Martin Fussenegger

List of Publications by Year in Descending Order

293 papers	14,654 citations	65 h-index	107 g-index
303 ext. papers	16,374 ext. citations	12 avg, IF	6.98 L-index

#	Paper	IF	Citations
293	Engineering a Rapid Insulin Release System Controlled By Oral Drug Administration.. *Advanced Science*, **2022**, e2105619	13.6	1
292	Identification of Sclareol As a Natural Neuroprotective Ca 1.3-Antagonist Using Synthetic Parkinson-Mimetic Gene Circuits and Computer-Aided Drug Discovery.. *Advanced Science*, **2022**, e2102855	13.6	3
291	Engineering autonomous closed-loop designer cells for disease therapy.. *IScience*, **2022**, 25, 103834	6.1	0
290	CelloSelect - A synthetic cellobiose metabolic pathway for selection of stable transgenic CHO cell lines.. *Metabolic Engineering*, **2022**, 70, 23-30	9.7	0
289	Electrogenetics: Bridging synthetic biology and electronics to remotely control the behavior of mammalian designer cells.. *Current Opinion in Chemical Biology*, **2022**, 68, 102151	9.7	0
288	Design of modular autoproteolytic gene switches responsive to anti-coronavirus drug candidates. *Nature Communications*, **2021**, 12, 6786	17.4	3
287	Synthetic Biology-based Optogenetic Approaches to Control Therapeutic Designer Cells. *Current Opinion in Systems Biology*, **2021**, 100396	3.2	0
286	Gene switch for l-glucose-induced biopharmaceutical production in mammalian cells. *Biotechnology and Bioengineering*, **2021**, 118, 2220-2233	4.9	1
285	5-Fluorouracil blocks quorum-sensing of biofilm-embedded methicillin-resistant Staphylococcus aureus in mice. *Nucleic Acids Research*, **2021**, 49, e73	20.1	0
284	Rational design and optimization of synthetic gene switches for controlling cell-fate decisions in pluripotent stem cells. *Metabolic Engineering*, **2021**, 65, 99-110	9.7	3
283	Smart-watch-programmed green-light-operated percutaneous control of therapeutic transgenes. *Nature Communications*, **2021**, 12, 3388	17.4	9
282	An overview of signaling pathways regulating YAP/TAZ activity. *Cellular and Molecular Life Sciences*, **2021**, 78, 497-512	10.3	15
281	Engineering precision therapies: lessons and motivations from the clinic. *Synthetic Biology*, **2021**, 6, ysaa024	3.5	1
280	Bottom-up de novo design of functional proteins with complex structural features. *Nature Chemical Biology*, **2021**, 17, 492-500	11.7	25
279	Synthetic Biology: Emerging Concepts to Design and Advance Adeno-Associated Viral Vectors for Gene Therapy. *Advanced Science*, **2021**, 8, 2004018	13.6	9
278	Smartphone-Flashlight-Mediated Remote Control of Rapid Insulin Secretion Restores Glucose Homeostasis in Experimental Type-1 Diabetes. *Small*, **2021**, 17, e2101939	11	6
277	A versatile plasmid architecture for mammalian synthetic biology (VAMSyB). *Metabolic Engineering*, **2021**, 66, 41-50	9.7	1

276	Control of gene expression in engineered mammalian cells with a programmable shear-stress inducer. *Biotechnology and Bioengineering*, **2021**, 118, 4751-4759	4.9	1
275	Therapeutic cell engineering: designing programmable synthetic genetic circuits in mammalian cells. *Protein and Cell*, **2021**, 1	7.2	3
274	Genetically Encoded Protein Thermometer Enables Precise Electrothermal Control of Transgene Expression. *Advanced Science*, **2021**, 8, e2101813	13.6	4
273	Emerging mammalian gene switches for controlling implantable cell therapies. *Current Opinion in Chemical Biology*, **2021**, 64, 98-105	9.7	1
272	Remote Control of Mammalian Therapeutic Designer Cells. *Cell Engineering*, **2021**, 53-67		
271	Genetically encoded betaxanthin-based small-molecular fluorescent reporter for mammalian cells. *Nucleic Acids Research*, **2020**, 48, e67	20.1	3
270	Electrogenetic cellular insulin release for real-time glycemic control in type 1 diabetic mice. *Science*, **2020**, 368, 993-1001	33.3	45
269	Phosphoregulated orthogonal signal transduction in mammalian cells. *Nature Communications*, **2020**, 11, 3085	17.4	13
268	Building sophisticated sensors of extracellular cues that enable mammalian cells to work as "doctors" in the body. *Cellular and Molecular Life Sciences*, **2020**, 77, 3567-3581	10.3	17
267	Segregated Nanocompartments Containing Therapeutic Enzymes and Imaging Compounds within DNA-Zipped Polymersome Clusters for Advanced Nanotheranostic Platform. *Small*, **2020**, 16, e1906492	11	11
266	Rewiring of endogenous signaling pathways to genomic targets for therapeutic cell reprogramming. *Nature Communications*, **2020**, 11, 608	17.4	13
265	Neurons differentiate magnitude and location of mechanical stimuli. *Proceedings of the National Academy of Sciences of the United States of America*, **2020**, 117, 848-856	11.5	22
264	Synthetic biology technologies for beta cell generation **2020**, 407-420		
263	Design of Multipartite Transcription Factors for Multiplexed Logic Genome Integration Control in Mammalian Cells. *ACS Synthetic Biology*, **2020**, 9, 2964-2970	5.7	0
262	Role of YAP/TAZ in Cell Lineage Fate Determination and Related Signaling Pathways. *Frontiers in Cell and Developmental Biology*, **2020**, 8, 735	5.7	21
261	The Role of Protein Engineering in Biomedical Applications of Mammalian Synthetic Biology. *Small*, **2020**, 16, e1903093	11	8
260	Shedding Light on Extracellular Vesicle Biogenesis and Bioengineering. *Advanced Science*, **2020**, 8, 2003056	15.6	57
259	Construction of a Multiwell Light-Induction Platform for Traceless Control of Gene Expression in Mammalian Cells. *Methods in Molecular Biology*, **2020**, 2173, 189-199	1.4	1

258	A modular degron library for synthetic circuits in mammalian cells. *Nature Communications*, **2019**, 10, 2013	17.4	22
257	Genetic circuitry for personalized human cell therapy. *Current Opinion in Biotechnology*, **2019**, 59, 31-38	11.4	9
256	A CRISPR/Cas9-based central processing unit to program complex logic computation in human cells. *Proceedings of the National Academy of Sciences of the United States of America*, **2019**, 116, 7214-7219	11.5	41
255	From synthetic biology to human therapy: engineered mammalian cells. *Current Opinion in Biotechnology*, **2019**, 58, 108-116	11.4	25
254	A fully human transgene switch to regulate therapeutic protein production by cooling sensation. *Nature Medicine*, **2019**, 25, 1266-1273	50.5	25
253	Engineering mammalian cells for disease diagnosis and treatment. *Current Opinion in Biotechnology*, **2019**, 55, 87-94	11.4	16
252	Synthetic Biology: Engineering Mammalian Cells To Control Cell-to-Cell Communication at Will. *ChemBioChem*, **2019**, 20, 994-1002	3.8	10
251	Purity by design: Reducing impurities in bioproduction by stimulus-controlled global translational downregulation of non-product proteins. *Metabolic Engineering*, **2019**, 52, 110-123	9.7	7
250	Light-Controlled Mammalian Cells and Their Therapeutic Applications in Synthetic Biology. *Advanced Science*, **2019**, 6, 1800952	13.6	41
249	Optogenetic Medicine: Synthetic Therapeutic Solutions Precision-Guided by Light. *Cold Spring Harbor Perspectives in Medicine*, **2019**, 9,	5.4	12
248	Generalized extracellular molecule sensor platform for programming cellular behavior. *Nature Chemical Biology*, **2018**, 14, 723-729	11.7	66
247	Synthetic biology-based cellular biomedical tattoo for detection of hypercalcemia associated with cancer. *Science Translational Medicine*, **2018**, 10,	17.5	34
246	Designer exosomes produced by implanted cells intracerebrally deliver therapeutic cargo for Parkinson's disease treatment. *Nature Communications*, **2018**, 9, 1305	17.4	232
245	Treatment of chronic pain by designer cells controlled by spearmint aromatherapy. *Nature Biomedical Engineering*, **2018**, 2, 114-123	19	17
244	Immunomimetic Designer Cells Protect Mice from MRSA Infection. *Cell*, **2018**, 174, 259-270.e11	56.2	40
243	Programming mammalian gene expression with the antibiotic simocyclinone D8 and the flavonoid luteolin. *AICHE Journal*, **2018**, 64, 4237-4246	3.6	3
242	Designer cells programming quorum-sensing interference with microbes. *Nature Communications*, **2018**, 9, 1822	17.4	31
241	Nonimmune cells equipped with T-cell-receptor-like signaling for cancer cell ablation. *Nature Chemical Biology*, **2018**, 14, 42-49	11.7	36

240	Engineering Whole Mammalian Cells for Target-Cell-Specific Invasion/Fusion. *Advanced Science*, **2018**, 5, 1700971	13.6	7
239	Synthetic gene circuits for the detection, elimination and prevention of disease. *Nature Biomedical Engineering*, **2018**, 2, 399-415	19	49
238	Caffeine-inducible gene switches controlling experimental diabetes. *Nature Communications*, **2018**, 9, 2318	17.4	36
237	Programmable full-adder computations in communicating three-dimensional cell cultures. *Nature Methods*, **2018**, 15, 57-60	21.6	42
236	A synthetic free fatty acid-regulated transgene switch in mammalian cells and mice. *Nucleic Acids Research*, **2018**, 46, 9864-9874	20.1	8
235	Designing cell function: assembly of synthetic gene circuits for cell biology applications. *Nature Reviews Molecular Cell Biology*, **2018**, 19, 507-525	48.7	111
234	A cell-penetrating artificial metalloenzyme regulates a gene switch in a designer mammalian cell. *Nature Communications*, **2018**, 9, 1943	17.4	67
233	Designed cell consortia as fragrance-programmable analog-to-digital converters. *Nature Chemical Biology*, **2017**, 13, 309-316	11.7	30
232	A Synthetic-Biology-Inspired Therapeutic Strategy for Targeting and Treating Hepatogenous Diabetes. *Molecular Therapy*, **2017**, 25, 443-455	11.7	30
231	Smartphone-controlled optogenetically engineered cells enable semiautomatic glucose homeostasis in diabetic mice. *Science Translational Medicine*, **2017**, 9,	17.5	109
230	Synthetic RNA-based switches for mammalian gene expression control. *Current Opinion in Biotechnology*, **2017**, 48, 54-60	11.4	28
229	Synthetic Biology-The Synthesis of Biology. *Angewandte Chemie - International Edition*, **2017**, 56, 6396-6419	11.4	103
228	Synthetische Biologie die Synthese der Biologie. *Angewandte Chemie*, **2017**, 129, 6494-6519	3.6	7
227	Self-adjusting synthetic gene circuit for correcting insulin resistance. *Nature Biomedical Engineering*, **2017**, 1, 0005	19	62
226	Sensing and responding to allergic response cytokines through a genetically encoded circuit. *Nature Communications*, **2017**, 8, 1101	17.4	17
225	Synthetic biology Engineering cell-based biomedical devices. *Current Opinion in Biomedical Engineering*, **2017**, 4, 50-56	4.4	5
224	Closed-loop control systems The quest for precision therapies for diabetes. *Current Opinion in Systems Biology*, **2017**, 5, 32-40	3.2	4
223	Generation of glucose-sensitive insulin-secreting beta-like cells from human embryonic stem cells by incorporating a synthetic lineage-control network. *Journal of Biotechnology*, **2017**, 259, 39-45	3.7	13

222	Design of Synthetic Promoters for Gene Circuits in Mammalian Cells. *Methods in Molecular Biology*, **2017**, 1651, 263-273	1.4	11
221	Quorum-Quenching Human Designer Cells for Closed-Loop Control of Pseudomonas aeruginosa Biofilms. *Nano Letters*, **2017**, 17, 5043-5050	11.5	16
220	Synthetic biology-inspired therapies for metabolic diseases. *Current Opinion in Biotechnology*, **2017**, 47, 59-66	11.4	17
219	Identification of Novel Death-Associated Protein Kinase 2 Interaction Partners by Proteomic Screening Coupled with Bimolecular Fluorescence Complementation. *Molecular and Cellular Biology* , **2016**, 36, 132-43	4.8	6
218	Synthetic Biology--Toward Therapeutic Solutions. *Journal of Molecular Biology*, **2016**, 428, 945-62	6.5	24
217	A programmable synthetic lineage-control network that differentiates human IPSCs into glucose-sensitive insulin-secreting beta-like cells. *Nature Communications*, **2016**, 7, 11247	17.4	87
216	The best of both worlds: reaping the benefits from mammalian and bacterial therapeutic circuits. *Current Opinion in Chemical Biology*, **2016**, 34, 11-19	9.7	10
215	Overexpression of YY1 increases the protein production in mammalian cells. *Journal of Biotechnology*, **2016**, 219, 72-85	3.7	22
214	Synthetic gene network restoring endogenous pituitary-thyroid feedback control in experimental Graves' disease. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, 1244-9	11.5	52
213	Engineering a ribozyme cleavage-induced split fluorescent aptamer complementation assay. *Nucleic Acids Research*, **2016**, 44, e94	20.1	29
212	Synthetic biology: applying biological circuits beyond novel therapies. *Integrative Biology (United Kingdom)*, **2016**, 8, 409-30	3.7	19
211	Engineering of synthetic gene circuits for (re-)balancing physiological processes in chronic diseases. *Wiley Interdisciplinary Reviews: Systems Biology and Medicine*, **2016**, 8, 402-22	6.6	19
210	Cell-mimetic designer cells provide closed-loop glycemic control. *Science*, **2016**, 354, 1296-1301	33.3	132
209	Toward a world of theranostic medication: Programming biological sentinel systems for therapeutic intervention. *Advanced Drug Delivery Reviews*, **2016**, 105, 66-76	18.5	26
208	A synthetic biology-based device prevents liver injury in mice. *Journal of Hepatology*, **2016**, 65, 84-94	13.4	38
207	Engineering Gene Circuits for Mammalian Cell-Based Applications. *Cold Spring Harbor Perspectives in Biology*, **2016**, 8,	10.2	30
206	Human whole-blood culture system for ex vivo characterization of designer-cell function. *Biotechnology and Bioengineering*, **2016**, 113, 588-97	4.9	9
205	Synthetic biology-application-oriented cell engineering. *Current Opinion in Biotechnology*, **2016**, 40, 139-148	11.4	23

204	Cosmetics-triggered percutaneous remote control of transgene expression in mice. *Nucleic Acids Research*, **2015**, 43, e91	20.1	18
203	A synthetic erectile optogenetic stimulator enabling blue-light-inducible penile erection. *Angewandte Chemie - International Edition*, **2015**, 54, 5933-8	16.4	47
202	A synthetic cGMP-sensitive gene switch providing Viagra( )-controlled gene expression in mammalian cells and mice. *Metabolic Engineering*, **2015**, 29, 169-179	9.7	9
201	Mammalian designer cells: Engineering principles and biomedical applications. *Biotechnology Journal*, **2015**, 10, 1005-18	5.6	15
200	Synthetic immunology: modulating the human immune system. *Trends in Biotechnology*, **2015**, 33, 65-79	15.1	34
199	Novel theranostic agents for next-generation personalized medicine: small molecules, nanoparticles, and engineered mammalian cells. *Current Opinion in Chemical Biology*, **2015**, 28, 29-38	9.7	51
198	A Synthetic Erectile Optogenetic Stimulator Enabling Blue-Light-Inducible Penile Erection. *Angewandte Chemie*, **2015**, 127, 6031-6036	3.6	4
197	Implantable synthetic cytokine converter cells with AND-gate logic treat experimental psoriasis. *Science Translational Medicine*, **2015**, 7, 318ra201	17.5	87
196	Prosthetic gene networks as an alternative to standard pharmacotherapies for metabolic disorders. *Current Opinion in Biotechnology*, **2015**, 35, 37-45	11.4	21
195	Heterogeneity of baseline neural marker expression by undifferentiated mesenchymal stem cells may be correlated to donor age. *Journal of Biotechnology*, **2014**, 174, 29-33	3.7	8
194	Engineering synergy in biotechnology. *Nature Chemical Biology*, **2014**, 10, 319-22	11.7	126
193	G protein-coupled receptors revisited: therapeutic applications inspired by synthetic biology. *Annual Review of Pharmacology and Toxicology*, **2014**, 54, 227-49	17.9	20
192	Mind-controlled transgene expression by a wireless-powered optogenetic designer cell implant. *Nature Communications*, **2014**, 5, 5392	17.4	87
191	Synthetic biology. Dynamic genome engineering in living cells. *Science*, **2014**, 346, 813-4	33.3	4
190	Engineered UV-A light-responsive gene expression system for measuring sun cream efficacy in mammalian cell culture. *Journal of Biotechnology*, **2014**, 189, 150-3	3.7	5
189	A synthetic multifunctional mammalian pH sensor and CO2 transgene-control device. *Molecular Cell* , **2014**, 55, 397-408	17.6	87
188	Bile acid-controlled transgene expression in mammalian cells and mice. *Metabolic Engineering*, **2014** , 21, 81-90	9.7	19
187	Synthetic therapeutic gene circuits in mammalian cells. *FEBS Letters*, **2014**, 588, 2537-44	3.8	52

186	The Synthetic Biology Approach to Stem Cells and Regenerative Medicine **2014**, 1-17		
185	3.3 Synthetic Biology Principles for Engineering Mammalian Designer Cells **2014**, 144-172		
184	A designer cell-based histamine-specific human allergy profiler. *Nature Communications*, **2014**, 5, 4408	17.4	45
183	Synthetic biology: Toehold gene switches make big footprints. *Nature*, **2014**, 516, 333-4	50.4	16
182	A general design strategy for protein-responsive riboswitches in mammalian cells. *Nature Methods*, **2014**, 11, 1154-60	21.6	77
181	Antagonistic control of a dual-input mammalian gene switch by food additives. *Nucleic Acids Research*, **2014**, 42, e116	20.1	24
180	Synthetic biology: How best to build a cell. *Nature*, **2014**, 509, 155-7	50.4	24
179	Design and Application of Synthetic Biology Devices for Therapy **2013**, 159-181		
178	A closed-loop synthetic gene circuit for the treatment of diet-induced obesity in mice. *Nature Communications*, **2013**, 4, 2825	17.4	93
177	An overview of the diverse roles of G-protein coupled receptors (GPCRs) in the pathophysiology of various human diseases. *Biotechnology Advances*, **2013**, 31, 1676-94	17.8	119
176	Biomedically relevant circuit-design strategies in mammalian synthetic biology. *Molecular Systems Biology*, **2013**, 9, 691	12.2	42
175	Synthetic mammalian gene circuits for biomedical applications. *Current Opinion in Chemical Biology*, **2013**, 17, 910-7	9.7	33
174	From gene switches to mammalian designer cells: present and future prospects. *Trends in Biotechnology*, **2013**, 31, 155-68	15.1	104
173	mRNA transfection-based, feeder-free, induced pluripotent stem cells derived from adipose tissue of a 50-year-old patient. *Metabolic Engineering*, **2013**, 18, 9-24	9.7	36
172	Engineering of synthetic intercellular communication systems. *Metabolic Engineering*, **2013**, 16, 33-41	9.7	79
171	Increasing the dynamic control space of mammalian transcription devices by combinatorial assembly of homologous regulatory elements from different bacterial species. *Metabolic Engineering*, **2013**, 15, 144-50	9.7	8
170	Pharmaceutically controlled designer circuit for the treatment of the metabolic syndrome. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 141-6	11.5	96
169	Synthetic mammalian trigger-controlled bipartite transcription factors. *Nucleic Acids Research*, **2013**, 41, e134	20.1	21

168	Reward-based hypertension control by a synthetic brain-dopamine interface. *Proceedings of the National Academy of Sciences of the United States of America*, **2013**, 110, 18150-5	11.5	60
167	Smart medication through combination of synthetic biology and cell microencapsulation. *Metabolic Engineering*, **2012**, 14, 252-60	9.7	44
166	Rewiring and dosing of systems modules as a design approach for synthetic mammalian signaling networks. *Molecular BioSystems*, **2012**, 8, 1824-32		11
165	Synthetic biology advancing clinical applications. *Current Opinion in Chemical Biology*, **2012**, 16, 345-54	9.7	33
164	Genetically programmed superparamagnetic behavior of mammalian cells. *Journal of Biotechnology* , **2012**, 162, 237-45	3.7	19
163	A novel reporter system for bacterial and mammalian cells based on the non-ribosomal peptide indigoidine. *Metabolic Engineering*, **2012**, 14, 325-35	9.7	43
162	Engineering of ribozyme-based riboswitches for mammalian cells. *Methods*, **2012**, 56, 351-7	4.6	43
161	Synthetic two-way communication between mammalian cells. *Nature Biotechnology*, **2012**, 30, 991-6	44.5	83
160	Programmable single-cell mammalian biocomputers. *Nature*, **2012**, 487, 123-7	50.4	281
159	Optogenetic therapeutic cell implants. *Gastroenterology*, **2012**, 143, 301-6	13.3	9
158	Reprogrammed cell delivery for personalized medicine. *Advanced Drug Delivery Reviews*, **2012**, 64, 1477-87	17.5	14
157	The use of light for engineered control and reprogramming of cellular functions. *Current Opinion in Biotechnology*, **2012**, 23, 695-702	11.4	34
156	Synthesis and characterization of PEG-based drug-responsive biohybrid hydrogels. *Macromolecular Rapid Communications*, **2012**, 33, 1280-5	4.8	11
155	Macromol. Rapid Commun. 15/2012. *Macromolecular Rapid Communications*, **2012**, 33, 1320-1320	4.8	
154	Evaluation of bicinchoninic acid as a ligand for copper(I)-catalyzed azide-alkyne bioconjugations. *Organic and Biomolecular Chemistry*, **2012**, 10, 6629-32	3.9	7
153	Engineering molecular circuits using synthetic biology in mammalian cells. *Annual Review of Chemical and Biomolecular Engineering*, **2012**, 3, 209-34	8.9	37
152	The food additive vanillic acid controls transgene expression in mammalian cells and mice. *Nucleic Acids Research*, **2012**, 40, e37	20.1	73
151	Phenylethyl butyrate enhances the potency of second-line drugs against clinical isolates of Mycobacterium tuberculosis. *Antimicrobial Agents and Chemotherapy*, **2012**, 56, 1142-5	5.9	14

150	Emerging biomedical applications of synthetic biology. *Nature Reviews Genetics*, **2011**, 13, 21-35	30.1	254
149	A synthetic optogenetic transcription device enhances blood-glucose homeostasis in mice. *Science*, **2011**, 332, 1565-8	33.3	358
148	De novo design and construction of an inducible gene expression system in mammalian cells. *Methods in Enzymology*, **2011**, 497, 239-53	1.7	15
147	A designer network coordinating bovine artificial insemination by ovulation-triggered release of implanted sperms. *Journal of Controlled Release*, **2011**, 150, 23-9	11.7	67
146	Conditional DNA-Protein Interactions Confer Stimulus-Sensing Properties to Biohybrid Materials. *Advanced Functional Materials*, **2011**, 21, 2861-2867	15.6	29
145	Differential effect of exocytic SNAREs on the production of recombinant proteins in mammalian cells. *Biotechnology and Bioengineering*, **2011**, 108, 611-20	4.9	42
144	Ectopic expression of human mTOR increases viability, robustness, cell size, proliferation, and antibody production of chinese hamster ovary cells. *Biotechnology and Bioengineering*, **2011**, 108, 853-66	4.9	72
143	Molecular diversity--the toolbox for synthetic gene switches and networks. *Current Opinion in Chemical Biology*, **2011**, 15, 414-20	9.7	53
142	Rational design of a small molecule-responsive intramer controlling transgene expression in mammalian cells. *Nucleic Acids Research*, **2011**, 39, e155	20.1	48
141	Design of synthetic mammalian quorum-sensing systems. *Methods in Molecular Biology*, **2011**, 692, 235-49	1.4	5
140	The NoRC complex mediates the heterochromatin formation and stability of silent rRNA genes and centromeric repeats. *EMBO Journal*, **2010**, 29, 2135-46	13	140
139	Self-sufficient control of urate homeostasis in mice by a synthetic circuit. *Nature Biotechnology*, **2010**, 28, 355-60	44.5	202
138	Life after the synthetic cell. *Nature*, **2010**, 465, 422-4	50.4	48
137	A synthetic low-frequency mammalian oscillator. *Nucleic Acids Research*, **2010**, 38, 2702-11	20.1	77
136	Watch the clock-engineering biological systems to be on time. *Current Opinion in Genetics and Development*, **2010**, 20, 634-43	4.9	10
135	An engineered mammalian band-pass network. *Nucleic Acids Research*, **2010**, 38, e174	20.1	68
134	Munc18b regulates core SNARE complex assembly and constitutive exocytosis by interacting with the N-peptide and the closed-conformation C-terminus of syntaxin 3. *Biochemical Journal*, **2010**, 431, 353-61	3.8	13
133	Scaffold-free cell delivery for use in regenerative medicine. *Advanced Drug Delivery Reviews*, **2010**, 62, 753-64	18.5	100

132	Synthetic gene networks in mammalian cells. *Current Opinion in Biotechnology*, **2010**, 21, 690-6	11.4	32
131	A Gene Therapy Technology-Based Biomaterial for the Trigger-Inducible Release of Biopharmaceuticals in Mice. *Advanced Functional Materials*, **2010**, 20, 2534-2538	15.6	32
130	Mammalian synthetic biology--from tools to therapies. *BioEssays*, **2010**, 32, 332-45	4.1	33
129	Heat-stable oral alga-based vaccine protects mice from Staphylococcus aureus infection. *Journal of Biotechnology*, **2010**, 145, 273-80	3.7	136
128	The vesicle-trafficking protein munc18b increases the secretory capacity of mammalian cells. *Metabolic Engineering*, **2010**, 12, 18-25	9.7	40
127	Ligand-dependent regulatory RNA parts for Synthetic Biology in eukaryotes. *Current Opinion in Biotechnology*, **2010**, 21, 760-5	11.4	19
126	Controlling transgene expression in subcutaneous implants using a skin lotion containing the apple metabolite phloretin. *Proceedings of the National Academy of Sciences of the United States of America*, **2009**, 106, 10638-43	11.5	89
125	The impact of synthetic biology on drug discovery. *Drug Discovery Today*, **2009**, 14, 956-63	8.8	38
124	Molecular engineering of exocytic vesicle traffic enhances the productivity of Chinese hamster ovary cells. *Biotechnology and Bioengineering*, **2009**, 102, 1170-81	4.9	66
123	Tricalcium phosphate nanoparticles enable rapid purification, increase transduction kinetics, and modify the tropism of mammalian viruses. *Biotechnology and Bioengineering*, **2009**, 102, 1197-208	4.9	9
122	Recent advances in mammalian synthetic biology-design of synthetic transgene control networks. *Current Opinion in Biotechnology*, **2009**, 20, 449-60	11.4	29
121	A tunable synthetic mammalian oscillator. *Nature*, **2009**, 457, 309-12	50.4	465
120	Functional cross-kingdom conservation of mammalian and moss (Physcomitrella patens) transcription, translation and secretion machineries. *Plant Biotechnology Journal*, **2009**, 7, 73-86	11.6	32
119	A biotin-triggered genetic switch in mammalian cells and mice. *Metabolic Engineering*, **2009**, 11, 117-24	9.7	49
118	A novel hybrid dual-channel catalytic-biological sensor system for assessment of fruit quality. *Journal of Biotechnology*, **2009**, 139, 314-7	3.7	14
117	Magnet-guided transduction of mammalian cells and mice using engineered magnetic lentiviral particles. *Journal of Biotechnology*, **2009**, 141, 118-22	3.7	23
116	Engineering of synthetic mammalian gene networks. *Chemistry and Biology*, **2009**, 16, 287-97		51
115	A synthetic metabolite-based mammalian inter-cell signaling system. *Molecular BioSystems*, **2009**, 5, 757-63		26

114	A general strategy for the production of difficult-to-express inducer-dependent bacterial repressor proteins in Escherichia coli. *Protein Expression and Purification*, **2009**, 66, 158-64	2	3
113	Epigenetic engineering of ribosomal RNA genes enhances protein production. *PLoS ONE*, **2009**, 4, e6653	3.7	22
112	A synthetic mammalian electro-genetic transcription circuit. *Nucleic Acids Research*, **2009**, 37, e33	20.1	41
111	Drug-sensing hydrogels for the inducible release of biopharmaceuticals. *Nature Materials*, **2008**, 7, 800-4	27	188
110	A novel system for trigger-controlled drug release from polymer capsules. *Journal of Controlled Release*, **2008**, 131, 211-9	11.7	35
109	A synthetic mammalian gene circuit reveals antituberculosis compounds. *Proceedings of the National Academy of Sciences of the United States of America*, **2008**, 105, 9994-8	11.5	133
108	Intronically encoded siRNAs improve dynamic range of mammalian gene regulation systems and toggle switch. *Nucleic Acids Research*, **2008**, 36, e101	20.1	40
107	Ectopic expression of delta FBJ murine osteosarcoma viral oncogene homolog B mediates transdifferentiation of adipose-like spheroids into osteo-like microtissues. *Tissue Engineering - Part A*, **2008**, 14, 1377-94	3.9	4
106	Modulation of cardiomyocyte electrical properties using regulated bone morphogenetic protein-2 expression. *Tissue Engineering - Part A*, **2008**, 14, 1969-88	3.9	19
105	A gas-inducible expression system in HEK.EBNA cells applied to controlled proliferation studies by expression of p27(Kip1). *Biotechnology and Bioengineering*, **2007**, 96, 1155-66	4.9	10
104	Multi-gene engineering: simultaneous expression and knockdown of six genes off a single platform. *Biotechnology and Bioengineering*, **2007**, 96, 821-34	4.9	31
103	InXy and SeXy, compact heterologous reporter proteins for mammalian cells. *Biotechnology and Bioengineering*, **2007**, 98, 655-67	4.9	4
102	A genetic time-delay circuitry in mammalian cells. *Biotechnology and Bioengineering*, **2007**, 98, 894-902	4.9	30
101	RepTAGs: universal tags for isolation and labeling of proteins, for labeling live mammalian cells and for drug discovery. *Biotechnology and Bioengineering*, **2007**, 98, 1276-87	4.9	
100	Inorganic nanoparticles for transfection of mammalian cells and removal of viruses from aqueous solutions. *Biotechnology and Bioengineering*, **2007**, 98, 1083-93	4.9	24
99	Inducible product gene expression technology tailored to bioprocess engineering. *Current Opinion in Biotechnology*, **2007**, 18, 399-410	11.4	57
98	Adeno-associated viral vectors engineered for macrolide-adjustable transgene expression in mammalian cells and mice. *BMC Biotechnology*, **2007**, 7, 75	3.5	9
97	Mammalian synthetic biology: engineering of sophisticated gene networks. *Journal of Biotechnology*, **2007**, 130, 329-45	3.7	84

96	Synthetic ecosystems based on airborne inter- and intrakingdom communication. *Proceedings of the National Academy of Sciences of the United States of America*, **2007**, 104, 10435-40	11.5	160
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