

# Yong-Gon Koh

## List of Publications by Year in descending order

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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	Effects of the Anterolateral Ligament and Anterior Cruciate Ligament on Knee Joint Mechanics: A Biomechanical Study Using Computational Modeling. Orthopaedic Journal of Sports Medicine, 2022, 10, 232596712210849.	1.7	3
2	Biomechanical effect of anatomical tibial component design on load distribution of medial proximal tibial bone in total knee arthroplasty. Bone and Joint Research, 2022, 11, 252-259.	3.6	3
3	Finite element analysis of femoral component sagittal alignment in mobile-bearing total knee arthroplasty. Bio-Medical Materials and Engineering, 2022, 33, 195-207.	0.6	3
4	Computational analysis of tibial slope adjustment with fixed-bearing medial unicompartmental knee arthroplasty in ACL- and PCL-deficient models. Bone and Joint Research, 2022, 11, 494-502.	3.6	1
5	Influence of Variation in Sagittal Placement of the Femoral Component after Cruciate-Retaining Total Knee Arthroplasty. Journal of Knee Surgery, 2021, 34, 444-451.	1.6	7
6	Finite element analysis of the influence of the posterior tibial slope on mobile-bearing unicompartmental knee arthroplasty. Knee, 2021, 29, 116-125.	1.6	7
7	Anatomic Differences in the Sagittal Knee Joint Are Associated With ACL Injury: Results From a Skeletally Immature Korean Population. Orthopaedic Journal of Sports Medicine, 2021, 9, 232596712199479.	1.7	5
8	Gender-Based Quantitative Analysis of the Grand Piano Sign in Mechanically Aligned Total Knee Arthroplasty in Asians. Journal of Clinical Medicine, 2021, 10, 1969.	2.4	1
9	Effect of post-cam design on the kinematics and contact stress of posterior-stabilized total knee arthroplasty. Bio-Medical Materials and Engineering, 2021, 32, 323-332.	0.6	0
10	Influence du nombre de trous dans l'ostéotomie tibiale par ouverture interne sur la biomécanique du genou. Aide d'une analyse par éléments finis. Revue De Chirurgie Orthopedique Et Traumatologique. 2021, 107, 527.		0
11	The influence of the number of holes in the open wedge high tibial osteotomy on knee biomechanics using finite element analysis. Orthopaedics and Traumatology: Surgery and Research, 2021, 107, 102884.	2.0	7
12	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. Stem Cells International, 2021, 2021, 1-18.	2.5	8
13	Analysis of Gender Differences in the Rotational Alignment of the Distal Femur in Kinematically Aligned and Mechanically Aligned Total Knee Arthroplasty. Journal of Clinical Medicine, 2021, 10, 3691.	2.4	4
14	Establishment of an integration-free human induced pluripotent stem cell line (TJCI001-A) from normal bone marrow-derived mesenchymal stem cells. Stem Cell Research, 2021, 55, 102484.	0.7	1
15	Existence of Gender-Based Difference in Morphology of Convex Lateral Tibial Plateau in Korean Population Primary Knee Joint Osteoarthritis. BioMed Research International, 2021, 2021, 1-5.	1.9	0
16	Correlation of Femoral Trochlear Dysplasia With Anterior Cruciate Ligament Injury in Skeletally Immature Patients. Orthopaedic Journal of Sports Medicine, 2021, 9, 232596712110226.	1.7	4
17	Kinematic Alignment in Cruciate Retaining Implants Improves the Biomechanical Function in Total Knee Arthroplasty during Gait and Deep Knee Bend. Journal of Knee Surgery, 2020, 33, 284-293.	1.6	6
18	Anatomy-mimetic design preserves natural kinematics of knee joint in patient-specific mobile-bearing unicompartmental knee arthroplasty. Knee Surgery, Sports Traumatology, Arthroscopy, 2020, 28, 1465-1472.	4.2	11

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19	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
20	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
21	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
22	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
23	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
24	Computational biomechanics of knee joint arthroplasty : a review. <i>Mechanical Engineering Reviews</i> , 2020, 7, 19-00338-19-00338.	4.7	2
25	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
26	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
27	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
28	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
29	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
30	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
31	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
32	Evaluation of tibial rotational axis in total knee arthroplasty using magnetic resonance imaging. <i>Scientific Reports</i> , 2020, 10, 14068.	3.3	7
33	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
34	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
35	Gender Differences in Patellar Positions among the Korean Population. <i>Applied Sciences (Switzerland)</i> , 2020, 10, 8842.	2.5	4
36	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

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37	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
38	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
39	Ganglioside GM3 Up-Regulate Chondrogenic Differentiation by Transform Growth Factor Receptors. <i>International Journal of Molecular Sciences</i> , 2020, 21, 1967.	4.1	7
40	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
41	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
42	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
43	Finite Element Study on the Preservation of Normal Knee Kinematics with Respect to the Prosthetic Design in Patient-Specific Medial Unicompartamental Knee Arthroplasty. <i>BioMed Research International</i> , 2020, 2020, 1-9.	1.9	7
44	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
45	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
46	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
47	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
48	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
49	Biomechanical Effect of UHMWPE and CFR-PEEK Insert on Tibial Component in Unicompartamental Knee Replacement in Different Varus and Valgus Alignments. <i>Materials</i> , 2019, 12, 3345.	2.9	8
50	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
51	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
52	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
53	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
54	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

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55	Biomechanical evaluation of the influence of posterolateral corner structures on cruciate ligaments forces during simulated gait and squatting. PLoS ONE, 2019, 14, e0214496.	2.5	12
56	Biomechanical analysis of a changed posterior condylar offset under deep knee bend loading in cruciate-retaining total knee arthroplasty. Bio-Medical Materials and Engineering, 2019, 30, 157-169.	0.6	1
57	Biomechanical effect with respect to the sagittal positioning of the femoral component in unicompartmental knee arthroplasty. Bio-Medical Materials and Engineering, 2019, 30, 171-182.	0.6	9
58	Total knee arthroplasty application of polyetheretherketone and carbon-fiber-reinforced polyetheretherketone: A review. Materials Science and Engineering C, 2019, 100, 70-81.	7.3	62
59	Biomechanical effects of posterior tibial slope on unicompartmental knee arthroplasty using finite element analysis. Bio-Medical Materials and Engineering, 2019, 30, 133-144.	0.6	11
60	Reduction in tibiofemoral conformity in lateral unicompartmental knee arthroplasty is more representative of normal knee kinematics. Bone and Joint Research, 2019, 8, 593-600.	3.6	8
61	The anterolateral ligament is a secondary stabilizer in the knee joint. Bone and Joint Research, 2019, 8, 509-517.	3.6	14
62	Optimal Design of Patient-Specific Total Knee Arthroplasty for Improvement in Wear Performance. Journal of Clinical Medicine, 2019, 8, 2023.	2.4	12
63	Influence of Preservation of Normal Knee Contact Stress on Other Compartments with respect to the Tibial Insert Design for Unicompartmental Knee Arthroplasty. Applied Bionics and Biomechanics, 2019, 1-9.	1.1	3
64	Comparison of the biomechanical effect of posterior condylar offset and kinematics between posterior cruciate-retaining and posterior-stabilized total knee arthroplasty. Knee, 2019, 26, 250-257.	1.6	8
65	Gender differences in morphology exist in posterior condylar offsets of the knee in Korean population. Knee Surgery, Sports Traumatology, Arthroscopy, 2019, 27, 1628-1634.	4.2	18
66	Computational analysis of customized cruciate retaining total knee arthroplasty restoration of native knee joint biomechanics. Artificial Organs, 2019, 43, 504-514.	1.9	11
67	Effect of joint line preservation on mobile-type bearing unicompartmental knee arthroplasty: finite element analysis. Australasian Physical and Engineering Sciences in Medicine, 2018, 41, 201-208.	1.3	20
68	The increase in posterior tibial slope provides a positive biomechanical effect in posterior-stabilized total knee arthroplasty. Knee Surgery, Sports Traumatology, Arthroscopy, 2018, 26, 3188-3195.	4.2	34
69	Biomechanical influence of deficient posterolateral corner structures on knee joint kinematics: A computational study. Journal of Orthopaedic Research, 2018, 36, 2202-2209.	2.3	11
70	Femoral component alignment in unicompartmental knee arthroplasty leads to biomechanical change in contact stress and collateral ligament force in knee joint. Archives of Orthopaedic and Trauma Surgery, 2018, 138, 563-572.	2.4	27
71	Influence of Increased Posterior Tibial Slope in Total Knee Arthroplasty on Knee Joint Biomechanics: A Computational Simulation Study. Journal of Arthroplasty, 2018, 33, 572-579.	3.1	70
72	Effect of geometric variations on tibiofemoral surface and post-cam design of normal knee kinematics restoration. Journal of Experimental Orthopaedics, 2018, 5, 53.	1.8	12

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73	Preservation of femoral and tibial coronal alignment to improve biomechanical effects of medial unicompartment knee arthroplasty: Computational study. <i>Bio-Medical Materials and Engineering</i> , 2018, 29, 651-664.	0.6	11
74	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
75	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
76	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
77	Effect of femoral component position on biomechanical outcomes of unicompartmental knee arthroplasty. <i>Knee</i> , 2018, 25, 491-498.	1.6	20
78	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
79	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
80	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
81	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
82	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
83	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
84	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
85	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
86	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
87	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
88	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
89	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
90	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

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91	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
92	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
93	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
94	The Effect of Femoral Cutting Guide Design Improvements for Patient-Specific Instruments. <i>BioMed Research International</i> , 2015, 2015, 1-8.	1.9	12
95	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
96	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
97	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
98	Overexpression of TGF- $\beta$ 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
99	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
100	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
101	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
102	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
103	Infrapatellar fat pad-derived mesenchymal stem cell therapy for knee osteoarthritis. <i>Knee</i> , 2012, 19, 902-907.	1.6	327