Saija Annukka Kontulainen

List of Publications by Year
in descending order

86	4,603	117625	98798
papers	citations	34 h-index	67 g-index

88	88	88	4099
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Exercise-induced bone gain is due to enlargement in bone size without a change in volumetric bone density: a peripheral quantitative computed tomography study of the upper arms of male tennis players. Bone, 2000, 27, 351-357.	2.9	412
2	Effect of a vibration exposure on muscular performance and body balance. Randomized cross-over study. Clinical Physiology and Functional Imaging, 2002, 22, 145-152.	1.2	317
3	Effect of four-month vertical whole body vibration on performance and balance. Medicine and Science in Sports and Exercise, 2002, 34, 1523-1528.	0.4	247
4	Effect of Long-Term Impact-Loading on Mass, Size, and Estimated Strength of Humerus and Radius of Female Racquet-Sports Players: A Peripheral Quantitative Computed Tomography Study Between Young and Old Starters and Controls. Journal of Bone and Mineral Research, 2002, 17, 2281-2289.	2.8	240
5	Effect of 8-Month Vertical Whole Body Vibration on Bone, Muscle Performance, and Body Balance: A Randomized Controlled Study. Journal of Bone and Mineral Research, 2003, 18, 876-884.	2.8	235
6	Effect of Long-Term Impact-Loading on Mass, Size, and Estimated Strength of Humerus and Radius of Female Racquet-Sports Players: A Peripheral Quantitative Computed Tomography Study Between Young and Old Starters and Controls. Journal of Bone and Mineral Research, 2003, 18, 352-359.	2.8	219
7	Tracking Dietary Patterns over 20 Years from Childhood through Adolescence into Young Adulthood: The Saskatchewan Pediatric Bone Mineral Accrual Study. Nutrients, 2017, 9, 990.	4.1	167
8	A longitudinal study of the relationship of physical activity to bone mineral accrual from adolescence to young adulthood. Bone, 2008, 43, 1101-1107.	2.9	166
9	Bone strength and its determinants in pre- and early pubertal boys and girls. Bone, 2006, 39, 598-608.	2.9	157
10	Good Maintenance of Exercise-Induced Bone Gain with Decreased Training of Female Tennis and Squash Players: A Prospective 5-Year Follow-Up Study of Young and Old Starters and Controls. Journal of Bone and Mineral Research, 2001, 16, 195-201.	2.8	155
11	Is a School-Based Physical Activity Intervention Effective for Increasing Tibial Bone Strength in Boys and Girls?. Journal of Bone and Mineral Research, 2007, 22, 434-446.	2.8	155
12	Changes in bone mineral content with decreased training in competitive young adult tennis players and controls: a prospective 4-yr follow-up. Medicine and Science in Sports and Exercise, 1999, 31, 646-652.	0.4	140
13	Strength indices from pQCT imaging predict up to 85% of variance in bone failure properties at tibial epiphysis and diaphysis. Journal of Musculoskeletal Neuronal Interactions, 2008, 8, 401-9.	0.1	96
14	Direct in vivo strain measurements in human boneâ€"A systematic literature review. Journal of Biomechanics, 2012, 45, 27-40.	2.1	92
15	Accuracy of pQCT for evaluating the aged human radius: an ashing, histomorphometry and failure load investigation. Osteoporosis International, 2006, 17, 1241-1251.	3.1	88
16	Does a novel school-based physical activity model benefit femoral neck bone strength in pre- and early pubertal children?. Osteoporosis International, 2008, 19, 1445-1456.	3.1	80
17	Cortical and trabecular bone in the femoral neck both contribute to proximal femur failure load prediction. Osteoporosis International, 2009, 20, 445-453.	3.1	73
18	Maturity- and sex-related changes in tibial bone geometry, strength and boneâ€"muscle strength indices during growth: A 20-month pQCT study. Bone, 2005, 36, 1003-1011.	2.9	63

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19	Effect of maturational timing on bone mineral content accrual from childhood to adulthood: Evidence from 15years of longitudinal data. Bone, 2011, 48, 1178-1185.	2.9	63
20	Tibial geometry is associated with failure load ex vivo: a MRI, pQCT and DXA study. Osteoporosis International, 2007, 18, 991-997.	3.1	62
21	Examining Bone Surfaces Across Puberty: A 20-Month pQCT Trial. Journal of Bone and Mineral Research, 2005, 20, 1202-1207.	2.8	61
22	Peak lean tissue mass accrual precedes changes in bone strength indices at the proximal femur during the pubertal growth spurt. Bone, 2009, 44, 1186-1190.	2.9	61
23	Higher premenarcheal bone mass in elite gymnasts is maintained into young adulthood after long-term retirement from sport: A 14-year follow-up. Journal of Bone and Mineral Research, 2012, 27, 104-110.	2.8	59
24	Does Previous Participation in High-Impact Training Result in Residual Bone Gain in Growing Girls?. International Journal of Sports Medicine, 2002, 23, 575-581.	1.7	57
25	Characterizing microarchitectural changes at the distal radius and tibia in postmenopausal women using HR-pQCT. Osteoporosis International, 2014, 25, 2057-2066.	3.1	55
26	Examining the developing bone: What do we measure and how do we do it?. Journal of Musculoskeletal Neuronal Interactions, 2005, 5, 213-24.	0.1	54
27	Does Physical Activity in Adolescence Have Site-Specific and Sex-Specific Benefits on Young Adult Bone Size, Content, and Estimated Strength?. Journal of Bone and Mineral Research, 2014, 29, 479-486.	2.8	53
28	Former exercisers of an 18-month intervention display residual aBMD benefits compared with control women 3.5 years post-intervention: a follow-up of a randomized controlled high-impact trial. Osteoporosis International, 2004, 15, 248-251.	3.1	46
29	Femoral neck cortical geometry measured with magnetic resonance imaging is associated with proximal femur strength. Osteoporosis International, 2006, 17, 1539-1545.	3.1	45
30	Change in Cortical Bone Density and Its Distribution Differs between Boys and Girls during Puberty. Journal of Clinical Endocrinology and Metabolism, 2006, 91, 2555-2561.	3.6	42
31	Lower leg muscle density is independently associated with fall status in community-dwelling older adults. Osteoporosis International, 2016, 27, 2231-2240.	3.1	42
32	Precompetitive and recreational gymnasts have greater bone density, mass, and estimated strength at the distal radius in young childhood. Osteoporosis International, 2011, 22, 75-84.	3.1	41
33	Lower-extremity muscle atrophy and fat infiltration after chronic spinal cord injury. Journal of Musculoskeletal Neuronal Interactions, 2015, 15, 32-41.	0.1	39
34	Analyzing Cortical Bone Cross-Sectional Geometry by Peripheral QCT: Comparison With Bone Histomorphometry. Journal of Clinical Densitometry, 2007, 10, 86-92.	1.2	38
35	Measurement of muscle and fat in postmenopausal women: precision of previously reported pQCT imaging methods. Bone, 2015, 75, 49-54.	2.9	37
36	Unilateral strength training leads to muscle-specific sparing effects during opposite homologous limb immobilization. Journal of Applied Physiology, 2018, 124, 866-876.	2.5	36

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37	Vegetarian-style dietary pattern during adolescence has long-term positive impact on bone from adolescence to young adulthood: a longitudinal study. Nutrition Journal, 2018, 17, 36.	3.4	29
38	Muscle cross sectional area and grip torque contraction types are similarly related to pQCT derived bone strength indices in the radii of older healthy adults. Journal of Musculoskeletal Neuronal Interactions, 2010, 10, 136-41.	0.1	26
39	A longitudinal study of bone area, content, density, and strength development at the radius and tibia in children 4â€“12Âyears of age exposed to recreational gymnastics. Osteoporosis International, 2015, 26, 1677-1690.	3.1	25
40	Former premenarcheal gymnasts exhibit site-specific skeletal benefits in adulthood after long-term retirement. Journal of Bone and Mineral Research, 2012, 27, 2298-2305.	2.8	24
41	Individual and combined effects of OA-related subchondral bone alterations on proximal tibial surface stiffness: a parametric finite element modeling study. Medical Engineering and Physics, 2015, 37, 783-791.	1.7	23
42	Effects of low-dose ibuprofen supplementation and resistance training on bone and muscle in postmenopausal women: A randomized controlled trial. Bone Reports, 2016, 5, 96-103.	0.4	23
43	A comparison of conventional maximum intensity projection with a new depth-specific topographic mapping technique in the CT analysis of proximal tibial subchondral bone density. Skeletal Radiology, 2010, 39, 867-876.	2.0	22
44	Bone mineral accrual in 4- to 10-year-old precompetitive, recreational gymnasts: A 4-year longitudinal study. Journal of Bone and Mineral Research, 2011, 26, 1313-1320.	2.8	22
45	Effects of High-Impact Training and Detraining on Femoral Neck Structure in Premenopausal Women: A Hip Structural Analysis of an 18-Month Randomized Controlled Exercise Intervention with 3.5-Year Follow-Up. Physiotherapy Canada Physiotherapie Canada, 2012, 64, 98-105.	0.6	21
46	Knee osteoarthritis patients with severe nocturnal pain have altered proximal tibial subchondral bone mineral density. Osteoarthritis and Cartilage, 2015, 23, 1483-1490.	1.3	21
47	Prediction of local proximal tibial subchondral bone structural stiffness using subject-specific finite element modeling: Effect of selected densityâ€“modulus relationship. Clinical Biomechanics, 2015, 30, 703-712.	1.2	21
48	Bone strength and muscle properties in postmenopausal women with and without a recent distal radius fracture. Osteoporosis International, 2015, 26, 2461-2469.	3.1	20
49	Predicting subchondral bone stiffness using a depth-specific CT topographic mapping technique in normal and osteoarthritic proximal tibiae. Clinical Biomechanics, 2011, 26, 1012-1018.	1.2	18
50	The timing of BMD and geometric adaptation at the proximal femur from childhood to early adulthood in males and females: A longitudinal study. Journal of Bone and Mineral Research, 2011, 26, 2753-2761.	2.8	18
51	Community-dwelling female fallers have lower muscle density in their lower legs than non-fallers: Evidence from the Saskatoon Canadian Multicentre Osteoporosis Study (CaMos) cohort. Journal of Nutrition, Health and Aging, 2015, 19, 113-120.	3.3	18
52	Optimizing finite element predictions of local subchondral bone structural stiffness using neural network-derived density-modulus relationships for proximal tibial subchondral cortical and trabecular bone. Clinical Biomechanics, 2017, 41, 1-8.	1.2	18
53	Site-Specific Variance in Radius and Tibia Bone Strength as Determined by Muscle Size and Body Mass. Physiotherapy Canada Physiotherapie Canada, 2012, 64, 292-301.	0.6	17
54	Bone health in children and youth with ASD: a systematic review and meta-analysis. Osteoporosis International, 2021, 32, 1679-1691.	3.1	17

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55	Monitoring time interval for pQCT-derived bone outcomes in postmenopausal women. Osteoporosis International, 2013, 24, 1917-1922.	3.1	16
56	In vivo precision of three HR-pQCT-derived finite element models of the distal radius and tibia in postmenopausal women. BMC Musculoskeletal Disorders, 2016, 17, 389.	1.9	15
57	Accounting for spatial variation of trabecular anisotropy with subject-specific finite element modeling moderately improves predictions of local subchondral bone stiffness at the proximal tibia. Journal of Biomechanics, 2017, 59, 101-108.	2.1	15
58	Role of endocortical contouring methods on precision of HR-pQCT-derived cortical micro-architecture in postmenopausal women and young adults. Osteoporosis International, 2016, 27, 789-796.	3.1	14
59	Least significant changes and monitoring time intervals for high-resolution pQCT-derived bone outcomes in postmenopausal women. Journal of Musculoskeletal Neuronal Interactions, 2015, 15, 190-6.	0.1	13
60	Comparison of Short-Term InÂVivo Precision of Bone Density and Microarchitecture at the Distal Radius and Tibia Between Postmenopausal Women and Young Adults. Journal of Clinical Densitometry, 2014, 17, 510-517.	1.2	12
61	A single-spring model predicts the majority of variance in impact force during a fall onto the outstretched hand. Journal of Biomechanics, 2019, 90, 149-152.	2.1	12
62	Regional depth-specific subchondral bone density measures in osteoarthritic and normal patellae: in vivo precision and preliminary comparisons. Osteoporosis International, 2014, 25, 1107-1114.	3.1	11
63	Precision of bone density and micro-architectural properties at the distal radius and tibia in children: an HR-pQCT study. Osteoporosis International, 2017, 28, 3189-3197.	3.1	11
64	Are milk and alternatives and fruit and vegetable intakes during adolescence associated with cortical and trabecular bone structure, density, and strength in adulthood?. Osteoporosis International, 2017, 28, 609-619.	3.1	11
65	Differences in Function and Fracture Risk in Postmenopausal Women With and Without a Recent Distal Radius Fracture. Journal of Aging and Physical Activity, 2018, 26, 136-145.	1.0	9
66	Relationship Between Trajectories of Trunk Fat Development in Emerging Adulthood and Cardiometabolic Risk at 36 Years of Age. Obesity, 2019, 27, 1652-1660.	3.0	9
67	Cortical porosity assessment in the distal radius: A comparison of HR-pQCT measures with Synchrotron-Radiation micro-CT-based measures. Bone, 2019, 120, 439-445.	2.9	9
68	Neighborhood Built Environment Measures and Association with Physical Activity and Sedentary Time in 9â€“14-Year-Old Children in Saskatoon, Canada. International Journal of Environmental Research and Public Health, 2020, 17, 3837.	2.6	8
69	The Effects of Elk Velvet Antler Dietary Supplementation on Physical Growth and Bone Development in Growing Rats. Evidence-based Complementary and Alternative Medicine, 2015, 2015, 1-10.	1.2	7
70	Predicting experimentally-derived failure load at the distal radius using finite element modelling based on peripheral quantitative computed tomography cross-sections (pQCT-FE): A validation study. Bone, 2019, 129, 115051.	2.9	7
71	Efficacy of Creatine Supplementation and Resistance Training on Area and Density of Bone and Muscle in Older Adults. Medicine and Science in Sports and Exercise, 2021, Publish Ahead of Print, 2388-2395.	0.4	7
72	Reliability of Annual Changes and Monitoring Time Intervals for Bone Strength, Size, Density, and Microarchitectural Development at the Distal Radius and Tibia in Children: A 1-Year HR-pQCT Follow-Up. Journal of Bone and Mineral Research, 2019, 34, 1297-1305.	2.8	6

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73	Linearity and sex-specificity of impact force prediction during a fall onto the outstretched hand using a single-damper-model. Journal of Musculoskeletal Neuronal Interactions, 2014, 14, 286-93.	0.1	6
74	Prevention of Osteoporosis and Bone Fragility. American Journal of Lifestyle Medicine, 2013, 7, 405-417.	1.9	5
75	Effects of dietary calcium and phosphorus on reproductive performance and markers of bone turnover in stall- or group-housed sows1. Journal of Animal Science, 2016, 94, 4205-4216.	0.5	4
76	Response to Letter to the Editor: â€˜Is subchondral bone mineral density associated with nocturnal pain in knee osteoarthritis patients?â€™. Osteoarthritis and Cartilage, 2015, 23, 2299-2301.	1.3	3
77	Distal radius sections offer accurate and precise estimates of forearm fracture load. Clinical Biomechanics, 2020, 80, 105144.	1.2	3
78	Dog-Assisted Physical Activity Intervention in Children with Autism Spectrum Disorder: A Feasibility and Efficacy Exploratory Study. Anthrozoos, 2022, 35, 601-612.	1.4	3
79	Maturational timing does not predict HSA estimated adult bone geometry at the proximal femur. Bone, 2011, 49, 1270-1278.	2.9	2
80	Compact MRI for Astronaut Physiological Research and Medical Diagnosis. , 2012, , .		2
81	The Health Benefits of Bovine Colostrum. , 2017, , 51-60.		2
82	Children with Autism Spectrum Disorder Spent 30 Min Less Daily Time in Moderate-to-Vigorous Physical Activity than Typically Developing Peers: a Meta-Analysis of Cross-sectional Data. Review Journal of Autism and Developmental Disorders, 2023, 10, 144-157.	3.4	2
83	Cessation of Treatment: A Universal Achilles' Heel. Journal of Bone and Mineral Research, 2001, 16, 1372-1373.	2.8	1
84	Bone acquisition/pediatric Bone: Meeting report from the 33rd Annual Meeting of the American Society for Bone and Mineral Research. IBMS BoneKEy, 2011, 8, 486-489.	0.0	1
85	Investigation of white line separation under load in bovine claws with and without toe-tip necrosis. American Journal of Veterinary Research, 2019, 80, 736-742.	0.6	1
86	Prevention of Osteoporosis and Bone Fragility. , 2013, , 1155-1162.		0