

# Brian Pietrosimone

## List of Publications by Year in descending order

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98  
papers

2,684  
citations

201385

27  
h-index

214527

47  
g-index

98  
all docs

98  
docs citations

98  
times ranked

1698  
citing authors

#	ARTICLE	IF	CITATIONS
1	Quadriceps Activation Following Knee Injuries: A Systematic Review. <i>Journal of Athletic Training</i> , 2010, 45, 87-97.	0.9	378
2	Sagittal plane knee joint moments following anterior cruciate ligament injury and reconstruction: A systematic review. <i>Clinical Biomechanics</i> , 2010, 25, 277-283.	0.5	128
3	Quadriceps Strength Predicts Self-reported Function Post-ACL Reconstruction. <i>Medicine and Science in Sports and Exercise</i> , 2016, 48, 1671-1677.	0.2	102
4	Biochemical markers of cartilage metabolism are associated with walking biomechanics 6 months following anterior cruciate ligament reconstruction. <i>Journal of Orthopaedic Research</i> , 2017, 35, 2288-2297.	1.2	84
5	Quadriceps Function and Gait Kinetics after Anterior Cruciate Ligament Reconstruction. <i>Medicine and Science in Sports and Exercise</i> , 2016, 48, 1664-1670.	0.2	78
6	Greater Mechanical Loading During Walking Is Associated With Less Collagen Turnover in Individuals With Anterior Cruciate Ligament Reconstruction. <i>American Journal of Sports Medicine</i> , 2016, 44, 425-432.	1.9	76
7	Neuromuscular deficits after peripheral joint injury: A neurophysiological hypothesis. <i>Muscle and Nerve</i> , 2015, 51, 327-332.	1.0	72
8	Gait Mechanics and T1 $\rho$ -MRI of Tibiofemoral Cartilage 6 Months after ACL Reconstruction. <i>Medicine and Science in Sports and Exercise</i> , 2019, 51, 630-639.	0.2	65
9	Concussion Frequency Associates with Musculoskeletal Injury in Retired NFL Players. <i>Medicine and Science in Sports and Exercise</i> , 2015, 47, 2366-2372.	0.2	64
10	Quadriceps Neuromuscular Function and Jump-Landing Sagittal-Plane Knee Biomechanics After Anterior Cruciate Ligament Reconstruction. <i>Journal of Athletic Training</i> , 2018, 53, 135-143.	0.9	53
11	Quadriceps Function, Knee Pain, and Self-Reported Outcomes in Patients With Anterior Cruciate Ligament Reconstruction. <i>Journal of Athletic Training</i> , 2018, 53, 337-346.	0.9	49
12	Walking Ground Reaction Force Post-ACL Reconstruction: Analysis of Time and Symptoms. <i>Medicine and Science in Sports and Exercise</i> , 2019, 51, 246-254.	0.2	49
13	Alterations in stride-to-stride variability during walking in individuals with chronic ankle instability. <i>Human Movement Science</i> , 2015, 40, 154-162.	0.6	48
14	Greater intracortical inhibition associates with lower quadriceps voluntary activation in individuals with ACL reconstruction. <i>Experimental Brain Research</i> , 2017, 235, 1129-1137.	0.7	46
15	Walking gait asymmetries 6 months following anterior cruciate ligament reconstruction predict 12-month patient-reported outcomes. <i>Journal of Orthopaedic Research</i> , 2018, 36, 2932-2940.	1.2	46
16	Associations Between Slower Walking Speed and T1 $\rho$ -Magnetic Resonance Imaging of Femoral Cartilage Following Anterior Cruciate Ligament Reconstruction. <i>Arthritis Care and Research</i> , 2018, 70, 1132-1140.	1.5	43
17	Whole-Body and Local Muscle Vibration Immediately Improve Quadriceps Function in Individuals With Anterior Cruciate Ligament Reconstruction. <i>Archives of Physical Medicine and Rehabilitation</i> , 2016, 97, 1121-1129.	0.5	42
18	Bilateral Gait 6 and 12 Months Post-Anterior Cruciate Ligament Reconstruction Compared with Controls. <i>Medicine and Science in Sports and Exercise</i> , 2020, 52, 785-794.	0.2	40

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19	Measuring voluntary quadriceps activation: Effect of visual feedback and stimulus delivery. <i>Journal of Electromyography and Kinesiology</i> , 2016, 26, 73-81.	0.7	39
20	Real-time biofeedback can increase and decrease vertical ground reaction force, knee flexion excursion, and knee extension moment during walking in individuals with anterior cruciate ligament reconstruction. <i>Journal of Biomechanics</i> , 2018, 76, 94-102.	0.9	39
21	Quadriceps weakness associates with greater T11-relaxation time in the medial femoral articular cartilage 6Months following anterior cruciate ligament reconstruction. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2019, 27, 2632-2642.	2.3	39
22	Demographic and surgical factors affect quadriceps strength after ACL reconstruction. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2019, 27, 921-930.	2.3	36
23	Walking Speed As a Potential Indicator of Cartilage Breakdown Following Anterior Cruciate Ligament Reconstruction. <i>Arthritis Care and Research</i> , 2016, 68, 793-800.	1.5	34
24	The Immediate Effects of an Anterior-To-Posterior Talar Mobilization on Neural Excitability, Dorsiflexion Range of Motion, and Dynamic Balance in Patients With Chronic Ankle Instability. <i>Journal of Sport Rehabilitation</i> , 2014, 23, 351-359.	0.4	32
25	Immediate increases in quadriceps corticomotor excitability during an electromyography biofeedback intervention. <i>Journal of Electromyography and Kinesiology</i> , 2015, 25, 316-322.	0.7	30
26	Immediate effect of vibratory stimuli on quadriceps function in healthy adults. <i>Muscle and Nerve</i> , 2016, 54, 469-478.	1.0	30
27	Jumpâ€“landing biomechanics following a 4-week real-time feedback intervention and retention. <i>Clinical Biomechanics</i> , 2016, 32, 85-91.	0.5	29
28	Associations between cartilage proteoglycan density and patient outcomes 12 months following anterior cruciate ligament reconstruction. <i>Knee</i> , 2018, 25, 118-129.	0.8	29
29	Corticospinal Excitability and Inhibition of the Soleus in Individuals With Chronic Ankle Instability. <i>PM and R</i> , 2016, 8, 1090-1096.	0.9	28
30	Anterior Cruciate Ligament Research Retreat VIII Summary Statement: An Update on Injury Risk Identification and Prevention Across the Anterior Cruciate Ligament Injury Continuum, March 14â€“16, 2019, Greensboro, NC. <i>Journal of Athletic Training</i> , 2019, 54, 970-984.	0.9	28
31	Quadriceps cortical adaptations in individuals with an anterior cruciate ligament injury. <i>Knee</i> , 2016, 23, 582-587.	0.8	27
32	Sagittal plane kinematics predict kinetics during walking gait in individuals with anterior cruciate ligament reconstruction. <i>Clinical Biomechanics</i> , 2016, 39, 9-13.	0.5	27
33	Comprehensively Assessing the Acute Femoral Cartilage Response and Recovery after Walking and Drop-Landing: An Ultrasonographic Study. <i>Ultrasound in Medicine and Biology</i> , 2018, 44, 311-320.	0.7	27
34	Lesser lower extremity mechanical loading associates with a greater increase in serum cartilage oligomeric matrix protein following walking in individuals with anterior cruciate ligament reconstruction. <i>Clinical Biomechanics</i> , 2018, 60, 13-19.	0.5	27
35	Inter-limb differences in impulsive loading following anterior cruciate ligament reconstruction in females. <i>Journal of Biomechanics</i> , 2016, 49, 3017-3021.	0.9	26
36	Changes in voluntary quadriceps activation predict changes in muscle strength and gait biomechanics following knee joint effusion. <i>Clinical Biomechanics</i> , 2014, 29, 923-929.	0.5	25

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37	Quadriceps rate of torque development and disability in individuals with anterior cruciate ligament reconstruction. <i>Clinical Biomechanics</i> , 2017, 46, 52-56.	0.5	25
38	Association between quadriceps strength and self-reported physical activity in people with knee osteoarthritis. <i>International Journal of Sports Physical Therapy</i> , 2014, 9, 320-8.	0.5	24
39	Co-activation during gait following anterior cruciate ligament reconstruction. <i>Clinical Biomechanics</i> , 2019, 67, 153-159.	0.5	23
40	Arthrogenic Muscle Inhibition Following Anterior Cruciate Ligament Injury. <i>Journal of Sport Rehabilitation</i> , 2022, 31, 694-706.	0.4	22
41	Persistent Muscle Inhibition after Anterior Cruciate Ligament Reconstruction. <i>Medicine and Science in Sports and Exercise</i> , 2016, 48, 2370-2377.	0.2	20
42	Whole-Body Vibration Improves Early Rate of Torque Development in Individuals With Anterior Cruciate Ligament Reconstruction. <i>Journal of Strength and Conditioning Research</i> , 2017, 31, 2992-3000.	1.0	20
43	Deficits in Quadriceps Force Control After Anterior Cruciate Ligament Injury: Potential Central Mechanisms. <i>Journal of Athletic Training</i> , 2019, 54, 505-512.	0.9	20
44	Biomechanical effects of manipulating peak vertical ground reaction force throughout gait in individuals 6â€“12Âmonths after anterior cruciate ligament reconstruction. <i>Clinical Biomechanics</i> , 2020, 76, 105014.	0.5	20
45	Peak knee biomechanics and limb symmetry following unilateral anterior cruciate ligament reconstruction: Associations of walking gait and jump-landing outcomes. <i>Clinical Biomechanics</i> , 2018, 53, 79-85.	0.5	19
46	The contribution of leg press and knee extension strength and power to physical function in people with knee osteoarthritis: A cross-sectional study. <i>Knee</i> , 2016, 23, 942-949.	0.8	18
47	The Role of Athletic Trainers in Preventing and Managing Posttraumatic Osteoarthritis in Physically Active Populations: a Consensus Statement of the Athletic Trainers' Osteoarthritis Consortium. <i>Journal of Athletic Training</i> , 2017, 52, 610-623.	0.9	17
48	The association between habitual walking speed and medial femoral cartilage deformation following 30 minutes of walking. <i>Gait and Posture</i> , 2018, 59, 128-133.	0.6	17
49	Ultrasonographic Assessment of Femoral Cartilage in Individuals With Anterior Cruciate Ligament Reconstruction: A Case-Control Study. <i>Journal of Athletic Training</i> , 2018, 53, 1082-1088.	0.9	17
50	Gait Biomechanics in Individuals Meeting Sufficient Quadriceps Strength Cutoffs After Anterior Cruciate Ligament Reconstruction. <i>Journal of Athletic Training</i> , 2021, 56, 960-966.	0.9	17
51	Risk of Knee Osteoarthritis Over 24 Months in Individuals Who Decrease Walking Speed During a 12-Month Period: Data from the Osteoarthritis Initiative. <i>Journal of Rheumatology</i> , 2017, 44, 1265-1270.	1.0	17
52	Osteoarthritis Prevalence in Retired National Football League Players With a History of Concussion and Lower Extremity Injury. <i>Journal of Athletic Training</i> , 2017, 52, 518-525.	0.9	16
53	Association between kinesiophobia and walking gait characteristics in physically active individuals with anterior cruciate ligament reconstruction. <i>Gait and Posture</i> , 2018, 64, 220-225.	0.6	15
54	Examination of Corticospinal and Spinal Reflexive Excitability During the Course of Postoperative Rehabilitation After Anterior Cruciate Ligament Reconstruction. <i>Journal of Orthopaedic and Sports Physical Therapy</i> , 2020, 50, 516-522.	1.7	14

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55	A Comparison of Psychological Readiness and Patient-Reported Function Between Sexes After Anterior Cruciate Ligament Reconstruction. <i>Journal of Athletic Training</i> , 2021, 56, 164-169.	0.9	14
56	Immediate Biochemical Changes After Gait Biofeedback in Individuals With Anterior Cruciate Ligament Reconstruction. <i>Journal of Athletic Training</i> , 2020, 55, 1106-1115.	0.9	14
57	Clinical Strategies for Addressing Muscle Weakness Following Knee Injury. <i>Clinics in Sports Medicine</i> , 2015, 34, 285-300.	0.9	13
58	Patient Knowledge and Beliefs About Knee Osteoarthritis After Anterior Cruciate Ligament Injury and Reconstruction. <i>Arthritis Care and Research</i> , 2016, 68, 1180-1185.	1.5	13
59	Prevalence of and Risk Factors for Total Hip and Knee Replacement in Retired National Football League Athletes. <i>American Journal of Sports Medicine</i> , 2019, 47, 2863-2870.	1.9	13
60	Gait biomechanics in individuals with patellar tendon and hamstring tendon anterior cruciate ligament reconstruction grafts. <i>Journal of Biomechanics</i> , 2019, 82, 103-108.	0.9	13
61	Using TENS to Enhance Therapeutic Exercise in Individuals with Knee Osteoarthritis. <i>Medicine and Science in Sports and Exercise</i> , 2020, 52, 2086-2095.	0.2	12
62	Body Mass Index and Type 2 Collagen Turnover in Individuals After Anterior Cruciate Ligament Reconstruction. <i>Journal of Athletic Training</i> , 2019, 54, 270-275.	0.9	11
63	Athletes after anterior cruciate ligament reconstruction demonstrate asymmetric intracortical facilitation early after surgery. <i>Journal of Orthopaedic Research</i> , 2021, 39, 147-153.	1.2	11
64	Association of Jump-Landing Biomechanics With Tibiofemoral Articular Cartilage Composition 12 Months After ACL Reconstruction. <i>Orthopaedic Journal of Sports Medicine</i> , 2021, 9, 232596712110164.	0.8	11
65	The effects of knee extensor moment biofeedback on gait biomechanics and quadriceps contractile behavior. <i>PeerJ</i> , 2020, 8, e9509.	0.9	11
66	Cortical motor representation of the rectus femoris does not differ between the left and right hemisphere. <i>Journal of Electromyography and Kinesiology</i> , 2016, 28, 46-52.	0.7	10
67	Acute Serum Cartilage Biomarker Response after Walking and Drop Landing. <i>Medicine and Science in Sports and Exercise</i> , 2018, 50, 1465-1471.	0.2	10
68	Validation of a Commercially Available Markerless Motion-Capture System for Trunk and Lower Extremity Kinematics During a Jump-Landing Assessment. <i>Journal of Athletic Training</i> , 2021, 56, 177-190.	0.9	10
69	Talar and Subtalar T1 $\rho$ -Relaxation Times in Limbs with and without Chronic Ankle Instability. <i>Cartilage</i> , 2021, 13, 1402S-1410S.	1.4	10
70	Weak associations between body mass index and self-reported disability in people with unilateral anterior cruciate ligament reconstruction. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2018, 26, 1326-1334.	2.3	9
71	Nonlinear Dynamic Measures for Evaluating Postural Control in Individuals With and Without Chronic Ankle Instability. <i>Motor Control</i> , 2019, 23, 243-261.	0.3	9
72	Somatosensory Function Influences Aberrant Gait Biomechanics Following Anterior Cruciate Ligament Reconstruction. <i>Journal of Orthopaedic Research</i> , 2020, 38, 620-628.	1.2	9

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73	Vibration improves gait biomechanics linked to posttraumatic knee osteoarthritis following anterior cruciate ligament injury. <i>Journal of Orthopaedic Research</i> , 2021, 39, 1113-1122.	1.2	9
74	Effects of BMI on Walking Speed and Gait Biomechanics after Anterior Cruciate Ligament Reconstruction. <i>Medicine and Science in Sports and Exercise</i> , 2021, 53, 108-114.	0.2	9
75	Certified Athletic Trainers' Knowledge and Perceptions of Posttraumatic Osteoarthritis After Knee Injury. <i>Journal of Athletic Training</i> , 2017, 52, 541-559.	0.9	8
76	Quadriceps Rate of Torque Development and Disability in Persons With Tibiofemoral Osteoarthritis. <i>Journal of Orthopaedic and Sports Physical Therapy</i> , 2018, 48, 694-703.	1.7	8
77	Sex-Specific Associations between Cartilage Structure and Metabolism at Rest and Acutely Following Walking and Drop-Landing. <i>Cartilage</i> , 2021, 13, 1772S-1781S.	1.4	8
78	Time between anterior cruciate ligament injury and reconstruction and cartilage metabolism six-months following reconstruction. <i>Knee</i> , 2018, 25, 296-305.	0.8	7
79	Ankle Dorsiflexion displacement is associated with hip and knee kinematics in females following anterior cruciate ligament reconstruction. <i>Research in Sports Medicine</i> , 2019, 27, 21-33.	0.7	7
80	Acute Talar Cartilage Deformation in Those with and without Chronic Ankle Instability. <i>Medicine and Science in Sports and Exercise</i> , 2021, 53, 1228-1234.	0.2	7
81	Biofeedback augmenting lower limb loading alters the underlying temporal structure of gait following anterior cruciate ligament reconstruction. <i>Human Movement Science</i> , 2020, 73, 102685.	0.6	6
82	Linking Gait Biomechanics and Daily Steps After ACL Reconstruction. <i>Medicine and Science in Sports and Exercise</i> , 2022, 54, 709-716.	0.2	6
83	Understanding, Detecting, and Managing the Risk of Posttraumatic Osteoarthritis Following Anterior Cruciate Ligament Reconstruction in the Military. <i>North Carolina Medical Journal</i> , 2017, 78, 327-328.	0.1	6
84	Assessing Step Count-Dependent Changes in Femoral Articular Cartilage Using Ultrasound. <i>Journal of Ultrasound in Medicine</i> , 2020, 39, 957-965.	0.8	5
85	Changes in Infrapatellar Fat Pad Volume 6 to 12 Months After Anterior Cruciate Ligament Reconstruction and Associations With Patient-Reported Knee Function. <i>Journal of Athletic Training</i> , 2021, 56, 1173-1179.	0.9	5
86	Long-term gait biomechanics in level, uphill, and downhill conditions following anterior cruciate ligament reconstruction. <i>Clinical Biomechanics</i> , 2021, 84, 105345.	0.5	5
87	Feasibility of a Wearable-Based Physical Activity Goal-Setting Intervention Among Individuals With Anterior Cruciate Ligament Reconstruction. <i>Journal of Athletic Training</i> , 2021, 56, 555-564.	0.9	5
88	Walking Biomechanics Six and Twelve Months Following Anterior Cruciate Ligament Reconstruction Compared to Healthy Controls. <i>Medicine and Science in Sports and Exercise</i> , 2019, 51, 265-265.	0.2	4
89	Females Decrease Vertical Ground Reaction Forces Following 4-Week Jump-Landing Feedback Intervention Without Negative Affect on Vertical Jump Performance. <i>Journal of Sport Rehabilitation</i> , 2019, 28, 866-870.	0.4	4
90	Effects of a knee valgus unloader brace on medial femoral articular cartilage deformation following walking in varus-aligned individuals. <i>Knee</i> , 2019, 26, 1067-1072.	0.8	3

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91	Cueing Changes in Peak Vertical Ground Reaction Force to Improve Coordination Dynamics in Walking. Journal of Motor Behavior, 2022, 54, 125-134.	0.5	3
92	Fewer daily steps are associated with greater cartilage oligomeric matrix protein response to loading post-ACL reconstruction. Journal of Orthopaedic Research, 2022, , .	1.2	3
93	In Vivo Compositional Changes in the Articular Cartilage of the Patellofemoral Joint Following Anterior Cruciate Ligament Reconstruction. Arthritis Care and Research, 2022, 74, 1172-1178.	1.5	2
94	Gait Biomechanics and Balance Associate with Talar and Subtalar T1ρ-Relaxation Times in Those with Chronic Ankle Instability. Medicine and Science in Sports and Exercise, 2022, 54, 1013-1019.	0.2	2
95	Evaluation of Agreement Between Participant and Expert on Jump-Landing Characteristics During a 4-Week Intervention. Journal of Sport Rehabilitation, 2018, 27, 536-540.	0.4	1
96	Decreased Loading During Gait Alters Intralimb Coordination In Anterior Cruciate Ligament Reconstructed Individuals. Medicine and Science in Sports and Exercise, 2020, 52, 246-246.	0.2	1
97	Dorsiflexion and Hop Biomechanics Associate with Greater Talar Cartilage Deformation in Those with Chronic Ankle Instability. Medicine and Science in Sports and Exercise, 2022, 54, 1176-1182.	0.2	1
98	Managing the Early Risk of Posttraumatic Osteoarthritis Following Anterior Cruciate Ligament Injury. Journal of Science in Sport and Exercise, 2020, 2, 258-264.	0.4	0