

Yong-Gon Koh

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/801202/publications.pdf>

Version: 2024-02-01

103
papers

2,615
citations

331670

21
h-index

206112

48
g-index

109
all docs

109
docs citations

109
times ranked

2345
citing authors

#	ARTICLE	IF	CITATIONS
1	Infrapatellar fat pad-derived mesenchymal stem cell therapy for knee osteoarthritis. <i>Knee</i> , 2012, 19, 902-907.	1.6	327
2	Mesenchymal Stem Cell Injections Improve Symptoms of Knee Osteoarthritis. <i>Arthroscopy - Journal of Arthroscopic and Related Surgery</i> , 2013, 29, 748-755.	2.7	308
3	Clinical results and second-look arthroscopic findings after treatment with adipose-derived stem cells for knee osteoarthritis. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2015, 23, 1308-1316.	4.2	205
4	Adipose-Derived Mesenchymal Stem Cells With Microfracture Versus Microfracture Alone: 2-Year Follow-up of a Prospective Randomized Trial. <i>Arthroscopy - Journal of Arthroscopic and Related Surgery</i> , 2016, 32, 97-109.	2.7	203
5	Comparative Outcomes of Open-Wedge High Tibial Osteotomy With Platelet-Rich Plasma Alone or in Combination With Mesenchymal Stem Cell Treatment: A Prospective Study. <i>Arthroscopy - Journal of Arthroscopic and Related Surgery</i> , 2014, 30, 1453-1460.	2.7	172
6	Biomechanical comparison of fixed and mobile bearing for unicompartmental knee arthroplasty using finite element analysis. <i>Journal of Orthopaedic Research</i> , 2014, 32, 338-345.	2.3	76
7	Influence of Increased Posterior Tibial Slope in Total Knee Arthroplasty on Knee Joint Biomechanics: A Computational Simulation Study. <i>Journal of Arthroplasty</i> , 2018, 33, 572-579.	3.1	70
8	Graft Extrusion Related to the Position of Allograft in Lateral Meniscal Allograft Transplantation: Biomechanical Comparison Between Parapatellar and Transpatellar Approaches Using Finite Element Analysis. <i>Arthroscopy - Journal of Arthroscopic and Related Surgery</i> , 2015, 31, 2380-2391.e2.	2.7	62
9	Total knee arthroplasty application of polyetheretherketone and carbon-fiber-reinforced polyetheretherketone: A review. <i>Materials Science and Engineering C</i> , 2019, 100, 70-81.	7.3	62
10	Overexpression of TGF- β 1 enhances chondrogenic differentiation and proliferation of human synovium-derived stem cells. <i>Biochemical and Biophysical Research Communications</i> , 2014, 450, 1593-1599.	2.1	61
11	Biomechanical evaluation of pedicle screw fixation system in spinal adjacent levels using polyetheretherketone, carbon-fiber-reinforced polyetheretherketone, and traditional titanium as rod materials. <i>Composites Part B: Engineering</i> , 2017, 130, 248-256.	12.0	60
12	Importance of joint line preservation in unicompartmental knee arthroplasty: Finite element analysis. <i>Journal of Orthopaedic Research</i> , 2017, 35, 347-352.	2.3	53
13	Finite Element Analysis of the Biomechanical Effects of 3 Posterolateral Corner Reconstruction Techniques for the Knee Joint. <i>Arthroscopy - Journal of Arthroscopic and Related Surgery</i> , 2017, 33, 1537-1550.	2.7	42
14	Optimal mechanical properties of a scaffold for cartilage regeneration using finite element analysis. <i>Journal of Tissue Engineering</i> , 2019, 10, 204173141983213.	5.5	38
15	The increase in posterior tibial slope provides a positive biomechanical effect in posterior-stabilized total knee arthroplasty. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2018, 26, 3188-3195.	4.2	34
16	Chondrogenic differentiation of human ASCs by stiffness control in 3D fibrin hydrogel. <i>Biochemical and Biophysical Research Communications</i> , 2020, 522, 213-219.	2.1	31
17	Co-culture with human synovium-derived mesenchymal stem cells inhibits inflammatory activity and increases cell proliferation of sodium nitroprusside-stimulated chondrocytes. <i>Biochemical and Biophysical Research Communications</i> , 2014, 447, 715-720.	2.1	29
18	Femoral component alignment in unicompartmental knee arthroplasty leads to biomechanical change in contact stress and collateral ligament force in knee joint. <i>Archives of Orthopaedic and Trauma Surgery</i> , 2018, 138, 563-572.	2.4	27

#	ARTICLE	IF	CITATIONS
19	Wear predictions for UHMWPE material with various surface properties used on the femoral component in total knee arthroplasty: a computational simulation study. <i>Journal of Materials Science: Materials in Medicine</i> , 2017, 28, 105.	3.6	26
20	Patient-specific instrumentation development in TKA: 1st and 2nd generation designs in comparison with conventional instrumentation. <i>Archives of Orthopaedic and Trauma Surgery</i> , 2017, 137, 111-118.	2.4	22
21	Tibiofemoral conformity variation offers changed kinematics and wear performance of customized posterior-stabilized total knee arthroplasty. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2019, 27, 1213-1223.	4.2	22
22	Flexed femoral component improves kinematics and biomechanical effect in posterior stabilized total knee arthroplasty. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2019, 27, 1174-1181.	4.2	21
23	Gender-related morphological differences in sulcus angle and condylar height for the femoral trochlea using magnetic resonance imaging. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2019, 27, 3560-3566.	4.2	21
24	Effect of joint line preservation on mobile-type bearing unicompartmental knee arthroplasty: finite element analysis. <i>Australasian Physical and Engineering Sciences in Medicine</i> , 2018, 41, 201-208.	1.3	20
25	Effect of femoral component position on biomechanical outcomes of unicompartmental knee arthroplasty. <i>Knee</i> , 2018, 25, 491-498.	1.6	20
26	Prediction of Wear on Tibial Inserts Made of UHMWPE, PEEK, and CFR-PEEK in Total Knee Arthroplasty Using Finite-Element Analysis. <i>Lubricants</i> , 2019, 7, 30.	2.9	20
27	Biomechanical and Clinical Effect of Patient-Specific or Customized Knee Implants: A Review. <i>Journal of Clinical Medicine</i> , 2020, 9, 1559.	2.4	20
28	Design optimization of high tibial osteotomy plates using finite element analysis for improved biomechanical effect. <i>Journal of Orthopaedic Surgery and Research</i> , 2019, 14, 219.	2.3	19
29	Is Electrocautery of Patella Useful in Patella Non-Resurfacing Total Knee Arthroplasty?: A Prospective Randomized Controlled Study. <i>Journal of Arthroplasty</i> , 2015, 30, 2125-2127.	3.1	18
30	Gender differences in morphology exist in posterior condylar offsets of the knee in Korean population. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2019, 27, 1628-1634.	4.2	18
31	Morphometry of femoral rotation for total knee prosthesis according to gender in a Korean population using three-dimensional magnetic resonance imaging. <i>Knee</i> , 2016, 23, 975-980.	1.6	15
32	Effect of Post-Cam Design for Normal Knee Joint Kinematic, Ligament, and Quadriceps Force in Patient-Specific Posterior-Stabilized Total Knee Arthroplasty by Using Finite Element Analysis. <i>BioMed Research International</i> , 2018, 2018, 1-11.	1.9	15
33	Comparison of Kinematics in Cruciate Retaining and Posterior Stabilized for Fixed and Rotating Platform Mobile-Bearing Total Knee Arthroplasty with respect to Different Posterior Tibial Slope. <i>BioMed Research International</i> , 2018, 2018, 1-11.	1.9	15
34	Finite element analysis for the biomechanical effect of tibial insert materials in total knee arthroplasty. <i>Composite Structures</i> , 2018, 201, 141-150.	5.8	15
35	The anterolateral ligament is a secondary stabilizer in the knee joint. <i>Bone and Joint Research</i> , 2019, 8, 509-517.	3.6	14
36	The Effect of Femoral Cutting Guide Design Improvements for Patient-Specific Instruments. <i>BioMed Research International</i> , 2015, 2015, 1-8.	1.9	12

#	ARTICLE	IF	CITATIONS
37	Malpositioning of Prosthesis: Patient-specific Total Knee Arthroplasty Versus Standard Off-the-Shelf Total Knee Arthroplasty. <i>Journal of the American Academy of Orthopaedic Surgeons Global Research and Reviews</i> , 2017, 1, e020.	0.7	12
38	Biomechanical Effects of Posterior Condylar Offset and Posterior Tibial Slope on Quadriceps Force and Joint Contact Forces in Posterior-Stabilized Total Knee Arthroplasty. <i>BioMed Research International</i> , 2017, 2017, 1-12.	1.9	12
39	Effect of geometric variations on tibiofemoral surface and post-cam design of normal knee kinematics restoration. <i>Journal of Experimental Orthopaedics</i> , 2018, 5, 53.	1.8	12
40	Biomechanical influence of lateral meniscal allograft transplantation on knee joint mechanics during the gait cycle. <i>Journal of Orthopaedic Surgery and Research</i> , 2019, 14, 300.	2.3	12
41	Biomechanical evaluation of the influence of posterolateral corner structures on cruciate ligaments forces during simulated gait and squatting. <i>PLoS ONE</i> , 2019, 14, e0214496.	2.5	12
42	Optimal Design of Patient-Specific Total Knee Arthroplasty for Improvement in Wear Performance. <i>Journal of Clinical Medicine</i> , 2019, 8, 2023.	2.4	12
43	Biomechanical influence of deficient posterolateral corner structures on knee joint kinematics: A computational study. <i>Journal of Orthopaedic Research</i> , 2018, 36, 2202-2209.	2.3	11
44	Preservation of femoral and tibial coronal alignment to improve biomechanical effects of medial unicompartement knee arthroplasty: Computational study. <i>Bio-Medical Materials and Engineering</i> , 2018, 29, 651-664.	0.6	11
45	Effects of posterior condylar offset and posterior tibial slope on mobile-bearing total knee arthroplasty using computational simulation. <i>Knee</i> , 2018, 25, 903-914.	1.6	11
46	Biomechanical effects of posterior tibial slope on unicompartemental knee arthroplasty using finite element analysis. <i>Bio-Medical Materials and Engineering</i> , 2019, 30, 133-144.	0.6	11
47	Computational analysis of customized cruciate retaining total knee arthroplasty restoration of native knee joint biomechanics. <i>Artificial Organs</i> , 2019, 43, 504-514.	1.9	11
48	Anatomy-mimetic design preserves natural kinematics of knee joint in patient-specific mobile-bearing unicompartemental knee arthroplasty. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2020, 28, 1465-1472.	4.2	11
49	Prediction of wear performance in femoral and tibial conformity in patient-specific cruciate-retaining total knee arthroplasty. <i>Journal of Orthopaedic Surgery and Research</i> , 2020, 15, 24.	2.3	11
50	Effects of measurement methods for tibial rotation axis on the morphometry in Korean populations by gender. <i>Knee</i> , 2017, 24, 23-30.	1.6	10
51	Validation of a computational knee joint model using an alignment method for the knee laxity test and computed tomography. <i>Bio-Medical Materials and Engineering</i> , 2017, 28, 417-429.	0.6	10
52	Gender differences exist in rotational anatomy of the distal femur in osteoarthritic knees using MRI. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2020, 28, 2990-2997.	4.2	10
53	Biomechanical effect of a lateral hinge fracture for a medial opening wedge high tibial osteotomy: finite element study. <i>Journal of Orthopaedic Surgery and Research</i> , 2020, 15, 63.	2.3	10
54	Biomechanical effect with respect to the sagittal positioning of the femoral component in unicompartemental knee arthroplasty. <i>Bio-Medical Materials and Engineering</i> , 2019, 30, 171-182.	0.6	9

#	ARTICLE	IF	CITATIONS
55	Morphologic difference and size mismatch in the medial and lateral tibial condyles exist with respect to gender for unicompartmental knee arthroplasty in the Korean population. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2020, 28, 1789-1796.	4.2	9
56	Biomechanical effect of tibial slope on the stability of medial unicompartmental knee arthroplasty in posterior cruciate ligament-deficient knees. <i>Bone and Joint Research</i> , 2020, 9, 593-600.	3.6	9
57	Morphometric study of gender difference in osteoarthritis posterior tibial slope using three-dimensional magnetic resonance imaging. <i>Surgical and Radiologic Anatomy</i> , 2020, 42, 667-672.	1.2	9
58	Patient-specific design for articular surface conformity to preserve normal knee mechanics in posterior stabilized total knee arthroplasty. <i>Bio-Medical Materials and Engineering</i> , 2018, 29, 401-414.	0.6	8
59	Biomechanical Effect of UHMWPE and CFR-PEEK Insert on Tibial Component in Unicompartmental Knee Replacement in Different Varus and Valgus Alignments. <i>Materials</i> , 2019, 12, 3345.	2.9	8
60	Reduction in tibiofemoral conformity in lateral unicompartmental knee arthroplasty is more representative of normal knee kinematics. <i>Bone and Joint Research</i> , 2019, 8, 593-600.	3.6	8
61	Comparison of the biomechanical effect of posterior condylar offset and kinematics between posterior cruciate-retaining and posterior-stabilized total knee arthroplasty. <i>Knee</i> , 2019, 26, 250-257.	1.6	8
62	Effect of the presence of the articular cartilage on the femoral component rotation in total knee arthroplasty in female and varus osteoarthritis knees. <i>Journal of Orthopaedic Surgery and Research</i> , 2020, 15, 499.	2.3	8
63	Proteomic Analysis Reveals Commonly Secreted Proteins of Mesenchymal Stem Cells Derived from Bone Marrow, Adipose Tissue, and Synovial Membrane to Show Potential for Cartilage Regeneration in Knee Osteoarthritis. <i>Stem Cells International</i> , 2021, 2021, 1-18.	2.5	8
64	Multi-objective design optimization of high tibial osteotomy for improvement of biomechanical effect by using finite element analysis. <i>Journal of Orthopaedic Research</i> , 2018, 36, 2956-2965.	2.3	7
65	Evaluation of tibial rotational axis in total knee arthroplasty using magnetic resonance imaging. <i>Scientific Reports</i> , 2020, 10, 14068.	3.3	7
66	Femoral trochlear morphology is associated with anterior cruciate ligament injury in skeletally immature patients. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2020, 28, 3969-3977.	4.2	7
67	Ganglioside GM3 Up-Regulate Chondrogenic Differentiation by Transform Growth Factor Receptors. <i>International Journal of Molecular Sciences</i> , 2020, 21, 1967.	4.1	7
68	Finite Element Study on the Preservation of Normal Knee Kinematics with Respect to the Prosthetic Design in Patient-Specific Medial Unicompartmental Knee Arthroplasty. <i>BioMed Research International</i> , 2020, 2020, 1-9.	1.9	7
69	Influence of Variation in Sagittal Placement of the Femoral Component after Cruciate-Retaining Total Knee Arthroplasty. <i>Journal of Knee Surgery</i> , 2021, 34, 444-451.	1.6	7
70	Finite element analysis of the influence of the posterior tibial slope on mobile-bearing unicompartmental knee arthroplasty. <i>Knee</i> , 2021, 29, 116-125.	1.6	7
71	The influence of the number of holes in the open wedge high tibial osteotomy on knee biomechanics using finite element analysis. <i>Orthopaedics and Traumatology: Surgery and Research</i> , 2021, 107, 102884.	2.0	7
72	Biomechanical evaluation of opening-wedge high tibial osteotomy with composite materials using finite-element analysis. <i>Knee</i> , 2018, 25, 977-987.	1.6	6

#	ARTICLE	IF	CITATIONS
73	Kinematic Alignment in Cruciate Retaining Implants Improves the Biomechanical Function in Total Knee Arthroplasty during Gait and Deep Knee Bend. <i>Journal of Knee Surgery</i> , 2020, 33, 284-293.	1.6	6
74	Effects of contact stress on patellarfemoral joint and quadriceps force in fixed and mobile-bearing medial unicompartmental knee arthroplasty. <i>Journal of Orthopaedic Surgery and Research</i> , 2020, 15, 517.	2.3	6
75	The posterior cortical axis as an alternative reference for femoral component placement in total knee arthroplasty. <i>Journal of Orthopaedic Surgery and Research</i> , 2020, 15, 603.	2.3	5
76	Anatomic Differences in the Sagittal Knee Joint Are Associated With ACL Injury: Results From a Skeletally Immature Korean Population. <i>Orthopaedic Journal of Sports Medicine</i> , 2021, 9, 232596712199479.	1.7	5
77	The Effect of Patient-Specific Instrumentation Incorporating an Extramedullary Tibial Guide on Operative Efficiency for Total Knee Arthroplasty. <i>BioMed Research International</i> , 2017, 2017, 1-7.	1.9	4
78	Biomechanical Evaluation of the Effect of Mesenchymal Stem Cells on Cartilage Regeneration in Knee Joint Osteoarthritis. <i>Applied Sciences (Switzerland)</i> , 2019, 9, 1868.	2.5	4
79	Difference in coronal curvature of the medial and lateral femoral condyle morphology by gender in implant design for total knee arthroplasty. <i>Surgical and Radiologic Anatomy</i> , 2020, 42, 649-655.	1.2	4
80	Gender difference exists in sagittal curvature of the distal femoral condyle morphology for osteoarthritic population. <i>Knee Surgery, Sports Traumatology, Arthroscopy</i> , 2020, 28, 3740-3746.	4.2	4
81	Gender Differences in Patellar Positions among the Korean Population. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 8842.	2.5	4
82	Analysis of Gender Differences in the Rotational Alignment of the Distal Femur in Kinematically Aligned and Mechanically Aligned Total Knee Arthroplasty. <i>Journal of Clinical Medicine</i> , 2021, 10, 3691.	2.4	4
83	Correlation of Femoral Trochlear Dysplasia With Anterior Cruciate Ligament Injury in Skeletally Immature Patients. <i>Orthopaedic Journal of Sports Medicine</i> , 2021, 9, 232596712110226.	1.7	4
84	Influence of Preservation of Normal Knee Contact Stress on Other Compartments with respect to the Tibial Insert Design for Unicompartmental Knee Arthroplasty. <i>Applied Bionics and Biomechanics</i> , 2019, 2019, 1-9.	1.1	3
85	Restoration of normal knee kinematics with respect to tibial insert design in mobile bearing lateral unicompartmental arthroplasty using computational simulation. <i>Bone and Joint Research</i> , 2020, 9, 421-428.	3.6	3
86	Effects of the material properties of a focal knee articular prosthetic on the human knee joint using computational simulation. <i>Knee</i> , 2020, 27, 1484-1491.	1.6	3
87	Gender difference in bowing of the sagittal femoral morphology measurement using magnetic resonance imaging. <i>Surgical and Radiologic Anatomy</i> , 2020, 42, 1231-1236.	1.2	3
88	Effects of the Anterolateral Ligament and Anterior Cruciate Ligament on Knee Joint Mechanics: A Biomechanical Study Using Computational Modeling. <i>Orthopaedic Journal of Sports Medicine</i> , 2022, 10, 232596712210849.	1.7	3
89	Biomechanical effect of anatomical tibial component design on load distribution of medial proximal tibial bone in total knee arthroplasty. <i>Bone and Joint Research</i> , 2022, 11, 252-259.	3.6	3
90	Finite element analysis of femoral component sagittal alignment in mobile-bearing total knee arthroplasty. <i>Bio-Medical Materials and Engineering</i> , 2022, 33, 195-207.	0.6	3

#	ARTICLE	IF	CITATIONS
91	The biomechanical effect of tibiofemoral conformity design for patient-specific cruciate retaining total knee arthroplasty using computational simulation. <i>Journal of Experimental Orthopaedics</i> , 2019, 6, 23.	1.8	2
92	Computational biomechanics of knee joint arthroplasty : a review. <i>Mechanical Engineering Reviews</i> , 2020, 7, 19-00338-19-00338.	4.7	2
93	Biomechanical analysis of a changed posterior condylar offset under deep knee bend loading in cruciate-retaining total knee arthroplasty. <i>Bio-Medical Materials and Engineering</i> , 2019, 30, 157-169.	0.6	1
94	Effect of insert material on forces on quadriceps, collateral ligament, and patellar tendon after rotating platform mobile-bearing total knee arthroplasty. <i>Asian Journal of Surgery</i> , 2020, 43, 742-749.	0.4	1
95	Biomechanical simulation for cartilage regeneration of knee joint osteoarthritis with composite scaffold using ply angle optimization. <i>Journal of Biomaterials Applications</i> , 2020, 34, 1019-1027.	2.4	1
96	Biomechanical Effect of Various Tibial Bearing Materials in Uni-Compartmental Knee Arthroplasty Using Finite Element Analysis. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 6487.	2.5	1
97	Gender-Based Quantitative Analysis of the Grand Piano Sign in Mechanically Aligned Total Knee Arthroplasty in Asians. <i>Journal of Clinical Medicine</i> , 2021, 10, 1969.	2.4	1
98	Establishment of an integration-free human induced pluripotent stem cell line (TJCi001-A) from normal bone marrow-derived mesenchymal stem cells. <i>Stem Cell Research</i> , 2021, 55, 102484.	0.7	1
99	The femoral trochlear anterior line is a better alternative intra-operative reference compared to femoral anterior tangent line for femoral rotation in both genders in total knee arthroplasty. <i>Journal of Experimental Orthopaedics</i> , 2020, 7, 43.	1.8	1
100	Computational analysis of tibial slope adjustment with fixed-bearing medial unicompartmental knee arthroplasty in ACL- and PCL-deficient models. <i>Bone and Joint Research</i> , 2022, 11, 494-502.	3.6	1
101	Effect of post-cam design on the kinematics and contact stress of posterior-stabilized total knee arthroplasty. <i>Bio-Medical Materials and Engineering</i> , 2021, 32, 323-332.	0.6	0
102	Influence du nombre de trous dans lâ€™ostéotomie tibiale par ouverture interne sur la biomécanique du genou : lâ€™aide dâ€™une analyse par éléments finis. <i>Revue De Chirurgie Orthopedique Et Traumatologique</i> , 2021, 107, 527.		0
103	Existence of Gender-Based Difference in Morphology of Convex Lateral Tibial Plateau in Korean Population Primary Knee Joint Osteoarthritis. <i>BioMed Research International</i> , 2021, 2021, 1-5.	1.9	0