Sebastian Springer

List of Publications by Year
in descending order

79 papers	2,879 citations	185998 28 h-index	197535 49 g-index
122 all docs	122 docs citations	122 times ranked	3259 citing authors

#	Article	IF	Citations
1	Reply to "Identification of thermodynamic quantities of the stability of peptide-MHC I complex using nanoscale differential scanning fluorimetry" by Jakob Harris and Jonghoon Kang. Molecular Immunology, 2022, 141, 257.	1.0	0
2	The P5-type ATPase ATP13A1 modulates major histocompatibility complex I-related protein 1 (MR1)-mediated antigen presentation. Journal of Biological Chemistry, 2022, 298, 101542.	1.6	7
3	Dissociation of Î²2m from MHC class I triggers formation of noncovalent transient heavy chain dimers. Journal of Cell Science, 2022, 135, .	1.2	6
4	Homotypic and heterotypic in cis associations of MHC class I molecules at the cell surface. Current Research in Immunology, 2022, 3, 85-99.	1.2	2
5	Opening opportunities for Kd determination and screening of MHC peptide complexes. Communications Biology, 2022, 5, .	2.0	7
6	Primary and secondary functions of HLA-E are determined by stability and conformation of the peptide-bound complexes. Cell Reports, 2022, 39, 110959.	2.9	8
7	FoldAffinity: binding affinities from nDSF experiments. Scientific Reports, 2021, 11, 9572.	1.6	28
8	The murine cytomegalovirus immunoevasin gp40/<i>m152</i> inhibits NKG2D receptor RAE-1Î³ by intracellular retention and cell surface masking. Journal of Cell Science, 2021, 134, .	1.2	4
9	Venus flytrap or pas de trois? The dynamics of MHC class I molecules. Current Opinion in Immunology, 2021, 70, 82-89.	2.4	7
10	Trace Amine-Associated Receptor 1 Trafficking to Cilia of Thyroid Epithelial Cells. Cells, 2021, 10, 1518.	1.8	5
11	Peptide-MHC I complex stability measured by nanoscale differential scanning fluorimetry reveals molecular mechanism of thermal denaturation. Molecular Immunology, 2021, 136, 73-81.	1.0	11
12	Tailored Nanoparticles as Vaccine Components. Applied Sciences (Switzerland), 2021, 11, 11898.	1.3	0
13	Procathepsin V Is Secreted in a TSH Regulated Manner from Human Thyroid Epithelial Cells and Is Accessible to an Activity-Based Probe. International Journal of Molecular Sciences, 2020, 21, 9140.	1.8	5
14	Significance of nuclear cathepsin V in normal thyroid epithelial and carcinoma cells. Biochimica Et Biophysica Acta - Molecular Cell Research, 2020, 1867, 118846.	1.9	13
15	Structures of peptide-free and partially loaded MHC class I molecules reveal mechanisms of peptide selection. Nature Communications, 2020, 11, 1314.	5.8	40
16	MHC Class I Stability is Modulated by Cell Surface Sialylation in Human Dendritic Cells. Pharmaceutics, 2020, 12, 249.	2.0	16
17	Empty peptide-receptive MHC class I molecules for efficient detection of antigen-specific T cells. Science Immunology, 2019, 4, .	5.6	64
18	High-throughput peptide-MHC complex generation and kinetic screenings of TCRs with peptide-receptive HLA-A*02:01 molecules. Science Immunology, 2019, 4, .	5.6	35

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19	Successive crystal structure snapshots suggest the basis for MHC class I peptide loading and editing by tapasin. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 5055-5060.	3.3	39
20	Abstract B049: Empty MHC class I molecules for improved detection of antigen-specific T-cells. , 2019, , .		0
21	Protein micropatterns printed on glass: Novel tools for proteinâ€ligand binding assays in live cells. Engineering in Life Sciences, 2018, 18, 124-131.	2.0	11
22	AntikÃ¶rper-Mikropatterns zur Analyse von Proteininteraktionen in Zellen. BioSpektrum, 2018, 24, 400-403.	0.0	0
23	Comparative validation of a microcapsule-based immunoassay for the detection of proteins and nucleic acids. PLoS ONE, 2018, 13, e0201009.	1.1	3
24	Distinct mechanisms survey the structural integrity of HLA-B*27:05 intracellularly and at the surface. PLoS ONE, 2018, 13, e0200811.	1.1	10
25	Cytomegalovirus gp40/m152 Uses TMED10 as ER Anchor to Retain MHC Class I. Cell Reports, 2018, 23, 3068-3077.	2.9	14
26	A two-hybrid antibody micropattern assay reveals specific in cis interactions of MHC I heavy chains at the cell surface. ELife, 2018, 7, .	2.8	12
27	Specific Capture of Peptideâ€Receptive Major Histocompatibility Complex Class I Molecules by Antibody Micropatterns Allows for a Novel Peptideâ€Binding Assay in Live Cells. Small, 2017, 13, 1602974.	5.2	16
28	Protein A Functionalized Polyelectrolyte Microcapsules as a Universal Platform for Enhanced Targeting of Cell Surface Receptors. ACS Applied Materials & Interfaces, 2017, 9, 11506-11517.	4.0	32
29	The murine cytomegalovirus immunoevasin gp40 binds MHC class I molecules to retain them in the early secretory pathway. Journal of Cell Science, 2016, 129, 219-27.	1.2	9
30	â€œTo Catch or Not to Catchâ€ Microcapsuleâ€Based Sandwich Assay for Detection of Proteins and Nucleic Acids. Advanced Functional Materials, 2016, 26, 6015-6024.	7.8	20
31	TAP-Dependent and -Independent Peptide Import into Dendritic Cell Phagosomes. Journal of Immunology, 2016, 197, 3454-3463.	0.4	29
32	F pocket flexibility influences the tapasin dependence of two differentially diseaseâ€associated MHC Class I proteins. European Journal of Immunology, 2015, 45, 1248-1257.	1.6	48
33	The Carboxy Terminus of the Ligand Peptide Determines the Stability of the MHC Class I Molecule H-2Kb: A Combined Molecular Dynamics and Experimental Study. PLoS ONE, 2015, 10, e0135421.	1.1	35
34	Transport and quality control of MHC class I molecules in the early secretory pathway. Current Opinion in Immunology, 2015, 34, 83-90.	2.4	29
35	Release from Endoplasmic Reticulum Matrix Proteins Controls Cell Surface Transport of <scp>MHC</scp> Class I Molecules. Traffic, 2015, 16, 591-603.	1.3	4
36	Dissociation of Î²₂â€microglobulin determines the surface quality control of major histocompatibility complex class I molecules. FASEB Journal, 2015, 29, 2780-2788.	0.2	28

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37	Mechanistic Basis for Epitope Proofreading in the Peptide-Loading Complex. Journal of Immunology, 2015, 195, 4503-4513.	0.4	43
38	Dipeptides catalyze rapid peptide exchange on MHC class I molecules. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 202-207.	3.3	45
39	Coupling between side chain interactions and binding pocket flexibility in HLA-B*44:02 molecules investigated by molecular dynamics simulations. Molecular Immunology, 2015, 63, 312-319.	1.0	18
40	A Novel Family of Human Leukocyte Antigen Class II Receptors May Have Its Origin in Archaic Human Species. Journal of Biological Chemistry, 2014, 289, 639-653.	1.6	37
41	Regulated Oligomerization Induces Uptake of a Membrane Protein into <scp>COPII</scp> Vesicles Independent of Its Cytosolic Tail. Traffic, 2014, 15, 531-545.	1.3	19
42	Pulseâ€Chase Analysis for Studying Protein Synthesis and Maturation. Current Protocols in Protein Science, 2014, 78, 30.3.1-30.3.23.	2.8	8
43	Peptide-independent stabilization of MHC class I molecules breaches cellular quality control*. Journal of Cell Science, 2014, 127, 2885-97.	1.2	57
44	The Prominence of the Ligand Peptide Carboxyl Terminus in the MHC Class I Molecules Stability and Affinity. Biophysical Journal, 2014, 106, 662a-663a.	0.2	0
45	Endoplasmic Reticulum Targeting Alters Regulation of Expression and Antigen Presentation of Proinsulin. Journal of Immunology, 2014, 192, 4957-4966.	0.4	9
46	Polyelectrolyte Microcapsule Based Assay for Monitoring Biotechnological Processes In Vitro and In Vivo. Biophysical Journal, 2014, 106, 621a.	0.2	0
47	Proline substitution independently enhances <scp>H</scp>â€2<scp>D</scp>^b complex stabilization and <scp>TCR</scp> recognition of melanomaâ€associated peptides. European Journal of Immunology, 2013, 43, 3051-3060.	1.6	22
48	Investigating MHC class I folding and trafficking with pulse-chase experiments. Molecular Immunology, 2013, 55, 126-130.	1.0	15
49	Not all empty MHC class I molecules are molten globules: Tryptophan fluorescence reveals a two-step mechanism of thermal denaturation. Molecular Immunology, 2013, 54, 386-396.	1.0	33
50	Determining the Activity of the Transporter Associated with Antigen Processing in the Compartments of the Secretory Pathway. Methods in Molecular Biology, 2013, 960, 137-144.	0.4	0
51	Dipeptides promote folding and peptide binding of MHC class I molecules. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 15383-15388.	3.3	55
52	A natural tapasin isoform lacking exon 3 modifies peptide loading complex function. European Journal of Immunology, 2013, 43, 1459-1469.	1.6	8
53	The tapasin isoform NeTT (new tapasin transcript) encoded by an alternatively spliced transcript lacking exon 3 impairs PLC (peptide loading complex) conferred stabilization of MHC class I molecules. Molecular Immunology, 2012, 51, 16.	1.0	0
54	Tapasin dependence of MHC class I molecules correlates with their conformational flexibility. Molecular Immunology, 2012, 51, 31.	1.0	0

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55	Enhanced immunogenicity of MHC class I-restricted tumor-associated altered peptide ligands. Molecular Immunology, 2012, 51, 33-34.	1.0	0
56	Stoichiometry of HLA Class II-Invariant Chain Oligomers. PLoS ONE, 2011, 6, e17257.	1.1	18
57	Tapasin dependence of major histocompatibility complex class I molecules correlates with their conformational flexibility. FASEB Journal, 2011, 25, 3989-3998.	0.2	61
58	Tapasin edits peptides on MHC class I molecules by accelerating peptide exchange. European Journal of Immunology, 2010, 40, 214-224.	1.6	52
59	Retrieval of a Metabolite from Cells with Polyelectrolyte Microcapsules. Small, 2010, 6, 2412-2419.	5.2	10
60	The transporter associated with antigen processing (TAP) is active in a post-ER compartment. Journal of Cell Science, 2010, 123, 4271-4279.	1.2	28
61	Peptide binding to MHC class I and II proteins: New avenues from new methods. Molecular Immunology, 2010, 47, 649-657.	1.0	42
62	Dual-Focus Fluorescence Correlation Spectroscopy: Measuring Translational and Rotational Diffusion of Biomolecules. Biophysical Journal, 2010, 98, 586a.	0.2	0
63	Flexibility of the MHC class II peptide binding cleft in the bound, partially filled, and empty states: A molecular dynamics simulation study. Biopolymers, 2009, 91, 14-27.	1.2	54
64	Intracellular transport: Small 19/2009. Small, 2009, 5, NA-NA.	5.2	0
65	Controlled Intracellular Release of Peptides from Microcapsules Enhances Antigen Presentation on MHC Class I Molecules. Small, 2009, 5, 2168-2176.	5.2	111
66	Calreticulin-dependent recycling in the early secretory pathway mediates optimal peptide loading of MHC class I molecules. EMBO Journal, 2009, 28, 3730-3744.	3.5	78
67	The mechanism of action of tapasin in the peptide exchange on MHC class I molecules determined from kinetics simulation studies. Molecular Immunology, 2009, 46, 2054-2063.	1.0	20
68	Differential tapasin dependence of MHC class I molecules correlates with conformational changes upon peptide dissociation: A molecular dynamics simulation study. Molecular Immunology, 2008, 45, 3714-3722.	1.0	58
69	Peptide-receptive Major Histocompatibility Complex Class I Molecules Cycle between Endoplasmic Reticulum and cis-Golgi in Wild-type Lymphocytes. Journal of Biological Chemistry, 2007, 282, 30680-30690.	1.6	47
70	Multifunctionalized Polymer Microcapsules: Novel Tools for Biological and Pharmacological Applications. Small, 2007, 3, 944-955.	5.2	223
71	Comparative molecular dynamics analysis of tapasin-dependent and -independent MHC class I alleles. Protein Science, 2006, 16, 299-308.	3.1	56
72	Tapasin and other chaperones: models of the MHC class I loading complex. Biological Chemistry, 2004, 385, 763-78.	1.2	68

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73	Conformational Flexibility of the MHC Class I Î±1-Î±2 Domain in Peptide Bound and Free States: A Molecular Dynamics Simulation Study. Biophysical Journal, 2004, 87, 2203-2214.	0.2	116
74	Structure of the Sec23p/24p and Sec13p/31p complexes of COPII. Proceedings of the National Academy of Sciences of the United States of America, 2001, 98, 10704-10709.	3.3	122
75	The p24 proteins are not essential for vesicular transport in Saccharomyces cerevisiae. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 4034-4039.	3.3	109
76	Crystal Structures of Two H-2Db/Glycopeptide Complexes Suggest a Molecular Basis for CTL Cross-Reactivity. Immunity, 1999, 10, 63-74.	6.6	121
77	A Primer on Vesicle Budding. Cell, 1999, 97, 145-148.	13.5	266
78	Fast Association Rates Suggest a Conformational Change in the MHC Class I Molecule H-2Dbupon Peptide Binding. Biochemistry, 1998, 37, 3001-3012.	1.2	67
79	Nucleation of COPII Vesicular Coat Complex by Endoplasmic Reticulum to Golgi Vesicle SNAREs. , 1998, 281, 698-700.		184