Mario Lamontagne

List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/304097/publications.pdf

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60 papers 2,571 citations

28 h-index 50 g-index

61 all docs

61 docs citations

61 times ranked

1944 citing authors

#	Article	IF	Citations
1	Effect of skin movement artifact on knee kinematics during gait and cutting motions measured in vivo. Gait and Posture, 2006, 24, 152-164.	0.6	370
2	The Effect of Cam FAI on Hip and Pelvic Motion during Maximum Squat. Clinical Orthopaedics and Related Research, 2009, 467, 645-650.	0.7	195
3	Femoroacetabular impingement alters hip and pelvic biomechanics during gait. Gait and Posture, 2009, 30, 41-44.	0.6	186
4	Lower limb biomechanics during gait do not return to normal following total hip arthroplasty. Gait and Posture, 2010, 32, 269-273.	0.6	174
5	Biomechanical analysis of wheelchair propulsion for various seating positions. Journal of Rehabilitation Research and Development, 1992, 29, 12.	1.6	112
6	The effects of cam femoroacetabular impingement corrective surgery on lower-extremity gait biomechanics. Gait and Posture, 2013, 37, 258-263.	0.6	85
7	Reliability of EMG spectral parameters in repeated measurements of back muscle fatigue. Journal of Electromyography and Kinesiology, 1999, 9, 235-243.	0.7	72
8	Patient-Specific Anatomical and Functional Parameters Provide New Insights into the Pathomechanism of Cam FAI. Clinical Orthopaedics and Related Research, 2015, 473, 1289-1296.	0.7	70
9	A musculoskeletal model customized for squatting task. Computer Methods in Biomechanics and Biomedical Engineering, 2019, 22, 21-24.	0.9	68
10	In Vivo Knee Kinematics during Gait Reveals New Rotation Profiles and Smaller Translations. Clinical Orthopaedics and Related Research, 2007, 454, 81-88.	0.7	64
11	Preoperative and Postoperative Lower-Extremity Joint and Pelvic Kinematics During Maximal Squatting of Patients with Cam Femoro-Acetabular Impingement. Journal of Bone and Joint Surgery - Series A, 2011, 93, 40-45.	1.4	63
12	Assessment of functional knee bracing: an in vivo three-dimensional kinematic analysis of the anterior cruciate deficient knee. Clinical Biomechanics, 2001, 16, 61-70.	0.5	60
13	Lower limb muscle activity and kinematics of an unanticipated cutting manoeuvre: a gender comparison. Knee Surgery, Sports Traumatology, Arthroscopy, 2009, 17, 968-976.	2.3	60
14	Surgical Correction of Cam Deformity in Association with Femoroacetabular Impingement and Its Impact on the Degenerative Process within the Hip Joint. Journal of Bone and Joint Surgery - Series A, 2017, 99, 1373-1381.	1.4	49
15	Electromyographic and biomechanic analysis of anterior cruciate ligament deficiency and functional knee bracing. Clinical Biomechanics, 2003, 18, 28-34.	0.5	48
16	Finite Element Analysis Examining the Effects of Cam FAI on Hip Joint Mechanical Loading Using Subject-Specific Geometries During Standing and Maximum Squat. HSS Journal, 2012, 8, 206-212.	0.7	48
17	How Different Marker Sets Affect Joint Angles in Inverse Kinematics Framework. Journal of Biomechanical Engineering, 2017, 139, .	0.6	46
18	Altered Walking and Muscle Patterns Reduce Hip Contact Forces in Individuals With Symptomatic Cam Femoroacetabular Impingement. American Journal of Sports Medicine, 2018, 46, 2615-2623.	1.9	45

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19	Does the Anterior Approach for THA Provide Closer-To-Normal Lower-Limb Motion?. Journal of Arthroplasty, 2013, 28, 1401-1407.	1.5	44
20	Study on three-dimensional kinematics and electromyography of ACL deficient knee participants wearing a functional knee brace during running. Knee Surgery, Sports Traumatology, Arthroscopy, 2006, 14, 555-563.	2.3	43
21	Comparison of joint mechanics of both lower limbs of tha patients with healthy participants during stair ascent and descent. Journal of Orthopaedic Research, 2011, 29, 305-311.	1.2	41
22	Anatomic Predictors of Sagittal Hip and Pelvic Motions in Patients With a Cam Deformity. American Journal of Sports Medicine, 2018, 46, 1331-1342.	1.9	41
23	Acetabular and spinoâ€pelvic morphologies are different in subjects with symptomatic cam femoroâ€acetabular impingement. Journal of Orthopaedic Research, 2018, 36, 1840-1848.	1.2	41
24	Hip Joint Stresses Due to Cam-Type Femoroacetabular Impingement: A Systematic Review of Finite Element Simulations. PLoS ONE, 2016, 11, e0147813.	1.1	40
25	Gender Differences in Time-Frequency EMG Analysis of Unanticipated Cutting Maneuvers. Medicine and Science in Sports and Exercise, 2008, 40, 1795-1804.	0.2	39
26	Increased Hip Stresses Resulting From a Cam Deformity and Decreased Femoral Neck-Shaft Angle During Level Walking. Clinical Orthopaedics and Related Research, 2017, 475, 998-1008.	0.7	39
27	Electromyographic Activity in Expert Downhill Skiers Using Functional Knee Braces After Anterior Cruciate Ligament Injuries. American Journal of Sports Medicine, 1997, 25, 635-641.	1.9	36
28	Does the anterior approach for total hip arthroplasty better restore stair climbing gait mechanics?. Journal of Orthopaedic Research, 2011, 29, 1412-1417.	1.2	32
29	Modified gait patterns due to cam FAI syndrome remain unchanged after surgery. Gait and Posture, 2019, 72, 135-141.	0.6	28
30	Lowerâ€limb joint mechanics after total hip arthroplasty during sitting and standing tasks. Journal of Orthopaedic Research, 2012, 30, 1611-1617.	1.2	26
31	Differences in anatomical parameters between the affected and unaffected hip in patients with bilateral cam-type deformities. Clinical Biomechanics, 2016, 33, 13-19.	0.5	26
32	The effect of functional knee brace design and hinge misalignment on lower limb joint mechanics. Clinical Biomechanics, 2008, 23, 52-59.	0.5	25
33	Asymptomatic Participants With a Femoroacetabular Deformity Demonstrate Stronger Hip Extensors and Greater Pelvis Mobility During the Deep Squat Task. Orthopaedic Journal of Sports Medicine, 2018, 6, 232596711878248.	0.8	25
34	Side does not matter in healthy young and older individuals – Examining the importance of how we match limbs during gait studies. Gait and Posture, 2019, 67, 133-136.	0.6	24
35	Gait and Motion Analysis of the Lower Extremity After Total Hip Arthroplasty: What the Orthopedic Surgeon Should Know. Orthopedic Clinics of North America, 2009, 40, 397-405.	0.5	22
36	The Biomechanics of Vertical Hopping: A Review. Research in Sports Medicine, 2013, 21, 380-394.	0.7	21

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37	Comparison of total hip arthroplasty surgical approaches by Principal Component Analysis. Journal of Biomechanics, 2012, 45, 2109-2115.	0.9	18
38	Cam FAI and Smaller Neck Angles Increase Subchondral Bone Stresses During Squatting: A Finite Element Analysis. Clinical Orthopaedics and Related Research, 2019, 477, 1053-1063.	0.7	16
39	Increased pelvic mobility and altered hip muscles contraction patterns: two-year follow-up cam-FAIS corrective surgery. Journal of Hip Preservation Surgery, 2019, 6, 140-148.	0.6	13
40	A custom musculoskeletal model for estimation of medial and lateral tibiofemoral contact forces during tasks with high knee and hip flexions. Computer Methods in Biomechanics and Biomedical Engineering, 2020, 23, 658-663.	0.9	12
41	Regression models to predict hip joint centers in pathological hip population. Gait and Posture, 2016, 44, 48-54.	0.6	10
42	Hip Muscle Forces and Contact Loading During Squatting After Cam-Type FAI Surgery. Journal of Bone and Joint Surgery - Series A, 2020, 102, 34-42.	1.4	10
43	BOPS: a Matlab toolbox to batch musculoskeletal data processing for OpenSim. Computer Methods in Biomechanics and Biomedical Engineering, 2021, 24, 1104-1114.	0.9	10
44	Muscle and Hip Contact Forces in Asymptomatic Men With Cam Morphology During Deep Squat. Frontiers in Sports and Active Living, 2021, 3, 716626.	0.9	10
45	Patientâ€Specific Functional Analysis: The Key to the Next Revolution Towards the Treatment of Hip and Knee Osteoarthritis. Journal of Orthopaedic Research, 2019, 37, 1754-1759.	1.2	7
46	Pre- and postoperative in silico biomechanics in individuals with cam morphology during stair tasks. Clinical Biomechanics, 2021, 86, 105387.	0.5	7
47	A waveform test for variance inequality, with a comparison of ground reaction force during walking in younger vs. older adults. Journal of Biomechanics, 2021, 127, 110657.	0.9	7
48	Does the Dual-Mobility Hip Prosthesis Produce Better Joint Kinematics During Extreme Hip Flexion Task?. Journal of Arthroplasty, 2017, 32, 3206-3212.	1.5	6
49	Application of Electromyography in Sport Medicine. , 2001, , 31-42.		6
50	Motion Analysis, Cartilage Mechanics, and Biology in Femoroacetabular Impingement: Current Understanding and Areas of Future Research. Journal of the American Academy of Orthopaedic Surgeons, The, 2013, 21, S27-S32.	1.1	5
51	Comparing the Accuracy of Visual and Computerized Onset Detection Methods on Simulated Electromyography Signals with Varying Signal-to-Noise Ratios. Journal of Functional Morphology and Kinesiology, 2021, 6, 70.	1.1	5
52	The Accuracy of the Use of Functional Hip Motions on Localization of the Center of the Hip. HSS Journal, 2012, 8, 192-197.	0.7	4
53	Comparison of anatomical parameters of cam femoroacetabular impingement to evaluate hip joint models segmented from CT data. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2018, 6, 293-302.	1.3	4
54	Biomechanics of Femoroacetabular Impingement. , 2015, , 783-795.		3

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55	Motion Analysis, Cartilage Mechanics, and Biology in Femoroacetabular Impingement: Current Understanding and Areas of Future Research. Journal of the American Academy of Orthopaedic Surgeons, The, 2013, 21, S27-S32.	1.1	3
56	Neuromuscular Strategies in ACL Injury Prevention. , 2012, , 43-51.		1
57	Spine, Pelvis and Hip Kinematicsâ€"Characterizing the Axial Plane in Healthy and Osteoarthritic Hips. Applied Sciences (Switzerland), 2021, 11, 9921.	1.3	1
58	Gait variability between younger and older adults: An equality of variance analysis. Gait and Posture, 2022, 95, 176-182.	0.6	1
59	Variability of lower limbs kinematics influenced by marker set. Gait and Posture, 2011, 33, S31-S32.	0.6	0
60	Biomechanics of Femoroacetabular Impingement. , 2014, , 1-14.		0