

# Laurent Simon

## List of Publications by Year in descending order

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51  
papers

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citations

566801

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71  
docs citations

71  
times ranked

447  
citing authors

#	ARTICLE	IF	CITATIONS
1	An integrated biophysical model for predicting the clinical pharmacokinetics of transdermally delivered compounds. <i>European Journal of Pharmaceutical Sciences</i> , 2021, 167, 105924.	1.9	10
2	Transient analysis of drug delivery from a toroidal membrane: Applications for medicated vaginal rings. <i>European Journal of Pharmaceutical Sciences</i> , 2020, 141, 105114.	1.9	1
3	Chemical reaction modeling of industrial scale nitrocellulose production for military applications. <i>AIChE Journal</i> , 2020, 66, e16234.	1.8	13
4	Time constant for the dermal absorption of semivolatile organic compounds from the gas phase of indoor air. <i>International Journal of Heat and Mass Transfer</i> , 2019, 144, 118687.	2.5	4
5	Transdermal Delivery of Sumatriptan Succinate Using Iontophoresis and Dissolving Microneedles. <i>Journal of Pharmaceutical Sciences</i> , 2019, 108, 3649-3656.	1.6	20
6	Controlled drug release from a spheroidal matrix. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2019, 518, 30-37.	1.2	3
7	Nitration Kinetics of Cellulose Fibers Derived from Wood Pulp in Mixed Acids. <i>Industrial &amp; Engineering Chemistry Research</i> , 2018, 57, 1883-1893.	1.8	16
8	The Choice of a Performance Indicator of Release in Transdermal Drug Delivery Systems. <i>Lecture Notes in Applied and Computational Mechanics</i> , 2018, , 49-64.	2.0	0
9	A laplace transform-based technique for solving multiscale and multidomain problems: Application to a countercurrent hemodialyzer model. <i>Computers in Biology and Medicine</i> , 2017, 87, 230-235.	3.9	0
10	Two-Dimensional Description of Absorption in Humans after Dermal Exposure to Volatile Organic Compounds. <i>Chemical Engineering Communications</i> , 2017, 204, 698-704.	1.5	2
11	An effective time-constant algorithm for drug transport to capillaries and surrounding tissues. <i>Computers in Biology and Medicine</i> , 2017, 89, 24-30.	3.9	1
12	Analytical and Numerical Methods in Determining the Combined Effects of Iontophoresis and Chemical Penetration Enhancers. , 2017, , 391-398.		0
13	A three-dimensional semi-analytical solution for predicting drug release through the orifice of a spherical device. <i>International Journal of Pharmaceutics</i> , 2016, 509, 477-482.	2.6	5
14	CdTe growth model by close spaced sublimation. , 2016, , .		1
15	The development of a peak-time criterion for designing controlled-release devices. <i>European Journal of Pharmaceutical Sciences</i> , 2016, 91, 64-73.	1.9	0
16	Dynamics of an electrochemical biosensor for the detection of toxic substances in water. , 2016, , .		0
17	On the effusion time of drugs from the open pore of a spherical vesicle. <i>Physica A: Statistical Mechanics and Its Applications</i> , 2016, 451, 366-372.	1.2	5
18	Prediction of in-vivo iontophoretic drug release data from in-vitro experimentsâ€“insights from modeling. <i>Mathematical Biosciences</i> , 2015, 270, 106-114.	0.9	5

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19	Three-dimensional analyses of a perforated cylindrical drug delivery device. <i>International Journal of Pharmaceutics</i> , 2015, 481, 64-70.	2.6	0
20	Modelling of dissolving microneedles for transdermal drug delivery: Theoretical and experimental aspects. <i>European Journal of Pharmaceutical Sciences</i> , 2015, 68, 137-143.	1.9	38
21	Dynamic analysis and performance evaluation of the BIAcore surface plasmon resonance biosensor. <i>Proceedings of SPIE</i> , 2015, , .	0.8	0
22	A FIRST-ORDER TIME CONSTANT ESTIMATION FOR NONLINEAR DIFFUSION PROBLEMS. <i>Chemical Engineering Communications</i> , 2014, 201, 719-736.	1.5	6
23	Molecular Transport in Viscoelastic Materials: Mechanistic Properties and Chemical Affinities. <i>SIAM Journal on Applied Mathematics</i> , 2014, 74, 1598-1614.	0.8	11
24	The dynamics of shrinking and expanding drug-loaded microspheres: A semi-empirical approach. <i>European Journal of Pharmaceutical Sciences</i> , 2014, 58, 55-62.	1.9	2
25	Two-dimensional transport analysis of transdermal drug absorption with a non-perfect sink boundary condition at the skin-capillary interface. <i>Mathematical Biosciences</i> , 2013, 244, 58-67.	0.9	16
26	TWO-DIMENSIONAL SOLUTION AND ANALYSIS OF A CYLINDRICAL MATRIX DEVICE WITH A CIRCULAR RELEASE AREA. <i>Chemical Engineering Communications</i> , 2013, 200, 115-138.	1.5	14
27	APPLICATION OF A DISSOLUTION-DIFFUSION MODEL TO THE RELEASE OF 5-FLUOROURACIL FROM POLYMER MICROSPHERES. <i>Chemical Engineering Communications</i> , 2012, 199, 587-599.	1.5	5
28	Graphical process design tools for iontophoretic transdermal drug-delivery devices. <i>Computer Methods and Programs in Biomedicine</i> , 2012, 107, 447-455.	2.6	4
29	Design of Skin Penetration Enhancers Using Replacement Methods for the Selection of the Molecular Descriptors. <i>Pharmaceutics</i> , 2012, 4, 343-353.	2.0	2
30	Effects of Iontophoresis and Chemical Enhancers on the Transport of Lidocaine and Nicotine Across the Oral Mucosa. <i>Pharmaceutical Research</i> , 2012, 29, 961-971.	1.7	24
31	Effects of epidermal turnover on the dynamics of percutaneous drug absorption. <i>Mathematical Biosciences</i> , 2011, 229, 16-21.	0.9	3
32	Transport mechanisms in oral transmucosal drug delivery: Implications for pain management. <i>Mathematical Biosciences</i> , 2011, 229, 93-100.	0.9	7
33	A Computational Procedure for Assessing the Dynamic Performance of Diffusion-Controlled Transdermal Delivery Devices. <i>Pharmaceutics</i> , 2011, 3, 485-496.	2.0	9
34	Flux tracking in drug delivery. <i>Applied Mathematical Modelling</i> , 2011, 35, 4684-4696.	2.2	12
35	Modeling and design of transdermal drug delivery patches containing an external heating device. <i>Computers and Chemical Engineering</i> , 2011, 35, 1152-1163.	2.0	16
36	Dynamics of Dissolution and Diffusion-Controlled Drug Release Systems. <i>Current Drug Delivery</i> , 2011, 8, 144-151.	0.8	5

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37	Dynamics and control of percutaneous drug absorption in the presence of epidermal turnover. <i>Journal of Pharmaceutical Sciences</i> , 2009, 98, 187-204.	1.6	16
38	Optimal intravenous bolus-infusion drug-dosage regimen based on two-compartment pharmacokinetic models. <i>Computers and Chemical Engineering</i> , 2009, 33, 1212-1219.	2.0	6
39	Timely drug delivery from controlled-release devices: Dynamic analysis and novel design concepts. <i>Mathematical Biosciences</i> , 2009, 217, 151-158.	0.9	30
40	PREDICTION OF EQUILIBRIUM PHASE COMPOSITIONS AND $\hat{\gamma}$ -GLUCOSIDASE PARTITION COEFFICIENT IN AQUEOUS TWO-PHASE SYSTEMS. <i>Chemical Engineering Communications</i> , 2007, 194, 117-128.	1.5	16
41	Application of orthogonal collocation and regression techniques for recovering parameters of a two-pathway transdermal drug-delivery model. <i>Computers and Chemical Engineering</i> , 2007, 31, 107-120.	2.0	10
42	Analysis of heat-aided membrane-controlled drug release from a process control perspective. <i>International Journal of Heat and Mass Transfer</i> , 2007, 50, 2425-2433.	2.5	11
43	Partitioning of $\hat{\gamma}$ -glucosidase from <i>Trichoderma reesei</i> in poly(ethylene glycol) and potassium phosphate aqueous two-phase systems: Influence of pH and temperature. <i>Biochemical Engineering Journal</i> , 2006, 30, 104-108.	1.8	48
44	A parametric study of iontophoretic transdermal drug-delivery systems. <i>Journal of Membrane Science</i> , 2006, 278, 124-132.	4.1	20
45	Observing Biomass Concentration in a Fixed-Bed Bioreactor. <i>Chemical Engineering Communications</i> , 2005, 192, 272-285.	1.5	6
46	Modeling continuous aqueous two-phase systems for control purposes. <i>Journal of Chromatography A</i> , 2004, 1043, 135-147.	1.8	13
47	Neural network-based prediction and optimization of estradiol release from ethylene-vinyl acetate membranes. <i>Computers and Chemical Engineering</i> , 2004, 28, 2407-2419.	2.0	26
48	Data-Based Modeling and Analysis of Bioprocesses: Some Real Experiences. <i>Biotechnology Progress</i> , 2003, 19, 1591-1605.	1.3	29
49	Control of starvation-induced apoptosis in Chinese hamster ovary cell cultures. <i>Biotechnology and Bioengineering</i> , 2002, 78, 645-657.	1.7	28
50	Probabilistic neural networks using Bayesian decision strategies and a modified Gompertz model for growth phase classification in the batch culture of <i>Bacillus subtilis</i> . <i>Biochemical Engineering Journal</i> , 2001, 7, 41-48.	1.8	31
51	An Analytical Solution for the Concentration Profile of a Sublimation Process. <i>Separation Science and Technology</i> , 1996, 31, 1019-1024.	1.3	0