Lydia E Kavraki

List of Publications by Year
in descending order

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236	14,183	57758 44	30087 103
papers	citations	h-index	g-index

250	250	250	7910
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	MotionBenchMaker: A Tool to Generate and Benchmark Motion Planning Datasets. IEEE Robotics and Automation Letters, 2022, 7, 882-889.	5.1	17
2	3pHLA-score improves structure-based peptide-HLA binding affinity prediction. Scientific Reports, 2022, 12, .	3.3	6
3	Adaptive Experience Sampling for Motion Planning Using the Generator-Critic Framework. IEEE Robotics and Automation Letters, 2022, 7, 9437-9444.	5.1	3
4	Learning to Retrieve Relevant Experiences for Motion Planning. , 2022, , .		1
5	Failure is an option: Task and Motion Planning with Failing Executions. , 2022, , .		1
6	Human-Guided Motion Planning in Partially Observable Environments. , 2022, , .		1
7	Sampling-Based Motion Planning for Uncertain High-Dimensional Systems via Adaptive Control. Springer Proceedings in Advanced Robotics, 2021, , 159-175.	1.3	6
8	Path Planning for Manipulation Using Experience-Driven Random Trees. IEEE Robotics and Automation Letters, 2021, 6, 3295-3302.	5.1	17
9	Online Partial Conditional Plan Synthesis for POMDPs With Safe-Reachability Objectives: Methods and Experiments. IEEE Transactions on Automation Science and Engineering, 2021, 18, 932-945.	5.2	5
10	Robust Optimization-based Motion Planning for high-DOF Robots under Sensing Uncertainty. , 2021, , .		3
11	Finite-Horizon Synthesis for Probabilistic Manipulation Domains. , 2021, , .		4
12	Learning Sampling Distributions Using Local 3D Workspace Decompositions for Motion Planning in High Dimensions. , 2021, , .		10
13	DINC-COVID: A webserver for ensemble docking with flexible SARS-CoV-2 proteins. Computers in Biology and Medicine, 2021, 139, 104943.	7.0	8
14	Machine learning models in the prediction of drug metabolism: challenges and future perspectives. Expert Opinion on Drug Metabolism and Toxicology, 2021, 17, 1245-1247.	3.3	14
15	Graph representation learning for structural proteomics. Emerging Topics in Life Sciences, 2021, 5, 789-802.	2.6	6
16	A Sampling-based Motion Planning Framework for Complex Motor Actions. , 2021, , .		3
17	Using Experience to Improve Constrained Planning on Foliations for Multi-Modal Problems. , 2021, , .		4
18	A General Task and Motion Planning Framework For Multiple Manipulators. , 2021, , .		10

#	Article	IF	Citations
19	HyperPlan: A Framework for Motion Planning Algorithm Selection and Parameter Optimization. , 2021, , .		3
20	Large-Scale Structure-Based Screening of Potential T Cell Cross-Reactivities Involving Peptide-Targets From BCG Vaccine and SARS-CoV-2. Frontiers in Immunology, 2021, 12, 812176.	4.8	10
21	A scalable motion planner for high-dimensional kinematic systems. International Journal of Robotics Research, 2020, 39, 361-388.	8.5	10
22	Informing Multi-Modal Planning with Synergistic Discrete Leads. , 2020, , .		14
23	Prediction of drug metabolites using neural machine translation. Chemical Science, 2020, 11, 12777-12788.	7.4	21
24	Structural Modeling and Molecular Dynamics of the Immune Checkpoint Molecule HLA-G. Frontiers in Immunology, 2020, 11, 575076.	4.8	9
25	HLA-Arena: A Customizable Environment for the Structural Modeling and Analysis of Peptide-HLA Complexes for Cancer Immunotherapy. JCO Clinical Cancer Informatics, 2020, 4, 623-636.	2.1	23
26	Large-Scale Structure-Based Prediction of Stable Peptide Binding to Class I HLAs Using Random Forests. Frontiers in Immunology, 2020, 11, 1583.	4.8	19
27	Computational analysis of complement inhibitor compstatin using molecular dynamics. Journal of Molecular Modeling, 2020, 26, 231.	1.8	6
28	Machine Learning-Guided Three-Dimensional Printing of Tissue Engineering Scaffolds. Tissue Engineering - Part A, 2020, 26, 1359-1368.	3.1	52
29	A Robotics-Inspired Screening Algorithm for Molecular Caging Prediction. Journal of Chemical Information and Modeling, 2020, 60, 1302-1316.	5.4	6
30	Improving the organization and interactivity of metabolic pathfinding with precomputed pathways. BMC Bioinformatics, 2020, 21, 13.	2.6	17
31	Increasing Robot Autonomy via Motion Planning and an Augmented Reality Interface. IEEE Robotics and Automation Letters, 2020, 5, 1017-1023.	5.1	18
32	Markov state modeling reveals alternative unbinding pathways for peptideâ€“MHC complexes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 30610-30618.	7.1	22
33	Online Partial Conditional Plan Synthesis for POMDPs with Safe-Reachability Objectives. Springer Proceedings in Advanced Robotics, 2020, , 127-143.	1.3	0
34	A General Algorithm for Time-Optimal Trajectory Generation Subject to Minimum and Maximum Constraints. Springer Proceedings in Advanced Robotics, 2020, , 368-383.	1.3	1
35	Augmenting Control Policies with Motion Planning for Robust and Safe Multi-robot Navigation. , 2020, , .		1
36	Point-Based Policy Synthesis for POMDPs With Boolean and Quantitative Objectives. IEEE Robotics and Automation Letters, 2019, 4, 1860-1867.	5.1	1

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37	Using Local Experiences for Global Motion Planning. , 2019, , .		22
38	Exploring implicit spaces for constrained sampling-based planning. International Journal of Robotics Research, 2019, 38, 1151-1178.	8.5	52
39	Efficient Symbolic Reactive Synthesis for Finite-Horizon Tasks. , 2019, , .		18
40	Online Multilayered Motion Planning with Dynamic Constraints for Autonomous Underwater Vehicles. , 2019, , .		17
41	Lazy Evaluation of Goal Specifications Guided by Motion Planning. , 2019, , .		5
42	Using parallelized incremental meta-docking can solve the conformational sampling issue when docking large ligands to proteins. BMC Molecular and Cell Biology, 2019, 20, 42.	2.0	22
43	APE-Gen: A Fast Method for Generating Ensembles of Bound Peptide-MHC Conformations. Molecules, 2019, 24, 881.	3.8	40
44	Guest Editorial: Special Issue on the 2016 Workshop on the Algorithmic Foundations of Robotics (WAFR). International Journal of Robotics Research, 2019, 38, 93-94.	8.5	0
45	Learning Feasibility for Task and Motion Planning in Tabletop Environments. IEEE Robotics and Automation Letters, 2019, 4, 1255-1262.	5.1	45
46	Online motion planning for unexplored underwater environments using autonomous underwater vehicles. Journal of Field Robotics, 2019, 36, 370-396.	6.0	42
47	Automated Abstraction of Manipulation Domains for Cost-Based Reactive Synthesis. IEEE Robotics and Automation Letters, 2019, 4, 285-292.	5.1	13
48	Machine Learning Guided Atom Mapping of Metabolic Reactions. Journal of Chemical Information and Modeling, 2019, 59, 1121-1135.	5.4	9
49	Structure-based Methods for Binding Mode and Binding Affinity Prediction for Peptide-MHC Complexes. Current Topics in Medicinal Chemistry, 2019, 18, 2239-2255.	2.1	59
50	Randomized Physics-Based Motion Planning for Grasping in Cluttered and Uncertain Environments. IEEE Robotics and Automation Letters, 2018, 3, 712-719.	5.1	39
51	An incremental constraint-based framework for task and motion planning. International Journal of Robotics Research, 2018, 37, 1134-1151.	8.5	79
52	Sampling-Based Methods for Motion Planning with Constraints. Annual Review of Control, Robotics, and Autonomous Systems, 2018, 1, 159-185.	11.8	106
53	General Prediction of Peptide-MHC Binding Modes Using Incremental Docking: A Proof of Concept. Scientific Reports, 2018, 8, 4327.	3.3	41
54	Maintaining and Enhancing Diversity of Sampled Protein Conformations in Robotics-Inspired Methods. Journal of Computational Biology, 2018, 25, 3-20.	1.6	4

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55	Revealing Unknown Protein Structures Using Computational Conformational Sampling Guided by Experimental Hydrogen-Exchange Data. International Journal of Molecular Sciences, 2018, 19, 3406.	4.1	2
56	Native state of complement protein C3d analysed via hydrogen exchange and conformational sampling. International Journal of Computational Biology and Drug Design, 2018, 11, 90.	0.3	6
57	Quantitative comparison of adaptive sampling methods for protein dynamics. Journal of Chemical Physics, 2018, 149, 244119.	3.0	49
58	The Task-Motion Kit: An Open Source, General-Purpose Task and Motion-Planning Framework. IEEE Robotics and Automation Magazine, 2018, 25, 61-70.	2.0	29
59	Platform-Independent Benchmarks for Task and Motion Planning. IEEE Robotics and Automation Letters, 2018, 3, 3765-3772.	5.1	39
60	Native state of complement protein C3d analysed via hydrogen exchange and conformational sampling. International Journal of Computational Biology and Drug Design, 2018, 11, 90.	0.3	0
61	General Prediction of Peptide-MHC Binding Modes Using Incremental Docking. , 2018, , .		4
62	Defining Low-Dimensional Projections to Guide Protein Conformational Sampling. Journal of Computational Biology, 2017, 24, 79-89.	1.6	3
63	DINC 2.0: A New Proteinâ€“Peptide Docking Webserver Using an Incremental Approach. Cancer Research, 2017, 77, e55-e57.	0.9	100
64	Robonaut 2 and you: Specifying and executing complex operations. , 2017, , .		11
65	Reactive synthesis for finite tasks under resource constraints. , 2017, , .		21
66	Interpreting T-Cell Cross-reactivity through Structure: Implications for TCR-Based Cancer Immunotherapy. Frontiers in Immunology, 2017, 8, 1210.	4.8	50
67	Coarse-Grained Conformational Sampling of Protein Structure Improves the Fit to Experimental Hydrogen-Exchange Data. Frontiers in Molecular Biosciences, 2017, 4, 13.	3.5	28
68	A review of parameters and heuristics for guiding metabolic pathfinding. Journal of Cheminformatics, 2017, 9, 51.	6.1	20
69	Call for Papers: Special Issue on Big Data in Robotics. Big Data, 2016, 4, 69-70.	3.4	0
70	Unix Philosophy and the Real World: Control Software for Humanoid Robots. Frontiers in Robotics and AI, 2016, 3, .	3.2	2
71	High-dimensional Winding-Augmented Motion Planning with 2D topological task projections and persistent homology. , 2016, , .		10
72	Big Data on Robotics. Big Data, 2016, 4, 195-196.	3.4	2

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73	Planning feasible and safe paths online for autonomous underwater vehicles in unknown environments. , 2016, , .		14
74	Special Issue on the 2014 Robotics Science & Systems Conference. International Journal of Robotics Research, 2016, 35, 3-4.	8.5	1
75	Call for Papers: Special Issue on Big Data in Robotics. Big Data, 2016, 4, 1-2.	3.4	1
76	Iterative Temporal Planning in Uncertain Environments With Partial Satisfaction Guarantees. IEEE Transactions on Robotics, 2016, 32, 583-599.	10.3	59
77	Motion Planning. Springer Handbooks, 2016, , 139-162.	0.6	19
78	Structure-guided selection of specificity determining positions in the human Kinome. BMC Genomics, 2016, 17, 431.	2.8	4
79	Structure-guided selection of Specificity Determining Positions in the human kinome. , 2015, , .		0
80	Editorial: special issue on the 2014 â€œRobotics: Science & Systemsâ€•conference. Autonomous Robots, 2015, 39, 219-220.	4.8	0
81	Improving protein conformational sampling by using guiding projections. , 2015, , .		6
82	Kinematically constrained workspace control via linear optimization. , 2015, , .		5
83	Towards manipulation planning with temporal logic specifications. , 2015, , .		57
84	A heuristic approach to finding diverse short paths. , 2015, , .		19
85	Asymptotically Optimal Stochastic Motion Planning with Temporal Goals. Springer Tracts in Advanced Robotics, 2015, , 335-352.	0.4	11
86	Understanding the challenges of protein flexibility in drug design. Expert Opinion on Drug Discovery, 2015, 10, 1301-1313.	5.0	94
87	Benchmarking Motion Planning Algorithms: An Extensible Infrastructure for Analysis and Visualization. IEEE Robotics and Automation Magazine, 2015, 22, 96-102.	2.0	77
88	Targeting the Src Homology 2 (SH2) Domain of Signal Transducer and Activator of Transcription 6 (STAT6) with Cell-Permeable, Phosphatase-Stable Phosphopeptide Mimics Potently Inhibits Tyr641 Phosphorylation and Transcriptional Activity. Journal of Medicinal Chemistry, 2015, 58, 8970-8984.	6.4	32
89	Extending the Applicability of POMDP Solutions to Robotic Tasks. IEEE Transactions on Robotics, 2015, 31, 948-961.	10.3	25
90	A sampling-based strategy planner for nondeterministic hybrid systems. , 2014, , .		8

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91	Active Planning, Sensing, and Recognition Using a Resource-Constrained Discriminant POMDP. , 2014, , .		1
92	SMT-based synthesis of integrated task and motion plans from plan outlines. , 2014, , .		43
93	Fast stochastic motion planning with optimality guarantees using local policy reconfiguration. , 2014, , .		5
94	Falsification of LTL safety properties in hybrid systems. International Journal on Software Tools for Technology Transfer, 2013, 15, 305-320.	1.9	31
95	Software for project-based learning of robot motion planning. Computer Science Education, 2013, 23, 332-348.	3.7	1
96	Resolution Independent Density Estimation for motion planning in high-dimensional spaces. , 2013, , .		19
97	Automated model approximation for robotic navigation with POMDPs. , 2013, , .		10
98	DINC: A new AutoDock-based protocol for docking large ligands. BMC Structural Biology, 2013, 13, S11.	2.3	43
99	Iterative temporal motion planning for hybrid systems in partially unknown environments. , 2013, , .		46
100	Improving the Prediction of Kinase Binding Affinity Using Homology Models. , 2013, , .		2
101	Combinatorial Clustering of Residue Position Subsets Predicts Inhibitor Affinity across the Human Kinome. PLoS Computational Biology, 2013, 9, e1003087.	3.2	14
102	Anytime solution optimization for sampling-based motion planning. , 2013, , .		48
103	SIMS: A Hybrid Method for Rapid Conformational Analysis. PLoS ONE, 2013, 8, e68826.	2.5	12
104	Modeling Structures and Motions of Loops in Protein Molecules. Entropy, 2012, 14, 252-290.	2.2	41
105	Safe distributed motion coordination for second-order systems with different planning cycles. International Journal of Robotics Research, 2012, 31, 129-150.	8.5	40
106	Accounting for uncertainty in simultaneous task and motion planning using task motion multigraphs. , 2012, , .		6
107	Low-dimensional projections for SyCLoP. , 2012, , .		3
108	Multi-robot target verification with reachability constraints. , 2012, , .		0

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109	A Sampling-Based Tree Planner for Systems With Complex Dynamics. IEEE Transactions on Robotics, 2012, 28, 116-131.	10.3	118
110	On the conformational flexibility of C3b: A molecular insight into activation and transformation of a major complement effector. Immunobiology, 2012, 217, 1192.	1.9	0
111	Multi-objective sensor-based replanning for a car-like robot. , 2012, , .		4
112	Computational Models of Protein Kinematics and Dynamics: Beyond Simulation. Annual Review of Analytical Chemistry, 2012, 5, 273-291.	5.4	42
113	The Open Motion Planning Library. IEEE Robotics and Automation Magazine, 2012, 19, 72-82.	2.0	1,018
114	Auto dock-based incremental docking protocol to improve docking of large ligands. , 2012, , .		1
115	Binding Modes of Peptidomimetics Designed to Inhibit STAT3. PLoS ONE, 2012, 7, e51603.	2.5	25
116	Teaching motion planning concepts to undergraduate students. , 2011, , .		0
117	Message from the Conference Co-chairs. , 2011, , .		0
118	Motion Planning with Complex Goals. IEEE Robotics and Automation Magazine, 2011, 18, 55-64.	2.0	92
119	On the advantages of task motion multigraphs for efficient mobile manipulation. , 2011, , .		6
120	Mobile manipulation: Encoding motion planning options using task motion multigraphs. , 2011, , .		17
121	The LabelHash Server and Tools for substructure-based functional annotation. Bioinformatics, 2011, 27, 2161-2162.	4.1	5
122	On modeling peptidomimetics in complex with the SH2 domain of Stat3. , 2011, 2011, 3229-32.		3
123	An Algorithm for Efficient Identification of Branched Metabolic Pathways. Journal of Computational Biology, 2011, 18, 1575-1597.	1.6	13
124	On the advantages of task motion multigraphs for efficient mobile manipulation. , 2011, , .		0
125	Analysis of substructural variation in families of enzymatic proteins with applications to protein function prediction. BMC Bioinformatics, 2010, 11, 242.	2.6	15
126	Tracing conformational changes in proteins. BMC Structural Biology, 2010, 10, S1.	2.3	61

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127	Application of nonlinear dimensionality reduction to characterize the conformational landscape of small peptides. Proteins: Structure, Function and Bioinformatics, 2010, 78, 223-235.	2.6	55
128	Multiâ€scale characterization of the energy landscape of proteins with application to the C3D/Efbâ€€ complex. Proteins: Structure, Function and Bioinformatics, 2010, 78, 1004-1014.	2.6	5
129	Finding metabolic pathways using atom tracking. Bioinformatics, 2010, 26, 1548-1555.	4.1	52
130	Motion planning with hybrid dynamics and temporal goals. , 2010, , .		38
131	On the implementation of single-query sampling-based motion planners. , 2010, , .		17
132	Sampling-based motion planning with temporal goals. , 2010, , .		172
133	The LabelHash algorithm for substructure matching. BMC Bioinformatics, 2010, 11, 555.	2.6	33
134	Motion Planning With Dynamics by a Synergistic Combination of Layers of Planning. IEEE Transactions on Robotics, 2010, 26, 469-482.	10.3	125
135	On the performance of random linear projections for sampling-based motion planning. , 2009, , .		16
136	Computational challenges in systems biology. Computer Science Review, 2009, 3, 1-17.	15.3	38
137	Safe and Distributed Kinodynamic Replanning for Vehicular Networks. Mobile Networks and Applications, 2009, 14, 292-308.	3.3	22
138	Hybrid systems: from verification to falsification byÂcombining motion planning and discrete search. Formal Methods in System Design, 2009, 34, 157-182.	0.8	45
139	Multiscale characterization of protein conformational ensembles. Proteins: Structure, Function and Bioinformatics, 2009, 76, 837-851.	2.6	63
140	Real-time perception-guided motion planning for a personal robot. , 2009, , .		63
141	Tracing conformational changes in proteins. , 2009, , .		1
142	Kinodynamic Motion Planning by Interior-Exterior Cell Exploration. Springer Tracts in Advanced Robotics, 2009, , 449-464.	0.4	80
143	Falsification of LTL Safety Properties in Hybrid Systems. Lecture Notes in Computer Science, 2009, , 368-382.	1.3	34
144	Roadmap Methods for Protein Folding. , 2008, 413, 219-239.		13

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145	Unfolding the fold of cyclic cysteineâ€rich peptides. Protein Science, 2008, 17, 482-493.	7.6	22
146	Prediction of enzyme function based on 3D templates of evolutionarily important amino acids. BMC Bioinformatics, 2008, 9, 17.	2.6	70
147	Electrostatic contributions drive the interaction between Staphylococcus aureus protein Efbâ€C and its complement target C3d. Protein Science, 2008, 17, 1894-1906.	7.6	34
148	Novel insights into target specificities and molecular mechanisms for two potent complement evasion proteins from Staphylococcus aureus. Molecular Immunology, 2008, 45, 4114-4115.	2.2	0
149	Bipolarity of the Saccharomyces Cerevisiae Genome. , 2008, , .		0
150	A statistical model to correct systematic bias introduced by algorithmic thresholds in protein structural comparison algorithms. , 2008, , .		9
151	Replanning: A powerful planning strategy for hard kinodynamic problems. , 2008, , .		8
152	Impact of workspace decompositions on discrete search leading continuous exploration (DSLX) motion planning. , 2008, , .		9
153	Kinodynamic motion planning with hardware demonstrations. , 2008, , .		10
154	Reconfiguration for Modular Robots Using Kinodynamic Motion Planning. , 2008, , .		9
155	Motion Planning. , 2008, , 109-131.		36
156	MATCHING OF STRUCTURAL MOTIFS USING HASHING ON RESIDUE LABELS AND GEOMETRIC FILTERING FOR PROTEIN FUNCTION PREDICTION. , 2008, , .		11
157	Quantitative Analysis of Nearest-Neighbors Search in High-Dimensional Sampling-Based Motion Planning. Springer Tracts in Advanced Robotics, 2008, , 3-18.	0.4	19
158	Matching of structural motifs using hashing on residue labels and geometric filtering for protein function prediction. Computational Systems Bioinformatics / Life Sciences Society Computational Systems Bioinformatics Conference, 2008, 7, 157-68.	0.4	1
159	CAVITY SCALING: AUTOMATED REFINEMENT OF CAVITY-AWARE MOTIFS IN PROTEIN FUNCTION PREDICTION. Journal of Bioinformatics and Computational Biology, 2007, 05, 353-382.	0.8	14
160	A decentralized planner that guarantees the safety of communicating vehicles with complex dynamics that replan online. , 2007, , .		21
161	Greedy but Safe Replanning under Kinodynamic Constraints. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .	0.0	67
162	The MASH Pipeline for Protein Function Prediction and an Algorithm for the Geometric Refinement of 3D Motifs. Journal of Computational Biology, 2007, 14, 791-816.	1.6	42

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163	A Motion Planner for a Hybrid Robotic System with Kinodynamic Constraints. , 2007, , .		5
164	On the Characterization of Protein Native State Ensembles. Biophysical Journal, 2007, 92, 1503-1511.	0.5	36
165	OOPS for Motion Planning: An Online, Open-source, Programming System. , 2007, , .		33
166	Nonlinear Dimensionality Reduction using Approximate Nearest Neighbors. , 2007, , .		0
167	Sampling-based robot motion planning: Towards realistic applications. Computer Science Review, 2007, 1, 2-11.	15.3	63
168	Distributed computation of the knn graph for large high-dimensional point sets. Journal of Parallel and Distributed Computing, 2007, 67, 346-359.	4.1	27
169	Fast and reliable analysis of molecular motion using proximity relations and dimensionality reduction. Proteins: Structure, Function and Bioinformatics, 2007, 67, 897-907.	2.6	41
170	From coarse-grain to all-atom: Toward multiscale analysis of protein landscapes. Proteins: Structure, Function and Bioinformatics, 2007, 68, 646-661.	2.6	111
171	Sampling Conformation Space to Model Equilibrium Fluctuations in Proteins. Algorithmica, 2007, 48, 303-327.	1.3	17
172	Hybrid Systems: From Verification to Falsification. , 2007, , 463-476.		28
173	A Distributed Protocol for Safe Real-Time Planning of Communicating Vehicles with Second-Order Dynamics. , 2007, , .		3
174	Composite motifs integrating multiple protein structures increase sensitivity for function prediction. Computational Systems Bioinformatics / Life Sciences Society Computational Systems Bioinformatics Conference, 2007, 6, 343-55.	0.4	2
175	Path planning for deformable linear objects. IEEE Transactions on Robotics, 2006, 22, 625-636.	10.3	161
176	Modeling protein conformational ensembles: From missing loops to equilibrium fluctuations. Proteins: Structure, Function and Bioinformatics, 2006, 65, 164-179.	2.6	71
177	Recurrent use of evolutionary importance for functional annotation of proteins based on local structural similarity. Protein Science, 2006, 15, 1530-1536.	7.6	30
178	Evaluation of algorithms for bearing-only SLAM. , 2006, , .		40
179	Low-dimensional, free-energy landscapes of protein-folding reactions by nonlinear dimensionality reduction. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 9885-9890.	7.1	293
180	Exploiting Panoramic Vision for Bearing-Only Robot Homing. , 2006, , 229-251.		8

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181	CAVITY-AWARE MOTIFS REDUCE FALSE POSITIVES IN PROTEIN FUNCTION PREDICTION. , 2006, , .		12
182	Geometric Sieving: Automated Distributed Optimization of 3D Motifs for Protein Function Prediction. Lecture Notes in Computer Science, 2006, , 500-515.	1.3	10
183	Probabilistic Roadmaps of Trees for Parallel Computation of Multiple Query Roadmaps. Springer Tracts in Advanced Robotics, 2005, , 80-89.	0.4	22
184	Fast Tree-Based Exploration of State Space for Robots with Dynamics. Springer Tracts in Advanced Robotics, 2005, , 297-312.	0.4	31
185	Fast intersection checking for parametric deformable models. , 2005, , .		4
186	Robot Homing by Exploiting Panoramic Vision. Autonomous Robots, 2005, 19, 7-25.	4.8	89
187	Robotics-Based Location Sensing Using Wireless Ethernet. Wireless Networks, 2005, 11, 189-204.	3.0	141
188	Distributed Sampling-Based Roadmap of Trees for Large-Scale Motion Planning. , 2005, , .		29
189	Path Planning for Variable Resolution Minimal-Energy Curves of Constant Length. , 2005, , .		18
190	Improving conformational searches by geometric screening. Bioinformatics, 2005, 21, 624-630.	4.1	20
191	Sampling-based roadmap of trees for parallel motion planning. IEEE Transactions on Robotics, 2005, 21, 597-608.	10.3	124
192	Algorithms for structural comparison and statistical analysis of 3D protein motifs. Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing, 2005, , 334-45.	0.7	12
193	Practical robust localization over large-scale 802.11 wireless networks. , 2004, , .		430
194	Measure theoretic analysis of probabilistic path planning. IEEE Transactions on Automation Science and Engineering, 2004, 20, 229-242.	2.3	85
195	On the feasibility of using wireless ethernet for indoor localization. IEEE Transactions on Automation Science and Engineering, 2004, 20, 555-559.	2.3	186
196	Motion Planning for Knot Untangling. Springer Tracts in Advanced Robotics, 2004, , 7-23.	0.4	10
197	ALGORITHMS FOR STRUCTURAL COMPARISON AND STATISTICAL ANALYSIS OF 3D PROTEIN MOTIFS. , 2004, , .		17
198	An Accurate, Sensitive, and Scalable Method to Identify Functional Sites in Protein Structures. Journal of Molecular Biology, 2003, 326, 255-261.	4.2	174

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199	Spacecraft Rendezvous and Docking with Real-Time, Randomized Optimization. , 2003, , .		16
200	Understanding Protein Flexibility through Dimensionality Reduction. Journal of Computational Biology, 2003, 10, 617-634.	1.6	91
201	Conformational Flexibility Models for the Receptor in Structure Based Drug Design. Current Pharmaceutical Design, 2003, 9, 1635-1648.	1.9	125
202	A dimensionality reduction approach to modeling protein flexibility. , 2002, , .		21
203	Algorithmic issues in modeling motion. ACM Computing Surveys, 2002, 34, 550-572.	23.0	51
204	A New Method for Fast and Accurate Derivation of Molecular Conformations. Journal of Chemical Information and Computer Sciences, 2002, 42, 64-70.	2.8	59
205	Randomized path planning for linkages with closed kinematic chains. IEEE Transactions on Automation Science and Engineering, 2001, 17, 951-958.	2.3	135
206	A Randomized Approach to Robot Path Planning Based on Lazy Evaluation. Combinatorial Optimization, 2001, , 221-253.	0.7	12
207	A randomized kinematics-based approach to pharmacophore-constrained conformational search and database screening. Journal of Computational Chemistry, 2000, 21, 731-747.	3.3	29
208	Deformable volumes in path planning applications. , 2000, , .		39
209	Path planning using lazy PRM. , 2000, , .		531
210	A two level fuzzy PRM for manipulation planning. , 2000, , .		81
211	Part orientation with one or two stable equilibria using programmable force fields. IEEE Transactions on Automation Science and Engineering, 2000, 16, 157-170.	2.3	65
212	Computational Approaches to Drug Design. Algorithmica, 1999, 25, 347-371.	1.3	38
213	Capturing the Connectivity of High-Dimensional Geometric Spaces by Parallelizable Random Sampling Techniques. Combinatorial Optimization, 1999, , 159-182.	0.7	13
214	Randomized Query Processing in Robot Path Planning. Journal of Computer and System Sciences, 1998, 57, 50-60.	1.2	57
215	RAPID: Randomized pharmacophore identification for drug design. Computational Geometry: Theory and Applications, 1998, 10, 263-272.	0.5	17
216	Analysis of probabilistic roadmaps for path planning. IEEE Transactions on Automation Science and Engineering, 1998, 14, 166-171.	2.3	283

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217	Capturing the connectivity of high-dimensional geometric spaces by parallelizable random sampling techniques. Lecture Notes in Computer Science, 1998, , 330-340.	1.3	6
218	A Random Sampling Scheme for Path Planning. International Journal of Robotics Research, 1997, 16, 759-774.	8.5	205
219	Probabilistic roadmaps for path planning in high-dimensional configuration spaces. IEEE Transactions on Automation Science and Engineering, 1996, 12, 566-580.	2.3	4,281
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