

# Roberta Galli

## List of Publications by Year in descending order

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64  
papers

2,045  
citations

186265

28  
h-index

254184

43  
g-index

67  
all docs

67  
docs citations

67  
times ranked

2281  
citing authors

#	ARTICLE	IF	CITATIONS
1	On chemistry of $\hat{1}^3$ -chitin. Carbohydrate Polymers, 2017, 176, 177-186.	10.2	225
2	Isolation and identification of chitin in three-dimensional skeleton of <i>Aplysina fistularis</i> marine sponge. International Journal of Biological Macromolecules, 2013, 62, 94-100.	7.5	91
3	Identification and first insights into the structure and biosynthesis of chitin from the freshwater sponge <i>Spongilla lacustris</i> . Journal of Structural Biology, 2013, 183, 474-483.	2.8	88
4	Extreme Biomimetics: formation of zirconium dioxide nanophase using chitinous scaffolds under hydrothermal conditions. Journal of Materials Chemistry B, 2013, 1, 5092.	5.8	84
5	Isolation and identification of chitin in the black coral <i>Parantipathes larix</i> (Anthozoa: Cnidaria). International Journal of Biological Macromolecules, 2012, 51, 129-137.	7.5	82
6	Label-Free Delineation of Brain Tumors by Coherent Anti-Stokes Raman Scattering Microscopy in an Orthotopic Mouse Model and Human Glioblastoma. PLoS ONE, 2014, 9, e107115.	2.5	77
7	Extreme biomimetic approach for developing novel chitin-GeO <sub>2</sub> nanocomposites with photoluminescent properties. Nano Research, 2015, 8, 2288-2301.	10.4	71
8	Intrinsic Indicator of Photodamage during Label-Free Multiphoton Microscopy of Cells and Tissues. PLoS ONE, 2014, 9, e110295.	2.5	69
9	Express Method for Isolation of Ready-to-Use 3D Chitin Scaffolds from <i>Aplysina archeri</i> (Aplysineidae:). Tj ETQq1 1 0.784314 rgBT /Over	4.6	65
10	Synthesis of nanostructured chitin-hematite composites under extreme biomimetic conditions. RSC Advances, 2014, 4, 61743-61752.	3.6	53
11	Extreme biomimetics: Preservation of molecular detail in centimeter-scale samples of biological meshes laid down by sponges. Science Advances, 2019, 5, eaax2805.	10.3	53
12	Vibrational Spectroscopic Imaging and Multiphoton Microscopy of Spinal Cord Injury. Analytical Chemistry, 2012, 84, 8707-8714.	6.5	47
13	Chitin of poriferan origin and the bioelectrometallurgy of copper/copper oxide. International Journal of Biological Macromolecules, 2017, 104, 1626-1632.	7.5	47
14	In ovo sexing of chicken eggs by fluorescence spectroscopy. Analytical and Bioanalytical Chemistry, 2017, 409, 1185-1194.	3.7	47
15	Sexing of chicken eggs by fluorescence and Raman spectroscopy through the shell membrane. PLoS ONE, 2018, 13, e0192554.	2.5	47
16	A metabolic switch regulates the transition between growth and diapause in <i>C. elegans</i> . BMC Biology, 2020, 18, 31.	3.8	47
17	Isolation and identification of chitin from heavy mineralized skeleton of <i>Suberea clavata</i> (Verongida:). Tj ETQq1 1 0.784314 rgBT /Over	7.5	44
18	In Ovo Sexing of Domestic Chicken Eggs by Raman Spectroscopy. Analytical Chemistry, 2016, 88, 8657-8663.	6.5	41

#	ARTICLE	IF	CITATIONS
19	First report on chitinous holdfast in sponges (Porifera). Proceedings of the Royal Society B: Biological Sciences, 2013, 280, 20130339.	2.6	40
20	New Source of 3D Chitin Scaffolds: The Red Sea Demosponge <i>Pseudoceratina arabica</i> (Pseudoceratinidae, Verongiida). Marine Drugs, 2019, 17, 92.	4.6	36
21	3D Chitin Scaffolds of Marine Demosponge Origin for Biomimetic Mollusk Hemolymph-Associated Biomineralization Ex-Vivo. Marine Drugs, 2020, 18, 123.	4.6	36
22	IDH1 mutation in human glioma induces chemical alterations that are amenable to optical Raman spectroscopy. Journal of Neuro-Oncology, 2018, 139, 261-268.	2.9	35
23	Spider Chitin: An Ultrafast Microwave-Assisted Method for Chitin Isolation from <i>Caribena versicolor</i> Spider Molt Cuticle. Molecules, 2019, 24, 3736.	3.8	35
24	Effects of tissue fixation on coherent anti-Stokes Raman scattering images of brain. Journal of Biomedical Optics, 2013, 19, 071402.	2.6	33
25	Spider Chitin. The biomimetic potential and applications of <i>Caribena versicolor</i> tubular chitin. Carbohydrate Polymers, 2019, 226, 115301.	10.2	33
26	Discovery of chitin in skeletons of non-verongioid Red Sea demosponges. PLoS ONE, 2018, 13, e0195803.	2.5	31
27	Non-linear optical microscopy of kidney tumours. Journal of Biophotonics, 2014, 7, 23-27.	2.3	29
28	Non-functionalized soft alginate hydrogel promotes locomotor recovery after spinal cord injury in a rat hemimyelonection model. Acta Neurochirurgica, 2018, 160, 449-457.	1.7	29
29	Rapid Label-Free Analysis of Brain Tumor Biopsies by Near Infrared Raman and Fluorescence Spectroscopy—A Study of 209 Patients. Frontiers in Oncology, 2019, 9, 1165.	2.8	29
30	Assessing the efficacy of coherent anti-Stokes Raman scattering microscopy for the detection of infiltrating glioblastoma in fresh brain samples. Journal of Biophotonics, 2017, 10, 404-414.	2.3	28
31	Optical Analysis of Glioma: Fourier-Transform Infrared Spectroscopy Reveals the <i>IDH1</i> Mutation Status. Clinical Cancer Research, 2018, 24, 2530-2538.	7.0	27
32	New family and genus of a Dendrilla-like sponge with characters of Verongiida. Part II. Discovery of chitin in the skeleton of <i>Ernstilla lacunosa</i> . Zoologischer Anzeiger, 2019, 280, 21-29.	0.9	23
33	Extreme Biomimetics: Designing of the First Nanostructured 3D Spongin-Atacamite Composite and its Application. Advanced Materials, 2021, 33, e2101682.	21.0	21
34	Biochemical Monitoring of Spinal Cord Injury by FT-IR Spectroscopy—Effects of Therapeutic Alginate Implant in Rat Models. PLoS ONE, 2015, 10, e0142660.	2.5	20
35	Label-free multiphoton microscopy reveals relevant tissue changes induced by alginate hydrogel implantation in rat spinal cord injury. Scientific Reports, 2018, 8, 10841.	3.3	19
36	Electrochemical method for isolation of chitinous 3D scaffolds from cultivated <i>Aplysina aerophoba</i> marine demosponge and its biomimetic application. Applied Physics A: Materials Science and Processing, 2020, 126, 1.	2.3	19

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37	Sacubitril/Valsartan Improves Diastolic Function But Not Skeletal Muscle Function in a Rat Model of HFpEF. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3570.	4.1	19
38	Label-free identification of the glioma stem-like cell fraction using Fourier-transform infrared spectroscopy. <i>International Journal of Radiation Biology</i> , 2014, 90, 710-717.	1.8	18
39	Sex-specific differences in age-dependent progression of aortic dysfunction and related cardiac remodeling in spontaneously hypertensive rats. <i>American Journal of Physiology - Regulatory Integrative and Comparative Physiology</i> , 2017, 312, R835-R849.	1.8	18
40	Endogenous Two-Photon Excited Fluorescence Provides Label-Free Visualization of the Inflammatory Response in the Rodent Spinal Cord. <i>BioMed Research International</i> , 2015, 2015, 1-9.	1.9	15
41	Arrested in Glass: Actin within Sophisticated Architectures of Biosilica in Sponges. <i>Advanced Science</i> , 2022, 9, e2105059.	11.2	15
42	Nerve regeneration in the cephalopod mollusc <i>Octopus vulgaris</i> : label-free multiphoton microscopy as a tool for investigation. <i>Journal of the Royal Society Interface</i> , 2018, 15, 20170889.	3.4	13
43	Label-free multiphoton microscopy reveals altered tissue architecture in hippocampal sclerosis. <i>Epilepsia</i> , 2017, 58, e1-e5.	5.1	12
44	Extreme biomineralization: the case of the hypermineralized ear bone of gray whale ( <i>Eschrichtius</i> ). <i>Journal of Biomedical Optics</i> , 2016, 21, 061008.	2.3	12
45	Contactless in ovo sex determination of chicken eggs. <i>Current Directions in Biomedical Engineering</i> , 2017, 3, 131-134.	0.4	11
46	Label-free multiphoton imaging allows brain tumor recognition based on texture analysis—a study of 382 tumor patients. <i>Neuro-Oncology Advances</i> , 2020, 2, vdaa035.	0.7	11
47	Exogenous ethanol induces a metabolic switch that prolongs the survival of <i>Caenorhabditis elegans</i> dauer larva and enhances its resistance to desiccation. <i>Aging Cell</i> , 2020, 19, e13214.	6.7	11
48	Inflammation-related alterations of lipids after spinal cord injury revealed by Raman spectroscopy. <i>Journal of Biomedical Optics</i> , 2016, 21, 061008.	2.6	10
49	Identification of distinctive features in human intracranial tumors by label-free nonlinear multimodal microscopy. <i>Journal of Biophotonics</i> , 2019, 12, e201800465.	2.3	10
50	Label-free multiphoton microscopy as a tool to investigate alterations of cerebral aneurysms. <i>Scientific Reports</i> , 2020, 10, 12359.	3.3	9
51	Application of optical and spectroscopic technologies for the characterization of carious lesions <i>in vitro</i> . <i>Biomedizinische Technik</i> , 2018, 63, 595-602.	0.8	8
52	Optical molecular imaging of corpora amylacea in human brain tissue. <i>Biomedizinische Technik</i> , 2018, 63, 579-585.	0.8	7
53	Optical coherence tomography and multiphoton microscopy offer new options for the quantification of fibrotic aortic valve disease in ApoE <sup>-/-</sup> mice. <i>Scientific Reports</i> , 2021, 11, 5834.	3.3	7
54	Label-free Imaging of Myocardial Remodeling in Atrial Fibrillation Using Nonlinear Optical Microscopy: A Feasibility Study.. <i>Journal of Atrial Fibrillation</i> , 2018, 10, 1644.	0.5	7

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55	Heart valve stenosis in laser spotlights: Insights into a complex disease. <i>Clinical Hemorheology and Microcirculation</i> , 2014, 58, 65-75.	1.7	5
56	Microstructure of urinary stones as studied by means of multimodal nonlinear optical imaging. <i>Journal of Raman Spectroscopy</i> , 2017, 48, 22-29.	2.5	5
57	Imaging Arm Regeneration: Label-Free Multiphoton Microscopy to Dissect the Process in Octopus vulgaris. <i>Frontiers in Cell and Developmental Biology</i> , 2022, 10, 814746.	3.7	4
58	Correlation of biomechanics and cancer cell phenotype by combined Brillouin and Raman spectroscopy of U87-MG glioblastoma cells. <i>Journal of the Royal Society Interface</i> , 2022, 19, .	3.4	4
59	Label-free Imaging of Tissue Architecture during Axolotl Peripheral Nerve Regeneration in Comparison to Functional Recovery. <i>Scientific Reports</i> , 2019, 9, 12641.	3.3	3
60	Brillouin Spectroscopy as an Innovative Tool to Investigate Biomechanical Properties of Native Human Aortic Valve and Bioprostheses Tissue. <i>Structural Heart</i> , 2021, 5, 29.	0.6	3
61	Brillouin confocal microscopy to determine biomechanical properties of SULEEI-treated bovine pericardium for application in cardiac surgery. <i>Clinical Hemorheology and Microcirculation</i> , 2021, 79, 179-192.	1.7	2
62	Raman-based imaging uncovers the effects of alginate hydrogel implants in spinal cord injury. , 2015, , .		2
63	Subclinical Endocarditis Might be a Hidden Trigger of Early Prosthetic Valve Calcification: A Histological Study. <i>Heart Surgery Forum</i> , 2018, 21, E300-E304.	0.5	2
64	Raman-based imaging uncovers the effects of alginate hydrogel implants in spinal cord injury. <i>Proceedings of SPIE</i> , 2015, , .	0.8	1