## Erhan Oztop

## List of Publications by Year in descending order

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393982 329751 2,275 73 19 37 citations h-index g-index papers 81 81 81 1742 citing authors docs citations times ranked all docs

| #  | Article   | IF  | CITATIONS |
|----|---|-----|-----------|
| 1  | Schema design and implementation of the grasp-related mirror neuron system. Biological Cybernetics, 2002, 87, 116-140.  | 0.6 | 255       |
| 2  | Mirror neurons and imitation: A computationally guided review. Neural Networks, 2006, 19, 254-271.  | 3.3 | 254       |
| 3  | Synthetic brain imaging: grasping, mirror neurons and imitation. Neural Networks, 2000, 13, 975-997.  | 3.3 | 227       |
| 4  | Mental state inference using visual control parameters. Cognitive Brain Research, 2005, 22, 129-151.  | 3.3 | 185       |
| 5  | Mirror neurons: Functions, mechanisms and models. Neuroscience Letters, 2013, 540, 43-55.   | 1.0 | 129       |
| 6  | Reinforcement learning to adjust parametrized motor primitives to new situations. Autonomous Robots, 2012, 33, 361-379.   | 3.2 | 128       |
| 7  | Teaching robots to cooperate with humans in dynamic manipulation tasks based on multi-modal human-in-the-loop approach. Autonomous Robots, 2014, 36, 123-136.                   | 3.2 | 114       |
| 8  | HUMAN–HUMANOID INTERACTION: IS A HUMANOID ROBOT PERCEIVED AS A HUMAN?. International Journal of Humanoid Robotics, 2005, 02, 537-559.   | 0.6 | 101       |
| 9  | Infant grasp learning: a computational model. Experimental Brain Research, 2004, 158, 480-503.  | 0.7 | 100       |
| 10 | Goal emulation and planning in perceptual space using learned affordances. Robotics and Autonomous Systems, 2011, 59, 580-595.  | 3.0 | 73        |
| 11 | Staged Development of Robot Skills: Behavior Formation, Affordance Learning and Imitation with Motionese. IEEE Transactions on Autonomous Mental Development, 2015, 7, 119-139. | 2.3 | 63        |
| 12 | Symbol Emergence in Cognitive Developmental Systems: A Survey. IEEE Transactions on Cognitive and Developmental Systems, 2019, 11, 494-516.                                     | 2.6 | 53        |
| 13 | A kernel-based approach to direct action perception. , 2012, , .  |     | 47        |
| 14 | From self-observation to imitation: Visuomotor association on a robotic hand. Brain Research Bulletin, 2008, 75, 775-784.   | 1.4 | 42        |
| 15 | Cognition-Enabled Robot Manipulation in Human Environments: Requirements, Recent Work, and Open Problems. IEEE Robotics and Automation Magazine, 2017, 24, 108-122.             | 2.2 | 37        |
| 16 | Unconstrained Real-time Markerless Hand Tracking for Humanoid Interaction. , 2006, , .  |     | 28        |
| 17 | Repulsive attractive network for baseline extraction on document images. Signal Processing, 1999, 75, 1-10.   | 2.1 | 26        |
| 18 | Human Adaptation to Human–Robot Shared Control. IEEE Transactions on Human-Machine Systems, 2019, 49, 126-136.  | 2.5 | 25        |

| #  | Article   | IF  | Citations |
|----|---|-----|-----------|
| 19 | Self-discovery of motor primitives and learning grasp affordances. , 2012, , .  |     | 24        |
| 20 | Dexterous Skills Transfer by Extending Human Body Schema to a Robotic Hand. , 2006, , .   |     | 21        |
| 21 | Parental scaffolding as a bootstrapping mechanism for learning grasp affordances and imitation skills. Robotica, 2015, 33, 1163-1180.                                       | 1.3 | 21        |
| 22 | A computational model of anterior intraparietal (AIP) neurons. Neurocomputing, 2006, 69, 1354-1361.   | 3.5 | 20        |
| 23 | A shared control method for online human-in-the-loop robot learning based on Locally Weighted Regression. , 2016, , .   |     | 20        |
| 24 | Model free head pose estimation using stereovision. Pattern Recognition, 2012, 45, 33-42.   | 5.1 | 18        |
| 25 | Human motor adaptation in whole body motion. Scientific Reports, 2016, 6, 32868.  | 1.6 | 17        |
| 26 | Unsupervised learning of object affordances for planning in a mobile manipulation platform. , 2011, , .   |     | 13        |
| 27 | Human-In-The-Loop Control and Task Learning for Pneumatically Actuated Muscle Based Robots.<br>Frontiers in Neurorobotics, 2018, 12, 71.                                    | 1.6 | 13        |
| 28 | Going beyond the perception of affordances: Learning how to actualize them through behavioral parameters. , $2011, \ldots$  |     | 12        |
| 29 | Robotic grasping and manipulation through human visuomotor learning. Robotics and Autonomous Systems, 2012, 60, 441-451.  | 3.0 | 12        |
| 30 | Emotion as an emergent phenomenon of the neurocomputational energy regulation mechanism of a cognitive agent in a decision-making task. Adaptive Behavior, 2021, 29, 55-71. | 1.1 | 11        |
| 31 | Learning to grasp with parental scaffolding. , 2011, , .  |     | 10        |
| 32 | Sequential decision making based on emergent emotion for a humanoid robot., 2016,,.   |     | 10        |
| 33 | Modeling robot trust based on emergent emotion in an interactive task., 2021,,.   |     | 10        |
| 34 | Imitation and mirror systems in robots through Deep Modality Blending Networks. Neural Networks, 2022, 146, 22-35.  | 3.3 | 10        |
| 35 | An Upper Bound on the Minimum Number of Monomials Required to Separate Dichotomies of $\{\hat{a}^1, 1\}$ n. Neural Computation, 2006, 18, 3119-3138.                        | 1.3 | 9         |
| 36 | Extensive Human Training for Robot Skill Synthesis: Validation on a Robotic Hand. Proceedings - IEEE International Conference on Robotics and Automation, 2007, , .         | 0.0 | 9         |

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|----|---|-----|-----------|
| 37 | Trust me! I am a robot: an affective computational account of scaffolding in robot-robot interaction. , 2021, , .   |     | 8         |
| 38 | Learning feature representations for an object recognition system. , 2006, , .  |     | 7         |
| 39 | Sign-representation of Boolean functions using a small number of monomials. Neural Networks, 2009, 22, 938-948.   | 3.3 | 7         |
| 40 | Action and Language Mechanisms in the Brain: Data, Models and Neuroinformatics. Neuroinformatics, 2014, 12, 209-225.  | 1.5 | 7         |
| 41 | Cooperative multi-task assignment for heterogonous UAVs. , 2015, , .  |     | 7         |
| 42 | Affordance-based altruistic robotic architecture for human–robot collaboration. Adaptive Behavior, 2019, 27, 223-241.   | 1.1 | 7         |
| 43 | The development of grasping and the mirror system. , 2006, , 397-423.   |     | 6         |
| 44 | Emergent emotion via neural computational energy conservation on a humanoid robot., 2013,,.   |     | 6         |
| 45 | Minimal Sign Representation of Boolean Functions: Algorithms and Exact Results for Low Dimensions.<br>Neural Computation, 2015, 27, 1796-1823.  | 1.3 | 6         |
| 46 | Predicting future object states using learned affordances., 2009,,.   |     | 5         |
| 47 | Structured unsupervised kernel regression for closed-loop motion control., 2010,,.  |     | 5         |
| 48 | Simultaneous human-robot adaptation for effective skill transfer., 2015,,.  |     | 4         |
| 49 | Synergistic human-robot shared control via human goal estimation. , 2016, , .   |     | 4         |
| 50 | Force Reference Extraction via Human Interaction for a Robotic Polishing Task: Force-Induced Motion. , $2019, \dots$  |     | 4         |
| 51 | Exploiting similarities for robot perception. , 2007, , .   |     | 3         |
| 52 | Effect Regulated Projection of Robot's Action Space for Production and Prediction of Manipulation Primitives Through Learning Progress and Predictability-Based Exploration. IEEE Transactions on Cognitive and Developmental Systems, 2021, 13, 286-297. | 2.6 | 3         |
| 53 | Environmental force estimation for a robotic hand: Compliant contact detection. , 2015, , .   |     | 2         |
| 54 | From Biologically Realistic Imitation to Robot Teaching Via Human Motor Learning. Lecture Notes in Computer Science, 2008, , 214-221.   | 1.0 | 2         |

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|----|---|-----|-----------|
| 55 | High-level representations through unconstrained sensorimotor learning. , 2020, , .   |     | 2         |
| 56 | High-level features for resource economy and fast learning in skill transfer. Advanced Robotics, 2022, 36, 291-303.   | 1.1 | 2         |
| 57 | Task dependent human-like grasping. , 2008, , .   |     | 1         |
| 58 | Models for the control of grasping. , 0, , 110-124.   |     | 1         |
| 59 | Neural representation in F5: cross-decoding from observation to execution. BMC Neuroscience, 2015, 16, .  | 0.8 | 1         |
| 60 | Adaptive Inverse Kinematics of a 9-DOF Surgical Robot for Effective Manipulation., 2019,,.  |     | 1         |
| 61 | Inferring Cost Functions Using Reward Parameter Search and Policy Gradient Reinforcement Learning. , 2021, , .  |     | 1         |
| 62 | Combined weight and density bounds on the polynomial threshold function representation of Boolean functions. Discrete Mathematics, 2022, 345, 112912.       | 0.4 | 1         |
| 63 | Conceptual and Computational Models of Mirror Neurons. The Brain & Neural Networks, 2005, 12, 61-73.  | 0.1 | 0         |
| 64 | Improving balance regulation in visuo-motor control for humanoid robots. , 2009, , .  |     | 0         |
| 65 | Effective Robot Skill Synthesis via Divided Control. , 2018, , .  |     | O         |
| 66 | Modeling the Development of Infant Imitation using Inverse Reinforcement Learning. , 2018, , .  |     | 0         |
| 67 | Guest Editorial Special Issue on Continual Unsupervised Sensorimotor Learning. IEEE Transactions on Cognitive and Developmental Systems, 2021, 13, 234-238. | 2.6 | 0         |
| 68 | An Ecologically Valid Reference Frame for Perspective Invariant Action Recognition. , 2021, , .   |     | 0         |
| 69 | Inverse Kinematics of Humanoid-Robot Reaching through Human Visuo-Motor Learning. , 2010, , 341-348.  |     | 0         |
| 70 | Humanoid Brain Science. Frontiers in Neuroengineering Series, 2014, , 29-46.  | 0.4 | 0         |
| 71 | Algorithms for Obtaining Parsimonious Higher Order Neurons. Lecture Notes in Computer Science, 2017, , 146-154.   | 1.0 | 0         |
| 72 | On the Co-absence of Input Terms in Higher Order Neuron Representation of Boolean Functions. Lecture Notes in Computer Science, 2017, , 362-370.            | 1.0 | 0         |

# ARTICLE IF CITATIONS
73 Lifelong Robot Learning., 2021,, 1-12. 0