Angelika Peer

List of Publications by Year
in descending order

109 papers	2,724 citations	394421 19 h-index	254184 43 g-index
116 all docs	116 docs citations	116 times ranked	2573 citing authors

#	Article	IF	Citations
1	Feature Extraction and Selection for Emotion Recognition from EEG. IEEE Transactions on Affective Computing, 2014, 5, 327-339.	8.3	697
2	A survey of environment-, operator-, and task-adapted controllers for teleoperation systems. Mechatronics, 2010, 20, 787-801.	3.3	173
3	An HMM approach to realistic haptic human-robot interaction. , 2009, , .		98
4	A New Admittance-Type Haptic Interface for Bimanual Manipulations. IEEE/ASME Transactions on Mechatronics, 2008, 13, 416-428.	5.8	59
5	The Role of Haptic Feedback for the Integration of Intentions in Shared Task Execution. IEEE Transactions on Haptics, 2013, 6, 94-105.	2.7	58
6	Human-Inspired Neurorobotic System for Classifying Surface Textures by Touch. IEEE Robotics and Automation Letters, 2016, 1, 516-523.	5.1	53
7	Contributions of the PPC to Online Control of Visually Guided Reaching Movements Assessed with fMRI-Guided TMS. Cerebral Cortex, 2011, 21, 1602-1612.	2.9	51
8	Human sit-to-stand transfer modeling towards intuitive and biologically-inspired robot assistance. Autonomous Robots, 2017, 41, 575-592.	4.8	48
9	Beaming: An Asymmetric Telepresence System. IEEE Computer Graphics and Applications, 2012, 32, 10-17.	1.2	47
10	A key region in the human parietal cortex for processing proprioceptive hand feedback during reaching movements. NeuroImage, 2014, 84, 615-625.	4.2	47
11	Seeing the hand while reaching speeds up onâ€line responses to a sudden change in target position. Journal of Physiology, 2009, 587, 4605-4616.	2.9	44
12	Experimental analysis of dominance in haptic collaboration. , 2009, , .		44
13	Multi-fingered telemanipulation - mapping of a human hand to a three finger gripper. , 2008, , .		43
14	Role determination in human-human interaction. , 2009, , .		42
15	Performance related energy exchange in haptic human-human interaction in a shared virtual object manipulation task. , 2009, , .		41
16	Local and Remote Cooperation With Virtual and Robotic Agents: A P300 BCI Study in Healthy and People Living With Spinal Cord Injury. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1622-1632.	4.9	40
17	Advancing the detection of steady-state visual evoked potentials in brainâ€“computer interfaces. Journal of Neural Engineering, 2016, 13, 036005.	3.5	37
18	Modeling and Two-Input Sliding Mode Control of Rotary Traveling Wave Ultrasonic Motors. IEEE Transactions on Industrial Electronics, 2018, 65, 7149-7159.	7.9	37

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19	Comparison of people's responses to real and virtual handshakes within a virtual environment. Brain Research Bulletin, 2011, 85, 276-282.	3.0	35
20	Interaction-Based Dynamic Measurement of Haptic Characteristics of Control Elements. Lecture Notes in Computer Science, 2014, , 177-184.	1.3	34
21	An Integrated Decision Making Approach for Adaptive Shared Control of Mobility Assistance Robots. International Journal of Social Robotics, 2016, 8, 631-648.	4.6	33
22	Handshake: Realistic Human-Robot Interaction in Haptic Enhanced Virtual Reality. Presence: Teleoperators and Virtual Environments, 2011, 20, 371-392.	0.6	31
23	Improvement of model-mediated teleoperation using a new hybrid environment estimation technique. , 2010, , .		29
24	Imitation learning of human grasping skills from motion and force data. , 2011, , .		29
25	Development of a Multi-modal Multi-user Telepresence and Teleaction System. International Journal of Robotics Research, 2010, 29, 1298-1316.	8.5	27
26	A BCI using VEP for continuous control of a mobile robot. , 2013, 2013, 5254-7.		27
27	Plugfest 2009: Global interoperability in Telerobotics and telemedicine. , 2010, 2010, 1733-1738.		26
28	Towards a mobile haptic interface for bimanual manipulations. , 2007, , .		25
29	Robust stability analysis of a bilateral teleoperation system using the parameter space approach. , 2008, , .		23
30	Exploring the Design Space of Haptic Assistants: The Assistance Policy Module. IEEE Transactions on Haptics, 2013, 6, 440-452.	2.7	22
31	Techniques for environment parameter estimation during telemanipulation. , 2008, , .		21
32	Towards real-time haptic assistance adaptation optimizing task performance and human effort. , 2011, , .		21
33	Efficiency analysis in a collaborative task with reciprocal haptic feedback. , 2009, , .		20
34	Model-Mediated Teleoperation for multi-operator multi-robot systems. , 2010, , .		20
35	Shared decision making in a collaborative task with reciprocal haptic feedback - an efficiency-analysis. , 2010, , .		20
36	Haptic Perception of Material Properties and Implications for Applications. Proceedings of the IEEE, 2013, PP, 1-12.	21.3	19

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37	Fast online impedance estimation for robot control. , 2009, , .		18
38	Online intention recognition for computer-assisted teleoperation. , 2010, , .		18
39	Development and Evaluation of a Device for the Haptic Rendering of Rotatory Car Doors. IEEE Transactions on Industrial Electronics, 2011, 58, 3133-3140.	7.9	18
40	Design and Evaluation of a Haptic Computer-Assistant for Telemanipulation Tasks. IEEE Transactions on Human-Machine Systems, 2013, 43, 385-397.	3.5	17
41	Decision-Making Model for Adaptive Impedance Control of Teleoperation Systems. IEEE Transactions on Haptics, 2017, 10, 5-16.	2.7	17
42	Activity, Plan, and Goal Recognition: A Review. Frontiers in Robotics and AI, 2021, 8, 643010.	3.2	17
43	Masking Effects for Damping JND. Lecture Notes in Computer Science, 2012, , 145-150.	1.3	17
44	Influence of Varied Human Movement Control on Task Performance and Feeling of Telepresence. Presence: Teleoperators and Virtual Environments, 2010, 19, 463-481.	0.6	16
45	Advances in Intelligent Mobility Assistance Robot Integrating Multimodal Sensory Processing. Lecture Notes in Computer Science, 2014, , 692-703.	1.3	15
46	Haptic telemanipulation with dissimilar kinematics. , 2005, , .		13
47	Development of a high-performance haptic telemanipulation system with dissimilar kinematics. Advanced Robotics, 2006, 20, 1303-1320.	1.8	13
48	Tele-assembly in Wide Remote Environments. , 2006, , .		13
49	Intercontinental multimodal tele-cooperation using a humanoid robot. , 2008, , .		13
50	Effect-size-based electrode and feature selection for emotion recognition from EEG. , 2013, , .		13
51	Invariance and variability in interaction error-related potentials and their consequences for classification. Journal of Neural Engineering, 2017, 14, 066015.	3.5	13
52	The Human Role in Telerobotics. , 2007, , 11-24.		12
53	Intercontinental, multimodal, wide-range tele-cooperation using a humanoid robot. , 2009, , .		12
54	Haptic Humanâ€“Robot Collaboration: Comparison of Robot Partner Implementations in Terms of Human-Likeness and Task Performance. Presence: Teleoperators and Virtual Environments, 2011, 20, 173-189.	0.6	12

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55	The Formable Object: A 24-Degree-of-Freedom Shape-Rendering Interface. IEEE/ASME Transactions on Mechatronics, 2015, 20, 1360-1371.	5.8	12
56	Control-theoretic model of haptic human-human interaction in a pursuit tracking task. , 2009, , .		11
57	Supporting interoperability and presence awareness in collaborative mixed reality environments. , 2013, , .		11
58	Development of a 3ÂDoF MR-Compatible Haptic Interface for Pointing and Reaching Movements. Lecture Notes in Computer Science, 2010, , 211-218.	1.3	11
59	Formable object — A new haptic interface for shape rendering. , 2013, , .		10
60	Evaluating the sitâ€toâ€stand transfer assistance from a smart walker in older adults with motor impairments. Geriatrics and Gerontology International, 2020, 20, 312-316.	1.5	10
61	Virtual Partner for a Haptic Interaction Task. Cognitive Systems Monographs, 2009, , 183-191.	0.1	10
62	Synthesis of an interactive haptic dancing partner. , 2010, , .		9
63	Enhancing task classification in human-machine collaborative teleoperation systems by real-time evaluation of an agreement criterion. , 2011, , .		9
64	Control of mobility assistive robot for human fall prevention. , 2015, , .		9
65	Port-based modeling of human-robot collaboration towards safety-enhancing energy shaping control. , 2016, , .		9
66	Robust stability analysis of bilateral teleoperation systems using admittance-type devices. , 2008, , .		8
67	Incorporating human haptic interaction models into teleoperation systems. , 2010, , .		8
68	Design of a new MR-compatible haptic interface with six actuated degrees of freedom. , 2014, , .		8
69	Evaluation Studies of Robotic Rollators by the User Perspective: A Systematic Review. Gerontology, 2016, 62, 644-653.	2.8	8
70	A systematic review of study results reported for the evaluation of robotic rollators from the perspective of users. Disability and Rehabilitation: Assistive Technology, 2018, 13, 31-39.	2.2	8
71	Optimization Criteria for Human Trajectory Formation in Dynamic Virtual Environments. Lecture Notes in Computer Science, 2010, , 257-262.	1.3	8
72	Redundancy resolution of a 7 DOF haptic interface considering collision and singularity avoidance. , 2008, , .		7

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73	The field of telerobotics [From the Guest Editors]. IEEE Robotics and Automation Magazine, 2008, 15, 9-9.	2.0	6
74	A cognitive architecture for modeling emotion dynamics: Intensity estimation from physiological signals. Cognitive Systems Research, 2018, 49, 128-141.	2.7	6
75	Advanced Telerobotics: Dual-Handed and Mobile Remote Manipulation. , 2007, , 471-497.		5
76	Intercontinental cooperative telemanipulation between Germany and Japan. , 2008, , .		5
77	Towards robotic re-embodiment using a Brain-and-Body-Computer Interface. , 2012, , .		5
78	Deciding on optimal assistance policies in haptic shared control tasks. , 2014, , .		5
79	Safety constrained motion control of mobility assistive robots. , 2014, , .		5
80	Human sit-to-stand transfer modeling for optimal control of assistive robots. , 2014, , .		5
81	Goal-recognition-based adaptive brain-computer interface for navigating immersive robotic systems. Journal of Neural Engineering, 2017, 14, 036024.	3.5	5
82	Design and Evaluation of a Haptic Interface With Octopod Kinematics. IEEE/ASME Transactions on Mechatronics, 2017, 22, 2091-2101.	5.8	5
83	An MR-Compatible Haptic Interface With Seven Degrees of Freedom. IEEE/ASME Transactions on Mechatronics, 2018, 23, 624-635.	5.8	5
84	A Coordinating Controller for Improved Task Performance in Multi-user Teleoperation. Lecture Notes in Computer Science, 2010, , 155-160.	1.3	5
85	Online Intention Recognition in Computer-Assisted Teleoperation Systems. Lecture Notes in Computer Science, 2010, , 233-239.	1.3	5
86	Evaluation of a Coordinating Controller for Improved Task Performance in Multi-user Teleoperation. Lecture Notes in Computer Science, 2010, , 240-247.	1.3	5
87	Control and performance evaluation of a new redundant haptic interface. , 2007, , .		4
88	Second-order model for rotary traveling wave ultrasonic motors. , 2015, , .		4
89	Parameter-Space Stability Analysis of LTI Time-Delay Systems With Parametric Uncertainties. IEEE Transactions on Automatic Control, 2018, 63, 3927-3934.	5.7	4
90	A simulation environment for studying transcutaneous electrotactile stimulation. PLoS ONE, 2019, 14, e0212479.	2.5	4

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91	Effects of Varied Human Movement Control on Task Performance and Feeling of Telepresence. Lecture Notes in Computer Science, 2008, , 755-765.	1.3	4
92	Multi-modal multi-user telepresence and teleaction system. , 2008, , .		3
93	Predictability of a Human Partner in a Pursuit Tracking Task without Haptic Feedback. , 2009, , .		3
94	Haptic Human-Robot Interaction. IEEE Transactions on Haptics, 2012, 5, 193-195.	2.7	3
95	Parameter-space transparency analysis of teleoperation systems. , 2012, , .		3
96	A Comparison of Evaluation Measures for Emotion Recognition in Dimensional Space. , 2013, , .		3
97	A new interaction force decomposition maximizing compensating forces under physical work constraints. , 2016, , .		3
98	Dynamic contextualization and comparison as the basis of biologically inspired action understanding. Paladyn, 2018, 9, 19-59.	2.7	3
99	Enhancing the Command-Following Bandwidth for Transparent Bilateral Teleoperation. , 2018, , .		3
100	Image-based magnetic control of paramagnetic microparticles in water. , 2011, , .		3
101	Development of a new 6 DOF parallel haptic interface for the rendering of elements and interior equipment in a car. , 2013, , .		2
102	Inverse kinematics for shape rendering interfaces. , 2013, , .		2
103	Social Haptic Interaction with Virtual Characters. Springer Series on Touch and Haptic Systems, 2012, , 189-214.	0.3	2
104	High-fidelity telepresence and teleaction. , 2010, , .		0
105	Tutorial: Control issues in haptic teleoperation. , 2011, , .		0
106	Workshop on human-X haptic collaboration. , 2011, , .		0
107	Haptic Rendering of Compliant Shapes. IEEE Transactions on Robotics, 2015, 31, 893-905.	10.3	0
108	Psychological Experiments in Haptic Collaboration Research. Springer Series on Touch and Haptic Systems, 2012, , 65-90.	0.3	0

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109	Modeling the Weber Fraction of Vibrotactile Amplitudes Using Gain Control Through Global Feedforward Inhibition. Lecture Notes in Computer Science, 2014, , 394-402.	1.3	0