

Olga Mayans

List of Publications by Year in descending order

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Version: 2024-02-01

114
papers

3,329
citations

172386

29
h-index

189801

50
g-index

120
all docs

120
docs citations

120
times ranked

4969
citing authors

#	ARTICLE	IF	CITATIONS
1	Firefly luciferase offers superior performance to AkaLuc for tracking the fate of administered cell therapies. <i>European Journal of Nuclear Medicine and Molecular Imaging</i> , 2022, 49, 796-808.	3.3	16
2	Time to retract Lancet paper on tissue engineered trachea transplants. <i>BMJ, The</i> , 2022, 376, o498.	3.0	9
3	Murine models of renal ischemia reperfusion injury: An opportunity for refinement using noninvasive monitoring methods. <i>Physiological Reports</i> , 2022, 10, e15211.	0.7	5
4	Production and analysis of titin kinase: Exploiting active/inactive kinase homologs in pseudokinase validation. <i>Methods in Enzymology</i> , 2022, 667, 147-181.	0.4	2
5	The N2A region of titin has a unique structural configuration. <i>Journal of General Physiology</i> , 2021, 153, .	0.9	12
6	Molecular Characterisation of Titin N2A and Its Binding of CARP Reveals a Titin/Actin Cross-linking Mechanism. <i>Journal of Molecular Biology</i> , 2021, 433, 166901.	2.0	22
7	Assessment of changes in autophagic vesicles in human immune cell lines exposed to nano particles. <i>Cell and Bioscience</i> , 2021, 11, 133.	2.1	3
8	Titin kinase ubiquitination aligns autophagy receptors with mechanical signals in the sarcomere. <i>EMBO Reports</i> , 2021, 22, e48018.	2.0	22
9	Mesenchymal stromal cells: what have we learned so far about their therapeutic potential and mechanisms of action?. <i>Emerging Topics in Life Sciences</i> , 2021, 5, 549-562.	1.1	12
10	Conformational changes in twitchin kinase in vivo revealed by FRET imaging of freely moving <i>C. elegans</i> . <i>ELife</i> , 2021, 10, .	2.8	5
11	Measuring Kidney Perfusion, pH, and Renal Clearance Consecutively Using MRI and Multispectral Optoacoustic Tomography. <i>Molecular Imaging and Biology</i> , 2020, 22, 494-503.	1.3	13
12	Multimodal Imaging Techniques Show Differences in Homing Capacity Between Mesenchymal Stromal Cells and Macrophages in Mouse Renal Injury Models. <i>Molecular Imaging and Biology</i> , 2020, 22, 904-913.	1.3	10
13	Structural annotation of the conserved carbohydrate esterase vb_24B_21 from Shiga toxin-encoding bacteriophage ϕ 24B. <i>Journal of Structural Biology</i> , 2020, 212, 107596.	1.3	2
14	In Vitro Determination of the Immunogenic Impact of Nanomaterials on Primary Peripheral Blood Mononuclear Cells. <i>International Journal of Molecular Sciences</i> , 2020, 21, 5610.	1.8	7
15	Perylene Diimide Nanoprobes for In Vivo Tracking of Mesenchymal Stromal Cells Using Photoacoustic Imaging. <i>ACS Applied Materials & Interfaces</i> , 2020, 12, 27930-27939.	4.0	5
16	What does fluorine do to a protein? Thermodynamic, and highly-resolved structural insights into fluorine-labelled variants of the cold shock protein. <i>Scientific Reports</i> , 2020, 10, 2640.	1.6	30
17	Porous chitosan by crosslinking with tricarboxylic acid and tuneable release. <i>SN Applied Sciences</i> , 2020, 2, 1.	1.5	21
18	Regenerative medicine therapies: lessons from the kidney. <i>Current Opinion in Physiology</i> , 2020, 14, 41-47.	0.9	5

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19	Single-Molecule Force Spectroscopy on the N2A Element of Titin: Effects of Phosphorylation and CARP. <i>Frontiers in Physiology</i> , 2020, 11, 173.	1.3	16
20	Rethinking Regenerative Medicine From a Transplant Perspective (and Vice Versa). <i>Transplantation</i> , 2019, 103, 237-249.	0.5	24
21	Exploration of the TRIM Fold of MuRF1 Using EPR Reveals a Canonical Antiparallel Structure and Extended COS-Box. <i>Journal of Molecular Biology</i> , 2019, 431, 2900-2909.	2.0	5
22	A Noninvasive Imaging Toolbox Indicates Limited Therapeutic Potential of Conditionally Activated Macrophages in a Mouse Model of Multiple Organ Dysfunction. <i>Stem Cells International</i> , 2019, 2019, 1-13.	1.2	7
23	The ZT Biopolymer: A Self-Assembling Protein Scaffold for Stem Cell Applications. <i>International Journal of Molecular Sciences</i> , 2019, 20, 4299.	1.8	4
24	Plasma Polymer Coatings To Direct the Differentiation of Mouse Kidney-Derived Stem Cells into Podocyte and Proximal Tubule-like Cells. <i>ACS Biomaterials Science and Engineering</i> , 2019, 5, 2834-2845.	2.6	4
25	Self-Assembling Proteins as High-Performance Substrates for Embryonic Stem Cell Self-Renewal. <i>Advanced Materials</i> , 2019, 31, 1807521.	11.1	6
26	Scalable, Non-denaturing Purification of Phosphoproteins Using Ga ³⁺ -IMAC: N2A and M1M2 Titin Components as Study case. <i>Protein Journal</i> , 2019, 38, 181-189.	0.7	12
27	<i>In vivo</i> fate of free and encapsulated iron oxide nanoparticles after injection of labelled stem cells. <i>Nanoscale Advances</i> , 2019, 1, 367-377.	2.2	16
28	Autophosphorylation Is a Mechanism of Inhibition in Twitchin Kinase. <i>Journal of Molecular Biology</i> , 2018, 430, 793-805.	2.0	3
29	Functional comparison of distinct <i>Brachyury</i> states in a renal differentiation assay. <i>Biology Open</i> , 2018, 7, .	0.6	2
30	Magnetic Resonance Imaging for Characterization of a Chick Embryo Model of Cancer Cell Metastases. <i>Molecular Imaging</i> , 2018, 17, 153601211880958.	0.7	19
31	Multicolour In Vivo Bioluminescence Imaging Using a NanoLuc-Based BRET Reporter in Combination with Firefly Luciferase. <i>Contrast Media and Molecular Imaging</i> , 2018, 2018, 1-10.	0.4	26
32	Widespread bacterial lysine degradation proceeding via glutarate and L-2-hydroxyglutarate. <i>Nature Communications</i> , 2018, 9, 5071.	5.8	65
33	Non-invasive imaging reveals conditions that impact distribution and persistence of cells after in vivo administration. <i>Stem Cell Research and Therapy</i> , 2018, 9, 332.	2.4	66
34	Evolutionary Morphing of Tryptophan Synthase: Functional Mechanisms for the Enzymatic Channeling of Indole. <i>Journal of Molecular Biology</i> , 2018, 430, 5066-5079.	2.0	6
35	Transdermal Measurement of Glomerular Filtration Rate in Mice. <i>Journal of Visualized Experiments</i> , 2018, . .	0.2	41
36	Assessing the Effectiveness of a Far-Red Fluorescent Reporter for Tracking Stem Cells In Vivo. <i>International Journal of Molecular Sciences</i> , 2018, 19, 19.	1.8	30

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37	Multimodal cell tracking from systemic administration to tumour growth by combining gold nanorods and reporter genes. <i>ELife</i> , 2018, 7, .	2.8	33
38	Ex vivo live cell tracking in kidney organoids using light sheet fluorescence microscopy. <i>PLoS ONE</i> , 2018, 13, e0199918.	1.1	22
39	Silver nanoparticle modified surfaces induce differentiation of mouse kidney-derived stem cells. <i>RSC Advances</i> , 2018, 8, 20334-20340.	1.7	6
40	Ensembles generated from crystal structures of single distant homologues solve challenging molecular-replacement cases in <i>AMPLE</i> . <i>Acta Crystallographica Section D: Structural Biology</i> , 2018, 74, 183-193.	1.1	16
41	Functionalized superparamagnetic iron oxide nanoparticles provide highly efficient iron-labeling in macrophages for magnetic resonance-based detection in vivo. <i>Cytotherapy</i> , 2017, 19, 555-569.	0.3	44
42	Surface nanotopography guides kidney-derived stem cell differentiation into podocytes. <i>Acta Biomaterialia</i> , 2017, 56, 171-180.	4.1	27
43	Twitchin kinase inhibits muscle activity. <i>Molecular Biology of the Cell</i> , 2017, 28, 1591-1600.	0.9	16
44	Preclinical imaging methods for assessing the safety and efficacy of regenerative medicine therapies. <i>Npj Regenerative Medicine</i> , 2017, 2, 28.	2.5	47
45	Approaches to <i>ab initio</i> molecular replacement of α -helical transmembrane proteins. <i>Acta Crystallographica Section D: Structural Biology</i> , 2017, 73, 985-996.	1.1	6
46	Characterisation of Cultured Mesothelial Cells Derived from the Murine Adult Omentum. <i>PLoS ONE</i> , 2016, 11, e0158997.	1.1	20
47	MS-1 <i>magA</i> . <i>Molecular Imaging</i> , 2016, 15, 153601211664153.	0.7	14
48	Imaging technologies for monitoring the safety, efficacy and mechanisms of action of cell-based regenerative medicine therapies in models of kidney disease. <i>European Journal of Pharmacology</i> , 2016, 790, 74-82.	1.7	25
49	Biophysical Analysis of the N-Terminal Domain from the Human Protein Phosphatase 1 Nuclear Targeting Subunit PNUTS Suggests an Extended Transcription Factor TFIIIS-Like Fold. <i>Protein Journal</i> , 2016, 35, 340-345.	0.7	6
50	Exploration of pathomechanisms triggered by a single-nucleotide polymorphism in titin's I-band: the cardiomyopathy-linked mutation T2580I. <i>Open Biology</i> , 2016, 6, 160114.	1.5	17
51	Extracellular matrix scaffolds as a platform for kidney regeneration. <i>European Journal of Pharmacology</i> , 2016, 790, 21-27.	1.7	15
52	Co-precipitation of DEAE-dextran coated SPIONs: how synthesis conditions affect particle properties, stem cell labelling and MR contrast. <i>Contrast Media and Molecular Imaging</i> , 2016, 11, 362-370.	0.4	24
53	Evaluating the effectiveness of transferrin receptor-1 (<i>TfR1</i>) as a magnetic resonance reporter gene. <i>Contrast Media and Molecular Imaging</i> , 2016, 11, 236-244.	0.4	25
54	Autologous Cells for Kidney Bioengineering. <i>Current Transplantation Reports</i> , 2016, 3, 207-220.	0.9	10

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55	CARP interacts with titin at a unique helical N2A sequence and at the domain Ig81 to form a structured complex. <i>FEBS Letters</i> , 2016, 590, 3098-3110.	1.3	22
56	The SH3 domain of UNC-89 (obscurin) interacts with paramyosin, a coiled-coil protein, in <i>Caenorhabditis elegans</i> muscle. <i>Molecular Biology of the Cell</i> , 2016, 27, 1606-1620.	0.9	18
57	Preventing Plasmon Coupling between Gold Nanorods Improves the Sensitivity of Photoacoustic Detection of Labeled Stem Cells <i>in Vivo</i> . <i>ACS Nano</i> , 2016, 10, 7106-7116.	7.3	78
58	Amniotic Fluid Stem Cells within Chimeric Kidney Rudiments Differentiate to Functional Podocytes after Transplantation into Mature Rat Kidneys. <i>Journal of the American Society of Nephrology: JASN</i> , 2016, 27, 1266-1268.	3.0	1
59	Residue contacts predicted by evolutionary covariance extend the application of <i>ab initio</i> molecular replacement to larger and more challenging protein folds. <i>IUCr</i> , 2016, 3, 259-270.	1.0	17
60	A descriptive guide for absolute quantification of produced shRNA pseudotyped lentiviral particles by real-time PCR. <i>Journal of Biological Methods</i> , 2016, 3, e55.	1.0	1
61	Structural advances on titin: towards an atomic understanding of multi-domain functions in myofilament mechanics and scaffolding. <i>Biochemical Society Transactions</i> , 2015, 43, 850-855.	1.6	20
62	Measures of kidney function by minimally invasive techniques correlate with histological glomerular damage in SCID mice with adriamycin-induced nephropathy. <i>Scientific Reports</i> , 2015, 5, 13601.	1.6	51
63	Overexpression of the MRI Reporter Genes Ferritin and Transferrin Receptor Affect Iron Homeostasis and Produce Limited Contrast in Mesenchymal Stem Cells. <i>International Journal of Molecular Sciences</i> , 2015, 16, 15481-15496.	1.8	46
64	Human Urine as a Noninvasive Source of Kidney Cells. <i>Stem Cells International</i> , 2015, 2015, 1-7.	1.2	45
65	Molecular Mechanism of Muscle Contraction: New Perspectives and Ideas. <i>BioMed Research International</i> , 2015, 2015, 1-2.	0.9	3
66	Concise Review: Workshop Review: Understanding and Assessing the Risks of Stem Cell-Based Therapies. <i>Stem Cells Translational Medicine</i> , 2015, 4, 389-400.	1.6	98
67	Titin and Obscurin: Giants Holding Hands and Discovery of a New Ig Domain Subset. <i>Journal of Molecular Biology</i> , 2015, 427, 707-714.	2.0	20
68	Patterned substrates fabricated by a controlled freezing approach and biocompatibility evaluation by stem cells. <i>Materials Science and Engineering C</i> , 2015, 49, 390-399.	3.8	12
69	Exploring the speed and performance of molecular replacement with <i>AMPLE</i> using <i>QUARK</i> <i>ab initio</i> protein models. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2015, 71, 338-343.	2.5	25
70	YbiB from <i>Escherichia coli</i> , the Defining Member of the Novel TrpD2 Family of Prokaryotic DNA-binding Proteins. <i>Journal of Biological Chemistry</i> , 2015, 290, 19527-19539.	1.6	5
71	Neuronal Calcium Sensor-1 Binds the D2 Dopamine Receptor and G-protein-coupled Receptor Kinase 1 (GRK1) Peptides Using Different Modes of Interactions. <i>Journal of Biological Chemistry</i> , 2015, 290, 18744-18756.	1.6	45
72	Routine phasing of coiled-coil protein crystal structures with <i>AMPLE</i> . <i>IUCr</i> , 2015, 2, 198-206.	1.0	24

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73	Assessing the Efficacy of Nano- and Micro-Sized Magnetic Particles as Contrast Agents for MRI Cell Tracking. PLoS ONE, 2014, 9, e100259.	1.1	56
74	Molecular basis for the fold organization and sarcomeric targeting of the muscle atrogen MuRF1. Open Biology, 2014, 4, 130172.	1.5	17
75	TrpB2 Enzymes are <i>O</i> -Phospho-serine Dependent Tryptophan Synthases. Biochemistry, 2014, 53, 6078-6083.	1.2	6
76	Titin kinase is an inactive pseudokinase scaffold that supports MuRF1 recruitment to the sarcomeric M-line. Open Biology, 2014, 4, 140041.	1.5	52
77	Metabolic and Target-Site Mechanisms Combine to Confer Strong DDT Resistance in <i>Anopheles gambiae</i> . PLoS ONE, 2014, 9, e92662.	1.1	102
78	Characterization of the interface between adsorbed fibronectin and human embryonic stem cells. Journal of the Royal Society Interface, 2013, 10, 20130139.	1.5	32
79	Application of the <i>AMPLE</i> cluster-and-truncate approach to NMR structures for molecular replacement. Acta Crystallographica Section D: Biological Crystallography, 2013, 69, 2194-2201.	2.5	13
80	Mechanistic and functional diversity in the mechanosensory kinases of the titin-like family. Biochemical Society Transactions, 2013, 41, 1066-1071.	1.6	23
81	Correlating efficacy and desensitization with GluK2 ligand-binding domain movements. Open Biology, 2013, 3, 130051.	1.5	6
82	Identification of an N-terminal inhibitory extension as the primary mechanosensory regulator of twitchin kinase. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 13608-13613.	3.3	25
83	<i>AMPLE</i> : a cluster-and-truncate approach to solve the crystal structures of small proteins using rapidly computed <i>ab initio</i> models. Acta Crystallographica Section D: Biological Crystallography, 2012, 68, 1622-1631.	2.5	109
84	The intracellular Ig fold: a robust protein scaffold for the engineering of molecular recognition. Protein Engineering, Design and Selection, 2012, 25, 205-212.	1.0	7
85	MuRFs Specialized Members of the TRIM/RBCC Family with Roles in the Regulation of the Trophic State of Muscle and Its Metabolism. Advances in Experimental Medicine and Biology, 2012, 770, 119-129.	0.8	18
86	Assembly of a protein "brush" by end-grafting titin fragments to liposomes. Journal of Bioscience and Bioengineering, 2011, 112, 178-179.	1.1	2
87	Conformational Flexibility of the Ligand-Binding Domain Dimer in Kainate Receptor Gating and Desensitization. Journal of Neuroscience, 2011, 31, 2916-2924.	1.7	27
88	Tertiary and Secondary Structure Elasticity of a Six-Ig Titin Chain. Biophysical Journal, 2010, 98, 1085-1095.	0.2	30
89	Bipartite Design of a Self-Fibrillating Protein Copolymer with Nanopatterned Peptide Display Capabilities. Nano Letters, 2010, 10, 4533-4537.	4.5	14
90	The Structure of the FnIII Tandem A77-A78 Points to a Periodically Conserved Architecture in the Myosin-Binding Region of Titin. Journal of Molecular Biology, 2010, 401, 843-853.	2.0	31

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91	Analysis of the distinct functions of growth factors and tissue culture substrates necessary for the long-term self-renewal of human embryonic stem cell lines. <i>Stem Cell Research</i> , 2009, 3, 28-38.	0.3	60
92	Activation of Anthranilate Phosphoribosyltransferase from <i>Sulfolobus solfataricus</i> by Removal of Magnesium Inhibition and Acceleration of Product Release. <i>Biochemistry</i> , 2009, 48, 5199-5209.	1.2	11
93	Ultralow-resolution ab initio phasing of filamentous proteins: crystals from a six-Ig fragment of titin as a case study. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2008, 64, 478-486.	2.5	2
94	A Rationally Designed Monomeric Variant of Anthranilate Phosphoribosyltransferase from <i>Sulfolobus solfataricus</i> is as Active as the Dimeric Wild-type Enzyme but Less Thermostable. <i>Journal of Molecular Biology</i> , 2008, 376, 506-516.	2.0	22
95	Structural Analysis of B-Box 2 from MuRF1: Identification of a Novel Self-Association Pattern in a RING-like Fold. <i>Biochemistry</i> , 2008, 47, 10722-10730.	1.2	36
96	A regular pattern of Ig super-motifs defines segmental flexibility as the elastic mechanism of the titin chain. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 1186-1191.	3.3	80
97	Lamina-associated Polypeptide 2 \pm Forms Homo-trimers via Its C Terminus, and Oligomerization Is Unaffected by a Disease-causing Mutation. <i>Journal of Biological Chemistry</i> , 2007, 282, 6308-6315.	1.6	11
98	Molecular determinants for the recruitment of the ubiquitin ligase MuRF1 onto α -tubulin. <i>FASEB Journal</i> , 2007, 21, 1383-1392.	0.2	91
99	Secondary and Tertiary Structure Elasticity of Titin Z1Z2 and a Titin Chain Model. <i>Biophysical Journal</i> , 2007, 93, 1719-1735.	0.2	46
100	Poly-Ig tandems from I-band titin share extended domain arrangements irrespective of the distinct features of their modular constituents. <i>Journal of Muscle Research and Cell Motility</i> , 2006, 26, 355-365.	0.9	42
101	The Ig Doublet Z1Z2: A Model System for the Hybrid Analysis of Conformational Dynamics in Ig Tandems from Titin. <i>Structure</i> , 2006, 14, 1437-1447.	1.6	42
102	Molecular insights into the self-assembly mechanism of dystrophin kinase. <i>FASEB Journal</i> , 2006, 20, 1142-1151.	0.2	24
103	Structural and Mutational Analysis of Substrate Complexation by Anthranilate Phosphoribosyltransferase from <i>Sulfolobus solfataricus</i> . <i>Journal of Biological Chemistry</i> , 2006, 281, 21410-21421.	1.6	23
104	Crystallization and preliminary X-ray analysis of the coiled-coil domain of dystrophin kinase. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2004, 60, 2336-2339.	2.5	2
105	Differential Regulation of a Hyperthermophilic α -Amylase with a Novel (Ca,Zn) Two-metal Center by Zinc. <i>Journal of Biological Chemistry</i> , 2003, 278, 9875-9884.	1.6	93
106	Stabilization of a (12 \pm)8-barrel protein by an engineered disulfide bridge. <i>FEBS Journal</i> , 2002, 269, 1145-1153.	0.2	22
107	Structural analysis of two enzymes catalysing reverse metabolic reactions implies common ancestry. <i>EMBO Journal</i> , 2002, 21, 3245-3254.	3.5	28
108	Three-dimensional structure of <i>Erwinia chrysanthemi</i> pectin methylesterase reveals a novel esterase active site. <i>Journal of Molecular Biology</i> , 2001, 305, 951-960.	2.0	105

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109	Purification, characterization and crystallization of thermostable anthranilate phosphoribosyltransferase from <i>Sulfolobus solfataricus</i> . <i>FEBS Journal</i> , 2001, 268, 2246-2252.	0.2	18
110	Structural Evidence for a Possible Role of Reversible Disulphide Bridge Formation in the Elasticity of the Muscle Protein Titin. <i>Structure</i> , 2001, 9, 331-340.	1.6	80
111	X-ray analysis of protein crystals with thin-plate morphology. <i>Journal of Synchrotron Radiation</i> , 1999, 6, 1016-1020.	1.0	4
112	Structural basis for activation of the titin kinase domain during myofibrillogenesis. <i>Nature</i> , 1998, 395, 863-869.	13.7	333
113	Crystallization and preliminary X-ray analysis of a member of a new family of pectate lyases, PelL from <i>Erwinia chrysanthemi</i> . <i>Acta Crystallographica Section D: Biological Crystallography</i> , 1998, 54, 419-422.	2.5	4
114	Structure and Evolution of Parallel β^2 -Helix Proteins. <i>Journal of Structural Biology</i> , 1998, 122, 236-246.	1.3	122