

Thomas J Balkin

List of Publications by Year in descending order

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Version: 2024-02-01

114
papers

9,337
citations

66343

42
h-index

39675

94
g-index

117
all docs

117
docs citations

117
times ranked

7444
citing authors

#	ARTICLE	IF	CITATIONS
1	The role of pharmacological interventions for sleep deprivation and restriction. , 2023, , 506-517.		0
2	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
3	Acute sleep interventions as an avenue for treatment of trauma-associated disorders. Journal of Clinical Sleep Medicine, 2022, 18, 2291-2312.	2.6	7
4	Self-Reported Sleep Need, Subjective Resilience, and Cognitive Performance Following Sleep Loss and Recovery Sleep. Psychological Reports, 2021, 124, 210-226.	1.7	10
5	Models for predicting sleep latency and sleep duration. Sleep, 2021, 44, .	1.1	5
6	γ -G308A genotype, resilience to sleep deprivation, and the effect of caffeine on psychomotor vigilance performance in a randomized, double-blind, placebo-controlled, crossover study. Chronobiology International, 2020, 37, 1461-1464.	2.0	6
7	Effect of cognitive load and emotional valence of distractors on performance during sleep extension and subsequent sleep deprivation. Sleep, 2020, 43, .	1.1	6
8	2B-Alert App: A mobile application for real-time individualized prediction of alertness. Journal of Sleep Research, 2019, 28, e12725.	3.2	27
9	Sleep extension reduces fatigue in healthy, normally-sleeping young adults. Sleep Science, 2019, 12, 21-27.	1.0	19
10	Precision Medicine for Sleep Loss and Fatigue Management. Sleep Medicine Clinics, 2019, 14, 399-406.	2.6	4
11	2B-Alert Web 2.0: An Open-access Tool to Determine Caffeine Doses That Optimize Alertness. Sleep, 2019, 42, A132-A133.	1.1	1
12	Objective changes in activity levels following sleep extension as measured by wrist actigraphy. Sleep Medicine, 2019, 60, 173-177.	1.6	6
13	Personalized Caffeine Recommendations To Maintain Alertness: You And I Need Different Doses. Sleep, 2019, 42, A84-A85.	1.1	0
14	Effects of sleep extension on cognitive/motor performance and motivation in military tactical athletes. Sleep Medicine, 2019, 58, 48-55.	1.6	27
15	Sleep health and its association with performance and motivation in tactical athletes enrolled in the Reserve Officers' Training Corps. Sleep Health, 2019, 5, 309-314.	2.5	17
16	Sleep extension reduces pain sensitivity. Sleep Medicine, 2019, 54, 172-176.	1.6	31
17	Optimizing Sleep in the Military. Chest, 2019, 155, 215-226.	0.8	37
18	A systematic review and meta-analysis of sleep architecture and chronic traumatic brain injury. Sleep Medicine Reviews, 2018, 41, 61-77.	8.5	32

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19	Rates of cerebral protein synthesis in primary visual cortex during sleep-dependent memory consolidation, a study in human subjects. <i>Sleep</i> , 2018, 41, .	1.1	2
20	Caffeine dosing strategies to optimize alertness during sleep loss. <i>Journal of Sleep Research</i> , 2018, 27, e12711.	3.2	17
21	Sleep as a Mediator of mTBI and PTSD. , 2018, , 25-32.		0
22	Sleep deprivation impairs recognition of specific emotions. <i>Neurobiology of Sleep and Circadian Rhythms</i> , 2017, 3, 10-16.	2.8	77
23	Real-time individualization of the unified model of performance. <i>Journal of Sleep Research</i> , 2017, 26, 820-831.	3.2	22
24	Limited Efficacy of Caffeine and Recovery Costs During and Following 5 Days of Chronic Sleep Restriction. <i>Sleep</i> , 2017, 40, .	1.1	22
25	Sleep and Performance Prediction Modeling. , 2017, , 689-696.e4.		2
26	Performance Deficits During Sleep Loss and Their Operational Consequences. , 2017, , 682-688.e4.		5
27	A Unified Model of Performance for Predicting the Effects of Sleep and Caffeine. <i>Sleep</i> , 2016, 39, 1827-1841.	1.1	28
28	Sleep and Health Resilience Metrics in a Large Military Cohort. <i>Sleep</i> , 2016, 39, 1111-1120.	1.1	91
29	<i>2B-Alert</i>Web: An Open-Access Tool for Predicting the Effects of Sleep/Wake Schedules and Caffeine Consumption on Neurobehavioral Performance. <i>Sleep</i> , 2016, 39, 2157-2159.	1.1	21
30	Sleep, Sleep Disorders, and Mild Traumatic Brain Injury. What We Know and What We Need to Know: Findings from a National Working Group. <i>Neurotherapeutics</i> , 2016, 13, 403-417.	4.4	107
31	The Impact of Insufficient Sleep on Combat Mission Performance. <i>Military Behavioral Health</i> , 2016, 4, 356-363.	0.8	38
32	A Unified Model of Performance: Validation of its Predictions across Different Sleep/Wake Schedules. <i>Sleep</i> , 2016, 39, 249-262.	1.1	29
33	Countermeasures for Mitigating Fatigue in Motor Vehicle Operators. <i>Reviews of Human Factors and Ergonomics</i> , 2015, 10, 115-137.	0.5	6
34	A Pilot Study on the Encoding of a Perceptual Learning Task following Sleep Deprivation. <i>Perceptual and Motor Skills</i> , 2015, 121, 80-93.	1.3	3
35	Indirect associations of combat exposure with post-deployment physical symptoms in U.S. soldiers: Roles of post-traumatic stress disorder, depression and insomnia. <i>Journal of Psychosomatic Research</i> , 2015, 78, 478-483.	2.6	18
36	Daily Insufficient Sleep and Active Duty Status. <i>Military Medicine</i> , 2015, 180, 68-76.	0.8	11

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37	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
38	Dose-dependent model of caffeine effects on human vigilance during total sleep deprivation. Journal of Theoretical Biology, 2014, 358, 11-24.	1.7	24
39	Caffeine Improves the Efficiency of Planning and Sequencing Abilities During Sleep Deprivation. Journal of Clinical Psychopharmacology, 2014, 34, 660-662.	1.4	15
40	<i>PER3</i> and <i>ADORA2A</i> polymorphisms impact neurobehavioral performance during sleep restriction. Journal of Sleep Research, 2013, 22, 160-165.	3.2	58
41	A biomathematical model of the restoring effects of caffeine on cognitive performance during sleep deprivation. Journal of Theoretical Biology, 2013, 319, 23-33.	1.7	18
42	A unified mathematical model to quantify performance impairment for both chronic sleep restriction and total sleep deprivation. Journal of Theoretical Biology, 2013, 331, 66-77.	1.7	48
43	Caffeine Gum Minimizes Sleep Inertia. Perceptual and Motor Skills, 2013, 116, 280-293.	1.3	45
44	Rhythmic alternating patterns of brain activity distinguish rapid eye movement sleep from other states of consciousness. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10300-10305.	7.1	113
45	Individualized performance prediction during total sleep deprivation: Accounting for trait vulnerability to sleep loss. , 2012, 2012, 5574-7.		3
46	Gambling When Sleep Deprived: Don't Bet on Stimulants. Chronobiology International, 2012, 29, 43-54.	2.0	88
47	Trait-Like Vulnerability to Total and Partial Sleep Loss. Sleep, 2012, 35, 1163-1172.	1.1	152
48	A new metric for quantifying performance impairment on the psychomotor vigilance test. Journal of Sleep Research, 2012, 21, 659-674.	3.2	15
49	Countermeasures to the neurocognitive deficits associated with sleep loss. Drug Discovery Today: Disease Models, 2011, 8, 139-146.	1.2	3
50	Behavioral Biomarkers of Sleepiness. Journal of Clinical Sleep Medicine, 2011, 7, S12-5.	2.6	12
51	Sleep disorders and work performance: findings from the 2008 National Sleep Foundation Sleep in America poll. Journal of Sleep Research, 2011, 20, 487-494.	3.2	296
52	Caffeine protects against increased risk-taking propensity during severe sleep deprivation. Journal of Sleep Research, 2011, 20, 395-403.	3.2	76
53	Infraslow EEG oscillations organize large-scale cortical-subcortical interactions during sleep: A combined EEG/fMRI study. Brain Research, 2011, 1374, 63-72.	2.2	54
54	Comparison of Motionlogger Watch and Actiwatch actigraphs to polysomnography for sleep/wake estimation in healthy young adults. Behavior Research Methods, 2011, 43, 1152-1160.	4.0	76

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55	The challenges and opportunities of technological approaches to fatigue management. Accident Analysis and Prevention, 2011, 43, 565-572.	5.7	94
56	Performance Deficits during Sleep Loss. , 2011, , 738-744.		3
57	Sleep history affects task acquisition during subsequent sleep restriction and recovery. Journal of Sleep Research, 2010, 19, 289-297.	3.2	19
58	Socializing by Day May Affect Performance by Night: Vulnerability to Sleep Deprivation is Differentially Mediated by Social Exposure in Extraverts vs Introverts. Sleep, 2010, 33, 1475-1485.	1.1	12
59	Socializing by Day May Affect Performance by Night: Vulnerability to Sleep Deprivation is Differentially Mediated by Social Exposure in Extraverts vs Introverts. Sleep, 2010, 33, 1475-1485.	1.1	19
60	Sex Differences in Self-Reported Risk-Taking Propensity on the Evaluation of Risks Scale. Psychological Reports, 2010, 106, 693-700.	1.7	23
61	Odor Identification Ability Predicts Executive Function Deficits Following Sleep Deprivation. International Journal of Neuroscience, 2010, 120, 328-334.	1.6	18
62	Sleep Symptoms as a Partial Mediator Between Combat Stressors and Other Mental Health Symptoms in Iraq War Veterans. Military Psychology, 2010, 22, 340-355.	1.1	40
63	Socializing by Day May Affect Performance by Night: Vulnerability to Sleep Deprivation is Differentially Mediated by Social Exposure in Extraverts vs Introverts. Sleep, 2010, 33, 1475-85.	1.1	5
64	Sustaining Executive Functions During Sleep Deprivation: A Comparison of Caffeine, Dextroamphetamine, and Modafinil. Sleep, 2009, , .	1.1	1
65	Decoupling of the brain's default mode network during deep sleep. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 11376-11381.	7.1	627
66	Chapter 16 Modeling Fatigue over Sleep Deprivation, Circadian Rhythm, and Caffeine with a Minimal Performance Inhibitor Model. Methods in Enzymology, 2009, 454, 405-421.	1.0	16
67	Handedness Correlates with Actigraphically Measured Sleep in a Controlled Environment. Perceptual and Motor Skills, 2009, 109, 395-400.	1.3	2
68	Positron Emission Tomography Correlates of Visually-Scored Electroencephalographic Waveforms During Non-Rapid Eye Movement Sleep. International Journal of Neuroscience, 2009, 119, 2074-2099.	1.6	7
69	Executive Functions and the Ability to Sustain Vigilance During Sleep Loss. Aviation, Space, and Environmental Medicine, 2009, 80, 81-87.	0.5	50
70	An Improved Methodology for Individualized Performance Prediction of Sleep-Deprived Individuals with the Two-Process Model. Sleep, 2009, 32, 1377-1392.	1.1	30
71	Banking Sleep: Realization of Benefits During Subsequent Sleep Restriction and Recovery. Sleep, 2009, 32, 311-321.	1.1	220
72	Sustaining Executive Functions During Sleep Deprivation: A Comparison of Caffeine, Dextroamphetamine, and Modafinil. Sleep, 2009, 32, 205-216.	1.1	119

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73	Low frequency BOLD fluctuations during resting wakefulness and light sleep: A simultaneous EEG-fMRI study. Human Brain Mapping, 2008, 29, 671-682.	3.6	521
74	ODOR IDENTIFICATION ABILITY PREDICTS CHANGES IN SYMPTOMS OF PSYCHOPATHOLOGY FOLLOWING 56h OF SLEEP DEPRIVATION. Journal of Sensory Studies, 2008, 23, 35-51.	1.6	8
75	Effects of dextroamphetamine, caffeine and modafinil on psychomotor vigilance test performance after 44h of continuous wakefulness. Journal of Sleep Research, 2008, 17, 309-321.	3.2	116
76	fMRI differences between early and late stage-1 sleep. Neuroscience Letters, 2008, 441, 81-85.	2.1	48
77	Sleep deprivation reduces perceived emotional intelligence and constructive thinking skills. Sleep Medicine, 2008, 9, 517-526.	1.6	289
78	Sleep Loss and Sleepiness. Chest, 2008, 134, 653-660.	0.8	121
79	Sex Differences in Cognitive Estimation During Sleep Deprivation: Effects of Stimulant Countermeasures. International Journal of Neuroscience, 2008, 118, 1547-1557.	1.6	24
80	Baseline Odor Identification Ability Predicts Degradation of Psychomotor Vigilance During 77 Hours of Sleep Deprivation. International Journal of Neuroscience, 2008, 118, 1207-1225.	1.6	22
81	Individualized performance prediction of sleep-deprived individuals with the two-process model. Journal of Applied Physiology, 2008, 104, 459-468.	2.5	36
82	Restoration of Risk-Propensity During Sleep Deprivation: Caffeine, Dextroamphetamine, and Modafinil. Aviation, Space, and Environmental Medicine, 2008, 79, 867-874.	0.5	54
83	Effects of Acute Caffeine Withdrawal on Short Category Test Performance in Sleep-Deprived Individuals. Perceptual and Motor Skills, 2007, 105, 1265-1274.	1.3	4
84	The Effects of 53 Hours of Sleep Deprivation on Moral Judgment. Sleep, 2007, 30, 345-352.	1.1	171
85	Caffeine Effects on Risky Decision Making After 75 Hours of Sleep Deprivation. Aviation, Space, and Environmental Medicine, 2007, 78, 957-962.	0.5	76
86	Ampakine (CX717) Effects on Performance and Alertness During Simulated Night Shift Work. Aviation, Space, and Environmental Medicine, 2007, 78, 937-943.	0.5	45
87	The effects of sleep deprivation on symptoms of psychopathology in healthy adults. Sleep Medicine, 2007, 8, 215-221.	1.6	265
88	The trait of Introversionâ€Extraversion predicts vulnerability to sleep deprivation. Journal of Sleep Research, 2007, 16, 354-363.	3.2	50
89	Discontinuous growth modeling of adaptation to sleep setting changes: individual differences and age. Aviation, Space, and Environmental Medicine, 2007, 78, 485-92.	0.5	6
90	The Effects of Caffeine, Dextroamphetamine, and Modafinil on Humor Appreciation During Sleep Deprivation. Sleep, 2006, 29, 841-847.	1.1	68

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91	OLFACTORY DECREMENTS AS A FUNCTION OF TWO NIGHTS OF SLEEP DEPRIVATION. <i>Journal of Sensory Studies</i> , 2006, 21, 456-463.	1.6	25
92	Impaired decision making following 49 h of sleep deprivation. <i>Journal of Sleep Research</i> , 2006, 15, 7-13.	3.2	427
93	Age and individual variability in performance during sleep restriction. <i>Journal of Sleep Research</i> , 2006, 15, 376-385.	3.2	84
94	Daytime Sleep and Performance Following a Zolpidem and Melatonin Cocktail. <i>Sleep</i> , 2005, 28, 93-103.	1.1	30
95	The Use of Stimulants to Modify Performance During Sleep Loss: A Review by the Sleep Deprivation and Stimulant Task Force of the American Academy of Sleep Medicine. <i>Sleep</i> , 2005, 28, 1163-1187.	1.1	146
96	Performance and alertness effects of caffeine, dextroamphetamine, and modafinil during sleep deprivation. <i>Journal of Sleep Research</i> , 2005, 14, 255-266.	3.2	277
97	Caffeine effects on recovery sleep following 27 h total sleep deprivation. <i>Aviation, Space, and Environmental Medicine</i> , 2005, 76, 108-13.	0.5	35
98	Comparative utility of instruments for monitoring sleepiness-related performance decrements in the operational environment. <i>Journal of Sleep Research</i> , 2004, 13, 219-227.	3.2	217
99	Fatigue models for applied research in warfighting. <i>Aviation, Space, and Environmental Medicine</i> , 2004, 75, A44-53; discussion A54-60.	0.5	76
100	Modulating the homeostatic process to predict performance during chronic sleep restriction. <i>Aviation, Space, and Environmental Medicine</i> , 2004, 75, A141-6.	0.5	20
101	On the importance of countermeasures in sleep and performance models. <i>Aviation, Space, and Environmental Medicine</i> , 2004, 75, A155-7.	0.5	8
102	Modafinil vs. caffeine: effects on fatigue during sleep deprivation. <i>Aviation, Space, and Environmental Medicine</i> , 2004, 75, 520-5.	0.5	50
103	Patterns of performance degradation and restoration during sleep restriction and subsequent recovery: a sleep dose-response study. <i>Journal of Sleep Research</i> , 2003, 12, 1-12.	3.2	1,152
104	The process of awakening: a PET study of regional brain activity patterns mediating the re-establishment of alertness and consciousness. <i>Brain</i> , 2002, 125, 2308-2319.	7.6	220
105	Maintaining alertness and performance during sleep deprivation: modafinil versus caffeine. <i>Psychopharmacology</i> , 2002, 159, 238-247.	3.1	368
106	The rate of absorption and relative bioavailability of caffeine administered in chewing gum versus capsules to normal healthy volunteers. <i>International Journal of Pharmaceutics</i> , 2002, 234, 159-167.	5.2	269
107	Does sleep fragmentation impact recuperation? A review and reanalysis. <i>Journal of Sleep Research</i> , 1999, 8, 237-245.	3.2	81
108	Dissociated Pattern of Activity in Visual Cortices and Their Projections During Human Rapid Eye Movement Sleep. <i>Science</i> , 1998, 279, 91-95.	12.6	584

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109	Comparison of the daytime sleep and performance effects of zolpidem versus triazolam. Psychopharmacology, 1992, 107, 83-88.	3.1	60
110	Administration of triazolam prior to recovery sleep: effects on sleep architecture, subsequent alertness and performance. Psychopharmacology, 1989, 99, 526-531.	3.1	17
111	Relationship between sleep inertia and sleepiness: Cumulative effects of four nights of sleep disruption/restriction on performance following abrupt nocturnal awakening. Biological Psychology, 1988, 27, 245-258.	2.2	85
112	Effects of Triazolam on Performance and Sleep in a Model of Transient Insomnia. Human Performance, 1988, 1, 145-160.	2.4	15
113	Sleepiness in the military: operational implications and research imperatives. , 0, , 215-224.		0
114	Fatigue management: the art of the state. , 0, , 257-267.		0