

Thomas J Balkin

List of Publications by Year in descending order

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Version: 2024-02-01

114
papers

9,337
citations

66234

42
h-index

39575

94
g-index

117
all docs

117
docs citations

117
times ranked

7444
citing authors

#	ARTICLE	IF	CITATIONS
1	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.	1.7	1,152
2	Decoupling of the brain's default mode network during deep sleep. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 11376-11381.	3.3	627
3	Dissociated Pattern of Activity in Visual Cortices and Their Projections During Human Rapid Eye Movement Sleep. <i>Science</i> , 1998, 279, 91-95.	6.0	584
4	Low frequency BOLD fluctuations during resting wakefulness and light sleep: A simultaneous EEG-fMRI study. <i>Human Brain Mapping</i> , 2008, 29, 671-682.	1.9	521
5	Impaired decision making following 49 h of sleep deprivation. <i>Journal of Sleep Research</i> , 2006, 15, 7-13.	1.7	427
6	Maintaining alertness and performance during sleep deprivation: modafinil versus caffeine. <i>Psychopharmacology</i> , 2002, 159, 238-247.	1.5	368
7	Sleep disorders and work performance: findings from the 2008 National Sleep Foundation Sleep in America poll. <i>Journal of Sleep Research</i> , 2011, 20, 487-494.	1.7	296
8	Sleep deprivation reduces perceived emotional intelligence and constructive thinking skills. <i>Sleep Medicine</i> , 2008, 9, 517-526.	0.8	289
9	Performance and alertness effects of caffeine, dextroamphetamine, and modafinil during sleep deprivation. <i>Journal of Sleep Research</i> , 2005, 14, 255-266.	1.7	277
10	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.	2.6	269
11	The effects of sleep deprivation on symptoms of psychopathology in healthy adults. <i>Sleep Medicine</i> , 2007, 8, 215-221.	0.8	265
12	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.	3.7	220
13	Banking Sleep: Realization of Benefits During Subsequent Sleep Restriction and Recovery. <i>Sleep</i> , 2009, 32, 311-321.	0.6	220
14	Comparative utility of instruments for monitoring sleepiness-related performance decrements in the operational environment. <i>Journal of Sleep Research</i> , 2004, 13, 219-227.	1.7	217
15	The Effects of 53 Hours of Sleep Deprivation on Moral Judgment. <i>Sleep</i> , 2007, 30, 345-352.	0.6	171
16	Trait-Like Vulnerability to Total and Partial Sleep Loss. <i>Sleep</i> , 2012, 35, 1163-1172.	0.6	152
17	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.	0.6	146
18	Sleep Loss and Sleepiness. <i>Chest</i> , 2008, 134, 653-660.	0.4	121

#	ARTICLE	IF	CITATIONS
19	Sustaining Executive Functions During Sleep Deprivation: A Comparison of Caffeine, Dextroamphetamine, and Modafinil. <i>Sleep</i> , 2009, 32, 205-216.	0.6	119
20	Effects of dextroamphetamine, caffeine and modafinil on psychomotor vigilance test performance after 44h of continuous wakefulness. <i>Journal of Sleep Research</i> , 2008, 17, 309-321.	1.7	116
21	Rhythmic alternating patterns of brain activity distinguish rapid eye movement sleep from other states of consciousness. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2013, 110, 10300-10305.	3.3	113
22	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.	2.1	107
23	The challenges and opportunities of technological approaches to fatigue management. <i>Accident Analysis and Prevention</i> , 2011, 43, 565-572.	3.0	94
24	Sleep and Health Resilience Metrics in a Large Military Cohort. <i>Sleep</i> , 2016, 39, 1111-1120.	0.6	91
25	Gambling When Sleep Deprived: Don't Bet on Stimulants. <i>Chronobiology International</i> , 2012, 29, 43-54.	0.9	88
26	Relationship between sleep inertia and sleepiness: Cumulative effects of four nights of sleep disruption/restriction on performance following abrupt nocturnal awakening. <i>Biological Psychology</i> , 1988, 27, 245-258.	1.1	85
27	Age and individual variability in performance during sleep restriction. <i>Journal of Sleep Research</i> , 2006, 15, 376-385.	1.7	84
28	Does sleep fragmentation impact recuperation? A review and reanalysis. <i>Journal of Sleep Research</i> , 2002, 8, 237-245.	1.7	81
29	Sleep deprivation impairs recognition of specific emotions. <i>Neurobiology of Sleep and Circadian Rhythms</i> , 2017, 3, 10-16.	1.4	77
30	Caffeine Effects on Risky Decision Making After 75 Hours of Sleep Deprivation. <i>Aviation, Space, and Environmental Medicine</i> , 2007, 78, 957-962.	0.6	76
31	Caffeine protects against increased risk-taking propensity during severe sleep deprivation. <i>Journal of Sleep Research</i> , 2011, 20, 395-403.	1.7	76
32	Comparison of Motionlogger Watch and Actiwatch actigraphs to polysomnography for sleep/wake estimation in healthy young adults. <i>Behavior Research Methods</i> , 2011, 43, 1152-1160.	2.3	76
33	Fatigue models for applied research in warfighting. <i>Aviation, Space, and Environmental Medicine</i> , 2004, 75, A44-53; discussion A54-60.	0.6	76
34	The Effects of Caffeine, Dextroamphetamine, and Modafinil on Humor Appreciation During Sleep Deprivation. <i>Sleep</i> , 2006, 29, 841-847.	0.6	68
35	Comparison of the daytime sleep and performance effects of zolpidem versus triazolam. <i>Psychopharmacology</i> , 1992, 107, 83-88.	1.5	60
36	PER3 and ADORA2A polymorphisms impact neurobehavioral performance during sleep restriction. <i>Journal of Sleep Research</i> , 2013, 22, 160-165.	1.7	58

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37	Restoration of Risk-Propensity During Sleep Deprivation: Caffeine, Dextroamphetamine, and Modafinil. <i>Aviation, Space, and Environmental Medicine</i> , 2008, 79, 867-874.	0.6	54
38	Infraslow EEG oscillations organize large-scale corticalâ€“subcortical interactions during sleep: A combined EEG/fMRI study. <i>Brain Research</i> , 2011, 1374, 63-72.	1.1	54
39	The trait of Introversionâ€“Extraversion predicts vulnerability to sleep deprivation. <i>Journal of Sleep Research</i> , 2007, 16, 354-363.	1.7	50
40	Executive Functions and the Ability to Sustain Vigilance During Sleep Loss. <i>Aviation, Space, and Environmental Medicine</i> , 2009, 80, 81-87.	0.6	50
41	Modafinil vs. caffeine: effects on fatigue during sleep deprivation. <i>Aviation, Space, and Environmental Medicine</i> , 2004, 75, 520-5.	0.6	50
42	fMRI differences between early and late stage-1 sleep. <i>Neuroscience Letters</i> , 2008, 441, 81-85.	1.0	48
43	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.	0.8	48
44	Ampakine (CX717) Effects on Performance and Alertness During Simulated Night Shift Work. <i>Aviation, Space, and Environmental Medicine</i> , 2007, 78, 937-943.	0.6	45
45	Caffeine Gum Minimizes Sleep Inertia. <i>Perceptual and Motor Skills</i> , 2013, 116, 280-293.	0.6	45
46	Sleep Symptoms as a Partial Mediator Between Combat Stressors and Other Mental Health Symptoms in Iraq War Veterans. <i>Military Psychology</i> , 2010, 22, 340-355.	0.7	40
47	The Impact of Insufficient Sleep on Combat Mission Performance. <i>Military Behavioral Health</i> , 2016, 4, 356-363.	0.4	38
48	Optimizing Sleep in the Military. <i>Chest</i> , 2019, 155, 215-226.	0.4	37
49	Individualized performance prediction of sleep-deprived individuals with the two-process model. <i>Journal of Applied Physiology</i> , 2008, 104, 459-468.	1.2	36
50	Caffeine effects on recovery sleep following 27 h total sleep deprivation. <i>Aviation, Space, and Environmental Medicine</i> , 2005, 76, 108-13.	0.6	35
51	A systematic review and meta-analysis of sleep architecture and chronic traumatic brain injury. <i>Sleep Medicine Reviews</i> , 2018, 41, 61-77.	3.8	32
52	Sleep extension reduces pain sensitivity. <i>Sleep Medicine</i> , 2019, 54, 172-176.	0.8	31
53	Daytime Sleep and Performance Following a Zolpidem and Melatonin Cocktail. <i>Sleep</i> , 2005, 28, 93-103.	0.6	30
54	An Improved Methodology for Individualized Performance Prediction of Sleep-Deprived Individuals with the Two-Process Model. <i>Sleep</i> , 2009, 32, 1377-1392.	0.6	30

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55	A Unified Model of Performance: Validation of its Predictions across Different Sleep/Wake Schedules. <i>Sleep</i> , 2016, 39, 249-262.	0.6	29
56	A Unified Model of Performance for Predicting the Effects of Sleep and Caffeine. <i>Sleep</i> , 2016, 39, 1827-1841.	0.6	28
57	Can a mathematical model predict an individual's trait-like response to both total and partial sleep loss?. <i>Journal of Sleep Research</i> , 2015, 24, 262-269.	1.7	27
58	<i>2BAlert</i> App: A mobile application for real-time individualized prediction of alertness. <i>Journal of Sleep Research</i> , 2019, 28, e12725.	1.7	27
59	Effects of sleep extension on cognitive/motor performance and motivation in military tactical athletes. <i>Sleep Medicine</i> , 2019, 58, 48-55.	0.8	27
60	OLFACTORY DECREMENTS AS A FUNCTION OF TWO NIGHTS OF SLEEP DEPRIVATION. <i>Journal of Sensory Studies</i> , 2006, 21, 456-463.	0.8	25
61	Sex Differences in Cognitive Estimation During Sleep Deprivation: Effects of Stimulant Countermeasures. <i>International Journal of Neuroscience</i> , 2008, 118, 1547-1557.	0.8	24
62	Dose-dependent model of caffeine effects on human vigilance during total sleep deprivation. <i>Journal of Theoretical Biology</i> , 2014, 358, 11-24.	0.8	24
63	Sex Differences in Self-Reported Risk-Taking Propensity on the Evaluation of Risks Scale. <i>Psychological Reports</i> , 2010, 106, 693-700.	0.9	23
64	Baseline Odor Identification Ability Predicts Degradation of Psychomotor Vigilance During 77 Hours of Sleep Deprivation. <i>International Journal of Neuroscience</i> , 2008, 118, 1207-1225.	0.8	22
65	Real-time individualization of the unified model of performance. <i>Journal of Sleep Research</i> , 2017, 26, 820-831.	1.7	22
66	Limited Efficacy of Caffeine and Recovery Costs During and Following 5 Days of Chronic Sleep Restriction. <i>Sleep</i> , 2017, 40, .	0.6	22
67	<i>2BAlert</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.	0.6	21
68	Modulating the homeostatic process to predict performance during chronic sleep restriction. <i>Aviation, Space, and Environmental Medicine</i> , 2004, 75, A141-6.	0.6	20
69	Sleep history affects task acquisition during subsequent sleep restriction and recovery. <i>Journal of Sleep Research</i> , 2010, 19, 289-297.	1.7	19
70	Socializing by Day May Affect Performance by Night: Vulnerability to Sleep Deprivation is Differentially Mediated by Social Exposure in Extraverts vs Introverts. <i>Sleep</i> , 2010, 33, 1475-1485.	0.6	19
71	Sleep extension reduces fatigue in healthy, normally-sleeping young adults. <i>Sleep Science</i> , 2019, 12, 21-27.	0.4	19
72	Odor Identification Ability Predicts Executive Function Deficits Following Sleep Deprivation. <i>International Journal of Neuroscience</i> , 2010, 120, 328-334.	0.8	18

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73	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.	0.8	18
74	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.	1.2	18
75	Administration of triazolam prior to recovery sleep: effects on sleep architecture, subsequent alertness and performance. <i>Psychopharmacology</i> , 1989, 99, 526-531.	1.5	17
76	Caffeine dosing strategies to optimize alertness during sleep loss. <i>Journal of Sleep Research</i> , 2018, 27, e12711.	1.7	17
77	Sleep health and its association with performance and motivation in tactical athletes enrolled in the Reserve Officers' Training Corps. <i>Sleep Health</i> , 2019, 5, 309-314.	1.3	17
78	Chapter 16 Modeling Fatigue over Sleep Deprivation, Circadian Rhythm, and Caffeine with a Minimal Performance Inhibitor Model. <i>Methods in Enzymology</i> , 2009, 454, 405-421.	0.4	16
79	Effects of Triazolam on Performance and Sleep in a Model of Transient Insomnia. <i>Human Performance</i> , 1988, 1, 145-160.	1.4	15
80	A new metric for quantifying performance impairment on the psychomotor vigilance test. <i>Journal of Sleep Research</i> , 2012, 21, 659-674.	1.7	15
81	Caffeine Improves the Efficiency of Planning and Sequencing Abilities During Sleep Deprivation. <i>Journal of Clinical Psychopharmacology</i> , 2014, 34, 660-662.	0.7	15
82	Socializing by Day May Affect Performance by Night: Vulnerability to Sleep Deprivation is Differentially Mediated by Social Exposure in Extraverts vs Introverts. <i>Sleep</i> , 2010, 33, 1475-1485.	0.6	12
83	Behavioral Biomarkers of Sleepiness. <i>Journal of Clinical Sleep Medicine</i> , 2011, 7, S12-5.	1.4	12
84	Daily Insufficient Sleep and Active Duty Status. <i>Military Medicine</i> , 2015, 180, 68-76.	0.4	11
85	Self-Reported Sleep Need, Subjective Resilience, and Cognitive Performance Following Sleep Loss and Recovery Sleep. <i>Psychological Reports</i> , 2021, 124, 210-226.	0.9	10
86	ODOR IDENTIFICATION ABILITY PREDICTS CHANGES IN SYMPTOMS OF PSYCHOPATHOLOGY FOLLOWING 56h OF SLEEP DEPRIVATION. <i>Journal of Sensory Studies</i> , 2008, 23, 35-51.	0.8	8
87	On the importance of countermeasures in sleep and performance models. <i>Aviation, Space, and Environmental Medicine</i> , 2004, 75, A155-7.	0.6	8
88	Positron Emission Tomography Correlates of Visually-Scored Electroencephalographic Waveforms During Non-Rapid Eye Movement Sleep. <i>International Journal of Neuroscience</i> , 2009, 119, 2074-2099.	0.8	7
89	Acute sleep interventions as an avenue for treatment of trauma-associated disorders. <i>Journal of Clinical Sleep Medicine</i> , 2022, 18, 2291-2312.	1.4	7
90	Countermeasures for Mitigating Fatigue in Motor Vehicle Operators. <i>Reviews of Human Factors and Ergonomics</i> , 2015, 10, 115-137.	0.5	6

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91	Objective changes in activity levels following sleep extension as measured by wrist actigraphy. <i>Sleep Medicine</i> , 2019, 60, 173-177.	0.8	6
92	<i>TNF-α</i> G308A genotype, resilience to sleep deprivation, and the effect of caffeine on psychomotor vigilance performance in a randomized, double-blind, placebo-controlled, crossover study. <i>Chronobiology International</i> , 2020, 37, 1461-1464.	0.9	6
93	Effect of cognitive load and emotional valence of distractors on performance during sleep extension and subsequent sleep deprivation. <i>Sleep</i> , 2020, 43, .	0.6	6
94	Discontinuous growth modeling of adaptation to sleep setting changes: individual differences and age. <i>Aviation, Space, and Environmental Medicine</i> , 2007, 78, 485-92.	0.6	6
95	Performance Deficits During Sleep Loss and Their Operational Consequences. , 2017, , 682-688.e4.		5
96	Models for predicting sleep latency and sleep duration. <i>Sleep</i> , 2021, 44, .	0.6	5
97	Socializing by Day May Affect Performance by Night: Vulnerability to Sleep Deprivation is Differentially Mediated by Social Exposure in Extraverts vs Introverts. <i>Sleep</i> , 2010, 33, 1475-85.	0.6	5
98	2B-Alert Web 2.0, an Open-Access Tool for Predicting Alertness and Optimizing the Benefits of Caffeine: Utility Study. <i>Journal of Medical Internet Research</i> , 2022, 24, e29595.	2.1	5
99	Effects of Acute Caffeine Withdrawal on Short Category Test Performance in Sleep-Deprived Individuals. <i>Perceptual and Motor Skills</i> , 2007, 105, 1265-1274.	0.6	4
100	Precision Medicine for Sleep Loss and Fatigue Management. <i>Sleep Medicine Clinics</i> , 2019, 14, 399-406.	1.2	4
101	Countermeasures to the neurocognitive deficits associated with sleep loss. <i>Drug Discovery Today: Disease Models</i> , 2011, 8, 139-146.	1.2	3
102	Performance Deficits during Sleep Loss. , 2011, , 738-744.		3
103	Individualized performance prediction during total sleep deprivation: Accounting for trait vulnerability to sleep loss. , 2012, 2012, 5574-7.		3
104	A Pilot Study on the Encoding of a Perceptual Learning Task following Sleep Deprivation. <i>Perceptual and Motor Skills</i> , 2015, 121, 80-93.	0.6	3
105	Handedness Correlates with Actigraphically Measured Sleep in a Controlled Environment. <i>Perceptual and Motor Skills</i> , 2009, 109, 395-400.	0.6	2
106	Sleep and Performance Prediction Modeling. , 2017, , 689-696.e4.		2
107	Rates of cerebral protein synthesis in primary visual cortex during sleep-dependent memory consolidation, a study in human subjects. <i>Sleep</i> , 2018, 41, .	0.6	2
108	Sustaining Executive Functions During Sleep Deprivation: A Comparison of Caffeine, Dextroamphetamine, and Modafinil. <i>Sleep</i> , 2009, , .	0.6	1

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109	0324 2B-Alert Web 2.0: An Open-access Tool to Determine Caffeine Doses That Optimize Alertness. Sleep, 2019, 42, A132-A133.	0.6	1
110	Sleepiness in the military: operational implications and research imperatives. , 0, , 215-224.		0
111	Fatigue management: the art of the state. , 0, , 257-267.		0
112	0206 Personalized Caffeine Recommendations To Maintain Alertness: You And I Need Different Doses. Sleep, 2019, 42, A84-A85.	0.6	0
113	The role of pharmacological interventions for sleep deprivation and restriction. , 2023, , 506-517.		0
114	Sleep as a Mediator of mTBI and PTSD. , 2018, , 25-32.		0