

# Gilbert Koch

## List of Publications by Year in descending order

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Version: 2024-02-01

35  
papers

671  
citations

687363

13  
h-index

610901

24  
g-index

37  
all docs

37  
docs citations

37  
times ranked

797  
citing authors

#	ARTICLE	IF	CITATIONS
1	Infliximab Treatment Does Not Lead to Full TNF- $\alpha$ Inhibition: A Target-Mediated Drug Disposition Model. <i>Clinical Pharmacokinetics</i> , 2022, 61, 143-154.	3.5	4
2	Not Only Preterm Neonates Mature but Also Traditional Dosing Regimens Have to Mature: The Role of Mathematical Modeling. <i>Neonatology</i> , 2021, 118, 114-115.	2.0	0
3	The rhythm of a preterm neonate's life: ultradian oscillations of heart rate, body temperature and sleep cycles. <i>Journal of Pharmacokinetics and Pharmacodynamics</i> , 2021, 48, 401-410.	1.8	6
4	OptiDose: Computing the Individualized Optimal Drug Dosing Regimen Using Optimal Control. <i>Journal of Optimization Theory and Applications</i> , 2021, 189, 46-65.	1.5	8
5	Modeling of levothyroxine in newborns and infants with congenital hypothyroidism: challenges and opportunities of a rare disease multi-center study. <i>Journal of Pharmacokinetics and Pharmacodynamics</i> , 2021, 48, 711-723.	1.8	3
6	Delay differential equations based models in NONMEM. <i>Journal of Pharmacokinetics and Pharmacodynamics</i> , 2021, 48, 763-802.	1.8	4
7	Copeptin Kinetics and Its Relationship to Osmolality During Rehydration for Diabetic Ketoacidosis in Children. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2020, 105, e4169-e4178.	3.6	3
8	Caffeine preserves quiet sleep in preterm neonates. <i>Pharmacology Research and Perspectives</i> , 2020, 8, e00596.	2.4	9
9	Pharmacometrics and Machine Learning Partner to Advance Clinical Data Analysis. <i>Clinical Pharmacology and Therapeutics</i> , 2020, 107, 926-933.	4.7	46
10	Pharmacokinetics and Pharmacodynamics Models of Tumor Growth and Anticancer Effects in Discrete Time. <i>Computational and Mathematical Biophysics</i> , 2020, 8, 114-125.	1.1	13
11	MON-081 Mathematical Modeling of Residual Endogenous FT4 Synthesis and Exogenous L-Thyroxine Administration over the First 2 Years of Life in Infants with Congenital Hypothyroidism. <i>Journal of the Endocrine Society</i> , 2020, 4, .	0.2	0
12	Characterization of Maternal and Neonatal Pharmacokinetic Behavior of Ceftazidime. <i>Journal of Clinical Pharmacology</i> , 2019, 59, 74-82.	2.0	7
13	A study on discrete and discrete fractional pharmacokinetics-pharmacodynamics models for tumor growth and anti-cancer effects. <i>Computational and Mathematical Biophysics</i> , 2019, 7, 10-24.	1.1	39
14	Methadone dosing strategies in preterm neonates can be simplified. <i>British Journal of Clinical Pharmacology</i> , 2019, 85, 1348-1356.	2.4	10
15	Clinical Pharmacology and Pharmacometrics to Better Understand Physiological Changes During Pregnancy and Neonatal Life. <i>Handbook of Experimental Pharmacology</i> , 2019, 261, 325-337.	1.8	10
16	Enhanced early prediction of clinically relevant neonatal hyperbilirubinemia with machine learning. <i>Pediatric Research</i> , 2019, 86, 122-127.	2.3	37
17	Target-Mediated Drug Disposition Model for Bispecific Antibodies: Properties, Approximation, and Optimal Dosing Strategy. <i>CPT: Pharmacometrics and Systems Pharmacology</i> , 2019, 8, 177-187.	2.5	30
18	Release and Decay Kinetics of Copeptin vs AVP in Response to Osmotic Alterations in Healthy Volunteers. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2018, 103, 505-513.	3.6	65

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19	Delayed logistic indirect response models: realization of oscillating behavior. <i>Journal of Pharmacokinetics and Pharmacodynamics</i> , 2018, 45, 49-58.	1.8	8
20	Pharmacokinetics of Fentanyl and Its Derivatives in Children: A Comprehensive Review. <i>Clinical Pharmacokinetics</i> , 2018, 57, 125-149.	3.5	49
21	The Interaction between Sildenafil and Phenobarbital in Infants with Congenital Heart Defects. <i>Proceedings for Annual Meeting of the Japanese Pharmacological Society</i> , 2018, WCP2018, PO2-15-19.	0.0	0
22	Target-mediated drug disposition with drug-drug interaction, Part I: single drug case in alternative formulations. <i>Journal of Pharmacokinetics and Pharmacodynamics</i> , 2017, 44, 17-26.	1.8	12
23	Target mediated drug disposition with drug-drug interaction, Part II: competitive and uncompetitive cases. <i>Journal of Pharmacokinetics and Pharmacodynamics</i> , 2017, 44, 27-42.	1.8	12
24	Facilitate Treatment Adjustment After Overdosing: Another Step Toward 21st-Century Medicine. <i>Journal of Clinical Pharmacology</i> , 2017, 57, 704-711.	2.0	3
25	Disease Progression Modeling to Evaluate the Effects of Enzyme Replacement Therapy on Kidney Function in Adult Patients with the Classic Phenotype of Fabry Disease. <i>Kidney and Blood Pressure Research</i> , 2017, 42, 1-15.	2.0	12
26	Caffeine Citrate Dosing Adjustments to Assure Stable Caffeine Concentrations in Preterm Neonates. <i>Journal of Pediatrics</i> , 2017, 191, 50-56.e1.	1.8	31
27	Pharmacodynamic Modeling of Cell Cycle Effects for Gemcitabine and Trabectedin Combinations in Pancreatic Cancer Cells. <i>Frontiers in Pharmacology</i> , 2016, 7, 421.	3.5	27
28	Assessment of non-linear combination effect terms for drug-drug interactions. <i>Journal of Pharmacokinetics and Pharmacodynamics</i> , 2016, 43, 461-479.	1.8	27
29	Pharmacodynamic modeling of combined chemotherapeutic effects predicts synergistic activity of gemcitabine and trabectedin in pancreatic cancer cells. <i>Cancer Chemotherapy and Pharmacology</i> , 2016, 77, 181-193.	2.3	24
30	Distributed transit compartments for arbitrary lifespan distributions in aging populations. <i>Journal of Theoretical Biology</i> , 2015, 380, 550-558.	1.7	5
31	Modeling of delays in PKPD: classical approaches and a tutorial for delay differential equations. <i>Journal of Pharmacokinetics and Pharmacodynamics</i> , 2014, 41, 291-318.	1.8	30
32	Mathematical Concepts in Pharmacokinetics and Pharmacodynamics with Application to Tumor Growth. <i>Lecture Notes in Mathematics</i> , 2013, , 225-250.	0.2	10
33	General relationship between transit compartments and lifespan models. <i>Journal of Pharmacokinetics and Pharmacodynamics</i> , 2012, 39, 343-355.	1.8	7
34	Multi-response model for rheumatoid arthritis based on delay differential equations in collagen-induced arthritic mice treated with an anti-GM-CSF antibody. <i>Journal of Pharmacokinetics and Pharmacodynamics</i> , 2012, 39, 55-65.	1.8	10
35	Modeling of tumor growth and anticancer effects of combination therapy. <i>Journal of Pharmacokinetics and Pharmacodynamics</i> , 2009, 36, 179-197.	1.8	91