <b>2013</b> , 51, 1532-1547	2.1	
73	On-line monitoring of large cultivations of microalgae and cyanobacteria. <i>Trends in Biotechnology</i> , <b>2013</b> , 31, 406-14	15.1	84
72	PAMAM-functionalized water soluble quantum dots for cancer cell targeting. <i>Journal of Materials Chemistry</i> , <b>2012</b> , 22, 11529		47
71	Transcriptome-based identification of antioxidative gene expression after fish oil supplementation in normo- and dyslipidemic men. <i>Nutrition and Metabolism</i> , <b>2012</b> , 9, 45	4.6	36
70	Regulation of lipid metabolism-related gene expression in whole blood cells of normo- and dyslipidemic men after fish oil supplementation. <i>Lipids in Health and Disease</i> , <b>2012</b> , 11, 172	4.4	19

69	Different gene expression profiles in normo- and dyslipidemic men after fish oil supplementation: results from a randomized controlled trial. <i>Lipids in Health and Disease</i> , <b>2012</b> , 11, 105	4.4	24
68	Cytokine production using membrane adsorbers: Human basic fibroblast growth factor produced by <i>Escherichia coli</i> . <i>Engineering in Life Sciences</i> , <b>2012</b> , 12, 29-38	3.4	20
67	Separation of patatins and protease inhibitors from potato fruit juice with clay minerals as cation exchangers. <i>Journal of Separation Science</i> , <b>2012</b> , 35, 1596-602	3.4	13
66	Aptamers as detection molecules on reverse phase protein microarrays for the analysis of cell lysates. <i>Engineering in Life Sciences</i> , <b>2012</b> , 12, 144-151	3.4	12
65	Aptamers as affinity ligands for downstream processing. <i>Engineering in Life Sciences</i> , <b>2012</b> , 12, 496-506	3.4	38
64	A novel in situ probe for oxygen uptake rate measurement in mammalian cell cultures. <i>Biotechnology Progress</i> , <b>2012</b> , 28, 581-6	2.8	3
63	Transcriptome analysis. <i>Advances in Biochemical Engineering/Biotechnology</i> , <b>2012</b> , 127, 1-25	1.7	4
62	Bubble segmentation based on Shape From Shading for in-situ microscopy <b>2011</b> ,		1
61	Disposable Sensor Systems <b>2011</b> , 67-81		11
60	Process analytical sensors and image-based techniques for single-use bioreactors. <i>Engineering in Life Sciences</i> , <b>2011</b> , 11, 550-553	3.4	12
59	Comparison of the activity and pluripotency maintaining potential of human leukemia inhibitory factor (LIF) produced in <i>E.coli</i> and CHO cells. <i>BMC Proceedings</i> , <b>2011</b> , 5 Suppl 8, P109	2.3	
58	Production and purification of TGFb-1 in CHO-Cells. <i>BMC Proceedings</i> , <b>2011</b> , 5 Suppl 8, P134	2.3	
57	In-situ microscopy and 2D fluorescence spectroscopy as online methods for monitoring CHO cells during cultivation. <i>BMC Proceedings</i> , <b>2011</b> , 5 Suppl 8, P76	2.3	8
56	Characterization of the human AGE1.HN cell line: a systems biology approach. <i>BMC Proceedings</i> , <b>2011</b> , 5 Suppl 8, P78	2.3	1
55	Increasing productivity of hybridoma cell lines by sorting by side scattering light. <i>BMC Proceedings</i> , <b>2011</b> , 5 Suppl 8, P83	2.3	
54	Offline glucose biomonitoring in yeast culture by polyamidoamine/cysteamine-modified gold electrodes. <i>Biotechnology Progress</i> , <b>2011</b> , 27, 530-8	2.8	26
53	Aptamer-based downstream processing of his-tagged proteins utilizing magnetic beads. <i>Biotechnology and Bioengineering</i> , <b>2011</b> , 108, 2371-9	4.9	59
52	Laminares Mischen in Miniatur-Hohlfasermembranreaktoren durch Ausnutzung von Sekundärstrahlungen (Teil 1). <i>Chemie-Ingenieur-Technik</i> , <b>2011</b> , 83, 1066-1073	0.8	8

51	Strikt anaerobe Batch-Kultivierung von <i>Eubacterium ramulus</i> in einem neuartigen Einweg-Beutelreaktorsystem. <i>Chemie-Ingenieur-Technik</i> , <b>2011</b> , 83, 2147-2152	0.8	8
50	A new set up for multi-analyte sensing: at-line bio-process monitoring. <i>Biosensors and Bioelectronics</i> , <b>2011</b> , 26, 4532-7	11.8	34
49	Adsorption and separation of proteins by a synthetic hydrotalcite. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2011</b> , 87, 217-25	6	28
48	Expression and purification of bioactive soluble murine stem cell factor from recombinant <i>Escherichia coli</i> using thioredoxin as fusion partner. <i>Journal of Biotechnology</i> , <b>2011</b> , 152, 1-8	3.7	7
47	Comparison of polysialic acid production in <i>Escherichia coli</i> K1 during batch cultivation and fed-batch cultivation applying two different control strategies. <i>Journal of Biotechnology</i> , <b>2011</b> , 154, 222-237	3.7	21
46	In vivo evaluation of polysialic acid as part of tissue-engineered nerve transplants. <i>Tissue Engineering - Part A</i> , <b>2010</b> , 16, 3085-98	3.9	24
45	Preparation of bioactive soluble human leukemia inhibitory factor from recombinant <i>Escherichia coli</i> using thioredoxin as fusion partner. <i>Protein Expression and Purification</i> , <b>2010</b> , 73, 51-7	2	27
44	Characterization and improvement of cell line performance via flow cytometry and cell sorting. <i>Engineering in Life Sciences</i> , <b>2010</b> , NA-NA	3.4	2
43	In-situ imaging sensors for bioprocess monitoring: state of the art. <i>Analytical and Bioanalytical Chemistry</i> , <b>2010</b> , 398, 2429-38	4.4	54
42	On-line infrared spectroscopy for bioprocess monitoring. <i>Applied Microbiology and Biotechnology</i> , <b>2010</b> , 88, 11-22	5.7	110
41	A review of non-invasive optical-based image analysis systems for continuous bioprocess monitoring. <i>Bioprocess and Biosystems Engineering</i> , <b>2010</b> , 33, 247-56	3.7	64
40	Adsorption and separation of proteins by a smectitic clay mineral. <i>Bioprocess and Biosystems Engineering</i> , <b>2010</b> , 33, 847-61	3.7	32
39	Polysialic acid immobilized on silanized glass surfaces: a test case for its use as a biomaterial for nerve regeneration. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2010</b> , 21, 1371-8	4.5	15
38	Fluorescence spectroscopy as a novel method for on-line analysis of biocatalytic C=C bond formations. <i>Journal of Molecular Catalysis B: Enzymatic</i> , <b>2010</b> , 66, 124-129		6
37	Long term expansion of undifferentiated human iPS and ES cells in suspension culture using a defined medium. <i>Stem Cell Research</i> , <b>2010</b> , 5, 51-64	1.6	136
36	Application of different strain regimes in two-dimensional and three-dimensional adipose tissue-derived stem cell cultures induces osteogenesis: implications for bone tissue engineering. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2010</b> , 94, 927-36	5.4	18
35	Alcohol biosensing by polyamidoamine (PAMAM)/cysteamine/alcohol oxidase-modified gold electrode. <i>Biotechnology Progress</i> , <b>2010</b> , 26, 896-906	2.8	42
34	Development of a flow-through microscopic multitesting system for parallel monitoring of cell samples in biotechnological cultivation processes. <i>Journal of Biotechnology</i> , <b>2010</b> , 150, 87-93	3.7	6

33	Laser ablation-based one-step generation and bio-functionalization of gold nanoparticles conjugated with aptamers. <i>Journal of Nanobiotechnology</i> , <b>2010</b> , 8, 21	9.4	72
32	Cytotoxicity of titanium and silicon dioxide nanoparticles. <i>Journal of Physics: Conference Series</i> , <b>2009</b> , 170, 012022	0.3	12
31	Prediction of flocculation ability of brewing yeast inoculates by flow cytometry, proteome analysis, and mRNA profiling. <i>Cytometry Part A: the Journal of the International Society for Analytical Cytology</i> , <b>2009</b> , 75, 140-7	4.6	19
30	Electrochemical method for the synthesis of silver nanoparticles. <i>Journal of Nanoparticle Research</i> , <b>2009</b> , 11, 1193-1200	2.3	171
29	Extracellular production and affinity purification of recombinant proteins with Escherichia coli using the versatility of the maltose binding protein. <i>Journal of Biotechnology</i> , <b>2009</b> , 140, 194-202	3.7	18
28	Application of conjoint liquid chromatography with monolithic disks for the simultaneous determination of immunoglobulin G and other proteins present in a cell culture medium. <i>Journal of Chromatography A</i> , <b>2009</b> , 1216, 2671-5	4.5	21
27	Sensors in disposable bioreactors status and trends. <i>Advances in Biochemical Engineering/Biotechnology</i> , <b>2009</b> , 115, 145-69	1.7	29
26	Development of a novel membrane aerated hollow-fiber microbioreactor. <i>Biotechnology Progress</i> , <b>2008</b> , 24, 367-71	2.8	11
25	Large-scale production and homogenous purification of long chain polysialic acids from E. coli K1. <i>Journal of Biotechnology</i> , <b>2008</b> , 135, 202-9	3.7	39
24	Antimicrobial and antibacterial effects of silver nanoparticles synthesized by novel electrochemical method <b>2008</b> ,		2
23	Systematic investigation of optimal aptamer immobilization for protein-microarray applications. <i>Analytical Chemistry</i> , <b>2008</b> , 80, 7372-8	7.8	87
22	Synthesis and biological evaluation of a polysialic acid-based hydrogel as enzymatically degradable scaffold material for tissue engineering. <i>Biomacromolecules</i> , <b>2008</b> , 9, 2353-9	6.9	27
21	A study on polysialic acid as a biomaterial for cell culture applications. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2008</b> , 85, 1-13	5.4	11
20	Online monitoring of microcarrier based fibroblast cultivations with in situ microscopy. <i>Biotechnology and Bioengineering</i> , <b>2008</b> , 99, 136-45	4.9	35
19	Fast and efficient screening system for new biomaterials in tissue engineering: a model for peripheral nerve regeneration. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2007</b> , 81, 736-47	5.4	11
18	Optimization of a microarray sandwich-ELISA against hINF-gamma on a modified nitrocellulose membrane. <i>Biotechnology Progress</i> , <b>2007</b> , 23, 1498-505	2.8	23
17	In situ multi-wavelength fluorescence spectroscopy as effective tool to simultaneously monitor spore germination, metabolic activity and quantitative protein production in recombinant <i>Aspergillus niger</i> fed-batch cultures. <i>Journal of Biotechnology</i> , <b>2007</b> , 132, 461-8	3.7	28
16	Cultivation of MC3T3-E1 cells on a newly developed material (Sponceram) using a rotating bed system bioreactor. <i>Journal of Biomedical Materials Research - Part A</i> , <b>2007</b> , 80, 268-75	5.4	25



15	Fast and efficient protein purification using membrane adsorber systems. <i>Journal of Biotechnology</i> , <b>2006</b> , 121, 361-7	3.7	25
14	Innovative modular membrane adsorber system for high-throughput downstream screening for protein purification. <i>Biotechnology Progress</i> , <b>2006</b> , 22, 1215-9	2.8	32
13	Isolation of bovine lactoferrin, lactoperoxidase and enzymatically prepared lactoferricin from proteolytic digestion of bovine lactoferrin using adsorptive membrane chromatography. <i>Journal of Chromatography A</i> , <b>2006</b> , 1117, 81-6	4.5	70
12	On-line monitoring and control of substrate concentrations in biological processes by flow injection analysis systems. <i>Biotechnology and Bioprocess Engineering</i> , <b>2004</b> , 9, 156-165	3.1	15
11	Flow cytometry: interesting tool for studying binding behavior of DNA on inorganic layered double hydroxide (LDH). <i>Cytometry</i> , <b>2004</b> , 62, 65-9		20
10	Towards Complete Automation of Mammalian Cell Culture Perfusion Processes. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , <b>2004</b> , 37, 387-391		
9	Chemometric modelling with two-dimensional fluorescence data for <i>Claviceps purpurea</i> bioprocess characterization. <i>Journal of Biotechnology</i> , <b>2003</b> , 105, 179-88	3.7	57
8	In-situ microscopy: Online process monitoring of mammalian cell cultures. <i>Cytotechnology</i> , <b>2002</b> , 38, 129-34	2.2	100
7	Flow cytometry in biotechnology. <i>Applied Microbiology and Biotechnology</i> , <b>2001</b> , 56, 350-60	5.7	135
6	Monitoring and control of industrial downstream processing of sugar beet molasses. <i>Journal of Chromatography A</i> , <b>2000</b> , 882, 329-34	4.5	10
5	Fiber Optic Oxygen Sensors for Use in Biotechnology, Environmental, and Food Industries. <i>Chemical Engineering and Technology</i> , <b>1999</b> , 22, 666-671	2	5
4	Two-dimensional fluorescence spectroscopy: a new tool for on-line bioprocess monitoring. <i>Biotechnology Progress</i> , <b>1998</b> , 14, 63-74	2.8	137
3	Immobilization of Transmembrane Proteins in Liquid Crystal Systems. <i>Chemical Engineering and Technology</i> , <b>1998</b> , 21, 575-579	2	
2	Faseroptische Sauerstoffsensoren für Biotechnologie, Umwelt- und Lebensmitteltechnik. <i>Chemie-Ingenieur-Technik</i> , <b>1998</b> , 70, 1611-1617	0.8	8
1	A fluorometric fiber-optic biosensor for dual analysis of glucose and fructose using glucose-fructose-oxidoreductase isolated from <i>Zymomonas mobilis</i> . <i>Journal of Biotechnology</i> , <b>1994</b> , 36, 39-44	3.7	8