Paolo Vicini

List of Publications by Year in descending order

94 papers	3,438 citations	147801 31 h-index	155660 55 g-index
97 all docs	97 docs citations	97 times ranked	4216 citing authors

#	Article	IF	Citations
1	Tumor Drug Penetration Measurements Could Be the Neglected Piece of the Personalized Cancer Treatment Puzzle. Clinical Pharmacology and Therapeutics, 2019, 106, 148-163.	4.7	60
2	A QSP Model for Predicting Clinical Responses to Monotherapy, Combination and Sequential Therapy Following CTLA-4, PD-1, and PD-L1 Checkpoint Blockade. Scientific Reports, 2019, 9, 11286.	3.3	69
3	A Computational Model of Neoadjuvant PD-1 Inhibition in Non-Small Cell Lung Cancer. AAPS Journal, 2019, 21, 79.	4.4	53
4	In silico simulation of a clinical trial with anti-CTLA-4 and anti-PD-L1 immunotherapies in metastatic breast cancer using a systems pharmacology model. Royal Society Open Science, 2019, 6, 190366.	2.4	54
5	Exposureâ€"Response Analysis of Overall Survival for Tremelimumab in Unresectable Malignant Mesothelioma: The Confounding Effect of Disease Status. Clinical and Translational Science, 2019, 12, 450-458.	3.1	13
6	Best Practices to Maximize the Use and Reuse of Quantitative and Systems Pharmacology Models: Recommendations From the United Kingdom Quantitative and Systems Pharmacology Network. CPT: Pharmacometrics and Systems Pharmacology, 2019, 8, 259-272.	2.5	37
7	Population Pharmacokinetics of Durvalumab in Cancer Patients and Association With Longitudinal Biomarkers of Disease Status. Clinical Pharmacology and Therapeutics, 2018, 103, 631-642.	4.7	111
8	Doseâ€Exposureâ€Response Relationship of the Investigational Antiâ€Interleukinâ€13 Monoclonal Antibody Tralokinumab in Patients With Severe, Uncontrolled Asthma. Clinical Pharmacology and Therapeutics, 2018, 103, 826-835.	4.7	6
9	Quantitative Characterization of CD8+ T Cell Clustering and Spatial Heterogeneity in Solid Tumors. Frontiers in Oncology, 2018, 8, 649.	2.8	30
10	Controlling the bioactivity of a peptide hormone in vivo by reversible self-assembly. Nature Communications, 2017, 8, 1026.	12.8	24
11	A computational multiscale agent-based model for simulating spatio-temporal tumour immune response to PD1 and PDL1 inhibition. Journal of the Royal Society Interface, 2017, 14, 20170320.	3.4	118
12	Found in Translation: Maximizing the Clinical Relevance of Nonclinical Oncology Studies. Clinical Cancer Research, 2017, 23, 1080-1090.	7.0	26
13	Multi-scale Modeling in Clinical Oncology: Opportunities and Barriers to Success. Annals of Biomedical Engineering, 2016, 44, 2626-2641.	2.5	66
14	Mathematical modeling of receptor occupancy data: A valuable technology for biotherapeutic drug development. Cytometry Part B - Clinical Cytometry, 2016, 90, 230-236.	1.5	12
15	Translational modeling and simulation approaches for molecularly targeted small molecule anticancer agents from bench to bedside. Expert Opinion on Drug Metabolism and Toxicology, 2016, 12, 253-265.	3.3	10
16	Multiscale Modeling in the Clinic: Drug Design and Development. Annals of Biomedical Engineering, 2016, 44, 2591-2610.	2.5	50
17	Application of Quantitative Biomeasures in Early Drug Discovery. AAPS Advances in the Pharmaceutical Sciences Series, 2016, , 37-46.	0.6	0
18	Organ Dose Estimates for Hyperthyroid Patients Treated with 131I: An Update of the Thyrotoxicosis Follow-Up Study. Radiation Research, 2015, 184, 595.	1.5	22

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19	The Role of Aggregates of Therapeutic Protein Products in Immunogenicity: An Evaluation by Mathematical Modeling. Journal of Immunology Research, 2015, 2015, 1-14.	2.2	18
20	Therapeutic outcomes, assessments, risk factors and mitigation efforts of immunogenicity of therapeutic protein products. Cellular Immunology, 2015, 295, 118-126.	3.0	68
21	Population pharmacokinetic/dynamic model of lymphosuppression after fludarabine administration. Cancer Chemotherapy and Pharmacology, 2015, 75, 67-75.	2.3	13
22	Mechanistic Understanding of Translational Pharmacokinetic-Pharmacodynamic Relationships in Nonclinical Tumor Models: A Case Study of Orally Available Novel Inhibitors of Anaplastic Lymphoma Kinase. Drug Metabolism and Disposition, 2015, 43, 54-62.	3.3	21
23	A Quantitative Systems Pharmacology Model for the Coagulation Network Describes Biomarker Changes Observed in a Clinical Study with FXa Variant and Predicts Age-Associated Biomarker Variations. Blood, 2015, 126, 3502-3502.	1.4	1
24	Bloodâ€“Tissue Exchange Modelling. , 2014, , 381-415.		0
25	Translational Pharmacokinetic-Pharmacodynamic Modeling for an Orally Available Novel Inhibitor of Anaplastic Lymphoma Kinase and c-Ros Oncogene 1. Journal of Pharmacology and Experimental Therapeutics, 2014, 351, 67-76.	2.5	27
26	A review of quantitative modeling of B cell responses to antigenic challenge. Journal of Pharmacokinetics and Pharmacodynamics, 2014, 41, 445-459.	1.8	2
27	Modeling, Simulation, and Translation Framework for the Preclinical Development of Monoclonal Antibodies. AAPS Journal, 2013, 15, 551-558.	4.4	20
28	A Mathematical Model of the Effect of Immunogenicity on Therapeutic Protein Pharmacokinetics. AAPS Journal, 2013, 15, 1141-1154.	4.4	41
29	Application of Target-Mediated Drug Disposition Model to Small Molecule Heat Shock Protein 90 Inhibitors. Drug Metabolism and Disposition, 2013, 41, 1285-1294.	3.3	24
30	A Limited Sampling Schedule to Estimate Mycophenolic Acid Area Under the Concentrationâ€Time Curve in Hematopoietic Cell Transplantation Recipients. Journal of Clinical Pharmacology, 2012, 52, 1654-1664.	2.0	17
31	The status of pharmacometrics in pregnancy: highlights from the 3 rd American conference on pharmacometrics. British Journal of Clinical Pharmacology, 2012, 74, 932-939.	2.4	25
32	Pharmacokinetic/Pharmacodynamic Modeling of Crizotinib for Anaplastic Lymphoma Kinase Inhibition and Antitumor Efficacy in Human Tumor Xenograft Mouse Models. Journal of Pharmacology and Experimental Therapeutics, 2012, 340, 549-557.	2.5	62
33	Ketorolac tromethamine: stereoâ€specific pharmacokinetics and singleâ€dose use in postoperative infants aged 2â€“6â€ƒmonths. Paediatric Anaesthesia, 2011, 21, 325-334.	1.1	37
34	Pharmacokinetic-Pharmacodynamic Modeling of Biomarker Response and Tumor Growth Inhibition to an Orally Available Heat Shock Protein 90 Inhibitor in a Human Tumor Xenograft Mouse Model. Journal of Pharmacology and Experimental Therapeutics, 2011, 338, 964-973.	2.5	29
35	An Approach to Determining Intracranial Pressure Variability Capable of Predicting Decreased Intracranial Adaptive Capacity in Patients With Traumatic Brain Injury. Biological Research for Nursing, 2010, 11, 317-324.	1.9	16
36	Measurement of Human Surfactant Protein-B Turnover in Vivo from Tracheal Aspirates Using Targeted Proteomics. Analytical Chemistry, 2010, 82, 2561-2567.	6.5	19

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37	IVGTT glucose minimal model covariate selection by nonlinear mixed-effects approach. American Journal of Physiology - Endocrinology and Metabolism, 2010, 298, E950-E960.	3.5	19
38	Population Pharmacokinetics of Cyclophosphamide and Metabolites in Children With Neuroblastoma: A Report From the Children's Oncology Group. Journal of Clinical Pharmacology, 2009, 49, 88-102.	2.0	34
39	A Limited Sampling Schedule to Estimate Individual Pharmacokinetic Parameters of Fludarabine in Hematopoietic Cell Transplant Patients. Clinical Cancer Research, 2009, 15, 5280-5287.	7.0	22
40	Nonlinear Mixed Effects to Improve Glucose Minimal Model Parameter Estimation: A Simulation Study in Intensive and Sparse Sampling. IEEE Transactions on Biomedical Engineering, 2009, 56, 2156-2166.	4.2	14
41	The System for Population Kinetics. , 2009, , 556-571.		0
42	Use of oral glucose minimal modelâ€“derived index of insulin sensitivity in subjects with early type 1 diabetes mellitus. Metabolism: Clinical and Experimental, 2008, 57, 445-447.	3.4	3
43	Glucose Minimal Model population analysis: Likelihood function profiling via Monte Carlo sampling. , 2008, 2008, 4932-5.		3
44	Kinetic Modeling in Support of Radionuclide Dose Assessment. Seminars in Nuclear Medicine, 2008, 38, 335-346.	4.6	17
45	Physiologically based pharmacokinetic model of midazolam disposition during pregnancy. , 2008, 2008, 5454-7.		17
46	Intracranial Pressure Waveform Morphology and Intracranial Adaptive Capacity. American Journal of Critical Care, 2008, 17, 545-554.	1.6	50
47	Intracranial pressure waveform morphology and intracranial adaptive capacity. American Journal of Critical Care, 2008, 17, 545-54.	1.6	18
48	Postoperative Ketorolac Tromethamine Use in Infants Aged 6???18 Months: The Effect on Morphine Usage, Safety Assessment, and Stereo-Specific Pharmacokinetics. Anesthesia and Analgesia, 2007, 104, 1040-1051.	2.2	41
49	Predicting Human Tumor Drug Concentrations from a Preclinical Pharmacokinetic Model of Temozolomide Brain Disposition. Clinical Cancer Research, 2007, 13, 4271-4279.	7.0	64
50	Simulating pharmacokinetic and pharmacodynamic fuzzy-parameterized models: a comparison of numerical methods. Journal of Pharmacokinetics and Pharmacodynamics, 2007, 34, 595-621.	1.8	10
51	Kinetic Modeling of Contrast-Enhanced MRI: An Automated Technique for Assessing Inflammation in the Rheumatoid Arthritis Wrist. Annals of Biomedical Engineering, 2007, 35, 781-795.	2.5	13
52	Identification of IVGTT minimal glucose model by nonlinear mixed-effects approaches. , 2006, 2006, 5049-52.		4
53	Catch-Bond Model Derived from Allostery Explains Force-Activated Bacterial Adhesion. Biophysical Journal, 2006, 90, 753-764.	0.5	176
54	THE GLUCOSE MINIMAL MODEL: POPULATION VS INDIVIDUAL PARAMETER ESTIMATION. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2006, 39, 231-235.	0.4	1

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55	Computer Simulations in Pharmacokinetics and Pharmacodynamics: Rediscovering Systems Physiology in the 21st Century. , 2006, , 513-528.		0
56	A Fuzzy Physiologically Based Pharmacokinetic Modeling Framework to Predict Drug Disposition in Humans. , 2006, 2006, 5037-40.		1
57	Real-time Dose Adjustment of Cyclophosphamide in a Preparative Regimen for Hematopoietic Cell Transplant: A Bayesian Pharmacokinetic Approach. Clinical Cancer Research, 2006, 12, 4888-4898.	7.0	40
58	Population approaches to estimate minimal model indexes of insulin sensitivity and glucose effectiveness using full and reduced sampling schedules. American Journal of Physiology - Endocrinology and Metabolism, 2006, 291, E716-E723.	3.5	17
59	A Fuzzy Physiologically Based Pharmacokinetic Modeling Framework to Predict Drug Disposition in Humans. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
60	Identification of IVGTT minimal glucose model by nonlinear mixed-effects approaches. Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2006, , .	0.5	0
61	Metabolism-based cyclophosphamide dosing for hematopoietic cell transplant. Clinical Pharmacology and Therapeutics, 2005, 78, 298-308.	4.7	31
62	Simultaneous population optimal design for pharmacokinetic-pharmacodynamic experiments. AAPS Journal, 2005, 7, E759-E785.	4.4	32
63	Estimating in Vitro Mitochondrial Oxygen Consumption During Muscle Contraction and Recovery: A Novel Approach that Accounts for Diffusion. Annals of Biomedical Engineering, 2005, 33, 343-355.	2.5	4
64	Robust Population Pharmacokinetic Experiment Design. Journal of Pharmacokinetics and Pharmacodynamics, 2005, 32, 33-64.	1.8	42
65	Integrated model of hepatic and peripheral glucose regulation for estimation of endogenous glucose production during the hot IVGTT. American Journal of Physiology - Endocrinology and Metabolism, 2005, 288, E1038-E1046.	3.5	26
66	Paradoxical Role of Cytochrome P450 3A in the Bioactivation and Clinical Effects of Levo-??-Acetylmethadol. Clinical Pharmacokinetics, 2005, 44, 731-751.	3.5	13
67	Pharmacokinetic Model-Predicted Anticancer Drug Concentrations in Human Tumors. Clinical Cancer Research, 2004, 10, 8048-8058.	7.0	46
68	Pubertal changes in HOMA and QUICKI: relationship to hepatic and peripheral insulin sensitivity. Pediatric Diabetes, 2004, 5, 122-125.	2.9	18
69	poped, a software for optimal experiment design in population kinetics. Computer Methods and Programs in Biomedicine, 2004, 74, 29-46.	4.7	79
70	Diminishing the risk of nonrelapse mortality in hematopoietic stem cell transplantation: Prediction of exposure to the cyclophosphamide metabolite carboxyethylphosphoramide mustard. Clinical Pharmacology and Therapeutics, 2004, 76, 270-280.	4.7	20
71	Pharmacokinetic and Pharmacodynamic Properties of Insulin Aspart and Human Insulin. Journal of Pharmacokinetics and Pharmacodynamics, 2003, 30, 221-235.	1.8	30
72	An Evaluation of Population D-Optimal Designs Via Pharmacokinetic Simulations. Annals of Biomedical Engineering, 2003, 31, 98-111.	2.5	27

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73	Pharmacodynamics of NN2211, a novel long acting GLP-1 derivative. European Journal of Pharmaceutical Sciences, 2003, 19, 141-150.	4.0	59
74	Quantitative Magnetic Resonance Imaging Analysis of Neovasculature Volume in Carotid Atherosclerotic Plaque. Circulation, 2003, 107, 851-856.	1.6	340
75	Epinephrine effects on insulin-glucose dynamics: the labeled IVGTT two-compartment minimal model approach. American Journal of Physiology - Endocrinology and Metabolism, 2002, 283, E78-E84.	3.5	19
76	Model-based Approaches to Biomarker Discovery and Evaluation: A Multidisciplinary Integrated Review. Critical Reviews in Biomedical Engineering, 2002, 30, 349-418.	0.9	8
77	The iterative two-stage population approach to IVGTT minimal modeling: improved precision with reduced sampling. American Journal of Physiology - Endocrinology and Metabolism, 2001, 280, E179-E186.	3.5	42
78	Blood-Tissue Exchange Modelling. , 2001, , 373-401.		0
79	An Evaluation of Extended vs Weighted Least Squares for Parameter Estimation in Physiological Modeling. Journal of Biomedical Informatics, 2001, 34, 348-364.	4.3	13
80	Cellular energetics analysis by a mathematical model of energy balance: estimation of parameters in human skeletal muscle. American Journal of Physiology - Cell Physiology, 2000, 279, C213-C224.	4.6	50
81	Pubertal Adolescent Male-Female Differences in Insulin Sensitivity and Glucose Effectiveness Determined by the One Compartment Minimal Model. Pediatric Research, 2000, 48, 384-388.	2.3	105
82	Identifiability and interval identifiability of mammillary and catenary compartmental models with some known rate constants. Mathematical Biosciences, 2000, 167, 145-161.	1.9	6
83	Glucose production during an IVGTT by deconvolution: validation with the tracer-to-tracee clamp technique. American Journal of Physiology - Endocrinology and Metabolism, 1999, 276, E285-E294.	3.5	22
84	Individual Prior Information in a Physiological Model of 2H8-Toluene Kinetics: An Empirical Bayes Estimation Strategy. Risk Analysis, 1999, 19, 1127-1134.	2.7	7
85	A Priori Identifiability of Distributed Models of Bloodâ€“Tissue Exchange. Annals of Biomedical Engineering, 1999, 27, 200-207.	2.5	8
86	Estimation of Blood Flow Heterogeneity in Human Skeletal Muscle Using Intravascular Tracer Data: Importance for Modeling Transcapillary Exchange. Annals of Biomedical Engineering, 1998, 26, 764-774.	2.5	14
87	A Pharmacokinetic/Pharmacodynamic Comparison of SAAM II and PC/WinNonlin Modeling Software. Journal of Pharmaceutical Sciences, 1998, 87, 1255-1263.	3.3	34
88	Biological monitoring of controlled toluene exposure. International Archives of Occupational and Environmental Health, 1998, 71, 433-444.	2.3	35
89	SAAM II: Simulation, analysis, and modeling software for tracer and pharmacokinetic studies. Metabolism: Clinical and Experimental, 1998, 47, 484-492.	3.4	401
90	Approaches to Population Kinetic Analysis with Application to Metabolic Studies. Advances in Experimental Medicine and Biology, 1998, 445, 103-113.	1.6	3

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91	The hot IVGTT two-compartment minimal model: indexesâ€‰ of glucose effectiveness and insulin sensitivity. American Journal of Physiology - Endocrinology and Metabolism, 1997, 273, E1024-E1032.	3.5	66
92	Estimation of endogenous glucose production after a glucose perturbation by nonparametric stochastic deconvolution. Computer Methods and Programs in Biomedicine, 1997, 52, 147-156.	4.7	23
93	Parameter estimation in distributed models of blood-tissue Exchange: A monte carlo strategy to assess precision. Annals of Biomedical Engineering, 1997, 25, 815-821.	2.5	6
94	Estimation of blood flow heterogeneity distribution in human skeletal muscle from positron emission tomography data. Annals of Biomedical Engineering, 1997, 25, 906-910.	2.5	29