

# IIT RESEARCH MATRIX

UPDATE: MAY 2018

Legend:

- Main Research Domain
- Interaction

RESEARCH LINE	PRINCIPAL INVESTIGATOR	ROBOTICS	NANOMATERIALS	LIFETECH	COMPUTATIONAL SCIENCES
Human-Robot Interfaces and Physical Interaction	Arash Ajoudani	●			
Quantum Materials Theory	Sergey Artyukhin		○		●
IIT@Harvard	John Assad			●	
Smart Materials	Athanassia Athanassiou		●	○	
D3 PharmaChemistry	Tiziano Bandiera			●	
Synaptic Plasticity of Inhibitory Networks	Andrea Barberis			●	
Event-Driven Perception for Robotics	Chiara Bartolozzi	●			
Artificial Touch in Soft Biorobotics	Lucia Beccai	○	●		
Cognition, Motion and Neuroscience	Cristina Becchio	○		●	
Neuroscience and Smart Materials	Fabio Benfenati		○	●	
Microtechnology for Neuroelectronics	Luca Berdondini			●	

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Soft Robotics for Human Cooperation and Rehabilitation	Antonio Bicchi	●			
MRI - Magnetic Resonance Imaging	Angelo Bifone			●	
Printed and Molecular Electronics	Mario Caironi		●		
Advanced Robotics	Darwin Caldwell	●			
Local Micro-environment and Brain Development	Laura Cancedda			●	
Visual and Multimodal Applied Learning	Barbara Caputo				●
Computational and Chemical Biology	Andrea Cavalli				●
Smart Bio-Interfaces	Gianni Ciofani		●	○	
Computational Nanoplasmonics	Cristian Ciracì				●
2D Materials Engineering	Camilla Coletti		●		
Plasmon Nanotechnologies	Francesco De Angelis		●	○	
Rehab Technologies - INAIL-IIT lab	Lorenzo De Michieli	●		○	
Neurobiology of miRNA	Davide De Pietri Tonelli			●	
Nanotechnologies for Humans and Biosystems	Massimo De Vittorio		●	○	

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<b>Molecular Modeling and Drug Discovery</b>	Marco De Vivo				●
<b>Nanotechnology for Precision Medicine</b>	Paolo Decuzzi		●	○	
<b>Visual Geometry and Modelling</b>	Alessio Del Bue	○			●
<b>Nanoscopy &amp; NIC@IIT</b>	Alberto Diaspro		●	○	
<b>Multiscale Brain Communication</b>	Luciano Fadiga			●	
<b>Optical Approaches to Brain Function</b>	Tommaso Fellin			●	
<b>Electron Crystallography</b>	Mauro Gemmi		●	○	
<b>Unit for Visually Impaired People</b>	Monica Gori	○		●	
<b>Functional Neuroimaging</b>	Alessandro Gozzi			●	
<b>Molecular Medicine</b>	Benedetto Grimaldi			●	
<b>Non-coding RNAs and RNA-based therapeutics</b>	Stefano Gustincich			●	
<b>Neuroscience and Behaviour</b>	Giandomenico Iannetti			●	○
<b>Optoelectronics</b>	Roman Krahne		●		
<b>Nanomaterials for Energy and Lifescience</b>	Guglielmo Lanzani		●	○	
<b>NanoChemistry</b>	Liberato Manna		●		

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<b>Bioinspired Soft Robotics</b>	Barbara Mazzolai	●			
<b>ICub</b>	Giorgio Metta	●		○	
<b>IIT@MIT</b>	Giorgio Metta				●
<b>Dynamic Interaction Control</b>	Giorgio Metta	●			
<b>Pattern Analysis and Computer Vision</b>	Vittorio Murino	○			●
<b>Humanoid Sensing and Perception</b>	Lorenzo Natale	●			
<b>Bio-Logic Materials</b>	Paolo Netti		○	●	
<b>Genomic Science</b>	Francesco Nicassio			●	○
<b>Neural Computation</b>	Stefano Panzeri				●
<b>Genetics of Cognition</b>	Francesco Papaleo			●	
<b>Atomistic Simulations</b>	Michele Parrinello				●
<b>Graphene Labs</b>	Vittorio Pellegrini		●		
<b>Nanomaterials for Biomedical Applications</b>	Teresa Pellegrino		●	○	
<b>Advanced Materials for Optoelectronics</b>	Annamaria Petrozza		●		
<b>Systems and Synthetic Biology</b>	Fabrizio Pirri		●		

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Advanced Materials for Sustainable Future Technologies	Fabrizio Pirri		●		
Multifunctional Neural Interfaces with deep-brain regions	Ferruccio Pisanello		●	○	
Theory and Technology of 2D Materials	Marco Polini				●
Nanobiointeractions & Nanodiagnostics	Pier Paolo Pompa		●	○	
Computational Statistics and Machine Learning	Massimiliano Pontil				●
D3 Validation	Angelo Reggiani			●	
Computational Modelling of Nanoscale and BioPhysical Systems	Walter Rocchia				●
Nanotechnologies for Neurosciences	Giancarlo Ruocco		○	●	
Robotics Brain and Cognitive Sciences	Giulio Sandini	●		○	
Tissue Electronics	Francesca Santoro		○	●	
Dynamic Legged Systems	Claudio Semini	●			
Synthetic and Systems Biology for Biomedicine	Velia Siciliano			●	
Computational Medicine	Sauro Succi		○		●
Polymers and Biomaterials	Nicola Tirelli		●		

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Neuromodulation of Cortical and Subcortical Circuits	Raffaella Tonini			●	
Humanoids & Human Centered Mechatronics	Nikolaos Tsagarakis	●			
Genetics and Epigenetics of Behavior	Valter Tucci			●	
Molecular Microscopy and Spectroscopy	Giuseppe Vicidomini		●	○	
Social cognition in human-robot interaction	Agnieszka Wykowska	●		○	

FACILITY	FACILITY COORDINATOR	ROBOTICS	NANOMATERIALS	LIFETECH	COMPUTATIONAL SCIENCES
Electron Microscopy	Rosaria Brescia		○	○	
Electronic Design Laboratory	Marco Crepaldi	○	○	○	
Clean Room	Francesco De Angelis		○		
Analytical Chemistry and In Vivo Pharmacology	Paolo Decuzzi			○	
Neurofacility	Luisa Franco			○	
Animal Facility	Monica Morini			○	
Materials Characterization	Mirko Prato		○		

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Mechanical Workshop	Roberto Puddu	○			