

# Michela Fratini

## List of Publications by Year in descending order

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citations

236925

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docs citations

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citing authors

#	ARTICLE	IF	CITATIONS
1	Hybrid Nanoparticles as Theranostics Platforms for Glioblastoma Treatment: Phototherapeutic and X-ray Phase Contrast Tomography Investigations. <i>Journal of Nanotheranostics</i> , 2022, 3, 1-17.	3.1	1
2	Evaluation of denoising strategies for task-based functional connectivity: Equalizing residual motion artifacts between rest and cognitively demanding tasks. <i>Human Brain Mapping</i> , 2021, 42, 1805-1828.	3.6	14
3	Discovery of <i>Lebambromyia</i> in Myanmar Cretaceous Amber: Phylogenetic and Biogeographic Implications (Insecta, Diptera, Phoroidea). <i>Insects</i> , 2021, 12, 354.	2.2	0
4	Assessment and Imaging of Intracellular Magnesium in SaOS-2 Osteosarcoma Cells and Its Role in Proliferation. <i>Nutrients</i> , 2021, 13, 1376.	4.1	3
5	3D Spatial Distribution of Nanoparticles in Mice Brain Metastases by X-ray Phase-Contrast Tomography. <i>Frontiers in Oncology</i> , 2021, 11, 554668.	2.8	5
6	X-ray microtomography and phylogenomics provide insights into the morphology and evolution of an enigmatic Mesozoic insect larva. <i>Systematic Entomology</i> , 2021, 46, 672-684.	3.9	27
7	Generic acquisition protocol for quantitative MRI of the spinal cord. <i>Nature Protocols</i> , 2021, 16, 4611-4632.	12.0	65
8	Steerable3D: An ImageJ plugin for neurovascular enhancement in 3-D segmentation. <i>Physica Medica</i> , 2021, 81, 197-209.	0.7	5
9	Numerical simulation of the blood oxygenation level-dependent functional magnetic resonance signal using finite element method. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2020, 36, e3290.	2.1	1
10	Assessment of plaque morphology in Alzheimer's mouse cerebellum using three-dimensional X-ray phase-based virtual histology. <i>Scientific Reports</i> , 2020, 10, 11233.	3.3	19
11	X-ray Phase Contrast Tomography Serves Preclinical Investigation of Neurodegenerative Diseases. <i>Frontiers in Neuroscience</i> , 2020, 14, 584161.	2.8	12
12	Investigation of the human pineal gland 3D organization by X-ray phase contrast tomography. <i>Journal of Structural Biology</i> , 2020, 212, 107659.	2.8	5
13	Brain Network Modularity During a Sustained Working-Memory Task. <i>Frontiers in Physiology</i> , 2020, 11, 422.	2.8	6
14	Multiscale Imaging Approach for Studying the Central Nervous System: Methodology and Perspective. <i>Frontiers in Neuroscience</i> , 2020, 14, 72.	2.8	7
15	X-ray phase contrast tomography for the investigation of amyotrophic lateral sclerosis. <i>Journal of Synchrotron Radiation</i> , 2020, 27, 1042-1048.	2.4	11
16	Multiscale pink-beam microCT imaging at the ESRF-ID17 biomedical beamline. <i>Journal of Synchrotron Radiation</i> , 2020, 27, 1347-1357.	2.4	21
17	High resolution 3D visualization of the spinal cord in a post-mortem murine model. <i>Biomedical Optics Express</i> , 2020, 11, 2235.	2.9	5
18	Brain Networks Underlying Eye's Pupil Dynamics. <i>Frontiers in Neuroscience</i> , 2019, 13, 965.	2.8	42

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19	Investigation of Herculaneum Papyri by X-Ray Phase-Contrast Tomography. , 2019, , 299-324.		0
20	Exploring Alzheimer's disease mouse brain through X-ray phase contrast tomography: From the cell to the organ. NeuroImage, 2019, 184, 490-495.	4.2	56
21	Assessing denoising strategies to increase signal to noise ratio in spinal cord and in brain cortical and subcortical regions. Journal of Instrumentation, 2018, 13, C02028-C02028.	1.2	6
22	3D map of theranostic nanoparticles distribution in mice brain and liver by means of X-ray Phase Contrast Tomography. Journal of Instrumentation, 2018, 13, C01049-C01049.	1.2	2
23	Nanoscale quantification of intracellular element concentration by X-ray fluorescence microscopy combined with X-ray phase contrast nanotomography. Applied Physics Letters, 2018, 112, .	3.3	32
24	An improved ring removal procedure for in-line x-ray phase contrast tomography. Physics in Medicine and Biology, 2018, 63, 045007.	3.0	14
25	Assessment of the effects of different sample perfusion procedures on phase-contrast tomographic images of mouse spinal cord. Journal of Instrumentation, 2018, 13, C03027-C03027.	1.2	7
26	Single cell versus large population analysis: cell variability in elemental intracellular concentration and distribution. Analytical and Bioanalytical Chemistry, 2018, 410, 337-348.	3.7	17
27	Fractal Dimension Analysis of High-Resolution X-Ray Phase Contrast Micro-Tomography Images at Different Threshold Levels in a Mouse Spinal Cord. Condensed Matter, 2018, 3, 48.	1.8	9
28	The Challenge of the Vascularization of Regenerated Tissues. Fundamental Biomedical Technologies, 2018, , 139-149.	0.2	1
29	Scale-invariant rearrangement of resting state networks in the human brain under sustained stimulation. NeuroImage, 2018, 179, 570-581.	4.2	13
30	3D imaging of theranostic nanoparticles in mice organs by means of x-ray phase contrast tomography. , 2018, , .		0
31	Quantitative 3D investigation of Neuronal network in mouse spinal cord model. Scientific Reports, 2017, 7, 41054.	3.3	40
32	SYRMEP Tomo Project: a graphical user interface for customizing CT reconstruction workflows. Advanced Structural and Chemical Imaging, 2017, 3, 4.	4.0	111
33	Combined use of X-ray fluorescence microscopy, phase contrast imaging for high resolution quantitative iron mapping in inflamed cells. Journal of Physics: Conference Series, 2017, 849, 012008.	0.4	1
34	Heterogeneous and self-organizing mineralization of bone matrix promoted by hydroxyapatite nanoparticles. Nanoscale, 2017, 9, 17274-17283.	5.6	31
35	X-Ray Phase Contrast Tomography Reveals Early Vascular Alterations and Neuronal Loss in a Multiple Sclerosis Model. Scientific Reports, 2017, 7, 5890.	3.3	64
36	Task-Related Modulations of BOLD Low-Frequency Fluctuations within the Default Mode Network. Frontiers in Physics, 2017, 5, .	2.1	15

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37	X-Rays Writing/Reading of Charge Density Waves in the CuO <sub>2</sub> Plane of a Simple Cuprate Superconductor. <i>Condensed Matter</i> , 2017, 2, 26.	1.8	11
38	Repeatability and reproducibility of intracellular molar concentration assessed by synchrotron-based x-ray fluorescence microscopy. <i>AIP Conference Proceedings</i> , 2016, , .	0.4	1
39	Carbon nanotube-based cold cathodes: Field emission angular properties and temporal stability. <i>Journal of Applied Physics</i> , 2016, 120, 164305.	2.5	3
40	Virtual unrolling and deciphering of Herculaneum papyri by X-ray phase-contrast tomography. <i>Scientific Reports</i> , 2016, 6, 27227.	3.3	27
41	Where is it and how much? Mapping and quantifying elements in single cells. <i>Analyst</i> , 2016, 141, 5221-5235.	3.5	23
42	Characterization of mouse spinal cord vascular network by means of synchrotron radiation X-ray phase contrast tomography. <i>Physica Medica</i> , 2016, 32, 1779-1784.	0.7	15
43	High-Resolution X-Ray Techniques as New Tool to Investigate the 3D Vascularization of Engineered-Bone Tissue. <i>Frontiers in Bioengineering and Biotechnology</i> , 2015, 3, 133.	4.1	10
44	Intrinsic Patterns of Coupling between Correlation and Amplitude of Low-Frequency fMRI Fluctuations Are Disrupted in Degenerative Dementia Mainly due to Functional Disconnection. <i>PLoS ONE</i> , 2015, 10, e0120988.	2.5	43
45	Simultaneous submicrometric 3D imaging of the micro-vascular network and the neuronal system in a mouse spinal cord. <i>Scientific Reports</i> , 2015, 5, 8514.	3.3	73
46	Imaging collagen packing dynamics during mineralization of engineered bone tissue. <i>Acta Biomaterialia</i> , 2015, 23, 309-316.	8.3	30
47	X-ray micro-beam techniques and phase contrast tomography applied to biomaterials. <i>Nuclear Instruments &amp; Methods in Physics Research B</i> , 2015, 364, 93-97.	1.4	3
48	Controlling Photoinduced Electron Transfer Via Defects Self-Organization for Novel Functional Macromolecular Systems. <i>Current Protein and Peptide Science</i> , 2014, 15, 394-399.	1.4	15
49	On the impact of physiological noise in spinal cord functional MRI. <i>Journal of Magnetic Resonance Imaging</i> , 2014, 40, 770-777.	3.4	20
50	Magnesium intracellular content and distribution map in drug-resistant and -sensitive whole cells. <i>Journal of Biological Research (Italy)</i> , 2014, 87, .	0.1	0
51	Three dimensional visualization of engineered bone and soft tissue by combined x-ray micro-diffraction and phase contrast tomography. <i>Physics in Medicine and Biology</i> , 2014, 59, 189-201.	3.0	27
52	Quantitative Chemical Imaging of the Intracellular Spatial Distribution of Fundamental Elements and Light Metals in Single Cells. <i>Analytical Chemistry</i> , 2014, 86, 5108-5115.	6.5	32
53	Carbon-Nanotubes Field Emitter to be Used in Advanced X-ray Source. , 2014, , 358-365.		1
54	Theoretical Analysis and Experimental Applications of X-ray Waveguides. , 2014, , 65-84.		0

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55	Imaging regenerating bone tissue based on neural networks applied to micro-diffraction measurements. Applied Physics Letters, 2013, 103, 253703.	3.3	12
56	X-ray fluorescence microscopy of light elements in cells: self-absorption correction by integration of compositional and morphological measurements. Journal of Physics: Conference Series, 2013, 463, 012022.	0.4	12
57	Size evolution of the oxygen interstitial nanowires in La <sub>2</sub> CuO <sub>4+y</sub> by thermal treatments and x-ray continuous illumination. Superconductor Science and Technology, 2012, 25, 124004.	3.5	20
58	Optimum inhomogeneity of local lattice distortions in La <sub>2</sub> CuO <sub>4+y</sub> . Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15685-15690.	7.1	109
59	Angular distribution of field emitted electrons from vertically aligned carbon nanotube arrays. Applied Physics Letters, 2012, 100.	3.3	8
60	Effect of Ru substitution on atomic displacements in the layered SmFe <sub>x</sub> Ru <sub>1-x</sub> AsO <sub>4</sub> . Applied Physics Letters, 2012, 100.	3.2	19
61	Control of silver-polymer aggregation mechanism by primary particle spatial correlations in dynamic fractal-like geometry. Nanoscale, 2011, 3, 3774.	5.6	10
62	Spatial inhomogeneity and planar symmetry breaking of the lattice incommensurate supermodulation in the high-temperature superconductor Bi <sub>2</sub> Sr <sub>2</sub> CaCu <sub>2</sub> O <sub>10</sub> . Nature Materials, 2011, 10, 733-736.	3.2	45
63	Evolution and control of oxygen order in a cuprate superconductor. Nature Materials, 2011, 10, 733-736.	27.5	148
64	Combined X-ray Microfluorescence and Atomic Force Microscopy Studies of Mg Distribution in Whole Cells. , 2011, , .		0
65	Intracellular concentration map of magnesium in whole cells by combined use of X-ray fluorescence microscopy and atomic force microscopy. Spectrochimica Acta, Part B: Atomic Spectroscopy, 2011, 66, 834-840.	2.9	20
66	Scale-free structural organization of oxygen interstitials in La <sub>2</sub> CuO <sub>4+y</sub> . Nature, 2010, 466, 841-844.	27.8	236
67	X-ray phase contrast microscopy at 300 nm resolution with laboratory sources. Optics Express, 2010, 18, 15998.	3.4	16
68	Feshbach resonance and mesoscopic phase separation near a quantum critical point in multiband FeAs-based superconductors. Superconductor Science and Technology, 2009, 22, 014004.	3.5	77
69	The Tetragonal to Orthorhombic Structural Phase Transition in Multiband FeAs-based Superconductors. Journal of Superconductivity and Novel Magnetism, 2009, 22, 305-308.	1.8	19
70	The Misfit Strain Critical Point in the 3D Phase Diagrams of Cuprates. Journal of Superconductivity and Novel Magnetism, 2009, 22, 299-303.	1.8	20
71	Flux Dynamics in NdO <sub>1-x</sub> F <sub>x</sub> FeAs Bulk Sample. Journal of Superconductivity and Novel Magnetism, 2009, 22, 549-552.	1.8	6
72	The Microstrain-Doping Phase Diagram of the Iron Pnictides: Heterostructures at Atomic Limit. Journal of Superconductivity and Novel Magnetism, 2009, 22, 589-593.	1.8	26

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73	A Model for Liquid-Striped Liquid Phase Separation in Liquids of Anisotropic Polarons. Journal of Superconductivity and Novel Magnetism, 2009, 22, 529-533.	1.8	33
74	Local structure of ReFeAsO (Re=La, Pr, Nd, Sm) oxypnictides studied by Fe K-edge EXAFS. Europhysics Letters, 2009, 87, 26005.	2.0	30
75	Isotope effect on the electronic topological transition in $Mg_{1-x}Al_xB_2$ . Physical Review B, 2009, 80, 040501.	3.2	25
76	RE L <sub>3</sub> -x-ray absorption study of REO <sub>3</sub> F <sub>1-x</sub> FeAs (RE =) Tj ETQq0.0 0 rgBT/Overlock	1.8	21
77	The effect of internal pressure on the tetragonal to monoclinic structural phase transition in ReOFeAs: the case of NdOFeAs. Superconductor Science and Technology, 2008, 21, 092002.	3.5	70
78	Controlling mesoscopic phase separation near electronic topological transitions via quenched disorder in ternary diborides. Journal of Physics Condensed Matter, 2008, 20, 434222.	1.8	9
79	The Feshbach resonance and nanoscale phase separation in a polaron liquid near the quantum critical point for a polaron Wigner crystal. Journal of Physics: Conference Series, 2008, 108, 012036.	0.4	35
80	Manipulation of Mesoscopic Phase Separation by X-ray Illumination. Journal of Superconductivity and Novel Magnetism, 2007, 20, 551-554.	1.8	3
81	Controlling the Critical Temperature in Mg <sub>1-x</sub> Al <sub>x</sub> B <sub>2</sub> . Journal of Superconductivity and Novel Magnetism, 2007, 20, 495-501.	1.8	11
82	Possible clean superconductivity in doped nanotube crystals. Journal of Physics and Chemistry of Solids, 2006, 67, 2187-2191.	4.0	1
83	T <sub>c</sub> as a Function of Electron Doping in Mg <sub>10</sub> B <sub>2</sub> Using Sc for Mg Substitution. Journal of Superconductivity and Novel Magnetism, 2005, 18, 667-670.	0.5	2
84	Activation Energy of the Photo Induced Q2 Oxygen Ordered Phase in the La <sub>2</sub> CuO <sub>4.08</sub> Superconductor. Journal of Superconductivity and Novel Magnetism, 2005, 18, 671-674.	0.5	4
85	Anomalous Thermal Expansion in Superconducting Mg <sub>1-x</sub> Al <sub>x</sub> B <sub>2</sub> System. Journal of Superconductivity and Novel Magnetism, 2005, 18, 737-741.	0.5	4
86	The Material-Dependent Parameter Controlling the Universal Phase Diagram of Cuprates. Journal of Superconductivity and Novel Magnetism, 2005, 18, 773-777.	0.5	2