Hiroaki Hobara

List of Publications by Year
in descending order

79	1,701	394421	345221
papers	citations	19 h-index	36 g-index

80	80	80	986
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Anterior-posterior ground reaction forces across a range of running speeds in unilateral transfemoral amputees. Sports Biomechanics, 2024, 23, 69-80.	1.6	5
2	Effects of walking speed on magnitude and symmetry of ground reaction forces in individuals with transfemoral prosthesis. Journal of Biomechanics, 2022, 130, 110845.	2.1	8
3	Effects of walking speed and prosthetic knee control type on external mechanical work in transfemoral prosthesis users. Journal of Biomechanics, 2022, 134, 110984.	2.1	5
4	Effects of step frequency during running on the magnitude and symmetry of ground reaction forces in individuals with a transfemoral amputation. Journal of NeuroEngineering and Rehabilitation, 2022, 19, 33.	4.6	3
5	Innovative alignment of sprinting prostheses for persons with transfemoral amputation: Exploratory study on a gold medal Paralympic athlete. Prosthetics and Orthotics International, 2021, 45, 46-53.	1.0	8
6	Unilateral above-knee amputees achieve symmetric mediolateral ground reaction impulse in walking using an asymmetric gait strategy. Journal of Biomechanics, 2021, 115, 110201.	2.1	7
7	Effects of prosthetic design parameters on running performance of a unilateral transfemoral amputee. Journal of Biomechanical Science and Engineering, 2021, , .	0.3	1
8	Inter-limb weight transfer strategy during walking after unilateral transfemoral amputation. Scientific Reports, 2021, 11, 4793.	3.3	14
9	External Mechanical Work in Runners With Unilateral Transfemoral Amputation. Frontiers in Bioengineering and Biotechnology, 2021, 9, 793651.	4.1	1
10	A Limb-specific Strategy across a Range of Running Speeds in Transfemoral Amputees. Medicine and Science in Sports and Exercise, 2020, 52, 892-899.	0.4	7
11	Walking characteristics of runners with a transfemoral or knee-disarticulation prosthesis. Clinical Biomechanics, 2020, 80, 105132.	1.2	11
12	Loading rates in unilateral transfemoral amputees with running-specific prostheses across a range of speeds. Clinical Biomechanics, 2020, 75, 104999.	1.2	5
13	Factors associated with a risk of prosthetic knee buckling during walking in unilateral transfemoral amputees. Gait and Posture, 2020, 77, 69-74.	1.4	16
14	Effect of step frequency on leg stiffness during running in unilateral transfemoral amputees. Scientific Reports, 2020, 10, 5965.	3.3	5
15	Joint moments during sprinting in unilateral transfemoral amputees wearing running-specific prostheses. Biology Open, 2019, 8, .	1.2	6
16	Vertical stiffness during one-legged hopping with and without using a running-specific prosthesis. Journal of Biomechanics, 2019, 86, 34-39.	2.1	5
17	Long jumpers with and without a transtibial amputation have different three-dimensional centre of mass and joint take-off step kinematics. Royal Society Open Science, 2019, 6, 190107.	2.4	5
18	Effect of safety boots with toe spring on foot clearance features during walking. International Journal of Industrial Ergonomics, 2019, 71, 32-36.	2.6	2

#	Article	IF	Citations
19	Three-Dimensional Takeoff Step Kinetics of Long Jumpers with and without a Transtibial Amputation. Medicine and Science in Sports and Exercise, 2019, 51, 716-725.	0.4	11
20	Leg stiffness in unilateral transfemoral amputees across a range of running speeds. Journal of Biomechanics, 2019, 84, 67-72.	2.1	16
21	Betweenâ€limb differences in running technique induces asymmetric negative joint work during running. European Journal of Sport Science, 2019, 19, 757-764.	2.7	4
22	Spatiotemporal parameters in sprinters with unilateral and bilateral transfemoral amputations and functional impairments. European Journal of Applied Physiology, 2019, 119, 85-90.	2.5	1
23	Leg amputation side determines performance in curve sprinting: a case study on a Paralympic medalist. Sports Biomechanics, 2019, 18, 75-87.	1.6	3
24	Amputee Locomotion. American Journal of Physical Medicine and Rehabilitation, 2019, 98, 182-190.	1.4	9
25	Estimation Accuracy of Average Walking Speed by Acceleration Signals: Comparison Among Three Different Sensor Locations. Advances in Intelligent Systems and Computing, 2019, , 346-351.	0.6	2
26	Estimation Accuracy of Step Length by Acceleration Signals: Comparison Among Three Different Sensor Locations. Advances in Intelligent Systems and Computing, 2019, , 24-30.	0.6	0
27	Mechanical stiffness of running-specific prostheses in consideration of clamped position. Mechanical Engineering Letters, 2018, 4, 17-00452-17-00452.	0.6	2
28	Inter-Individual Variability in The Joint Negative Work During Running. Sports Medicine International Open, 2018, 02, E157-E162.	1.1	2
29	Can forward dynamics simulation with simple model estimate complex phenomena?: Case study on sprinting using running-specific prosthesis. ROBOMECH Journal, 2018, 5, .	1.6	9
30	Differences in spatiotemporal parameters during 200-m sprint between bilateral and unilateral transfemoral amputees. Prosthetics and Orthotics International, 2018, 42, 567-570.	1.0	1
31	Individual Step Characteristics During Sprinting in Unilateral Transtibial Amputees. Journal of Applied Biomechanics, 2018, 34, 509-513.	0.8	2
32	The Effect of Increasing Jump Steps on Stance Leg Joint Kinetics in Bounding. International Journal of Sports Medicine, 2018, 39, 661-667.	1.7	3
33	Leg stiffness during sprinting in transfemoral amputees with running-specific prosthesis. Gait and Posture, 2017, 56, 65-67.	1.4	17
34	Ground Reaction Forces During Sprinting in Unilateral Transfemoral Amputees. Journal of Applied Biomechanics, 2017, 33, 406-409.	0.8	19
35	Relationship between body height and spatiotemporal parameters during a 100-m sprint in able-bodied and unilateral transtibial sprinters. Prosthetics and Orthotics International, 2017, 41, 492-497.	1.0	2
36	Training Shoes do not Decrease the Negative Work of the Lower Extremity Joints. International Journal of Sports Medicine, 2017, 38, 921-927.	1.7	4

#	Article	IF	Citations
37	Elite long jumpers with below the knee prostheses approach the board slower, but take-off more effectively than non-amputee athletes. Scientific Reports, 2017, 7, 16058.	3.3	33
38	Differences in take-off leg kinetics between horizontal and vertical single-leg rebound jumps. Sports Biomechanics, 2017, 16, 187-200.	1.6	18
39	A Comparison of Vertical Stiffness Values Calculated from Different Measures of Center of Mass Displacement in Single-Leg Hopping. Journal of Applied Biomechanics, 2017, 33, 39-47.	0.8	11
40	Modeling and analysis of individual with lower extremity amputation locomotion using prosthetic feet and running-specific prostheses. , 2017, 2017, 901-904.		1
41	How to Develop a Sensor System to Assess the Potential Risk of Running-related Injury of the Foot and Ankle?. Clinical Research on Foot & Ankle, 2017, 05, .	0.1	0
42	Effects of prophylactic ankle and knee braces on leg stiffness during hopping. Open Access Journal of Sports Medicine, 2017, Volume 8, 107-112.	1.3	3
43	Spatiotemporal Parameters of 100-m Sprint in Different Levels of Sprinters with Unilateral Transtibial Amputation. PLoS ONE, 2016, 11, e0163712.	2.5	3
44	Comparison of 3 Methods for Computing Loading Rate during Running. International Journal of Sports Medicine, 2016, 37, 1087-1090.	1.7	39
45	Amputee Locomotion: Ground Reaction Forces During Submaximal Running With Running-Specific Prostheses. Journal of Applied Biomechanics, 2016, 32, 287-294.	0.8	24
46	Normative Spatiotemporal Parameters During 100-m Sprints in Amputee Sprinters Using Running-Specific Prostheses. Journal of Applied Biomechanics, 2016, 32, 93-96.	0.8	12
47	Ethnicity and spatiotemporal parameters of bilateral and unilateral transtibial amputees in a 100-m sprint. SpringerPlus, 2016, 5, 343.	1.2	3
48	Step Frequency and Step Length of 200-m Sprint in Able-bodied and Amputee Sprinters. International Journal of Sports Medicine, 2016, 37, 165-168.	1.7	8
49	Age-independent and age-dependent sex differences in gait pattern determined by principal component analysis. Gait and Posture, 2016, 46, 11-17.	1.4	74
50	How too big shoes affect to the joint kinematics of kids gait pattern?. Footwear Science, 2015, 7, S53-S55.	2.1	5
51	Plantar loading in an amputee runner using running-specific prostheses with a rubber sole. Footwear Science, 2015, 7, S65-S66.	2.1	0
52	Does amputation side influence sprint performances in athletes using running-specific prostheses?. SpringerPlus, 2015, 4, 670.	1.2	5
53	The fastest sprinter in 2068 has an artificial limb?. Prosthetics and Orthotics International, 2015, 39, 519-520.	1.0	12
54	Leg stiffness of older and younger individuals over a range of hopping frequencies. Journal of Electromyography and Kinesiology, 2015, 25, 305-309.	1.7	12

#	Article	IF	Citations
55	Spatiotemporal Variables of Able-bodied and Amputee Sprinters in Menâ€™s 100-m Sprint. International Journal of Sports Medicine, 2015, 36, 494-497.	1.7	17
56	Running-specific prostheses: The history, mechanics, and controversy. Journal of the Society of Biomechanisms, 2014, 38, 105-110.	0.0	12
57	Amputee locomotion: Lower extremity loading using running-specific prostheses. Gait and Posture, 2014, 39, 386-390.	1.4	30
58	Foot clearance strategy for step-over-step stair climbing in transfemoral amputees. Prosthetics and Orthotics International, 2014, 38, 332-335.	1.0	5
59	Key joint kinematic characteristics of the gait of fallers identified by principal component analysis. Journal of Biomechanics, 2014, 47, 2424-2429.	2.1	53
60	A Comparison of Computation Methods for Leg Stiffness During Hopping. Journal of Applied Biomechanics, 2014, 30, 154-159.	0.8	19
61	Amputee locomotion: Spring-like leg behavior and stiffness regulation using running-specific prostheses. Journal of Biomechanics, 2013, 46, 2483-2489.	2.1	56
62	Effects of inertial properties of transfemoral prosthesis on leg swing motion during stair ascent. , 2013, 2013, 1591-4.		2
63	Factors affecting stair-ascent patterns in unilateral transfemoral amputees. Prosthetics and Orthotics International, 2013, 37, 222-226.	1.0	7
64	Differences in Spring-Mass Characteristics Between One- and Two-Legged Hopping. Journal of Applied Biomechanics, 2013, 29, 785-789.	0.8	8
65	Effect of Hopping Frequency on Bilateral Differences in Leg Stiffness. Journal of Applied Biomechanics, 2013, 29, 55-60.	0.8	26
66	Leg stiffness and sprint ability in amputee sprinters. Prosthetics and Orthotics International, 2012, 36, 312-317.	1.0	11
67	Effects of foot placement on the lower extremity in the swing phase during stair ascending: Implications for transfemoral prostheses. , 2012, , .		3
68	Sex differences in relationship between passive ankle stiffness and leg stiffness during hopping. Journal of Biomechanics, 2012, 45, 2750-2754.	2.1	21
69	Limb oxygenation during the cold pressor test in spinal cord-injured humans. Clinical Autonomic Research, 2012, 22, 71-78.	2.5	3
70	Lower extremity joint kinematics of stair ascent in transfemoral amputees. Prosthetics and Orthotics International, 2011, 35, 467-472.	1.0	24
71	Preferred step frequency minimizes veering during natural human walking. Neuroscience Letters, 2011, 505, 291-293.	2.1	19
72	Acute effects of static stretching on leg-spring behavior during hopping. European Journal of Applied Physiology, 2011, 111, 2115-2121.	2.5	13

#	Article	IF	Citations
73	Determinant of leg stiffness during hopping is frequency-dependent. European Journal of Applied Physiology, 2011, 111, 2195-2201.	2.5	41
74	Leg stiffness adjustment for a range of hopping frequencies in humans. Journal of Biomechanics, 2010, 43, 506-511.	2.1	101
75	Differences in lower extremity stiffness between endurance-trained athletes and untrained subjects. Journal of Science and Medicine in Sport, 2010, 13, 106-111.	1.3	47
76	Continuous change in spring-mass characteristics during a 400m sprint. Journal of Science and Medicine in Sport, 2010, 13, 256-261.	1.3	74
77	Knee stiffness is a major determinant of leg stiffness during maximal hopping. Journal of Biomechanics, 2009, 42, 1768-1771.	2.1	430
78	Determinants of difference in leg stiffness between endurance- and power-trained athletes. Journal of Biomechanics, 2008, 41, 506-514.	2.1	96
79	Changes in muscle activity with increase in leg stiffness during hopping. Neuroscience Letters, 2007, 418, 55-59.	2.1	99