Waniewski Jacek

List of Publications by Year
in descending order

74 papers	1,247 citations	430442 18 h-index	414034 32 g-index
75 all docs	75 docs citations	75 times ranked	586 citing authors

#	Article	IF	Citations
1	Peritoneal transport in CAPD patients with permanent loss of ultrafiltration capacity. Kidney International, 1990, 38, 495-506.	2.6	314
2	Osmotic Conductance of the Peritoneum in Capd Patients with Permanent Loss of Ultrafiltration Capacity. Peritoneal Dialysis International, 1996, 16, 488-496.	1.1	50
3	Methods for Estimation of Peritoneal Dialysate Volume and Reabsorption Rate Using Macromolecular Markers. Peritoneal Dialysis International, 1994, 14, 8-16.	1.1	46
4	Theoretical Description of Mass Transport in Medical Membrane Devices. Artificial Organs, 1995, 19, 420-427.	1.0	43
5	Hyaluronan prevents the decreased net ultrafiltration caused by increased peritoneal dialysate fill volume. Kidney International, 1998, 53, 496-502.	2.6	37
6	Paradoxes in Peritoneal Transport of Small Solutes. Peritoneal Dialysis International, 1996, 16, 63-70.	1.1	35
7	Distributed modeling of osmotically driven fluid transport in peritoneal dialysis: theoretical and computational investigations. American Journal of Physiology - Heart and Circulatory Physiology, 2009, 296, H1960-H1968.	1.5	30
8	Transcapillary Refilling Rate and Its Determinants during Haemodialysis with Standard and High Ultrafiltration Rates. American Journal of Nephrology, 2019, 50, 133-143.	1.4	29
9	Peritoneal Transport in Peritoneal Dialysis Patients Using Glucose-Based and Amino Acid-Based Solutions. Peritoneal Dialysis International, 2007, 27, 544-553.	1.1	27
10	Alterations of peritoneal transport characteristics in dialysis patients with ultrafiltration failure: tissue and capillary components. Nephrology Dialysis Transplantation, 2019, 34, 864-870.	0.4	27
11	Phosphate, urea and creatinine clearances: haemodialysis adequacy assessed by weekly monitoring. Nephrology Dialysis Transplantation, 2015, 30, 129-136.	0.4	26
12	Theoretical and Numerical Analysis of Different Adequacy Indices for Hemodialysis and Peritoneal Dialysis. Blood Purification, 2006, 24, 355-366.	0.9	23
13	Subject-specific pulse wave propagation modeling: Towards enhancement of cardiovascular assessment methods. PLoS ONE, 2018, 13, e0190972.	1.1	23
14	Bidirectional Solute Transport in Peritoneal Dialysis. Peritoneal Dialysis International, 1994, 14, 327-337.	1.1	22
15	Peritoneal Fluid Transport in CAPD Patients with Different Transport Rates of Small Solutes. Peritoneal Dialysis International, 2004, 24, 240-251.	1.1	22
16	Kinetic Analysis of Peritoneal Fluid and Solute Transport with Combination of Glucose and Icodextrin as Osmotic Agents. Peritoneal Dialysis International, 2009, 29, 72-80.	1.1	21
17	Distributed Modeling of Diffusive Solute Transport in Peritoneal Dialysis. Annals of Biomedical Engineering, 2002, 30, 1181-1195.	1.3	20
18	Changes in Free Water Fraction and Aquaporin Function With Dwell Time During Continuous Ambulatory Peritoneal Dialysis. Artificial Organs, 2010, 34, 1138-1143.	1.0	19

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19	Can the Diverse Family of Dialysis Adequacy Indices Be Understood as One Integrated System?. Blood Purification, 2010, 30, 257-265.	0.9	19
20	Peritoneal Fluid Transport: Mechanisms, Pathways, Methods of Assessment. Archives of Medical Research, 2013, 44, 576-583.	1.5	19
21	The Effect of Dialysate Acidity on Peritoneal Solute Transport in the Rat. Peritoneal Dialysis International, 1995, 15, 312-319.	1.1	18
22	Discriminative Impact of Ultrafiltration on Peritoneal Protein Transport. Peritoneal Dialysis International, 2000, 20, 39-46.	1.1	16
23	Fractional Solute Removal and KT/V in Different Modalities of Renal Replacement Therapy. Blood Purification, 2004, 22, 367-376.	0.9	16
24	A Mathematical Model of Local Stimulation of Perfusion by Vasoactive Agent Diffusing from Tissue Surface. Cardiovascular Engineering (Dordrecht, Netherlands), 2004, 4, 115-123.	1.0	16
25	Adequacy Indices for Dialysis in Acute Renal Failure: Kinetic Modeling. Artificial Organs, 2010, 34, 412-419.	1.0	15
26	Quantification of Dialytic Removal and Extracellular Calcium Mass Balance during a Weekly Cycle of Hemodialysis. PLoS ONE, 2016, 11, e0153285.	1.1	15
27	Mathematical modelling of cardiovascular response to the Valsalva manoeuvre. Mathematical Medicine and Biology, 2016, 34, dqw008.	0.8	14
28	Concomitant bidirectional transport during peritoneal dialysis can be explained by a structured interstitium. American Journal of Physiology - Heart and Circulatory Physiology, 2016, 310, H1501-H1511.	1.5	14
29	Hemodialysis-induced changes in hematocrit, hemoglobin and total protein: Implications for relative blood volume monitoring. PLoS ONE, 2019, 14, e0220764.	1.1	14
30	Linear approximations for the description of solute flux through permselective membranes. Journal of Membrane Science, 1994, 95, 179-184.	4.1	12
31	Long Peritoneal Dialysis Dwells With Icodextrin: Kinetics of Transperitoneal Fluid and Polyglucose Transport. Frontiers in Physiology, 2019, 10, 1326.	1.3	11
32	Phosphate clearance in peritoneal dialysis. Scientific Reports, 2020, 10, 17504.	1.6	11
33	Transcapillary transport of water, small solutes and proteins during hemodialysis. Scientific Reports, 2020, 10, 18736.	1.6	11
34	Can the Three Pore Model Correctly Describe Peritoneal Transport of Protein?. ASAIO Journal, 2014, 60, 576-581.	0.9	10
35	Impact of Ultrafiltration on Back-Diffusion in Hemodialyzer. Artificial Organs, 1994, 18, 933-941.	1.0	9
36	Transit Time, Residence Time, and the Rate of Approach to Steady State for Solute Transport During Peritoneal Dialysis. Annals of Biomedical Engineering, 2008, 36, 1735-1743.	1.3	9

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37	Fluid Tonicity Affects Peritoneal Characteristics Derived by 3-PORE Model. Peritoneal Dialysis International, 2019, 39, 243-251.	1.1	9
38	Peritoneal Transport of Glucose in Rat. Peritoneal Dialysis International, 1999, 19, 442-450.	1.1	8
39	Intraperitoneal Addition of Hyaluronan Improves Peritoneal Dialysis Efficiency. Peritoneal Dialysis International, 1999, 19, 106-111.	1.1	8
40	Membrane Transport of Several Ions During Peritoneal Dialysis: Mathematical Modeling. Artificial Organs, 2012, 36, E163-78.	1.0	8
41	Genotypic and phenotypic predictors of inflammation in patients with chronic kidney disease. Nephrology Dialysis Transplantation, 2016, 31, 2033-2040.	0.4	8
42	Changes of Peritoneal Transport Parameters with Time on Dialysis: Assessment with Sequential Peritoneal Equilibration Test. International Journal of Artificial Organs, 2017, 40, 595-601.	0.7	8
43	Association between Biomarkers of Mineral and Bone Metabolism and Removal of Calcium and Phosphate in Hemodialysis. Blood Purification, 2020, 49, 71-78.	0.9	8
44	?Time inversion? and mobility of many particle systems. Communications in Mathematical Physics, 1980, 76, 27-37.	1.0	7
45	Transperitoneal Transport of Glucose Inâ€ƒVitro. Artificial Organs, 2000, 24, 857-863.	1.0	7
46	Exact and Numerical Solutions of a Spatially-Distributed Mathematical Model for Fluid and Solute Transport in Peritoneal Dialysis. Symmetry, 2016, 8, 50.	1.1	7
47	Peritoneal Fluid Transport rather than Peritoneal Solute Transport Associates with Dialysis Vintage and Age of Peritoneal Dialysis Patients. Computational and Mathematical Methods in Medicine, 2016, 2016, 1-10.	0.7	7
48	Distributed modeling of glucose-induced osmotic flow. Advances in Peritoneal Dialysis Conference on Peritoneal Dialysis, 2007, 23, 2-6.	0.1	7
49	Individual based modeling and parameter estimation for a Lotkaâ€"Volterra system. Mathematical Biosciences, 1999, 157, 23-36.	0.9	6
50	Kinetic studies of dipeptide-based and amino acid-based peritoneal dialysis solutions. Kidney International, 2001, 59, 363-373.	2.6	6
51	Mean Transit Time and Mean Residence Time for Linear Diffusionâ€"Convectionâ€"Reaction Transport System. Computational and Mathematical Methods in Medicine, 2007, 8, 37-49.	0.7	6
52	Dialysis Adequacy Indices and Body Composition in Male and Female Patients on Peritoneal Dialysis. Peritoneal Dialysis International, 2014, 34, 417-425.	1.1	6
53	Impact of hemodialysis on cardiovascular system assessed by pulse wave analysis. PLoS ONE, 2018, 13, e0206446.	1.1	6
54	Mobility and measurements in nonlinear wave mechanics. Journal of Mathematical Physics, 1986, 27, 1796-1799.	0.5	5

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55	Acidâ€“base kinetics during hemodialysis using bicarbonate and lactate as dialysate buffer bases based on the H⁺mobilization model. International Journal of Artificial Organs, 2020, 43, 645-652.	0.7	5
56	Monitoring relative blood volume changes during hemodialysis: Impact of the priming procedure. Artificial Organs, 2021, 45, 1189-1194.	1.0	5
57	Calculation of the Gibbsâ€“Donnan factors for multi-ion solutions with non-permeating charge on both sides of a permselective membrane. Scientific Reports, 2021, 11, 22150.	1.6	5
58	Representations of Peritoneal Tissue â€“ Mathematical Models in Peritoneal Dialysis. , 2011, , .		4
59	A mathematical model for fluid-glucose-albumin transport in peritoneal dialysis. International Journal of Applied Mathematics and Computer Science, 2014, 24, 837-851.	1.5	4
60	Are Dialysis Adequacy Indices Independent of Solute Generation Rate?. ASAIO Journal, 2014, 60, 90-94.	0.9	4
61	Modeling Pathological Hemodynamic Responses to the Valsalva Maneuver. Journal of Biomechanical Engineering, 2017, 139, .	0.6	4
62	Water removal during automated peritoneal dialysis assessed by remote patient monitoring and modelling of peritoneal tissue hydration. Scientific Reports, 2021, 11, 15589.	1.6	4
63	Kinetic Modeling and Adequacy of Dialysis. , 2011, , .		3
64	Comparison of three PET methods to assess peritoneal membrane transport. Brazilian Journal of Medical and Biological Research, 2019, 52, e8596.	0.7	3
65	A Mathematical Model for Transport in Poroelastic Materials with Variable Volume:Derivation, Lie Symmetry Analysis, and Examples. Symmetry, 2020, 12, 396.	1.1	3
66	Fluid Transport in Peritoneal Dialysis: A Mathematical Model and Numerical Solutions. , 2007, , 281-288.		3
67	A Simple and Fast Method to Estimate Peritoneal Membrane Transport Characteristics Using Dialysate Sodium Concentration. Peritoneal Dialysis International, 1999, 19, 212-216.	1.1	2
68	On the change of transport parameters with dwell time during peritoneal dialysis. Peritoneal Dialysis International, 2021, 41, 404-412.	1.1	2
69	Changes in Subendocardial Viability Ratio in Traumatic Brain Injury Patients. Brain Connectivity, 2021, 11, 349-358.	0.8	2
70	Kinetic modeling of fluid and solute transport in peritoneal dialysis. Frontiers of Medical and Biological Engineering: the International Journal of the Japan Society of Medical Electronics and Biological Engineering, 2000, 10, 105-115.	0.2	1
71	Erythrocytes as Volume Markers in Experimental PD Show that Albumin Transport in the Extracellular Space Depends on PD Fluid Osmolarity. Peritoneal Dialysis International, 2016, 36, 247-256.	1.1	1
72	A Mathematical Model for Transport in Poroelastic Materials with Variable Volume: Derivation, Lie Symmetry Analysis and Examplesâ€”Part 2. Symmetry, 2022, 14, 109.	1.1	1

#	Article	IF	Citations
73	Distributed Models of Peritoneal Transport. , 2011, , .		0
74	FP623THE IMPACT OF INTER-INDIVIDUAL VARIATION IN THE FRANK-STARLING MECHANISM ON BLOOD PRESSURE RESPONSE TO HAEMODIALYSIS â€“ A MODELLING STUDY. Nephrology Dialysis Transplantation, 2019, 34, .	0.4	0