

Curriculum vitae Europass



Informații personale

Nume / Prenume	Petrescu, Andrei-Jose
Adresă	Institutul de Biochimie al Academiei Romane - IBAR
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Web Page	http://www.biochim.ro/ib/departments/strbiochem/StrBiochem.php
Naționalitate	Romana

Functii / Responsabilitati

Perioada	2000 - prezent.
Funcție	Sef DBBBS - <i>Departamentul de Bioinformatica, Biocalcul si Biochimie Structurala</i>
Institutie	Institutul de Biochimie al Academiei Romane - IBAR, Splaiul Independentei 296, 060031 Bucuresti 17
Responsabilități	Coordonarea programelor de biologie structurală ale IBAR, Conducere de Doctorat, Scoala de Studii Avansate a Academiei Romane (SCOSAAR) Sustinerea de Cursuri Universitare, Masterale & Post Doc, Educatie continua
Expertiză	Bioinformatica, Biocalcul, Biologie Structurală, Biochimie Fizica, Glicobiologie

Educație și formare

Calificare	<i>Doctor in Fizica, Specialitatea Biofizica</i>
Specializare	Biofizica Moleculara / Tehnici fizice in Biochimie, Modelare si Simulare Moleculara, Glicobiologie
Institutie	Universitatea Bucuresti, Facultatea de Fizica

Afilieri

Membru în societăți și organizații:

- SCR (Senior Common Room) Member, Corpus Christi College, Oxford - în 1998
- Glycobiology Institute, Department of Biochemistry, University of Oxford
- Biochemical Society, UK

Societatea Română de Biochimie și Biologie Moleculară

Responsabilități

Activități în folosul comunitatii

- Membru al Comitetului Comunitatilor Europene de Bioinformatica – ELIXIR (2005-2010)
- Vicepresedinde CNATDCU 2020-2025
- Membru CNCS Comisia de Biologie.
- Evaluator granturi CNCSIS și Academia Romana, UEFISCDI
- Evaluator BMC Bioinformatics, QSAR & Combinatorial Science etc
-

Cercetare - Stagii Invitate

- 1993 - 2009	Departamentul de Biochimie al Universității din Oxford, 1-4 luni/an
- 2005 - 2011	Universitatea din Wageningen, Granturi FP5, FP6
- 1999 - 2000	IWR Biocomputing, Universitatea din Heidelberg
- 1994 - 1999	CEA-Saclay - Lab L.Brilluooin; Lab Sim.Mol, 5 stagii EU 4-6 luni.
- 1991	Facultatea de Farmacie, Wurzburg - Department de Biochimie, 3 luni

>25

Rezultatele Cercetării

Producție științifică:

- *Lucrări în publicații recenzate:* 102
 - Articole în reviste circuitul principal (ISI-Thomson):* 78
 - Capitole carte în străinătate:* 2
 - Articole / carti în țară:* 23
- *Brevete:* 4

Impactul cercetării:

- *Indice Hirsh – WoS All-DB* 33
- *Total citări WoS All DB* >4000
- *AIS mediu per articol* 2.5
- *FI mediu per articol* 6.1
- *Articole în reviste cu AIS>3.0* 12
- *Lucrări cu peste 100 citări* 11

Premii

- *Laureat al premiului N.Simionescu al Academiei Romane, 2000:*
"Pentru contribuții în domeniul plierii proteinelor"
- *Laureat al Premiului MEC 2006:*
"Pentru contribuții la colaborare științifică în cadrul FP6"

Activitate didactică:

- *Conducător de Doctorat - SCOSAAR - Școala de Studii Avansate a Academiei Romane;*
- *Coordonator Postdoc - Programul "Biotehnologii Celulare și Moleculare cu Aplicații în Medicină"*
- *Cursuri MSc: Școala Superioară Normală București*
 - *Cursul de Bioinformatică, Modelare și Simulare Moleculară în Biochimie (2009 - prezent)*
- *Cursul Internațional FEBS "Recombinant DNA Technology & Protein Expression"*
 - *Cursul de Bioinformatică, 2003,2005,2008;*

**Tabel cu Doctoranzi Incadrați în programul de Bioinformatică și Biocalcul al IBAR-SCOSAAR
în perioada 2021 - 2026**

	An Incadrare	Nume	Prenume	An Finalizare	Status	Premii
1	2026	Bordeianau	Andrei		Activ	
2	2026	Popescu	Cezar Gabriel		Activ	
3	2025	Cireșanu	Dan-Ștefan		Activ	
4	2025	Purice	Teodora-Cristina		Activ	
5	2025	Ungureanu	Victor-Gabriel		Activ	ISQBP
6	2024	Bugeac	Cosmin-Alexandru		Activ	
7	2023	Iacob (Munteanu)	Ancuța-Lenuța		Activ	
8	2021	Trif	Cosmin		Activ	
9	2020	Șulea	Teodor Asvadur	2025	Excelent	SRBBM
10	2020	Ursu	Eugen	2026	Excelent	
11	2019	Sârghie (Atanasiu)	Larisa	2025	Foarte Bine	
12	2017	Bunu (Romanescu)	Gabriela	2023	Excelent	
13	2017	Martin	Eliza-Cristina	2022	Excelent	R.Acad
14	2021	Bectaș	Floriana Sibel	2022	Transferată	
15	2021	Manoliu	Laura-Cristina-Elena	2022	Retrasă	

Selecție de Lucrări Semnificative

2026 - 2021

1. Stănescu LM, Aramă CC, Chirițoiu GN, Petrescu AJ, Petrescu ȘM, Munteanu CVA. "A new strategy to separate peptide methionine sulfoxides stereoisomers for potential immunotherapy application." **Anal Bioanal Chem.** (2026) May 1;.
doi: 10.1007/s00216-026-06507-0.
AI: 0.65 / Q1 FI: 3.80
2. Sulea TA, Martin EC, Bugeac CA, Bectăș FS, Iacob AL, Spiridon L, Petrescu AJ. "Lessons from Deep Learning Structural Prediction of Multistate Multidomain Proteins-The Case Study of Coiled-Coil NOD-like Receptors." **Int J Mol Sci.** **26(2)**:500 (2025);.
doi: 10.3390/ijms26020500.
AI: 1.05 / Q1 FI: 4.90
3. Sulea TA, Draga S, Mernea M, Corlan AD, Radu BM, Petrescu AJ, Amuzescu B. "Differential Inhibition by Cenobamate of Canonical Human Nav1.5 Ion Channels and Several Point Mutants." **Int J Mol Sci.** **26(1)**:358. (2025)
doi: 10.3390/ijms26010358.
AI: 1.05 / Q1 FI: 4.90
4. Martin EC, Le Targa L, Tsakou-Ngouafo L, Fan TP, Lin CY, Xiao J, Huang Z, Yuan S, Xu A, Su YH, Petrescu AJ, Pontarotti P, Schatz DG. Insights into RAG evolution from the identification of "missing link" family A RAGL transposons. **Mol Biol Evol**, **40(11)**, msad232 (2023) –
doi: 10.1093/molbev/msad232
AI: 5.06 / Q1 FI: 10.70
5. Martin EC, Ion CF, Ifrimescu F, Spiridon L, Bakker J, Goverse A, Petrescu AJ. "NLRscape: an atlas of plant NLR proteins". **Nucleic Acids Res.**, **51(D1)**:D1470-D1482 (2023)
doi: 10.1093/nar/gkac1014
AI: 5.51 / Q1 FI: 19.16
6. Papadopoulos N, Nédélec A, Derenne A, Sulea TA, Pecquet C, Chachoua I, Vertenoel G, Tilmant T, Petrescu AJ, Mazzucchelli G, Iorga BI, Vertommen D, Constantinescu SN. "Oncogenic CALR mutant C-terminus mediates dual binding to the thrombopoietin receptor triggering complex dimerization and activation." **Nat Commun.** **14(1)**:1881 (2023).
doi: 10.1038/s41467-023-37277-3
AI: 5.61 / Q1 FI: 17.69
7. Chirițoiu GN, Munteanu CVA, Sulea TA, Spiridon L, Petrescu AJ, Jandus C, Romero P, Petrescu SM, "Methionine oxidation selectively enhances T cell reactivity against a melanoma antigen", **iScience**, **26(7)**, 107205 (2023),
doi: 10.1016/j.isci.2023.107205
AI: 1.63 / Q1 FI: 5.80
8. Munteanu CVA, Chirițoiu GN, Petrescu AJ, Petrescu ȘM. "Defining the altered glycoproteomic space of the early secretory pathway by class I mannosidase pharmacological inhibition." **Front Mol Biosci.** **9**:1064868 (2023).
doi: 10.3389/fmolb.2022.1064868
AI: 1.33 / Q2 FI: 6.11
9. Martin EC, Spiridon L, Goverse A, Petrescu AJ. "NLRexpress-A bundle of machine learning motif predictors-Reveals motif stability underlying plant Nod-like receptors diversity.", **Front Plant Sci.**, **13**, 975888, (2022).
doi: 10.3389/fpls.2022.975888
AI: 1.17 / Q1 FI: 6.63
10. van Grinsven IL, Martin EC*, Petrescu AJ*, Kormelink R*. "Tsw - A case study on structure-function puzzles in plant NLRs with unusually large LRR domains.", **Front Plant Sci**, **13**, 983693, (2022)
doi: 10.3389/fpls.2022.983693
AI: 1.17 / Q1 FI: 6.63
11. Mernea M*, Martin EC*, Petrescu AJ*, Avram S*. "Deep learning in the quest for compound nomination for fighting COVID-19." **Curr Med Chem.** **28(28)**:5699-5732. (2021)
doi: 10.2174/0929867328666210113170222
AI: 0.90 / Q2 FI: 4.20
12. Munteanu CVA, Chirițoiu GN, Chirițoiu M, Ghenea S, Petrescu AJ, Petrescu ȘM. "Affinity Proteomics and Deglycoproteomics Uncover Novel EDEM2 Endogenous Substrates and an Integrative ERAD Network", **Mol Cell Proteomics.** **20**:100125. (2021).
doi: 10.1016/j.mcpro.2021.100125
AI: 2.00 / Q1 FI: 7.38
13. Manica G, Ghenea S, Munteanu CVA, Martin EC, Butnaru C, Surleac M, Chiritoiu GN, Alexandru PR, Petrescu AJ, Petrescu SM. "EDEM3 Domains Cooperate to Perform Its Overall Cell Functioning." **Int J Mol Sci.** **22(4)**:2172 (2021).
doi: 10.3390/ijms22042172
AI: 1.06 / Q1 FI: 6.21

14. Baudin M, [Martin EC](#), Sass C, Hassan JA, Bendix C, Saucedo R, Diplock N, Specht CD, [Petrescu AJ](#), Lewis JD. "A natural diversity screen in *Arabidopsis thaliana* reveals determinants for HopZ1a recognition in the ZAR1-ZED1 immune complex." **Plant Cell Environ.**;44(2):629-644 (2021)
doi: 10.1111/pce.13927
AI: 1.80 / Q1 FI: 6.40

Lucrări Anterioare

1990 - 2020

15. [Martin EC](#), Vicari C, Tsakou-Ngouafo L, Pontarotti P, [Petrescu AJ](#), Schatz DG. "Identification of RAG-like transposons in protostomes suggests their ancient bilaterian origin." **Mob DNA.** 11, 17 (2020).
doi: 10.1186/s13100-020-00214-y
AI: 0.90 / Q1 FI: 5.80
16. [Martin EC](#), Sukarta OCA, [Spiridon L](#), Grigore LG, [Constantinescu V](#), [Tacutu R](#), Goverse A, [Petrescu A-J](#), "LRRpredictor - A New LRR Motif Detection Method for Irregular Motifs of Plant NLR Proteins Using an Ensemble of Classifiers", **Genes** 11(3), 286-300 (2020)
doi: 10.3390/genes11030286
AI: 0.90 / Q2 FI: 3.70
17. [Spiridon L](#), [Şulea TA](#), Minh DDL, [Petrescu AJ](#). "Robosample: A rigid-body molecular simulation program based on robot mechanics." **Biochim Biophys Acta Gen Subj.** 1864(8), 129616. (2020)
doi: 10.1016/j.bbagen.2020.129616
AI: 1.80 / Q2 FI: 3.40
18. Baudin M, Schreiber KJ, [Martin EC](#), [Petrescu AJ](#), Lewis JD. "Structure-function analysis of ZAR1 immune receptor reveals key molecular interactions for activity." **Plant J.** 101(2), 352-370 (2020)
doi: 10.1111/tpj.14547
AI: 2.10 / Q1 FI: 6.10
19. Zhang Y, Cheng TC, Huang G, Lu Q, [Surleac MD](#), Mandell JD, Pontarotti P, [Petrescu AJ](#), Xu A, Xiong Y, Schatz DG. "Transposon molecular domestication and the evolution of the RAG recombinase.", **Nature.** 569:79-84 (2019).
doi: 10.1038/s41586-019-1093-7
AI: 22.20 / Q1 FI: 42.70
20. Sarbu M, Ica R, Petrut A, Vukelić Ž, [Munteanu CVA](#), [Petrescu AJ](#), Zamfir AD. "Gangliosidome of human anencephaly: A high resolution multistage mass spectrometry study.", **Biochimie.** 163:142-151 (2019)
doi: 10.1016/j.biochi.2019.05.017
AI: 0.90 / Q3 FI: 3.10
21. Sarbu M, Dehelean L, [Munteanu CVA](#), Ica R, [Petrescu AJ](#), Zamfir AD. "Human caudate nucleus exhibits a highly complex ganglioside pattern as revealed by high-resolution multistage Orbitrap MS.", **J.Carb.Chem.** 38(9):531-551 (2019)
doi: 10.1080/07328303.2019.1669632
AI: 0.00 / Q3 FI: 0.80
22. Ciubotaru M, Musat MG, [Surleac M](#), Ionita E, [Petrescu AJ](#), Abele E, Abele R. "The Design of New HIV-IN Tethered Bifunctional Inhibitors using Multiple Microdomain Targeted Docking." **Curr Med Chem.** 26(15):2574-2600 (2019).
doi: 10.2174/0929867325666180406114405
AI: 0.90 / Q2 FI: 4.20
23. [Munteanu CVA](#), Chiriţoiu GN, [Petrescu AJ](#), [Petrescu ŞM](#). "Profiling Optimal Conditions for Capturing EDEM Proteins Complexes in Melanoma Using Mass Spectrometry." **Adv Exp Med Biol.** 1140, 155-167 (2019)
doi: 10.1007/978-3-030-15950-4_9
AI: 0.60 / Q3 FI: 2.40
24. Wróblewski T, [Spiridon L](#), [Martin EC](#), [Petrescu AJ](#), Cavanaugh K, Jose-Truco M, Xu H, Gozdowski D, Pawłowski K, Micheltore RW, Takken FLW.. "Genome-wide functional analyses of plant CCNLR-type pathogen receptors reveal essential roles of their N-ter domain in oligomerization, networking, and immunity." **PLOS Biology** 16(12): e2005821 (2018)
doi: 10.1371/journal.pbio.2005821
AI: 5.60 / Q1 FI: 9.10
25. Sloodweg EJ, [Spiridon LN](#), [Martin EC](#), Tameling WIL, Townsend PD, Pomp R, Roosien J, Drawska O, Sukarta OCA, Schots A, Borst JW, Joosten MHAJ, Bakker J, Smant G, Cann MJ, [Petrescu AJ](#), Goverse A. "Distinct Roles of Non-Overlapping Surface Regions of the Coiled-Coil Domain in the Potato Immune Receptor Rx1." **Plant Physiol.** 178(3):1310-1331 (2018)
doi: 10.1104/pp.18.00603
AI: 2.20 / Q1 FI: 6.90
26. Norris EJ, Jones WD, [Surleac MD](#), [Petrescu AJ](#), Destephani D, Zhang Q, Hamadeh I, Kneisl J, Livasy CA, Ganapathi RN, Tait DL, Ganapathi MK. Clonal lineage of high grade serous ovarian cancer in a patient with neurofibromatosis type 1. **Gynecol Oncol Rep.** 23:41-44 (2018).

doi: 10.1016/j.gore.2018.01.005

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27. Butnaru CM, Chiritoiu MB, Chiritoiu GN, Petrescu SM, Petrescu AJ. "Inhibition of N-glycan processing modulates the network of EDEM3 interactors" **Biochem Biophys Res Commun.** **486(4)**:978-984 (2017)
doi: 10.1016/j.bbrc.2017.03.143
AI: 0.70 / Q3 FI: 2.30
28. Kozuki T, Chikamori K, Surleac MD, Micluta MA, Petrescu AJ, Norris EJ, Elson P, Hoeltge GA, Grabowski DR, Porter ACG, Ganapathi RN, Ganapathi MK. Roles of the C-terminal domains of topoisomerase II α and topoisomerase II β in regulation of the decatenation checkpoint. **Nucleic Acids Res.** **45(10)**:5995-6010 (2017) doi: 10.1093/nar/gkx325
AI: 3.60 / Q1 FI: 10.20
29. Ruta LL, Kissen R, Nicolau I, Neagoe AD, Petrescu AJ, Bones AM, Farcasanu IC. Heavy metal accumulation by *Saccharomyces cerevisiae* cells armed with metal binding hexapeptides targeted to the inner face of the plasma membrane. **Appl Microbiol Biotechnol.** **101(14)**:5749-5763 (2017)
doi: 10.1007/s00253-017-8335-0
AI: 1.00 / Q2 FI: 3.30
30. Rajaraman J, Douchkov D, Hensel G, Stefanato FL, Gordon A, Ereful N, Caldararu OF, Petrescu AJ, Kumlehn J, Boyd LA, Schweizer P, "An LRR/Malectin Receptor-Like Kinase Mediates Resistance to Non-adapted and Adapted Powdery Mildew Fungi in Barley and Wheat." **Front Plant Sci.** **7**:1836-1844 (2016).
doi: 10.3389/fpls.2016.01836
AI: 1.30 / Q1 FI: 4.30
31. Diaz-Granados A, Petrescu AJ, Goverse A, Smant G. "SPRYSEC Effectors: A Versatile Protein-Binding Platform to Disrupt Plant Innate Immunity." **Front Plant Sci.** **7**:1575-1588 (2016)
doi: 10.3389/fpls.2016.01575
AI: 1.30 / Q1 FI: 4.30
32. De Oliveira AS, Koolhaas I, Boiteux LS, Caldararu OF, Petrescu AJ, Oliveira Resende R, Kormelink R. Cell death triggering and effector recognition by Sw-5 SD-CNL proteins from resistant and susceptible tomato isolines to Tomato spotted wilt virus. **Mol Plant Pathol.** **17(9)**:1442-1454 (2016)
doi: 10.1111/mp.12439
AI: 1.30 / Q1 FI: 4.70
33. Sueldo DJ, Shimels M, Spiridon LN, Caldararu O, Petrescu AJ, Joosten MH, Tameling WL., "Random mutagenesis of the nucleotide-binding domain of NRC1 (NB-LRR Required for Hypersensitive Response-Associated Cell Death-1), a downstream signalling nucleotide-binding, leucine-rich repeat (NB-LRR) protein, identifies gain-of-function mutations in the nucleotide-binding pocket." **New Phytol.** **208(1)**, 210-223. (2015)
doi: 10.1111/nph.13459
AI: 2.50 / Q1 FI: 7.70
34. Zhang YH, Shetty K, Surleac MD, Petrescu AJ, Schatz DG. "Mapping and Quantitation of the Interaction between the Recombination Activating Gene Proteins RAG1 and RAG2." **J.Biol.Chem.** **290(19)**, 11802-17. (2015)
doi: 10.1074/jbc.M115.638627
AI: 2.00 / Q1 FI: 4.60
35. Ciubotaru M, Surleac MD, Metskas LA, Koo P, Rhoades E, Petrescu A-J, Schatz DG., "The architecture of the 12RSS in V(D)J recombination signal and synaptic complexes" **Nucleic Acid Res.** **43(2)**, 917-931 (2015)
doi: 10.1093/nar/gku1348
AI: 3.60 / Q1 FI: 9.20
36. Sarbu M, Munteanu CVA, Dehelean L, Petrescu AJ, Jasna PK, Zamfir AD, "Identification and structural characterization of novel O- and N-glycoforms in the urine of a Schindler disease patient by Orbitrap mass spectrometry" **J.Mass.Spectrometry**, **50(9)**, 1044-1056 (2015)
doi: 10.1002/jms.3616
AI: 0.70 / Q3 FI: 2.40
35. Sela H, Spiridon LN, Ashkenazi H, Bhullar NK, Brunner S, Petrescu A-J, Fahima T, Keller B, Jordan T, "3D modeling and diversity analysis reveals distinct AVR recognition sites and evolutionary pathways in wild and domesticated wheat Pm3 R genes" **Mol Plant Microbe Interact.**, **27(8)**, 835-845 (2014)
doi: 10.1094/MPMI-01-14-0009-R
AI: 1.50 / Q1 FI: 4.40
36. Sloatweg EJ, Spiridon LN, Roosien J, Butterbach P, Pomp R, Westerhof L, Wilbers R, Bakker E, Bakker J, Petrescu A-J, Smant G, Goverse A "Structural Determinants at the Interface of the ARC2 and LRR Domains Control the Activation of the NB-LRR Plant Immune Receptors Rx1 and Gpa2." **Plant Physiol.**, **161(3)**, 1510-1528 (2013)
doi: 10.1104/pp.113.218842
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37. Ciubotaru M, Trexler AJ, Spiridon LN, Surleac MD, Rhoades E, Petrescu A-J, Schatz DG. "RAG and HMGB1 create a large bend in the 23RSS in the V(D)J recombination synaptic complexes.", **Nucl.Acid.Res.**, **41(4)**, 2437-2425 (2013)
doi: 10.1093/nar/gks1294
AI: 2.60 / Q1 FI: 8.80
38. Flangea C, Petrescu A-J, Seidler DG, Munteanu CVA, Zamfir AD, "Identification of an unusually sulfated tetrasaccharide chondroitin/dermatan motif in mouse brain by combining chip- nanoelectrospray multistage MS2-MS4 and high resolution mass spectrometry.", **Electrophoresis**, **34(11)**, 1581-1592 (2013)
doi: 10.1002/elps.201200704
AI: 0.60 / Q3 FI: 3.10
39. Marin MB, Ghenea S, Spiridon LN, Chiritoiu GN, Petrescu A-J, Petrescu SM. "Tyrosinase degradation is prevented when EDEM1 lacks the intrinsically disordered region", **PLoS One**, **7(8)**, e42998 (2012)
doi: 10.1371/journal.pone.0042998
AI: 1.80 / Q1 FI: 3.70
40. Sela H, Spiridon LN, Petrescu A-J, Akerman M, Mandel-Gutfreund Y, Nevo E, Loutre C, KSela H, Spiridon LN, Petrescu A-J, Akerman M, Mandel-Gutfreund Y, Nevo E, Loutre C, Keller B, Schulman AH, Fahima T, "Ancient diversity of splicing motifs and protein surfaces in the wild emmer wheat (*Triticum dicoccoides*) LR10 coiled coil (CC) and leucine-rich repeat (LRR) domains" **Mol. Plant Pathol**, **13(3)**, 276–287 (2012)
doi: 10.1111/j.1364-3703.2011.00744.x
AI: 1.20 / Q1 FI: 3.90
41. Cioaca D, Ghenea S, Spiridon LN, Marin M, Petrescu A-J, Petrescu SM. "C-terminus glycans with critical functional role in the maturation of secretory glycoproteins.", **PLoS One**, **6(5)**, e19979 (2011)
doi: 10.1371/journal.pone.0019979
AI: 1.80 / Q1 FI: 4.00
42. Maekawa T, Cheng W, Spiridon LN, Töller A, Lukasik E, Saijo Y, Liu P, Shen Q-H, Micluta MA, Somssich IE, Takken FLW, Petrescu A-J, Chai J, Schulze-Lefert P, "Coiled-coil domain-dependent homodimerization of intracellular MLA immune receptors defines a minimal functional module for triggering cell death", **Cell Host-Microbe**, **9(3)**: 187-199 (2011)
doi: 10.1016/j.chom.2011.02.008
AI: 6.90 / Q1 FI: 13.50
43. Grozav AG, Willard BB, Kozuki T, Chikamori K, Micluta MA, Petrescu A-J, Kinter M, Ganapathi R, Ganapathi MK. "Tyrosine 656 in topoisomerase IIβ is important for the catalytic activity of the enzyme: Identification based on artifactual +80-Da modification at this site". **Proteomics**. **11(5)**: 829-842 (2011)
doi: 10.1002/pmic.201000194
AI: 1.20 / Q1 FI: 4.50
44. Slootweg E, Roosien J, Spiridon LN, Petrescu A-J, Tameling W, Joosten M, Pomp R, vanSchaik C, Borst JW, Smant G, Schots A, Bakker J, Goverse A. "Nucleocytoplasmic Distribution Is Required for Activation of Resistance by the Potato NB-LRR Receptor Rx1 and Is Balanced by Its Functional Domains.", **Plant Cell**. **22(12)**: 4195-4215 (2010)
doi: 10.1105/tpc.110.077537
AI: 4.00 / Q1 FI: 9.40
45. Rehman S, Postma W, Tytgat T, Prins P, Qin L, Overmars H, Vossen J, Spiridon L, Petrescu AJ, Goverse A, Bakker J, Smant G, Rehman S. "A secreted SPRY domain-containing protein (SPRYSEC) from the plant-parasitic nematode *Globodera rostochiensis* interacts with a CC-NB-LRR protein from a susceptible tomato.", **Mol Plant Microbe Interact.**, **22(3)**, 330 -340 (2009)
doi: 10.1094/MPMI-22-3-0330
AI: 1.60 / Q1 FI: 4.40
46. Balasu MC, Spiridon LN, Miron S, Craescu CT, Scheidig AJ, Petrescu AJ, Szedlacsek SE. "Interface analysis of the complex between ERK2 and PTP-SL.", **PLoS One**, **4(5)**, e5432 (2009)
doi: 10.1371/journal.pone.0005432
AI: 1.90 / Q1 FI: 4.30
47. Kammenga JE, Doroszuk A, Riksen JA, Hazendonk E, Spiridon L, Petrescu A-J, Tijsterman M, Plasterk RH, Bakker J. "A *Caenorhabditis elegans* wild type defies the temperature-size rule owing to a single nucleotide polymorphism in tra-3.", **PLoS Genet**. **3(3)**, e34 (2007)
doi: 10.1371/journal.pgen.0030034
AI: 6.00 / Q1 FI: 8.90
48. Kudla U, Milac AL, Qin L, Overmars H, Roze E, Holterman M, Petrescu A-J, Goverse A, Bakker J, Helder J, Smant G. "Structural and functional characterization of a novel, host penetration-related pectate lyase from the potato cyst nematode *Globodera rostochiensis*", **Mol. Plant Pathol**, **8(3)**, 293-305 (2007)
doi: 10.1111/j.1364-3703.2007.00394.x
AI: 1.10 / Q1 FI: 3.00
49. Petrescu A-J, Wormald MR, Dwek RA. "Structural aspects of glycomes with a focus on N-glycosylation and glycoprotein folding.", **Curr Opin Struct Biol**. **16(5)**: 600-607 (2006)
doi: 10.1016/j.sbi.2006.08.007

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50. Milac AL, Avram S, Petrescu A-J, "Evaluation of a neural networks QSAR method based on ligand representation using substituent descriptors Application to HIV-1 protease inhibitors." **J Mol Graph Model.** **25(1)**, 37-45 (2006)
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