

Panagiotis Kastritis

Senior Researcher

Institute of Chemical Biology (ICB/NHRF)

E-mail: pkastrit@eie.gr

Website: <https://blogs.urz.uni-halle.de/kastritislab/>

ORCID: 0000-0002-1463-8422

Google Scholar: Panagiotis Kastritis

Linkedin: [Panagiotis Kastritis](#)



Professional positions

Since 08/2024	Professor for "Integrative Structural Biochemistry" – Institute for Biochemistry & Biotechnology, University of Halle-Wittenberg (MLU), Halle, Germany
Since 08/2024	Senior Researcher - Institute of Chemical Biology, National Hellenic Research Institution (ICB/NHRF), Athens, Greece (position proposed since 07/2024)
03/2023 – 07/2023	Associate Researcher - Institute of Chemical Biology, National Hellenic Research Institution (ICB/NHRF), Athens, Greece
Since 03/2023	ERA Chair for Cryo-EM – Institute of Chemical Biology, National Hellenic Research Foundation, Athens, Greece
08/2018 – 07/2024	Junior Professor for "Cryo-EM for membrane protein complexes" (Jun.-Prof., W1) – Institute for Biochemistry & Biotechnology, University of Halle-Wittenberg (MLU), Halle, Germany
Since 08/2018	Group Leader: <i>Cryo-EM</i> – ZIK HALOmem, MLU, Germany
2013–2018	Postdoc: <i>Structural Systems Biology</i> – Structural and Computational Biology Unit, EMBL-Heidelberg, Germany
2012–2013	Postdoc: <i>NMR & Computational Structural Biology</i> – Bijvoet Center for Biomolecular Research, Utrecht University, The Netherlands

Studies and Work Experience

Dec. 2012	Ph.D. (Chemistry) , Utrecht University, Utrecht, The Netherlands
2008–2012	Ph.D. Candidate/Research Associate – NMR Spectroscopy Group, Universit�t Utrecht, Utrecht, The Netherlands
2008	Diploma (Ptychion) Biology - University of Athens, Athens, Greece
2005–2008	Thesis (Structural Biology) - Cell Biology and Biophysics, Department of Biology, University of Athens, Athens, Greece
2002–2008	Biology Degree - University of Athens, Athens, Greece

Funding

2023–2028 Athens	<p>“ERA Chair Holder to establish the electron cryo-microscopy analysis of cellular and artificial nanomachines”</p> <p>Funder: European Union – Horizon Europe Amount: 2,499,921.00 EUR</p>
2020–2024 Halle	<p>“CORONAmem: Molecular determinants of differential host susceptibility to SARS-CoV-2 at the point of entry” <i>together with Prof. Stubbs & Prof. Bacia (ZIK HALOmem)</i></p> <p>Funder: Federal Ministry of Education and Research Amount: 1,815,599.53 EUR [~600,000 for my lab]</p>
2020–2028 Halle	<p>“Dissecting the structural role of flexibility in protein interactions using an integrative computational approach”, <i>within the framework of GRK 2467, Spokesperson: Prof. Sinz</i></p> <p>Funder: German Research Foundation (DFG) Amount: 3 Ph.D. Students</p>
2020–2024 Halle	<p>“Structure-based antibody design for modulating macromolecular interactions”</p> <p>Funder: BioSolutions GmbH Amount: 2 Ph.D. Students (expected grant for +2 Ph.D.)</p>
2019–2022 Halle	<p>“Electron microscopy of enzymatic pathways in polymer-stabilized nanodiscs”, <i>within "Agripoly", together with Dr. A. Meister</i></p> <p>Funder: EU (ESF)/Sachsen-Anhalt Amount: 1 Ph.D. Student</p>
2019–2022 Halle	<p>“Strategic Investments II”, <i>together with Profs. Stubbs, Balbach, Bacia & Jun-Prof. Schmidt (ZIK HALOmem).</i></p> <p>Funder: Federal Ministry of Education and Research Amount: 3,998,273.64 EUR [~1,100,000 for my lab]</p>
2017–2022 Halle	<p>“Cryo-electron microscopy of membrane-bound protein nanomachines” (NWG III Kastritis, <i>ZIK HALOmem</i>).</p> <p>Funder: Federal Ministry of Education and Research Amount: 6,742,304.51 EUR</p>
2016–2020 Halle	<p>European Regional Development Fund II (ZS/2016/04/78115), <i>together with Profs. Stubbs & Jun-Prof. Schmidt (ZIK HALOmem)</i></p> <p>Funder: EU, European Regional Development Fund Amount: 911,498.00 EUR [~600,000 for my lab]</p>
2014–2017 Heidelberg	<p>“Protein complexes as specimen for next-generation visual proteomics at near-atomic resolution”.</p> <p>Funder: Marie Curie/EMBO (EIPOD Scholarship), Amount: my post-doc position, EMBL-Heidelberg.</p>
2008 Athens, GR	<p>“Solution structure of a 43 kDa thermostable TIM barrel type chitinase”, NMR Utrecht, The Netherlands.</p> <p>Funder: EU-NMR Amount: my scholarship, expenses for visiting scientists</p>

Publications

- **86** peer-reviewed Publications (e.g., *Nature*, *PNAS USA*, *Nat comm*, *Cell Reports*, etc.)
 - **13** First and **22** Senior (co-)author Publications
 - **6** others currently under review
 - h-index: **36** – **8758** Citations (July 2023, Google Scholar)
- **3** Most Important publications as corresponding author [Last 3 years]

1. Skalidis I et al. Cryo-EM and artificial intelligence visualize endogenous protein community members. **Structure**. 2022 Apr 7; 30(4):575-589.e6.
2. Tüting C et al. Cryo-EM snapshots of a native lysate provide structural insights into a metabolon-embedded transacetylase reaction. **Nat Commun**. 2021 Nov 26;12(1):6933.
3. Kyrilis FL et al. Integrative structure of a 10-megadalton eukaryotic pyruvate dehydrogenase complex from native cell extracts. **Cell Rep**. 2021 Feb 9;34(6):108727.

Prizes and awards

2024, 2021	Positive (interim and final) evaluations for the Junior Professorship (equivalent to habilitation), MLU
2023	<i>Top 2%</i> biochemists world-wide (Elsevier, DOI:10.17632/btchxktzyw.6)
2022, 2019	Cover for the journals " <i>Structure</i> " and " <i>Biological Chemistry</i> "
2018 (Aug)	BMBF research group leader fellowship; ZIK HALOmem, MLU.
2017 (July)	Cover for the journal „ <i>Molecular Systems Biology</i> “
2014, 2010	Positive recommendations for first author manuscripts in F1000: http://f1000.com/prime/718363743 ; http://f1000.com/prime/3437978
2012	Ph.D. Award of the Bijvoet Center, Utrecht, Netherlands: <i>Best Doctoral Thesis of the Year 2012</i> .
2008–2013	HADDOCK group (including myself): Best macromolecular docking group in the CAPRI experiment.

Supervision of Graduate Students and Doctoral Fellows

2022 –	4 Ph.D. students graduated: Dr. Kyrilis [<i>summa cum laude</i>]; Dr. Skalidis [<i>summa cum laude</i>]; Dr. Schmidt [<i>cum laude</i>]; Dr. Janson [<i>magna cum laude</i>]
2018 –	3 Staff scientists / 5 Post-docs / 5 Ph.D. students. Institute of Biochemistry and Biotechnology & ZIK HALOmem, MLU, Halle, Germany.
2018 – 2021	Member of Ph.D. Committee for 6 Ph.D. students from MLU.
2020 –	Committee member for 3 Master Students, Head of committee for 1.
2020	External member of Ph.D. Committee for 1 Ph.D. student from University of Jena.
2019 –	Member of Thesis Advisory committee for 1 Ph.D. student.

Teaching activities, Course organization, Conferences and Invited talks

2022 –	Teaching assistant: Experimental Physics (BSc), MLU.
2022 –	Teaching assistant: Pharmaceutical Biotechnology (MSc), MLU.
2020	Course organizer and teacher: Cryo-Electron Microscopy, Graduate College "Agripoly", Halle.
2019,2020	Course organizer and teacher: Biophysical methods for protein structure analysis. Volunteer seminar series for the jGBM, Halle.
2019	Course organizer and teacher: Cryo-Electron Microscopy, Research Graduate School "RTG 2467", Halle.
2019 –	Teaching assistant: Biophysical Chemistry (BSc), MLU.
2018 – (MSc), MLU	Course co-organizer: Structural Biology and Bioinformatics
2018 –	>40 Invited lectures and talks in conferences

Institutional Responsibilities, Reviewing Activities and Conference Organization

2022, 2019	Co-organizer (with C. Schmidt) “1 st and 2 nd HALOmem International Meetings – Membrane structure and dynamics”. Sep 2022, Nov 2019.
2021	Organizer (with S. Keller, C. Paulino, C. Löw) “Advances in Structural Biology of Membrane Proteins”: 29 Nov-1 Dec 2021. EMBO Workshop.
2021 –	Scientific Evaluation, CSSB Hamburg, Germany
2020 –	Organizer of the Internal HALOmem Seminar, MLU.
2021 –	Scientific Evaluation, Knut and Alice Wallenberg Foundation, Sweden
2019 –	Scientific Evaluation, German Research Foundation, Germany
2019 –	Scientific Evaluation, Alexander von Humboldt, Germany
2019 –	Scientific Evaluation, National Agency for Research (ANR, France)
2019 –	Fellowship Reviewer, “la Caixa” Fellowship, Spain
2019 –	Scientific Evaluation, Research Council, Vetenskapsrådet, Sweden
2018 –	ZIK HALOmem Directorium.
2018 –	Faculty member, Institute of Biochemistry and Biotechnology, MLU.
2018 –	Member of the Faculty Committee of Natural Sciences I, MLU.
2017 –	Peer reviewer for scientific journals, e.g. <i>Nat Methods</i> , <i>Nat Comm</i> , <i>Sci Reports</i> , <i>Mol Cell Proteomics</i> , <i>PLOS Comp Biol</i> , <i>Protein Sci</i> etc.

Memberships in Scientific Societies and Networks

2024	Panelist and Member of the Wellcome Trust (UK)
2022	Panelist and Member of the Chan Zuckerberg Initiative (USA)
2019	Member of the Humboldt Network
2019	Member of the Institute of Technical Biochemistry
2018	Member of the German Society of Biochemistry and Molecular Biology
2018	Member of the EMBL Alumni Network
2013	Member of the University of Utrecht Alumni Network

List of Publications

All below-mentioned PDFs can be downloaded from: <https://cloud.uni-halle.de/s/Dz3tXMSMjuMP5wN>

2024

86  **Current Opinion in Structural Biology**

Kyrilis FL, Low JKK, Mackay JP, **Kastritis PL**. Structural biology in cellulose: Minding the gap between conceptualization and realization. *Curr Opin Struct Biol*. 2024 Aug;87:102843. doi: 10.1016/j.sbi.2024.102843. Epub 2024 May 23.

85 **communications biology**
 **SPRINGER NATURE**

Schmidt L, Tüting C, Kyrilis FL, Hamdi F, Semchonok DA, Hause G, Meister A, Ihling C, Stubbs MT, Sinz A, **Kastritis PL**. Delineating organizational principles of the endogenous L-A virus by cryo-EM and computational analysis of native cell extracts. *Commun Biol*. 2024 May 10;7(1):557. doi: 10.1038/s42003-024-06204-7. SJR: 5.9. Citations: 3.

84  **BioMACROMOLECULES**

Otrin N, Otrin L, Bednarz C, Träger TK, Hamdi F, **Kastritis PL**, Ivanov I, Sundmacher K. Protein-Rich Rafts in Hybrid Polymer/Lipid Giant Unilamellar Vesicles. *Biomacromolecules*. 2024 Feb 12;25(2):778-791. doi: 10.1021/acs.biomac.3c00972. SJR: 6.2. Citations: 0. [84_Otrin_et-al_2024.pdf]

83  **Biochemistry**

Schmitt FJ, Mehmood AS, Tüting C, Phan HT, Reisdorf J, Rieder F, Ghane Golmohamadi F, Verma R, **Kastritis PL**, Laufer J. Effect of Molecular Dynamics and Internal Water Contact on the Photophysical Properties of Red pH-Sensitive Proteins. *Biochemistry*. 2024 Jan 2;63(1):82-93. doi: 10.1021/acs.biochem.3c00444. SJR: 2.9. Citations: 0. [83_Schmitt_et-al_2024.pdf]

2023

82  **Journal of Structural Biology**

Semchonok DA, Kyrilis FL, Hamdi F, **Kastritis PL***. Cryo-EM of a heterogeneous biochemical fraction elucidates multiple protein complexes from a multicellular thermophilic eukaryote. *J Struct Biol X*. 2023 Aug 9;8:100094. doi: 10.1016/j.yjsbx.2023.100094. SJR: 3.0. Citations: 0. [82_Semchonok_et-al_2023.pdf]

81 **PROTEIN|SCIENCE** 

Hassan AH, Ihling C, Iacobucci C, **Kastritis PL**, Sinz A, Kruse T. The structural principles underlying molybdenum insertase complex assembly. *Protein Sci.* 2023 Sep;32(9):e4753. doi: 10.1002/pro.4753. SJR: **8.0**. Citations: 1. [81_Hassan_et-al_2023.pdf]

80 **Proteomics**
Proteomics and Systems Biology
WILEY

Tüting C, Schmidt L, Skolidis I, Sinz A, **Kastritis PL***. Enabling cryo-EM density interpretation from yeast native cell extracts by proteomics data and AlphaFold structures. *Proteomics.* 2023 Sep;23(17):e2200096. doi: 10.1002/pmic.202200096. SJR: **3.4**. Citations: 2. [80_Tueting_et-al_2023.pdf]

79 **nature plants**

Opatíková M, Semchonok DA, Kopečný D, Ilík P, Pospíšil P, Ilíková I, Roudnický P, Zeljković SĆ, Tarkowski P, Kyrilis FL, Hamdi F, **Kastritis PL**, Kouřil R. Cryo-EM structure of a plant photosystem II supercomplex with light-harvesting protein Lhcb8 and α -tocopherol. *Nat Plants.* 2023 Aug;9(8):1359-1369. doi: 10.1038/s41477-023-01483-0. SJR: **18.0**. Citations: 4. [79_Opatikova_et-al_2023.pdf]

78  OXFORD
ACADEMIC
Journal of Experimental Botany

Zahn T, Zhu Z, Ritoff N, Krapf J, Junker A, Altmann T, Schmutzer T, Tüting C, **Kastritis PL**, Babben S, Quint M, Pillen K, Maurer A. Novel exotic alleles of EARLY FLOWERING 3 determine plant development in barley. *J Exp Bot.* 2023 Jun 27;74(12):3630-3650. doi: 10.1093/jxb/erad127. SJR: **6.9**. Citations: 6. [78_Zahn_et-al_2023.pdf]

77 **JBC** | JOURNAL OF
BIOLOGICAL
CHEMISTRY

Zhou Y, Syed JH, Semchonok DA, Wright E, Kyrilis FL, Hamdi F, **Kastritis PL**, Bruce BD, Reynolds TB. Solubilization, purification, and characterization of the hexameric form of phosphatidylserine synthase from *Candida albicans*. *J Biol Chem.* 2023 Jun;299(6):104756. doi: 10.1016/j.jbc.2023.104756. SJR: **4.8**. Citations: 1. [77_Zhou_et-al_2023.pdf]

Di Ianni A, Tüting C, Kipping M, Ihling CH, Köppen J, Iacobucci C, Arlt C, **Kastritis PL***, Sinz A. Structural assessment of the full-length wild-type tumor suppressor protein p53 by mass spectrometry-guided computational modeling. *Sci Rep.* 2023 May 25;13(1):8497. doi: 10.1038/s41598-023-35437-5. SJR: 4.6. Citations: 3. [76_DiIanni_et-al_2023.pdf]

Skalidis I, Kyrilis FL, Tüting C, Hamdi F, Träger TK, Belapure J, Hause G, Fratini M, O'Reilly FJ, Heilmann I, Rappsilber J, **Kastritis PL***. Structural analysis of an endogenous 4-megadalton succinyl-CoA-generating metabolon. *Commun Biol.* 2023 May 22;6(1):552. doi: 10.1038/s42003-023-04885-0. SJR: 5.9. Citations: 2. [75_Skalidis_et-al_2023.pdf]

Träger T, **Kastritis PL***. Cracking the code of cellular protein-protein interactions: AlphaFold and whole-cell crosslinking to the rescue. *Mol Syst Biol.* 2023 Apr 12;19(4):e11587. doi: 10.15252/msb.202311587. SJR: 9.9. Citations: 2. [74_Traeger-Kastritis_2023.pdf]

Demisli S, Galani E, Goulielmaki M, Kyrilis FL, Ilić T, Hamdi F, Crevar M, **Kastritis PL**, Pletsas V, Nallet F, Savić S, Xenakis A, Papadimitriou V. Encapsulation of cannabidiol in oil-in-water nanoemulsions and nanoemulsion-filled hydrogels: A structure and biological assessment study. *J Colloid Interface Sci.* 2023 Mar 15;634:300-313. doi: 10.1016/j.jcis.2022.12.036. SJR: 9.9. Citations: 13. [73_Demisli_et-al_2023.pdf]

Belapure J, Sorokina M, **Kastritis PL***. IRAA: A statistical tool for investigating a protein-protein interaction interface from multiple structures. *Protein Sci.* 2023 Jan;32(1):e4523. doi: 10.1002/pro.4523. SJR: 8.0. Citations: 0. [72_Belapure_et-al_2023.pdf]

2022

71 **Bio**MACROMOLECULES

Janson K, Kyrilis FL, Tüting C, Alfes M, Das M, Träger TK, Schmidt C, Hamdi F, Vargas C, Keller S, Meister A*, **Kastritis PL***. Cryo-Electron Microscopy Snapshots of Eukaryotic Membrane Proteins in Native Lipid-Bilayer Nanodiscs. *Biomacromolecules*. 2022 Dec 12;23(12):5084-5094.
doi: 10.1021/acs.biomac.2c00935. SJR: 6.2. Citations: 5. [71_Janson_et-al_2022.pdf]

70 **nature**

Tafur L, Hinterdorfer K, Gabus C, Lamanna C, Bergmann A, Sadian Y, Hamdi F, Kyrilis FL, **Kastritis PL**, Loewith R. Cryo-EM structure of the SEA complex. *Nature*. 2022 Nov;611(7935):399-404.
doi: 10.1038/s41586-022-05370-0. SJR: 64.8. Citations: 15. [70_Tafur_et-al_2022.pdf]

69 **GEN** Genetic Engineering
& Biotechnology News
Mary Ann Liebert, Inc. publishers

Kastritis PL*. An integrative approach to probing transient protein structures in cell extracts. *Genetic Engineering & Biotechnology News*. 2022 Sep;42(9):68-70.
doi: 10.1089/gen.42.09.22. SJR: n/a. Citations: 0. [69_Kastritis_2022.pdf]

68 **LANGMUIR**

Wurl A, Ott M, Plato E, Meister A, Hamdi F, **Kastritis PL**, Blume A, Ferreira TM. Filling the Gap with Long n-Alkanes: Incorporation of C20 and C30 into Phospholipid Membranes. *Langmuir*. 2022 Jul 19;38(28):8595-8606.
doi: 10.1021/acs.langmuir.2c00872. SJR: 3.9. Citations: 3. [68_Wurl_et-al_2022.pdf]

67 **jmb**
Journal of Molecular Biology

Sorokina M, Belapure J, Tüting C, Paschke R, Papatotiriou I, Rodrigues JPGLM, **Kastritis PL***. An Electrostatically-steered Conformational Selection Mechanism Promotes SARS-CoV-2 Spike Protein Variation. *J Mol Biol*. 2022 Jul 15;434(13):167637.
doi: 10.1016/j.jmb.2022.167637. SJR: 5.6. Citations: 2. [67_Sorokina_et-al_2022.pdf]

66  Proceedings of the
National Academy of Sciences
of the United States of America


Marušič N, Otrin L, Rauchhaus J, Zhao Z, Kyrilis FL, Hamdi F, **Kastritis PL**, Dimova R, Ivanov I, Sundmacher K. Increased efficiency of charge-mediated fusion in polymer/lipid hybrid membranes. *Proc Natl Acad Sci U S A*. 2022 May 17;119(20):e2122468119. doi: 10.1073/pnas.2122468119. SJR: **11.1**. Citations: 19. [66_Marusic_et-al_2022.pdf]

65  **CHEMICAL
REVIEWS**

Piersimoni L, **Kastritis PL**, Arlt C, Sinz A. Cross-Linking Mass Spectrometry for Investigating Protein Conformations and Protein-Protein Interactions—A Method for All Seasons. *Chem Rev*. 2022 Apr 27;122(8):7500-7531. doi: 10.1021/acs.chemrev.1c00786. SJR: **62.1**. Citations: 125. [65_Piersimoni_et-al_2022.pdf]

64  **Structure**

Skalidis I, Kyrilis FL, Tüting C, Hamdi F, Chojnowski G, **Kastritis PL***. Cryo-EM and artificial intelligence visualize endogenous protein community members. *Structure*. 2022 Apr 7;30(4):575-589.e6. doi: 10.1016/j.str.2022.01.001. SJR: **5.7**. Citations: 28. [64_Skalidis_et-al_2022.pdf]

63  Colloids and Surfaces B: Biointerfaces

Li F, Harvey RD, Modicano P, Hamdi F, Kyrilis F, Müller S, Gruhle K, **Kastritis PL**, Drescher S, Dailey LA. Investigating bolalipids as solubilizing agents for poorly soluble drugs: Effects of alkyl chain length on solubilization and cytotoxicity. *Colloids Surf B Biointerfaces*. 2022 Apr;212:112369. doi: 10.1016/j.colsurfb.2022.112369. SJR: **5.8**. Citations: 4. [63_Li_et-al_2022.pdf]

2021

62 **Plant Communications** 

Semchonok DA, Mondal J, Cooper CJ, Schlum K, Li M, Amin M, Sorzano COS, Ramírez-Aportela E, **Kastritis PL**, Boekema EJ, Guskov A, Bruce BD. Cryo-EM structure of a tetrameric photosystem I from *Chroococcidiopsis* TS-821, a thermophilic, unicellular, non-heterocyst-forming cyanobacterium. *Plant Commun*. 2021 Oct 13;3(1):100248. doi: 10.1016/j.xplc.2021.100248. SJR: **10.5**. Citations: 12 [62_Semchonok_et-al_2021.pdf]

61

Tüting C, Kyrilis FL, Müller J, Sorokina M, Skalidis I, Hamdi F, Sadian Y, **Kastritis PL***. Cryo-EM snapshots of a native lysate provide structural insights into a metabolon-embedded transacetylase reaction. *Nat Commun*. 2021 Nov 26;12(1):6933.
doi: 10.1038/s41467-021-27287-4. SJR: 16.6. Citations: 28. [61_Tueeting_et-al_2021.pdf]

60 **BBA** Biomembranes
Biochimica et Biophysica Acta

Janson K, Zierath J, Kyrilis FL, Semchonok DA, Hamdi F, Skalidis I, Kopf AH, Das M, Kolar C, Rasche M, Vargas C, Keller S, **Kastritis PL***, Meister A*. Solubilization of artificial mitochondrial membranes by amphiphilic copolymers of different charge. *Biochim Biophys Acta Biomembr*. 2021 Aug 10;1863(12):183725.
doi: 10.1016/j.bbamem.2021.183725. SJR: 3.4. Citations: 11. [60_Janson_et-al-2021.pdf]

59



Otrin L, Witkowska A, Marušič N, Zhao Z, Lira RB, Kyrilis FL, Hamdi F, Ivanov I, Lipowsky R, **Kastritis PL**, Dimova R, Sundmacher K, Jahn R, Vidaković-Koch T. En route to dynamic life processes by SNARE-mediated fusion of polymer and hybrid membranes. *Nat Commun*. 2021 Aug 17;12(1):4972.
doi: 10.1038/s41467-021-25294-z. SJR: 16.6. Citations: 24. [59_Otrin_et-al_2021.pdf]

58 **PLOS ONE**

Li Y, Kuhn M, Zukowska-Kasprzyk J, Hennrich ML, **Kastritis PL**, O'Reilly FJ, Phapale P, Beck M, Gavin AC, Bork P. Coupling proteomics and metabolomics for the unsupervised identification of protein-metabolite interactions in *Chaetomium thermophilum*. *PLoS One*. 2021 Jul 9;16(7):e0254429.
doi: 10.1371/journal.pone.0254429. SJR: 3.7. Citations: 8. [58_Li_et-al_2021.pdf]

57 **ANTICANCER RESEARCH**

Drikos I, Boutou E, **Kastritis PL**, Vorgias CE. BRCA1-BRCT mutations alter the subcellular localization of BRCA1 *in vitro*. *Anticancer Res*. 2021 Jun;41(6):2953-2962.
doi: 10.21873/anticancer.15077. SJR: 2.0. Citations: 5. [57_Drikos_et-al_2021.pdf]

56 **Bio**MACROMOLECULES

Hoffmann M, Haselberger D, Hofmann T, Müller L, Janson K, Meister A, Das M, Vargas C, Keller S, **Kastritis PL**, Schmidt C, Hinderberger D. Nanoscale Model System for the Human Myelin Sheath. *Biomacromolecules*. 2021 Sep 13;22(9):3901-3912.
doi: 10.1021/acs.biomac.1c00714. SJR: 6.2. Citations: 6. [56_Hofmann_et-al_2021.pdf]

Rehkamp A, Tänzler D, Tüting C, **Kastritis PL**, Iacobucci C, Ihling CH, Kipping M, Koch KW, Sinz A. First 3D-Structural Data of Full-Length Guanylyl Cyclase 1 in Rod-Outer-Segment Preparations of Bovine Retina by Cross-Linking/Mass Spectrometry. *J Mol Biol.* 2021 May 14;433(10):166947.
doi: 10.1016/j.jmb.2021.166947. SJR: 5.6. Citations: 7. [55_Rehkamp_et-al_2021.pdf]

Kyrilis FL, Belapure J, **Kastritis PL***. Detecting Protein Communities in Native Cell Extracts by Machine Learning: A Structural Biologist's Perspective. *Front Mol Biosci.* 2021 Apr 15;8:660542.
doi: 10.3389/fmolb.2021.660542. SJR: 5.0. Citations: 12. [54_Kyrilis_et-al_2021_B.pdf]

Kyrilis FL, Semchonok DA, Skalidis I, Tüting C, Hamdi F, O'Reilly FJ, Rappsilber J, **Kastritis PL***. Integrative structure of a 10-megadalton eukaryotic pyruvate dehydrogenase complex from native cell extracts. *Cell Rep.* 2021 Feb 9;34(6):108727.
doi: 10.1016/j.celrep.2021.108727. SJR: 8.8. Citations: 41. [53_Kyrilis_et-al_2021.pdf]

Hofmann T, Barth M, Meister A, **Kastritis PL**, Schmidt C. Thin-Layer chromatography and coomassie staining of phospholipids for fast and simple lipidomics sample preparation.
Anal. Sens. 2021 accepted author manuscript.
doi: 10.1002/anse.202100029. SJR: n/a. Citations: 5. [52_accepted_Hoffman_et-al_2021.pdf]

Sorzano COS, Semchonok D, Lin SC, Lo YC, Vilas JL, Jiménez-Moreno A, Gragera M, Vacca S, Maluenda D, Martínez M, Ramírez-Aportela E, Melero R, Cuervo A, Conesa JJ, Conesa P, Losana P, Caño LD, de la Morena JJ, Fonseca YC, Sánchez-García R, Strelak D, Fernández-Giménez E, de Isidro F, Herreros D, **Kastritis PL**, Marabini R, Bruce BD, Carazo JM. Algorithmic robustness to preferred orientations in single particle analysis by CryoEM. *J Struct Biol.* 2021 Mar;213(1):107695.
doi: 10.1016/j.jsb.2020.107695. SJR: 3.0. Citations: 20. [51_Sorzano_et-al_2021.pdf]

2020

50 PLOS COMPUTATIONAL BIOLOGY

Rodrigues JPGLM, Barrera-Vilarmau S, M C Teixeira J, Sorokina M, Seckel E, **Kastritis PL**, Levitt M. Insights on cross-species transmission of SARS-CoV-2 from structural modeling. *PLoS Comput Biol*. 2020 Dec 3;16(12):e1008449.
doi: 10.1371/journal.pcbi.1008449. SJR: 4.3. Citations: 64. [50_Rodrigues_et-al_2020.pdf]

49  Cell Communication and Signaling

Skalidis I, Tüting C, **Kastritis PL***. Unstructured regions of large enzymatic complexes control the availability of metabolites with signaling functions. *Cell Commun Signal*. 2020 Aug 26;18(1):136.
doi: 10.1186/s12964-020-00631-9. SJR: 8.4. Citations: 15. [49_Skalidis_et-al_2020.pdf]

48 SCIENTIFIC DATA 

Sorokina M, M C Teixeira J, Barrera-Vilarmau S, Paschke R, Papatotiriou I, Rodrigues JPGLM, **Kastritis PL***. Structural models of human ACE2 variants with SARS-CoV-2 Spike protein for structure-based drug design. *Sci Data*. 2020 Sep 16;7(1):309.
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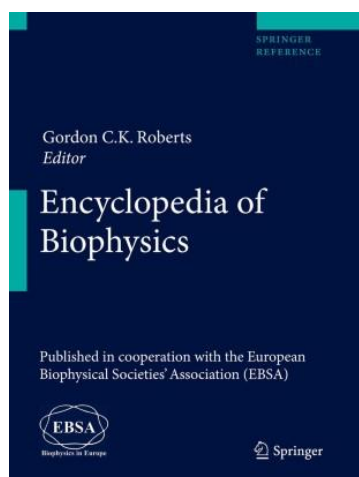
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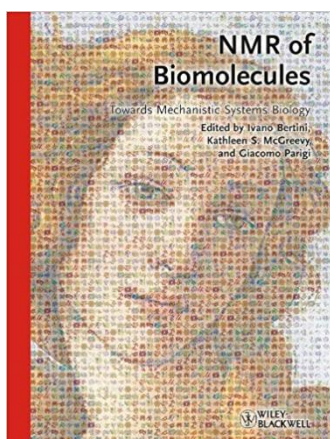
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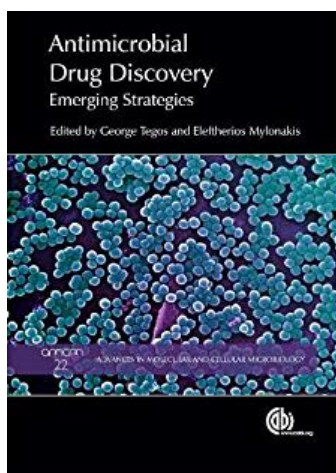
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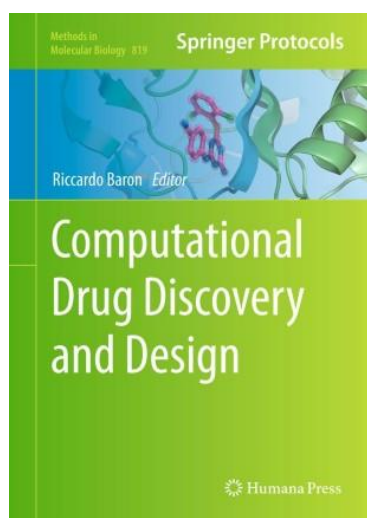
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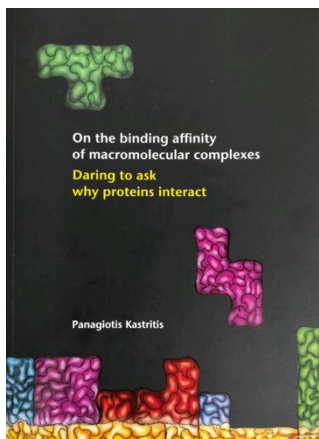
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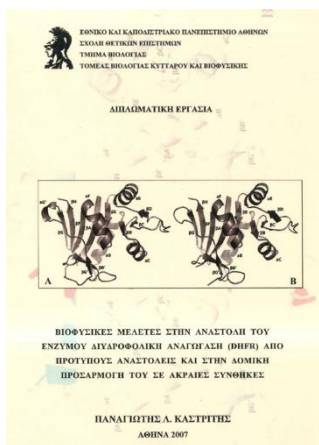
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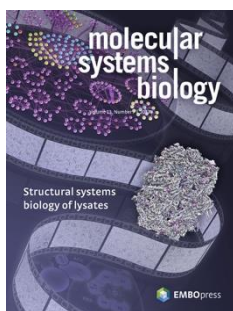


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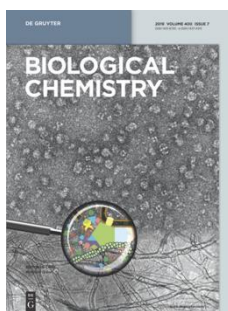


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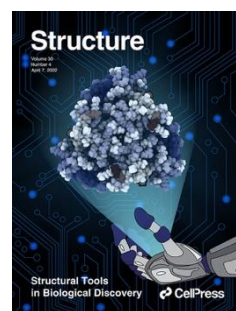
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