

# Jaques Reifman

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1096998/publications.pdf>

Version: 2024-02-01

135  
papers

2,962  
citations

172457

29  
h-index

254184

43  
g-index

137  
all docs

137  
docs citations

137  
times ranked

3435  
citing authors

#	ARTICLE	IF	CITATIONS
1	Assessment of the unified model of performance: accuracy of <sc>groupâ€œverage</sc> and individualised alertness predictions. Journal of Sleep Research, 2023, 32, e13626.	3.2	3
2	Wearables Detect Malaria Early in a Controlled Human-Infection Study. IEEE Transactions on Biomedical Engineering, 2022, 69, 2119-2129.	4.2	5
3	2B-Alert Web 2.0, an Open-Access Tool for Predicting Alertness and Optimizing the Benefits of Caffeine: Utility Study. Journal of Medical Internet Research, 2022, 24, e29595.	4.3	5
4	Metabolic adjustments of blood-stage Plasmodium falciparum in response to sublethal pyrazoleamide exposure. Scientific Reports, 2022, 12, 1167.	3.3	8
5	A Strain Rate-Dependent Constitutive Model for GÃ¶ttingen Minipig Cerebral Arteries. Journal of Biomechanical Engineering, 2022, 144, .	1.3	3
6	A 3-D virtual human model for simulating heat and cold stress. Journal of Applied Physiology, 2022, 133, 288-310.	2.5	6
7	Models for predicting sleep latency and sleep duration. Sleep, 2021, 44, .	1.1	5
8	The importance of modeling the human cerebral vasculature in blunt trauma. BioMedical Engineering OnLine, 2021, 20, 11.	2.7	12
9	Effects of body size and load carriage on lower-extremity biomechanical responses in healthy women. BMC Musculoskeletal Disorders, 2021, 22, 219.	1.9	8
10	Animal Orientation Affects Brain Biomechanical Responses to Blast-Wave Exposure. Journal of Biomechanical Engineering, 2021, 143, .	1.3	6
11	Metabolic Survival Adaptations of Plasmodium falciparum Exposed to Sublethal Doses of Fosmidomycin. Antimicrobial Agents and Chemotherapy, 2021, 65, .	3.2	14
12	A 3-D virtual human thermoregulatory model to predict whole-body and organ-specific heat-stress responses. European Journal of Applied Physiology, 2021, 121, 2543-2562.	2.5	13
13	Optimal sleep and work schedules to maximize alertness. Sleep, 2021, 44, .	1.1	7
14	Inter-study and time-dependent variability of metabolite abundance in cultured red blood cells. Malaria Journal, 2021, 20, 299.	2.3	7
15	Investigation of the direct and indirect mechanisms of primary blast insult to the brain. Scientific Reports, 2021, 11, 16040.	3.3	7
16	Individuals with and without military-related PTSD differ in subjective sleepiness and alertness but not objective sleepiness. Journal of Psychiatric Research, 2021, 141, 301-308.	3.1	1
17	In silico Identification of Key Factors Driving the Response of Muscle Sensory Neurons to Noxious Stimuli. Frontiers in Neuroscience, 2021, 15, 719735.	2.8	2
18	Cerebral Vasculature Influences Blast-Induced Biomechanical Responses of Human Brain Tissue. Frontiers in Bioengineering and Biotechnology, 2021, 9, 744808.	4.1	2

#	ARTICLE	IF	CITATIONS
19	A 3-D Finite-Element Minipig Model to Assess Brain Biomechanical Responses to Blast Exposure. <i>Frontiers in Bioengineering and Biotechnology</i> , 2021, 9, 757755.	4.1	2
20	An attempt to identify reproducible high-density EEG markers of PTSD during sleep. <i>Sleep</i> , 2020, 43, .	1.1	44
21	Obstructions in the lower airways lead to altered airflow patterns in the central airway. <i>Respiratory Physiology and Neurobiology</i> , 2020, 272, 103311.	1.6	8
22	Individual Differences in Women During Walking Affect Tibial Response to Load Carriage: The Importance of Individualized Musculoskeletal Finite-Element Models. <i>IEEE Transactions on Biomedical Engineering</i> , 2020, 67, 545-555.	4.2	12
23	Genome-Scale Model-Based Identification of Metabolite Indicators for Early Detection of Kidney Toxicity. <i>Toxicological Sciences</i> , 2020, 173, 293-312.	3.1	5
24	Controlled Multifactorial Coagulopathy: Effects of Dilution, Hypothermia, and Acidosis on Thrombin Generation In Vitro. <i>Anesthesia and Analgesia</i> , 2020, 130, 1063-1076.	2.2	20
25	Injury Length and Arteriole Constriction Shape Clot Growth and Blood-Flow Acceleration in a Mouse Model of Thrombosis. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2020, 40, 2114-2126.	2.4	3
26	Inter-channel phase differences during sleep spindles are altered in Veterans with PTSD. <i>NeuroImage: Clinical</i> , 2020, 28, 102390.	2.7	6
27	Toxicant-Induced Metabolic Alterations in Lipid and Amino Acid Pathways Are Predictive of Acute Liver Toxicity in Rats. <i>International Journal of Molecular Sciences</i> , 2020, 21, 8250.	4.1	8
28	Mechanism-based identification of plasma metabolites associated with liver toxicity. <i>Toxicology</i> , 2020, 441, 152493.	4.2	10
29	Metabolic alterations in the erythrocyte during blood-stage development of the malaria parasite. <i>Malaria Journal</i> , 2020, 19, 94.	2.3	18
30	Alterations in sleep electroencephalography synchrony in combat-exposed veterans with post-traumatic stress disorder. <i>Sleep</i> , 2020, 43, .	1.1	9
31	Effects of load carriage on biomechanical variables associated with tibial stress fractures in running. <i>Gait and Posture</i> , 2020, 77, 190-194.	1.4	16
32	Increased oscillatory frequency of sleep spindles in combat-exposed veteran men with post-traumatic stress disorder. <i>Sleep</i> , 2020, 43, .	1.1	16
33	Does Blast Exposure to the Torso Cause a Blood Surge to the Brain?. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 573647.	4.1	10
34	Identification of Veterans With PTSD Based on EEG Features Collected During Sleep. <i>Frontiers in Psychiatry</i> , 2020, 11, 532623.	2.6	5
35	<i>Alert</i> App: A mobile application for real-time individualized prediction of alertness. <i>Journal of Sleep Research</i> , 2019, 28, e12725.	3.2	27
36	Predictive Approach Identifies Molecular Targets and Interventions to Restore Angiogenesis in Wounds With Delayed Healing. <i>Frontiers in Physiology</i> , 2019, 10, 636.	2.8	17

#	ARTICLE	IF	CITATIONS
37	Skeletal loading score is associated with bone microarchitecture in young adults. <i>Bone</i> , 2019, 127, 360-366.	2.9	13
38	Volumetric characteristics of idiopathic pulmonary fibrosis lungs: computational analyses of high-resolution computed tomography images of lung lobes. <i>Respiratory Research</i> , 2019, 20, 216.	3.6	8
39	Microfluidic and computational study of structural properties and resistance to flow of blood clots under arterial shear. <i>Biomechanics and Modeling in Mechanobiology</i> , 2019, 18, 1461-1474.	2.8	9
40	0324 2B-Alert Web 2.0: An Open-access Tool to Determine Caffeine Doses That Optimize Alertness. <i>Sleep</i> , 2019, 42, A132-A133.	1.1	1
41	Dynamics of the Tracheal Airway and Its Influences on Respiratory Airflows: An Exemplar Study. <i>Journal of Biomechanical Engineering</i> , 2019, 141, .	1.3	4
42	Short-term metabolic adjustments in <i>Plasmodium falciparum</i> counter hypoxanthine deprivation at the expense of long-term viability. <i>Malaria Journal</i> , 2019, 18, 86.	2.3	13
43	0074 Can We Identify Reproducible Brain-activity Markers Of PTSD During Sleep?. <i>Sleep</i> , 2019, 42, A31-A31.	1.1	0
44	Regional Changes in Density and Microarchitecture in the Ultradistal Tibia of Female Recruits After U.S. Army Basic Combat Training. <i>Calcified Tissue International</i> , 2019, 105, 68-76.	3.1	6
45	0206 Personalized Caffeine Recommendations To Maintain Alertness: You And I Need Different Doses. <i>Sleep</i> , 2019, 42, A84-A85.	1.1	0
46	A 3-D Rat Brain Model for Blast-Wave Exposure: Effects of Brain Vasculature and Material Properties. <i>Annals of Biomedical Engineering</i> , 2019, 47, 2033-2044.	2.5	35
47	Network Modeling of Liver Metabolism to Predict Plasma Metabolite Changes During Short-Term Fasting in the Laboratory Rat. <i>Frontiers in Physiology</i> , 2019, 10, 161.	2.8	6
48	0883 EEG Connectivity Markers In Combat-exposed Veterans With PTSD. <i>Sleep</i> , 2019, 42, A355-A355.	1.1	1
49	Randomized, double-blind, placebo-controlled, crossover study of the effects of repeated-dose caffeine on neurobehavioral performance during 48h of total sleep deprivation. <i>Psychopharmacology</i> , 2019, 236, 1313-1322.	3.1	19
50	Impact of Tissue Factor Localization on Blood Clot Structure and Resistance under Venous Shear. <i>Biophysical Journal</i> , 2018, 114, 978-991.	0.5	27
51	PC-PVT 2.0: An updated platform for psychomotor vigilance task testing, analysis, prediction, and visualization. <i>Journal of Neuroscience Methods</i> , 2018, 304, 39-45.	2.5	34
52	Assessing Airflow Sensitivity to Healthy and Diseased Lung Conditions in a Computational Fluid Dynamics Model Validated In Vitro. <i>Journal of Biomechanical Engineering</i> , 2018, 140, .	1.3	26
53	Changes in tibial bone microarchitecture in female recruits in response to 8 weeks of U.S. Army Basic Combat Training. <i>Bone</i> , 2018, 113, 9-16.	2.9	53
54	Material Properties of Rat Middle Cerebral Arteries at High Strain Rates. <i>Journal of Biomechanical Engineering</i> , 2018, 140, .	1.3	14

#	ARTICLE	IF	CITATIONS
55	Effects of signal artefacts on electroencephalography spectral power during sleep: quantifying the effectiveness of automated artefact rejection algorithms. <i>Journal of Sleep Research</i> , 2018, 27, 98-102.	3.2	10
56	Caffeine dosing strategies to optimize alertness during sleep loss. <i>Journal of Sleep Research</i> , 2018, 27, e12711.	3.2	17
57	Collective interaction effects associated with mammalian behavioral traits reveal genetic factors connecting fear and hemostasis. <i>BMC Psychiatry</i> , 2018, 18, 175.	2.6	0
58	Genetic interaction effects reveal lipid-metabolic and inflammatory pathways underlying common metabolic disease risks. <i>BMC Medical Genomics</i> , 2018, 11, 54.	1.5	13
59	Computational analysis identifies putative prognostic biomarkers of pathological scarring in skin wounds. <i>Journal of Translational Medicine</i> , 2018, 16, 32.	4.4	9
60	Regional variation of bone density, microarchitectural parameters, and elastic moduli in the ultradistal tibia of young black and white men and women. <i>Bone</i> , 2018, 112, 194-201.	2.9	8
61	Tachycardic and non-tachycardic responses in trauma patients with haemorrhagic injuries. <i>Injury</i> , 2018, 49, 1654-1660.	1.7	3
62	Individualized estimation of human core body temperature using noninvasive measurements. <i>Journal of Applied Physiology</i> , 2018, 124, 1387-1402.	2.5	25
63	Metabolic network-based predictions of toxicant-induced metabolite changes in the laboratory rat. <i>Scientific Reports</i> , 2018, 8, 11678.	3.3	37
64	A cross-sectional study of the effects of load carriage on running characteristics and tibial mechanical stress: implications for stress-fracture injuries in women. <i>BMC Musculoskeletal Disorders</i> , 2017, 18, 125.	1.9	33
65	Using a genome-scale metabolic network model to elucidate the mechanism of chloroquine action in <i>Plasmodium falciparum</i> . <i>International Journal for Parasitology: Drugs and Drug Resistance</i> , 2017, 7, 138-146.	3.4	26
66	Predictive Analysis of Mechanistic Triggers and Mitigation Strategies for Pathological Scarring in Skin Wounds. <i>Journal of Immunology</i> , 2017, 198, 832-841.	0.8	18
67	Bone mass, microarchitecture and strength are influenced by race/ethnicity in young adult men and women. <i>Bone</i> , 2017, 103, 200-208.	2.9	58
68	Real-time individualization of the unified model of performance. <i>Journal of Sleep Research</i> , 2017, 26, 820-831.	3.2	22
69	2B-Alert app: Real-time learning and individualized prediction of cognitive performance. <i>Journal of Science and Medicine in Sport</i> , 2017, 20, S51.	1.3	6
70	Collective Genetic Interaction Effects and the Role of Antigen-Presenting Cells in Autoimmune Diseases. <i>PLoS ONE</i> , 2017, 12, e0169918.	2.5	8
71	Mechanisms of action of <i>Coxiella burnetii</i> effectors inferred from host-pathogen protein interactions. <i>PLoS ONE</i> , 2017, 12, e0188071.	2.5	12
72	A strategy for evaluating pathway analysis methods. <i>BMC Bioinformatics</i> , 2017, 18, 453.	2.6	27

#	ARTICLE	IF	CITATIONS
73	Genotype distribution-based inference of collective effects in genome-wide association studies: insights to age-related macular degeneration disease mechanism. BMC Genomics, 2016, 17, 695.	2.8	12
74	Phenotypic Characterization of a Novel Virulence-Factor Deletion Strain of Burkholderia mallei That Provides Partial Protection against Inhalational Glanders in Mice. Frontiers in Cellular and Infection Microbiology, 2016, 6, 21.	3.9	13
75	Metabolic host responses to malarial infection during the intraerythrocytic developmental cycle. BMC Systems Biology, 2016, 10, 58.	3.0	20
76	A Unified Model of Performance for Predicting the Effects of Sleep and Caffeine. Sleep, 2016, 39, 1827-1841.	1.1	28
77	<i>2B-Alert</i> Web: An Open-Access Tool for Predicting the Effects of Sleep/Wake Schedules and Caffeine Consumption on Neurobehavioral Performance. Sleep, 2016, 39, 2157-2159.	1.1	21
78	An Integrated Musculoskeletal-Finite-Element Model to Evaluate Effects of Load Carriage on the Tibia During Walking. Journal of Biomechanical Engineering, 2016, 138, .	1.3	26
79	Muscle Oxygen Saturation Improves Diagnostic Association Between Initial Vital Signs and Major Hemorrhage: A Prospective Observational Study. Academic Emergency Medicine, 2016, 23, 353-357.	1.8	11
80	DBSecSys 2.0: a database of Burkholderia mallei and Burkholderia pseudomallei secretion systems. BMC Bioinformatics, 2016, 17, 387.	2.6	4
81	A Step Toward Balance: Thrombin Generation Improvement via Procoagulant Factor and Antithrombin Supplementation. Anesthesia and Analgesia, 2016, 123, 535-546.	2.2	20
82	Computational Study of Thrombus Formation and Clotting Factor Effects under Venous Flow Conditions. Biophysical Journal, 2016, 110, 1869-1885.	0.5	45
83	Computational identification and analysis of signaling subnetworks with distinct functional roles in the regulation of TNF production. Molecular BioSystems, 2016, 12, 826-838.	2.9	13
84	A Unified Model of Performance: Validation of its Predictions across Different Sleep/Wake Schedules. Sleep, 2016, 39, 249-262.	1.1	29
85	A systems biology strategy to identify molecular mechanisms of action and protein indicators of traumatic brain injury. Journal of Neuroscience Research, 2015, 93, 199-214.	2.9	14
86	Mechanistic Modeling of the Effects of Acidosis on Thrombin Generation. Anesthesia and Analgesia, 2015, 121, 278-288.	2.2	15
87	Using host-pathogen protein interactions to identify and characterize Francisella tularensis virulence factors. BMC Genomics, 2015, 16, 1106.	2.8	33
88	Automated Analysis of Vital Signs to Identify Patients With Substantial Bleeding Before Hospital Arrival. Shock, 2015, 43, 429-436.	2.1	25
89	Biofilm Formation Mechanisms of Pseudomonas aeruginosa Predicted via Genome-Scale Kinetic Models of Bacterial Metabolism. PLoS Computational Biology, 2015, 11, e1004452.	3.2	53
90	Computational Identification of Mechanistic Factors That Determine the Timing and Intensity of the Inflammatory Response. PLoS Computational Biology, 2015, 11, e1004460.	3.2	6

#	ARTICLE	IF	CITATIONS
91	Is heart rate variability better than routine vital signs for prehospital identification of major hemorrhage?. American Journal of Emergency Medicine, 2015, 33, 254-261.	1.6	14
92	Mathematical Modeling of the Heat-Shock Response in HeLa Cells. Biophysical Journal, 2015, 109, 182-193.	0.5	35
93	Untangling the Effect of Head Acceleration on Brain Responses to Blast Waves. Journal of Biomechanical Engineering, 2015, 137, 124502.	1.3	13
94	Mining Host-Pathogen Protein Interactions to Characterize Burkholderia mallei Infectivity Mechanisms. PLoS Computational Biology, 2015, 11, e1004088.	3.2	34
95	In reply to "Utility of shock index calculation in hemorrhagic trauma". American Journal of Emergency Medicine, 2015, 33, 978-979.	1.6	1
96	Can a mathematical model predict an individual's trait-like response to both total and partial sleep loss?. Journal of Sleep Research, 2015, 24, 262-269.	3.2	27
97	Human core temperature prediction for heat-injury prevention. IEEE Journal of Biomedical and Health Informatics, 2014, 19, 1-1.	6.3	12
98	Simulation of B Cell Affinity Maturation Explains Enhanced Antibody Cross-Reactivity Induced by the Polyvalent Malaria Vaccine AMA1. Journal of Immunology, 2014, 193, 2073-2086.	0.8	57
99	PC-PVT: A platform for psychomotor vigilance task testing, analysis, and prediction. Behavior Research Methods, 2014, 46, 140-147.	4.0	110
100	Computational Approach To Characterize Causative Factors and Molecular Indicators of Chronic Wound Inflammation. Journal of Immunology, 2014, 192, 1824-1834.	0.8	56
101	A virtual rat for simulating environmental and exertional heat stress. Journal of Applied Physiology, 2014, 117, 1278-1286.	2.5	11
102	A computational study of the respiratory airflow characteristics in normal and obstructed human airways. Computers in Biology and Medicine, 2014, 52, 130-143.	7.0	67
103	Kinetic model facilitates analysis of fibrin generation and its modulation by clotting factors: implications for hemostasis-enhancing therapies. Molecular BioSystems, 2014, 10, 2347-2357.	2.9	22
104	Modeling metabolism and stage-specific growth of Plasmodium falciparum HB3 during the intraerythrocytic developmental cycle. Molecular BioSystems, 2014, 10, 2526-2537.	2.9	16
105	DBSecSys: a database of Burkholderia mallei secretion systems. BMC Bioinformatics, 2014, 15, 244.	2.6	9
106	Dose-dependent model of caffeine effects on human vigilance during total sleep deprivation. Journal of Theoretical Biology, 2014, 358, 11-24.	1.7	24
107	Prediction of Metabolic Flux Distribution from Gene Expression Data Based on the Flux Minimization Principle. PLoS ONE, 2014, 9, e112524.	2.5	43
108	Bridging the gap between gene expression and metabolic phenotype via kinetic models. BMC Systems Biology, 2013, 7, 63.	3.0	19

#	ARTICLE	IF	CITATIONS
109	A biomathematical model of the restoring effects of caffeine on cognitive performance during sleep deprivation. <i>Journal of Theoretical Biology</i> , 2013, 319, 23-33.	1.7	18
110	A unified mathematical model to quantify performance impairment for both chronic sleep restriction and total sleep deprivation. <i>Journal of Theoretical Biology</i> , 2013, 331, 66-77.	1.7	48
111	Systems Biology Approaches for Discovering Biomarkers for Traumatic Brain Injury. <i>Journal of Neurotrauma</i> , 2013, 30, 1101-1116.	3.4	55
112	Computational Analysis of the Effects of Reduced Temperature on Thrombin Generation. <i>Anesthesia and Analgesia</i> , 2013, 117, 565-574.	2.2	41
113	Novel Burkholderia mallei Virulence Factors Linked to Specific Host-Pathogen Protein Interactions. <i>Molecular and Cellular Proteomics</i> , 2013, 12, 3036-3051.	3.8	38
114	Are Standard Diagnostic Test Characteristics Sufficient for the Assessment of Continual Patient Monitoring?. <i>Medical Decision Making</i> , 2013, 33, 225-234.	2.4	65
115	A 3-D mathematical model to identify organ-specific risks in rats during thermal stress. <i>Journal of Applied Physiology</i> , 2013, 115, 1822-1837.	2.5	19
116	Modeling Phenotypic Metabolic Adaptations of Mycobacterium tuberculosis H37Rv under Hypoxia. <i>PLoS Computational Biology</i> , 2012, 8, e1002688.	3.2	65
117	Individualized performance prediction during total sleep deprivation: Accounting for trait vulnerability to sleep loss. , 2012, 2012, 5574-7.		3
118	Therapeutic correction of thrombin generation in dilution-induced coagulopathy. <i>Journal of Trauma and Acute Care Surgery</i> , 2012, 73, S95-S102.	2.1	21
119	QuartetS-DB: a large-scale orthology database for prokaryotes and eukaryotes inferred by evolutionary evidence. <i>BMC Bioinformatics</i> , 2012, 13, 143.	2.6	11
120	PathNet: a tool for pathway analysis using topological information. <i>Source Code for Biology and Medicine</i> , 2012, 7, 10.	1.7	67
121	Inferring high-confidence human protein-protein interactions. <i>BMC Bioinformatics</i> , 2012, 13, 79.	2.6	28
122	A new metric for quantifying performance impairment on the psychomotor vigilance test. <i>Journal of Sleep Research</i> , 2012, 21, 659-674.	3.2	15
123	Computational analysis of intersubject variability and thrombin generation in dilutional coagulopathy. <i>Transfusion</i> , 2012, 52, 2475-2486.	1.6	20
124	Kinetic modeling sheds light on the mode of action of recombinant factor VIIa on thrombin generation. <i>Thrombosis Research</i> , 2011, 128, 381-390.	1.7	33
125	Categorizing Biases in High-Confidence High-Throughput Protein-Protein Interaction Data Sets. <i>Molecular and Cellular Proteomics</i> , 2011, 10, M111.012500.	3.8	25
126	QuartetS: a fast and accurate algorithm for large-scale orthology detection. <i>Nucleic Acids Research</i> , 2011, 39, e88-e88.	14.5	32



#	ARTICLE	IF	CITATIONS
127	Universal Glucose Models for Predicting Subcutaneous Glucose Concentration in Humans. IEEE Transactions on Information Technology in Biomedicine, 2010, 14, 157-165.	3.2	107
128	Exploration of Prehospital Vital Sign Trends for the Prediction of Trauma Outcomes. Prehospital Emergency Care, 2009, 13, 286-294.	1.8	40
129	A systems biology framework for modeling metabolic enzyme inhibition of Mycobacterium tuberculosis. BMC Systems Biology, 2009, 3, 92.	3.0	34
130	An Improved Methodology for Individualized Performance Prediction of Sleep-Deprived Individuals with the Two-Process Model. Sleep, 2009, 32, 1377-1392.	1.1	30
131	Individualized performance prediction of sleep-deprived individuals with the two-process model. Journal of Applied Physiology, 2008, 104, 459-468.	2.5	36
132	Automatically-Computed Prehospital Severity Scores are Equivalent to Scores Based on Medic Documentation. Journal of Trauma, 2008, 65, 915-923.	2.3	17
133	Error bounds for data-driven models of dynamical systems. Computers in Biology and Medicine, 2007, 37, 670-679.	7.0	70
134	A Method for Automatic Identification of Reliable Heart Rates Calculated from ECG and PPG Waveforms. Journal of the American Medical Informatics Association: JAMIA, 2006, 13, 309-320.	4.4	82
135	Algorithms to qualify respiratory data collected during the transport of trauma patients. Physiological Measurement, 2006, 27, 797-816.	2.1	33