FULL PAPERS

1) Petronilli V, Nicolli A, **Costantini P**, Colonna R, Bernardi P (1994) *Regulation of the permeability transition pore, a voltage-dependent mitochondrial channel inhibited by cyclosporin A.*
Biochim. Biophys. Acta - Bioenergetics 1187: 255-9
IF 1995 (not available for 1994): 2.500

2) Petronilli V, **Costantini P**, Scorrano L, Colonna R, Passamonti S, Bernardi P (1994) *The voltage sensor of the mitochondrial permeability transition pore is tuned by the oxidation-reduction state of vicinal thiols. Increase of the gating potential by oxidants and its reversal by reducing agents.*
J. Biol. Chem. 269: 16638-42
IF 1995 (not available for 1994): 7.385

3) Nicolli A, **Costantini P**, Basso E, Colonna R, Petronilli V, Bernardi P. *Potential role of cyclosporin A-sensitive mitochondrial channels in ischemia-reperfusion injury* (1995)
Transplant. Proc. 27: 2825-6
IF: 0.726

4) **Costantini P**, Petronilli V, Colonna R, Bernardi P (1995) *On the effects of paraquat on isolated mitochondria. Evidence that paraquat causes opening of the cyclosporin A-sensitive permeability transition pore synergistically with nitric oxide*.
Toxicology 99: 77-88
IF: 1.396

5) **Costantini P**, Chernyak BV, Petronilli V, Bernardi P (1995) *Selective inhibition of the mitochondrial permeability transition pore at the oxidation-reduction sensitive dithiol by monobromobimane.*
FEBS Lett. 362: 239-42
IF: 3.842

6) **Costantini P**, Chernyak BV, Petronilli V, Bernardi P (1996) *Modulation of the mitochondrial permeability transition pore by pyridine nucleotides and dithiol oxidation at two separate sites.*
J. Biol. Chem. 271: 6746-51
IF: 7.452

7) Bernardi P, Colonna R, **Costantini P**, Eriksson O, Fontaine E, Ichas F, Massari S, Nicolli A, Petronilli V, Scorrano L (1998) *The mitochondrial permeability transition.*
Biofactors 8: 273-81
IF 2001 (first available): 1.273

8) Bernardi P, Basso E, Colonna R, **Costantini P**, Di Lisa F, Eriksson O, Fontaine E, Forte M, Ichas F, Massari S, Nicolli A, Petronilli V, Scorrano L (1998) *Perspectives on the mitochondrial permeability transition*.
Biochim. Biophys. Acta - Bioenergetics 1365: 200-206
IF: 2.478

9) **Costantini P**, Colonna R, Bernardi P (1998) *Induction of the mitochondrial permeability transition by N-Ethylmaleimide depends on secondary oxidation of critical thiol groups. Potentiation by copper-ortho-phenantroline without dimerization of the adenine nucleotide translocase.*
Biochim. Biophys. Acta - Bioenergetics 1365: 385-92
IF: 2.478

10) Marchetti P, Zamzami N, Joseph B, Schraen-Maschke S, Méreau-Richard C, **Costantini P**, Métivier D, Susin SA, Kroemer G, Formstecher P (1999) *The novel retinoid 6-[3-(1-adamantyl)-4-hydroxyphenyl]-2-naphtalene carboxylic acid can trigger apoptosis through a mitochondrial pathway independent of the nucleus.*
Cancer Res. 59: 6257-66
IF: 8.614

11) Jacotot E, **Costantini P**, Laboureau E, Zamzami N, Susin SA, Kroemer G (1999) *Mitochondrial membrane permeabilization during the apoptotic process.*
Ann. NY Acad. Sci. 887: 18-30
IF: 0.964

12) Ravagnan L, Marzo I, **Costantini P**, Susin SA, Zamzami N, Petit PX, Hirsch F, Goulbern M, Poupon MF, Miccoli L, Xie Z, Reed JC, Kroemer G (1999) *Lonidamine triggers apoptosis via a direct, Bcl-2-inhibited effect on the mitochondrial permeability transition pore.*
Oncogene 18: 2537-46
IF: 6.517

13) Susin SA, Lorenzo HK, Zamzami N, Marzo I, Snow BE, Brothers GM, Mangion J, Jacotot E, **Costantini P**, Loeffler M, Larochette N, Goodlett DR, Aebersold R, Siderovski DP, Penninger JM, Kroemer G (1999) *Molecular characterization of mitochondrial apoptosis-inducing factor.*
Nature 397: 441-6
IF: 29.491

14) Bernardi P, Colonna R, **Costantini P**, Eriksson O, Nicolli A, Petronilli V, Scorrano L (1999) *Chemical modification of the mitochondrial permeability transition pore by specific amino acid reagents.*
Drug Develop Res. 46: 14-17
IF: 1.506

15) De Pablo M, Susin SA, Jacotot E, Larochette N, **Costantini P**, Ravagnan L, Zamzami N, Kroemer G (1999) *Palmitate induces apoptosis via a direct effect on mitochondria.*
Apoptosis 4: 81-87
IF: 1.585

16) Rippo MR, Malisan F, Ravagnan L, Tomassini B, Condò I, **Costantini P**, Susin SA, Rufini A, Todaro M, Kroemer G, Testi R (2000) *GD3 ganglioside as an intracellular mediator of apoptosis.*
Eur. Cytokyne Netw. 11: 487-8
IF: 1.693

17) Zamzami N, El Hamel C, Maisse C, Brenner C, Muñoz-Pinedo C, Belzacq AS, **Costantini P**, Vieira H, Loeffler M, Molle G, Kroemer G (2000) *Bid acts on the permeability transition pore complex to induce apoptosis.*
Oncogene 19: 6342-50
IF: 6.490

18) Rippo MR, Malisan F, Ravagnan L, Tomassini B, Condo I, **Costantini P**, Susin SA, Rufini A, Todaro M, Kroemer G, Testi R (2000) *GD3 ganglioside directly targets mitochondria in a bcl-2-controlled fashion.*
FASEB J. 14: 2047-54
IF: 9.249

19) Susin SA, Daugas E, Ravagnan L, Samejima K, Zamzami N, Loeffler M, **Costantini P**, Ferri KF, Irinopoulou T, Prévost MC, Brothers G, Mak TW, Penninger J, Earnshaw WC, Kroemer G (2000) *Two distinct pathways leading to nuclear apoptosis.*
J. Exp. Med. 192: 571-80
IF: 15.236

20) **Costantini P**, Belzacq AS, Vieira HL, Larochette N, De Pablo MA, Zamzami N, Susin SA, Brenner C, Kroemer G (2000) *Oxidation of a critical thiol residue of the adenine nucleotide translocator enforces Bcl-2-independent permeability transition pore opening and apoptosis.*
Oncogene 19: 307-14
IF: 6.490

21) **Costantini P**, Jacotot E, Decaudin D, Kroemer G (2000) *The mitochondrion as a target of anti-cancer chemotherapy.*
J. Natl. Canc. Inst. 92: 1042-53
IF: 14.159

22) Jacotot E, Ravagnan L, Loeffler M, Ferri KF, Vieira HL, Zamzami N, **Costantini P**, Druillennec S, Hoebeke J, Briand JP, Irinopoulou T, Daugas E, Susin SA, Cointe D, Xie ZH, Reed JC, Roques BP, Kroemer G (2000) *The HIV-1 viral protein R induces apoptosis via a direct effect on the mitochondrial permeability transition pore.*
J. Exp. Med. 191: 33-46
IF: 15.236

23) Miramar MD, **Costantini P**, Ravagnan L, Saraiva LM, Haouzi D, Brothers G, Penninger JM, Peleato ML, Kroemer G, Susin SA (2001) *NADH oxidase activity of mitochondrial apoptosis-inducing factor.*
J. Biol. Chem. 276: 16391-98
IF: 7.258

24) **Costantini P**, Bruey JM, Castedo M, Métivier D, Loeffler M, Susin SA, Ravagnan L, Zamzami N, Garrido C, Kroemer G (2002) *Pre-processed caspase-9 contained in mitochondria participates in apoptosis.*
Cell Death Differ. 9: 82-8
IF: 5.701

25) Johans M, Milanesi E, Franck M, Johans C, Liobikas J, Panagiotaki M, Greci L, Principato G, Kinnunen PK, Bernardi P, **Costantini P**, Eriksson O (2005) *Modification of permeability transition pore arginine(s) by phenylglyoxal derivatives in isolated mitochondria and mammalian cells. Structure-function relationship of arginine ligands.*
J. Biol. Chem. 280: 12130-36
IF: 5.854

26) Segalla A, Szabo I, **Costantini P**, Giacometti GM (2005) *Study of the effect of ion channel modulators on photosynthetic oxygen evolution.*
J. Chem. Inf. Model. 45:1691-700
IF: 2.923

27) Milanesi E*, **Costantini P***, Gambalunga A, Colonna R, Petronilli V, Cabrelle A, Semenzato G, Cesura AM, Pinard E, Bernardi P (2006) *The mitochondrial effects of small organic ligands of BCL-2. Sensitization of BCL-2-overexpressing cells to apoptosis by a pyrimidine-2,4,6-trione derivative*.
J. Biol. Chem. 281: 10066-72 *: co-authorship
IF: 5.808

28) Tosatto SC, Giacometti GM, Valle G, **Costantini P** (2006) *Functional insights from the structural modelling of a small Fe-hydrogenase.*
Biochem. Biophys. Res. Commun. 339: 277-83
IF: 2.855

29) Tosatto SC, Toppo S, Carbonera D, Giacometti GM, **Costantini P** (2008) *Comparative analysis of Fe-only hydrogenase from Thermotogales indicates the molecular basis of resistance to oxygen inactivation.*
J. Int. Hydrogen Energy 33: 570-8
IF: 4.028

30) Berto P, D'Adamo S, Bergantino E, Vallese F, Giacometti GM, **Costantini P** (2011) *The cyanobacterium Synechocystis sp. PCC 6803 is able to express an active [FeFe]-hydrogenase without additional maturation proteins.*
Biochem. Biophys. Res. Commun. 4: 678-83
IF: 2.484

31) Cendron L, Berto P, D'Adamo S, Vallese F, Govoni C, Posewitz MC, Giacometti GM, **Costantini P**[*], Zanotti G[*] (2011) *Crystal structure of HydF scaffold protein provides insights into [FeFe]-hydrogenase maturation*.
J. Biol. Chem. 286: 43944-50 *: co-corresponding authors
IF: 4.773

32) Vallese F, Berto P, Ruzzene M, Cendron L, Sarno S, De Rosa E, Giacometti GM, **Costantini P** (2012) *Biochemical analysis of the Interactions between the proteins involved in the [FeFe]-hydrogenase maturation process.*
J. Biol. Chem. 287: 36544-55
IF: 4.651

33) Berto P, Di Valentin M, Cendron L, Vallese F, Albertini M, Salvadori E, Giacometti GM, Carbonera D, **Costantini P** (2012) *The [4Fe-4S]-cluster coordination of [FeFe]-hydrogenase maturation protein HydF as revealed by EPR and HYSCORE spectroscopies*.
BBA-Bionergetics 1817: 2149-57
IF: 4.624

34) Albertini M, Vallese F, Di Valentin M, Berto P, Giacometti GM, **Costantini P**[*], Carbonera D* (2014) *The proton iron-sulfur cluster environment of the [FeFe]-hydrogenase maturation protein HydF from Thermotoga neapolitana.*
Int. J. Hydrogen Energy 39: 18574-18582 *: co-corresponding authors
IF: 2.930

35) Maso L, Galazzo L, Vallese F, Di Valentin M, Albertini M, De Rosa E, Giacometti GM, **Costantini P**[*], Carbonera D[*] (2015) *A conformational study of the GTPase domain of [FeFe]-hydrogenase maturation protein HydF, by PELDOR spectroscopy*.
Applied Magnetic Resonance 46, 465-479 *: co-corresponding authors
IF : 1.152

36) Albertini M, Galazzo L, Maso L, Vallese F, Berto P, De Rosa E, Di Valentin M, **Costantini P***, Carbonera D* (2015) *Characterization of the [FeFe]-hydrogenase maturation protein HydF by EPR techniques: insights into the catalytic mechanism.*
Topics in Catalysis 58, 708-18 *: co-corresponding authors
IF : 2.220

37) Albertini M, Berto P, Vallese F, Di Valentin M, **Costantini P***, Carbonera D* (2015) *Probing the solvent accessibility of the [4Fe-4S] cluster of the hydrogenase maturation protein HydF from Thermotoga neapolitana by HYSCORE and 3p-ESEEM*.
Journal of Physical Chemistry B 119, 13680-13689 *: co-corresponding authors
IF : 3.377

38) De Rosa E, Checchetto V, Franchin C, Bergantino E, Berto P, Szabò I, Giacometti GM, Arrigoni G, **Costantini P** (2015) *[NiFe]-hydrogenase is essential for cyanobacterium Synechocystis sp. PCC 6803 survival under long term darkness.* **Scientific Reports** 5, 12424. DOI: 10.1038/srep12424
IF : 5.228

39) Galazzo L, Maso L, De Rosa E, Bortolus M, Doni D, Acquasaliente L, De Filippis V, **Costantini P***, Carbonera D* (2017) *The GTPase domain of [FeFe]-hydrogenase maturation protein HydF is a molecular switch. GTP binding triggers conformational changes detected by SDSL-EPR.* **Scientific Reports** 7, 1714. DOI: 10.1038/s41598-01886-y
*: co-corresponding authors
IF : 4.259

40) Castro IH, Ferrari A., Herrera MG, Noguera ME, Maso L, Benini M, Rufini A, Testi R, **Costantini P**, Santos J (2018) *Biophysical characterization of the recombinant human frataxin precursor*. **FEBS Open Bio** 8, 390-405
IF : 2.143