Jongeun Choi

List of Publications by Citations

126 papers	1,393 citations	22 h-index	32 g-index
159 ext. papers	1,805 ext. citations	3.5 avg, IF	5 L-index

#	Paper	IF	Citations
126	Distributed learning and cooperative control for multi-agent systems. *Automatica*, **2009**, 45, 2802-2814	5.7	120
125	Solutions to the Inverse LQR Problem with Application to Biological Systems Analysis. *IEEE Transactions on Control Systems Technology*, **2015**, 23, 770-777	4.8	74
124	Mobile Sensor Network Navigation Using Gaussian Processes With Truncated Observations **2011**, 27, 1118-1131		54
123	On parameter estimation for biaxial mechanical behavior of arteries. *Journal of Biomechanics*, **2009**, 42, 524-30	2.9	51
122	Association of Intraluminal Thrombus, Hemodynamic Forces, and Abdominal Aortic Aneurysm Expansion Using Longitudinal CT Images. *Annals of Biomedical Engineering*, **2016**, 44, 1502-14	4.7	50
121	Adaptive sampling for learning gaussian processes using mobile sensor networks. *Sensors*, **2011**, 11, 3051-66	3.86	45
120	Comparison of the Abbott RealTime High-Risk Human Papillomavirus (HPV), Roche Cobas HPV, and Hybrid Capture 2 assays to direct sequencing and genotyping of HPV DNA. *Journal of Clinical Microbiology*, **2012**, 50, 2359-65	9.7	44
119	Automated Skeletal Classification with Lateral Cephalometry Based on Artificial Intelligence. *Journal of Dental Research*, **2020**, 99, 249-256	8.1	40
118	Gaussian Process Regression for Sensor Networks Under Localization Uncertainty. *IEEE Transactions on Signal Processing*, **2013**, 61, 223-237	4.8	37
117	Environmental Monitoring Using Autonomous Aquatic Robots: Sampling Algorithms and Experiments. *IEEE Transactions on Control Systems Technology*, **2013**, 21, 899-905	4.8	36
116	Feedback control of an achiral robotic microswimmer. *Journal of Bionic Engineering*, **2017**, 14, 245-259	2.7	31
115	Efficient Bayesian spatial prediction with mobile sensor networks using Gaussian Markov random fields. *Automatica*, **2013**, 49, 3520-3530	5.7	31
114	*. Journal of Microelectromechanical Systems*, **2005**, 14, 683-690	2.5	30
113	Sequential Bayesian Prediction and Adaptive Sampling Algorithms for Mobile Sensor Networks. *IEEE Transactions on Automatic Control*, **2012**, 57, 2078-2084	5.9	27
112	Prior Distributions of Material Parameters for Bayesian Calibration of Growth and Remodeling Computational Model of Abdominal Aortic Wall. *Journal of Biomechanical Engineering*, **2015**, 137, 101001	2.1	24
111	Sea lamprey orient toward a source of a synthesized pheromone using odor-conditioned rheotaxis. *Behavioral Ecology and Sociobiology*, **2012**, 66, 1557-1567	2.5	24
110	Spatial prediction with mobile sensor networks using Gaussian processes with built-in Gaussian Markov random fields. *Automatica*, **2012**, 48, 1735-1740	5.7	23

109	Design and control of a thermal stabilizing system for a MEMS optomechanical uncooled infrared imaging camera. *Sensors and Actuators A: Physical*, **2003**, 104, 132-142	3.9	23
108	Automated cephalometric landmark detection with confidence regions using Bayesian convolutional neural networks. *BMC Oral Health*, **2020**, 20, 270	3.7	23
107	. *IEEE Transactions on Control Systems Technology*, **2013**, 21, 229-238	4.8	22
106	Computational Growth and Remodeling of Abdominal Aortic Aneurysms Constrained by the Spine. *Journal of Biomechanical Engineering*, **2015**, 137,	2.1	22
105	Linear Parameter-Varying Control for Engineering Applications. *Springer Briefs in Electrical and Computer Engineering*, **2013**,	0.4	22
104	Driving Assistant Companion With Voice Interface Using Long Short-Term Memory Networks. *IEEE Transactions on Industrial Informatics*, **2019**, 15, 582-590	11.9	21
103	A Deep Learning Approach to Predict Abdominal Aortic Aneurysm Expansion Using Longitudinal Data. *Frontiers in Physics*, **2020**, 7,	3.9	18
102	Gain-scheduling control of port-fuel-injection processes. *Control Engineering Practice*, **2011**, 19, 380-394	3.9	18
101	On growth measurements of abdominal aortic aneurysms using maximally inscribed spheres. *Medical Engineering and Physics*, **2015**, 37, 683-91	2.4	17
100	Robust Track-Following Controller Design in Hard Disk Drives Based on Parameter Dependent Lyapunov Functions. *IEEE Transactions on Magnetics*, **2010**, 46, 1060-1068	2	16
99	Guaranteed Performance State-Feedback Gain-Scheduling Control With Uncertain Scheduling Parameters. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2016**, 138,	1.6	14
98	Patient-Specific Prediction of Abdominal Aortic Aneurysm Expansion Using Bayesian Calibration. *IEEE Journal of Biomedical and Health Informatics*, **2019**, 23, 2537-2550	7.2	14
97	Reliability of assessing trunk motor control using position and force tracking and stabilization tasks. *Journal of Biomechanics*, **2014**, 47, 44-9	2.9	14
96	Prediction of Abdominal Aortic Aneurysm Growth Using Dynamical Gaussian Process Implicit Surface. *IEEE Transactions on Biomedical Engineering*, **2019**, 66, 609-622	5	13
95	Feature selection for position estimation using an omnidirectional camera. *Image and Vision Computing*, **2015**, 39, 1-9	3.7	13
94	Adaptive Control of Multiagent Systems for Finding Peaks of Uncertain Static Fields. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2012**, 134,	1.6	13
93	Characterization and performance of optomechanical uncooled infrared imaging system **2003**, 4820, 164		13
92	Significance of mesangial IgA deposition in minimal change nephrotic syndrome: a study of 60 cases. *Yonsei Medical Journal*, **1990**, 31, 258-63	3	13

91	Optimal control of the spine system. *Journal of Biomechanical Engineering*, **2010**, 132, 051004	2.1	12
90	Parameter Reduction in Estimated Model Sets for Robust Control. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2010**, 132,	1.6	11
89	Unexpected Collision Avoidance Driving Strategy Using Deep Reinforcement Learning. *IEEE Access*, **2020**, 8, 17243-17252	3.5	10
88	Analysis of conversion of Alzheimer's disease using a multi-state Markov model. *Statistical Methods in Medical Research*, **2019**, 28, 2801-2819	2.3	10
87	Quantitative measures of sagittal plane head-neck control: a test-retest reliability study. *Journal of Biomechanics*, **2015**, 48, 549-54	2.9	10
86	. *IEEE Transactions on Control Systems Technology*, **2011**, 19, 1433-1443	4.8	10
85	Tips on Stochastic Optimal Feedback Control and Bayesian Spatiotemporal Models: Applications to Robotics. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2015**, 137,	1.6	9
84	Distributed Gaussian Process Regression Under Localization Uncertainty. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2015**, 137,	1.6	9
83	Optimal LPV control with hard constraints. *International Journal of Control, Automation and Systems*, **2016**, 14, 148-162	2.9	8
82	Towards Model-Based Control of Achiral Microswimmers **2014**,		8
81	Characterization of wavelet coefficients for ultrasonic signals. *Journal of Applied Physics*, **2010**, 107, 114909		8
80	Inferring human subject motor control intent using inverse MPC **2016**,		8
79	Prediction of Reward Functions for Deep Reinforcement Learning via Gaussian Process Regression. *IEEE/ASME Transactions on Mechatronics*, **2020**, 25, 1739-1746	5.5	7
78	Time-Domain Optimal Experimental Design in Human Seated Postural Control Testing. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2015**, 137, 0545011-545017	1.6	7
77	Learning Coverage Control of Mobile Sensing Agents in One-Dimensional Stochastic Environments. *IEEE Transactions on Automatic Control*, **2010**, 55, 804-809	5.9	7
76	Large-Area, Crosstalk-Free, Flexible Tactile Sensor Matrix Pixelated by Mesh Layers. *ACS Applied Materials & Interfaces*, **2021**, 13, 12259-12267	9.5	7
75	Reliability of assessing postural control during seated balancing using a physical human-robot interaction. *Journal of Biomechanics*, **2017**, 64, 198-205	2.9	6
74	Anomaly Detection of Electromyographic Signals. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2018**, 26, 770-779	4.8	6

73	Fully Bayesian simultaneous localization and spatial prediction using Gaussian Markov random fields (GMRFs) **2013**,		6
72	Parameter estimation for wavelet transformed ultrasonic signals. *NDT and E International*, **2011**, 44, 32-40	1	6
71	Explorative navigation of mobile sensor networks using sparse Gaussian processes **2010**,		6
70	Posture-Predictive Power Control in Body Sensor Networks Using Linear-Quadratic Gaussian Control **2009**,		6
69	Inferring Control Intent during Seated Balance using Inverse Model Predictive Control. *IEEE Robotics and Automation Letters*, **2019**, 4, 224-230	4.2	6
68	Feedback control of three-bead achiral robotic microswimmers **2015**,		5
67	Stochastic adaptive sampling for mobile sensor networks using kernel regression. *International Journal of Control, Automation and Systems*, **2012**, 10, 778-786	2.9	5
66	Carbon nanotubes-integrated inertial switch for reliable detection of threshold acceleration **2011**,		5
65	Efficient Spatial Prediction Using Gaussian Markov Random Fields Under Uncertain Localization **2012**,		5
64	Robust optimal design of diffusion-weighted magnetic resonance experiments for skin microcirculation. *Journal of Magnetic Resonance*, **2010**, 206, 246-54	3	5
63	Biologically-inspired Navigation Strategies for Swarm Intelligence using Spatial Gaussian Processes. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2008**, 41, 593-598		5
62	Development of a SLAM System for Small UAVs in Indoor Environments using Gaussian Processes. *Journal of Institute of Control, Robotics and Systems*, **2014**, 20, 1098-1102	1	5
61	Fully Bayesian Field Slam Using Gaussian Markov Random Fields. *Asian Journal of Control*, **2016**, 18, 1175-1188	1.7	5
60	The Inverse Problem of Continuous-Time Linear Quadratic Gaussian Control With Application to Biological Systems Analysis **2014**,		4
59	Swarm intelligence for achieving the global maximum using spatio-temporal Gaussian processes **2008**,		4
58	Nonaffine Helicopter Control Design and Implementation Based on a Robust Explicit Nonlinear Model Predictive Control. *IEEE Transactions on Control Systems Technology*, **2021**, 1-8	4.8	4
57	Multifidelity Sampling for Fast Bayesian Shape Estimation With Tactile Exploration. *IEEE Transactions on Industrial Informatics*, **2020**, 16, 4478-4488	11.9	3
56	Selecting Sensitive Parameter Subsets in Dynamical Models With Application to Biomechanical System Identification. *Journal of Biomechanical Engineering*, **2018**, 140,	2.1	3

55	Appearance-Based Localization of Mobile Robots Using Group LASSO Regression. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2018**, 140,	1.6	3
54	Bayesian Prediction and Adaptive Sampling Algorithms for Mobile Sensor Networks. *Springer Briefs in Electrical and Computer Engineering*, **2016**,	0.4	3
53	Uncertainty and Disturbance Estimation for Quadrotor Control Using Extended High-Gain Observers: Experimental Implementation **2017**,		3
52	Appearance-based localization using Group LASSO regression with an indoor experiment **2015**,		3
51	Linear Matrix Inequalities Approach to Input Covariance Constraint Control With Application to Electronic Throttle. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2015**, 137,	1.6	3
50	Gaussian process regression using Laplace approximations under localization uncertainty **2012**,		3
49	A Linear Matrix Inequality Solution to the Output Covariance Constraint Control Problem **2012**,		3
48	Determining Human Control Intent Using Inverse LQR Solutions **2013**,		3
47	Odor-conditioned rheotaxis of the sea lamprey: modeling, analysis and validation. *Bioinspiration and Biomimetics*, **2013**, 8, 046011	2.6	3
46	Robust Optimal Experimental Design for Study of the Human Head-Neck Tracking Response **2012**,		3
45	Parameter reduction of nonlinear least-squares estimates via nonconvex optimization **2008**,		3
44	Multiple robust track-following controller design in hard disk drives. *International Journal of Adaptive Control and Signal Processing*, **2008**, 22, 359-373	2.8	3
43	Effects of an air spoiler on the wake of a road vehicle by PIV measurements. *Journal of Visualization*, **2006**, 9, 411-418	1.6	3
42	Vision-Based Uncertainty-Aware Lane Keeping Strategy Using Deep Reinforcement Learning. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2021**, 143,	1.6	3
41	Model Predictive Tracking Control for Invariant Systems on Matrix Lie Groups via Stable Embedding Into Euclidean Spaces. *IEEE Transactions on Automatic Control*, **2020**, 65, 3191-3198	5.9	3
40	Feasibility of Incorporating Test-Retest Reliability and Model Diversity in Identification of Key Neuromuscular Pathways During Head Position Tracking. *IEEE Transactions on Neural Systems and Rehabilitation Engineering*, **2019**, 27, 275-282	4.8	2
39	Coronary artery decision algorithm trained by two-step machine learning algorithm.. *RSC Advances*, **2020**, 10, 4014-4022	3.7	2
38	Data-driven system identification of the social network dynamics in online postings of an extremist group **2016**,		2

37	Dynamic, output-feedback, gain-scheduling control of an electric variable valve timing system **2013**,		2
36	Robotic solutions to facilitate studying human motor control **2017**,		2
35	Determination of body segment masses and centers of mass using a force plate method. *Medical Engineering and Physics*, **2014**, 36, 805-6	2.4	2
34	Distributed learning in mobile sensor networks using cross validation **2010**,		2
33	Cooperatively learning mobile agents for gradient climbing **2007**,		2
32	Early prediction of Alzheimer□ disease using longitudinal volumetric MRI data from ADNI. *Health Services and Outcomes Research Methodology*, **2020**, 20, 13-39	1.6	2
31	Quantifying trunk neuromuscular control using seated balancing and stability threshold. *Journal of Biomechanics*, **2020**, 112, 110038	2.9	2
30	Gaussian Process Online Learning With a Sparse Data Stream. *IEEE Robotics and Automation Letters*, **2020**, 5, 5977-5984	4.2	2
29	Intraluminal thrombus effect on the progression of abdominal aortic aneurysms by using a multistate continuous-time Markov chain model. *Journal of International Medical Research*, **2020**, 48, 300060520968449	1.4	2
28	Machine learning approaches to surrogate multifidelity Growth and Remodeling models for efficient abdominal aortic aneurysmal applications. *Computers in Biology and Medicine*, **2021**, 133, 104394	7	2
27	Level-Set Based Greedy Algorithm With Sequential Gaussian Process Regression for Implicit Surface Estimation **2016**,		2
26	Training an artificial neural network for recognizing electron collision patterns. *Physics Letters, Section A: General, Atomic and Solid State Physics*, **2021**, 387, 127005	2.3	2
25	Fully Bayesian Prediction Algorithms for Mobile Robotic Sensors under Uncertain Localization Using Gaussian Markov Random Fields. *Sensors*, **2018**, 18,	3.8	2
24	Deep Learning-Based Software Improves Clinicians' Detection Sensitivity of Aneurysms on Brain TOF-MRA. *American Journal of Neuroradiology*, **2021**, 42, 1769-1775	4.4	2
23	Output feedback control design using Extended High-Gain Observers and dynamic inversion with projection for a small scaled helicopter. *Automatica*, **2021**, 133, 109883	5.7	2
22	Customer-Specific Robotic Attendant for VR Simulators. *IEEE Transactions on Automation Science and Engineering*, **2020**, 17, 1901-1910	4.9	1
21	Scalar sensor-based adaptive manipulation for source seeking. *International Journal of Control, Automation and Systems*, **2014**, 12, 126-136	2.9	1
20	A Distributed Navigation Strategy for Mobile Sensor Networks With the Probabilistic Wireless Links. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2017**, 139,	1.6	1

19	Flexible and transparent benzene sensor using functionalized few-layer MoS2 **2015**,	1
18	Plastic deformation of microstructures using carbon nanotubes film as latching surface **2011**,	1
17	A unified Bayesian approach for prediction and detection using mobile sensor networks **2012**,	1
16	Parameter Reduction of Nonlinear Least-Squares Estimates via the Singular Value Decomposition. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2008**, 41, 12383-12388	1
15	Topological flow characteristics in a butterfly valve used for a spark ignition engine. *Journal of Visualization*, **2006**, 9, 291-299	1.6	1
14	Synthesis of multiple robust controllers for parametric uncertain LTI systems **2006**,	1
13	DESIGN AND CONTROL OF A THERMAL STABILIZING SYSTEM FOR AN OPTOMECHANICAL UNCOOLED INFRARED IMAGING CAMERA. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2002**, 35, 367-372	1
12	The Effects of Osteopathic Manipulative Treatment on Pain and Disability in Patients with Chronic Neck Pain: A Single-Blinded Randomized Controlled Trial. *PM and R*, **2021**,	2.2	1
11	Efficient Sampling for Rapid Estimation of 3-D Stiffness Distribution via Active Tactile Exploration. *IEEE/ASME Transactions on Mechatronics*, **2020**, 25, 1729-1738	5.5	1
10	State reconstruction in a nonlinear vehicle suspension system using deep neural networks. *Nonlinear Dynamics*, **2021**, 105, 439-455	5	1
9	Implementation of State and Disturbance Estimation for Quadrotor Control Using Extended High-Gain Observers **2016**,	1
8	Diagnosis of obstructive sleep apnea with prediction of flow characteristics according to airway morphology automatically extracted from medical images: Computational fluid dynamics and artificial intelligence approach. *Computer Methods and Programs in Biomedicine*, **2021**, 208, 106243	6.9	1
7	Safety-Critical Control With Nonaffine Control Inputs Via a Relaxed Control Barrier Function for an Autonomous Vehicle. *IEEE Robotics and Automation Letters*, **2022**, 7, 1944-1951	4.2	0
6	Correction to "Gaussian Process Online Learning With a Sparse Data Stream"[Oct 20 5977-5984]. *IEEE Robotics and Automation Letters*, **2021**, 6, 429-430	4.2	0
5	Stability threshold during seated balancing is sensitive to low back pain and safe to assess. *Journal of Biomechanics*, **2021**, 125, 110541	2.9	0
4	Suspension Control Strategies Using Switched Soft Actor-Critic Models for Real Roads. *IEEE Transactions on Industrial Electronics*, **2022**, 1-1	8.9	0
3	Regularized nonlinear regression for simultaneously selecting and estimating key model parameters: Application to head-neck position tracking. *Engineering Applications of Artificial Intelligence*, **2022**, 113, 104974	7.2	0
2	Measurements in the wake of an airfoil with regular roughness on the upper surface near the leading edge. *Proceedings of the Institution of Mechanical Engineers, Part G: Journal of Aerospace Engineering*, **2006**, 220, 203-208	0.9	

LIST OF PUBLICATIONS

1   PII-23. *Clinical Pharmacology and Therapeutics*, **2006**, 79, P42-P42   6.1

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