

STIVALA PUBBLICAZIONI

Publications in international peer-reviewed journals.

- 1) L. BIANCHI, A. BIANCHI, F. TATEO, R. PIZZALA, L.A. STIVALA and L. SANTAMARIA.
Reduction of chromosomal damage by bleomycin in lymphocytes from subjects supplemented with carotenoids, relevance in bleomycin tumour chemotherapy. Preliminary results.
Boll.Chimico Farmac., **12** (129), 83S-87S, 1990.
- 2) BELLOMO G., M. VAIRETTI, L.A. STIVALA, F. MIRABELLI, P. RICHELMI and S. ORRENIUS.
Demonstration of nuclear compartmentalization of glutathione in hepatocytes.
Proc.Natl.Acad.Sci. USA, **89**, 4412-4416, 1992.
- 3) R. RIZZI, F. RE, A. BIANCHI, V. DE FEO, F. DE SIMONE, L. BIANCHI and L.A. STIVALA.
Mutagenic and antimutagenic activities of *Uncaria tomentosa* and its extracts.
Journal of Ethnopharmacology, **38**, 63-77, 1993.
- 4) E. PROSPERI, L.A. STIVALA and L. BIANCHI.
Flow cytometric analysis of DNA sensitivity to nuclease S1 in UVC-irradiated human fibroblasts.
J. Photochem. Photobiol., B: Biol., **18**, 91-93, 1993.
- 5) E. PROSPERI, L.A. STIVALA, E. SALA, I. SCOVASSI and L. BIANCHI.
Proliferating cells nuclear antigen complex formation induced by ultraviolet irradiation in human quiescent fibroblasts as detected by immunostaining and flow cytometry.
Experimental Cell Research, **205**, 320-325, 1993.
- 6) L. BIANCHI, F. TATEO, R. PIZZALA, L.A. STIVALA, M.G. VERRI, R. MELLI and L. SANTAMARIA.
Carotenoids reduce the chromosomal damage induced by bleomycin in human cultured lymphocytes.
Anticancer Research, **13**, 1007-1010, 1993.
- 7) L.A. STIVALA, E. PROSPERI, R. ROSSI and L. BIANCHI.
Involvement of proliferating cell nuclear antigen in DNA repair after damage induced by genotoxic agents in human fibroblasts.
Carcinogenesis, **14** (12), 2569-2573, 1993.
- 8) L. BIANCHI, A. ZANNOLI, R. PIZZALA, L.A. STIVALA and E. CHIESARA.
Genotoxicity assay of five pesticides and their mixtures in *Saccharomyces cerevisiae* D7.
Mutation Res., **312**, 203-211, 1994.
- 9) E. PROSPERI, A.I. SCOVASSI, L.A. STIVALA and L. BIANCHI.
Proliferating cell nuclear antigen bound to DNA synthesis sites: phosphorylation and association with cyclin D1 and cyclin A.
Experimental Cell Res., **215**, 257-262, 1994.
- 10) L.A. STIVALA, R. PIZZALA, R. ROSSI, R. MELLI, M.G. VERRI, and L. BIANCHI.
Photoinduction of micronuclei by 4,4',6 trimethylangelicin and 8-methoxypsoralen in different experimental models.
Mutation Res., **327**, 227-236, 1995.
- 11) L.A. STIVALA, A.I. SCOVASSI, L. BIANCHI and E. PROSPERI.
Nuclear binding of cell cycle-related proteins: Cyclin A versus proliferating cell nuclear antigen (PCNA).
Biochimie, **77**, 888-892, 1995.

12) L. BIANCHI, R. MELLI, R. PIZZALA, L.A. STIVALA, L. REHAK, S. QUARTA, V. VANNINI.

Effects of β -carotene and α -tocopherol on photogenotoxicity induced by 8-methoxypsoralen: the role of oxygen.

Mutation Res., **369**, 183-194, 1996.

13) M. SAVIO, L.A. STIVALA, A.I. SCOVASSI, L. BIANCHI and E. PROSPERI.

p21^{waf1/cip1} protein associates with the detergent-insoluble form of PCNA concomitantly with disassembly of PCNA at nucleotide excision repair sites.

Oncogene, **13**, 1591-1598, 1996.

14) L.A. STIVALA, M. SAVIO, O. CAZZALINI, R. PIZZALA, L. REHAK, L. BIANCHI, V. VANNINI and E. PROSPERI.

Effect of β -carotene on cell cycle progression of human fibroblasts.

Carcinogenesis, **17** (11), 2395-2401, 1996.

15) A. IVANA SCOVASSI, L.A. STIVALA, L. ROSSI, L. BIANCHI and E. PROSPERI.

Nuclear association of cyclin D1 in human fibroblasts: tight binding to nuclear structures and modulation by protein kinase inhibitors.

Experimental Cell Res., **237**, 127-134, 1997.

16) E. PROSPERI, L.A. STIVALA, A.I. SCOVASSI, and L. BIANCHI.

Cyclins: relevance of subcellular localization in cell cycle control.

Eur. J. Histochem. 41, 161-168, 1997.

17) M. SAVIO, L.A. STIVALA, L. BIANCHI, V. VANNINI and E. PROSPERI.

Involvement of the proliferating cell nuclear antigen (PCNA) in DNA repair induced by alkylating agents and oxidative damage in human fibroblasts.

Carcinogenesis, **19** (4), 1998.

18) F. ALESSI, S. QUARTA, M. SAVIO, F. RIVA, L. ROSSI, L.A. STIVALA, A.I. SCOVASSI, L. MEIJER and E. PROSPERI. The cyclin-dependent kinase inhibitors Olomoucine and Roscovitine arrest human fibroblasts in G1 phase by specific inhibition of CDK2 kinase activity.

Experimental Cell Res., **245**, 8-18, 1998.

19) A. MASINI, C. SCOTTI, A. CALLIGARO, O. CAZZALINI, L.A. STIVALA, L. BIANCHI, F. GIOVANNINI, D. CECCARELLI, U. MUSCATELLO, A. TOMASI and V. VANNINI.

Zidovudine-induced experimental myopathy: dual mechanism of mitochondrial damage.

Journal of Neurological Science, **166**, 131-140, 1999.

20) L.A. STIVALA, M. SAVIO, S. QUARTA, C. SCOTTI, O. CAZZALINI, L. ROSSI, A.I. SCOVASSI, R. PIZZALA, R. MELLI, L. BIANCHI, V. VANNINI and E. PROSPERI.

The antiproliferative effect of β -carotene requires p21^{waf1/cip1} in normal human fibroblasts.

European Journal of Biochemistry, **267**, 2290-2296, 2000.

21) L.A. STIVALA, F. RIVA, O. CAZZALINI, M. SAVIO and E. PROSPERI.

p21^{waf1/cip1}-null human fibroblasts are deficient in nucleotide excision repair downstream the recruitment of PCNA to DNA repair sites.

Oncogene, **20**, 563-570, 2001.

22) L.A. STIVALA, M. SAVIO, F. CARAFOLI, P. PERUCCA, L. BIANCHI, G. MAGA, L. FORTI, U.M. PAGNONI, A. ALBINI, E. PROSPERI, V. VANNINI.

Specific structural determinants are responsible for the antioxidant activity and the cell cycle effects of resveratrol.

J. Biol. Chem., 276 (25), 22586-94, 2001.

23) O. CAZZALINI, L.C. LAZZE', L. IAMELE, L.A. STIVALA, L. BIANCHI, P. VAGHI, A. CORNAGLIA, A. CALLIGARO, D. CURTI, A. ALESSANDRINI, E. PROSPERI, V. VANNINI.

Early effects of AZT on mitochondrial functions in the absence of mitochondrial DNA depletion in rat myotubes.

Biochem Pharmacol., 62(7), 893-902, 2001

24) M. SALUCCI, L.A. STIVALA, G. MAIANI, R. BUGIANESI, V. VANNINI.

Flavonoids uptake and their effect on cell cycle of human colon adenocarcinoma cells (Caco2).

Br. J. Cancer, 86 (10), 1645-51, 2002.

25) P. SOMMI, M. SAVIO, L.A. STIVALA, C. SCOTTI, P. MIGNOSI, E. PROSPERI, V. VANNINI, E. SOLCIA.

Helicobacter pilori releases a factor(s) inhibiting cell cycle progression of human gastric cell lines by affecting cyclin E/cdk2 kinase activity and Rb protein phosphorylation through enhanced p27 kip1 protein expression.

Experimental Cell Research, 281, 128-139, 2002

26) C. SCOTTI, L. IAMELE, A. ALESSANDRINI, V. VANNINI, O. CAZZALINI, M.C.

LAZZE', R. MELLI, M. SAVIO, R. PIZZALA, L.A. STIVALA, S. BIGLIERI, A. TOMASI, L. BIANCHI.

Lack of molecular relationships between lipid peroxidation and mitochondrial DNA single strand breaks in isolated hepatocytes and mitochondria.

Mitochondrion, 2, 361-373, 2003.

27) MC LAZZE', R PIZZALA., M SAVIO., LA STIVALA, E PROSPERI, BIANCHI L.

Anthocyanins protect against DNA damage induced by tert-butyl-hydroperoxide in rat smooth muscle and hepatoma cells

Mutat Res., 535, 103-15, 2003

28) O. CAZZALINI, P. PERUCCA, F. RIVA, L.A. STIVALA, L. BIANCHI, V. VANNINI, B. DUCOMMAN, E. PROSPERI.

p21CDKN1A does not interfere with loading of PCNA at DNA replication sites, but inhibits subsequent binding of DNA polymerase delta at the G1/S phase transition.

Cell Cycle, 2(6), 596-603, 2003

29) F. RIVA, O. CAZZALINI, L.A. STIVALA, I.A. SCOVASSI, L.S. COX, B. DUCOMMAN, E. PROSPERI.

Distinct pools of proliferating cell nuclear antigen associated to DNA replication sites interact with the p125 subunit of DNA polymerase delta or DNA ligase I.

Exp Cell Res., 293(2), 357-67, 2004

30) M.C. LAZZE', M. SAVIO, PIZZALA R., O. CAZZALINI, P. PERUCCA, A.I. SCOVASSI, L.A. STIVALA, BIANCHI L.

Anthocyanins induce cell cycle perturbations and apoptosis in different human cell lines.

Carcinogenesis, 25(8), 1427-33, 2004.

31) L.M SZEWCZUK, L. FORTI, L.A. STIVALA, T.M. PENNING.

Resveratrol is a peroxidase-mediated inactivator of COX-1 but not COX-2: a mechanistic approach to the design of COX-1 selective agents.

J Biol Chem., 279(21), 22727-37, 2004.

32) O. CAZZALINI, P. PERUCCA, F. VALSECCHI, L.A. STIVALA, L. BIANCHI, V. VANNINI, E. PROSPERI.

Intracellular localization of the cyclin-dependent kinase inhibitor p21^{CDKN1A}-GFP fusion protein during cell cycle arrest.

Histochem Cell Biol., 121(5), 377-81, 2004.

33) L.A. STIVALA, E. PROSPERI

Analysis of p21^{CDKN1A} recruitment to DNA excision repair foci in the UV-induced DNA damage response.

Methods Mol Biol, 281, 73-89, 2004.

34) M. BELLERI, D. RIBATTI, S. NICOLI, F. COTELLI, L. FORTI, V. VANNINI, L.A. STIVALA, M. PRESTA.

Antiangiogenic and vascular targeting activity of the microtubule-destabilizing trans-resveratrol derivative 3,5,4'-trimethoxystilbene.

Mol Pharmacol., 67 (5), 1451-9, 2005.

35) G.A. LOCATELLI, M. SAVIO, L. FORTI, I. SHEVELEY, K. RAMADAN, L.A. STIVALA, V. VANNINI, U. HUBSCHER, S. SPADARI, G. MAGA.

Inhibition of mammalian DNA polymerases by resveratrol: mechanism and structural determinants.

Biochem J., 389:259-68, 2005.

36) P. PERUCCA, O. CAZZALINI, O. MORTUSEWICZ, D. NECCHI, M. SAVIO, T. NARDO, L.A. STIVALA, H. LEONHARDT, M.C. CARDOSO, E. PROSPERI.

Spatiotemporal dynamics of p21^{CDKN1A} protein recruitment to DNA-damage sites and interaction with proliferating cell nuclear antigen.

J Cell Sci., 119, 1517-27, 2006

37) M. SAVIO, M. CERRI, O. CAZZALINI, P. PERUCCA, L.A. STIVALA, P. PICHIERRI, A. FRANCHITTO, L. MEIJER, E. PROSPERI.

Replication-dependent DNA damage response triggered by roscovitine induces an uncoupling of DNA replication proteins.

Cell Cycle, 5(18), 2153-9, 2006.

38) O. CAZZALINI, P. PERUCCA, M. SAVIO, D. NECCHI, L. BIANCHI, L.A. STIVALA, B. DUCOMMUN, A.I. SCOVASSI, AND E. PROSPERI

Interaction of p21^{CDKN1A} with PCNA regulates the histone acetyltransferase activity of p300 in nucleotide excision repair

Nucleic Acids Res., 36 (5), 1713-22, 2008.

39) Belleri M, RIBATTI D, SAVIO M, STIVALA L.A., FORTI L, TANGHETTI E, ALESSI P, COLTRINI D, BUGATTI A, MITOLA S, NICOLI S, VANNINI V, PRESTA M.

alphaVbeta3 Integrin-dependent antiangiogenic activity of resveratrol stereoisomers. *Mol Cancer Ther.* 7(12), 3761-70, 2008.

40) P. PERUCCA, O. CAZZALINI, M. MADINE, M. SAVIO, R.A. LASKEY, V. VANNINI, E. PROSPERI, L.A. STIVALA.

Loss of p21^{CDKN1A} impairs entry to quiescence and activates a DNA damage response in normal fibroblasts induced to quiescence.

Cell Cycle, 8(1), 105-14, 2009.

41) M. SAVIO, T. COPPA, O. CAZZALINI, P. PERUCCA, D. NECCHI, T. NARDO, L.A. STIVALA, E. PROSPERI.

Degradation of p21CDKN1A after DNA damage is independent of type of lesion, and is not required for DNA repair.

DNA Repair, 8(7), 778-85, 2009.

42) LAPPANO R, ROSANO C, MADEO A, ALBANITO L, PLASTINA P, GABRIELE B, FORTI L, STIVALA L.A., IACOPETTA D, DOLCE V, ANDÒ S, PEZZI V, MAGGIOLINI M.

Structure-activity relationships of resveratrol and derivatives in breast cancer cells.

Mol Nutr Food Res, 53(7), 845-58, 2009.

43) M. SAVIO, T. COPPA, L. BIANCHI, V. VANNINI, G. MAGA, L. FORTI, O. CAZZALINI, M.C. LAZZE', P. PERUCCA, E. PROSPERI, L.A. STIVALA.

The resveratrol analogue 4,4'-dihydroxy-trans-stilbene inhibits cell proliferation with higher efficiency but different mechanism from resveratrol.

Int J Biochem Cell Biol., 41, 2493-2502, 2009.

44) CAZZALINI O, DONÀ F, SAVIO M, TILLHON M, MACCARIO C, PERUCCA P, STIVALA L.A., SCOVASSI AI, PROSPERI E.

p21CDKN1A participates in base excision repair by regulating the activity of poly(ADP-ribose) polymerase-1.

DNA Repair (Amst)., 9(6):627-35, 2010.

45) CAZZALINI O, SCOVASSI AI, SAVIO M, STIVALA L.A., PROSPERI E.

Multiple roles of the cell cycle inhibitor p21(CDKN1A) in the DNA damage response

Mutat Res., 704(1-3):12-20, 2010.

46) COPPA T, LAZZÈ MC, CAZZALINI O, PERUCCA P, PIZZALA R, BIANCHI L, STIVALA L.A., FORTI L, MACCARIO C, VANNINI V, SAVIO M.

Structure-Activity Relationship of Resveratrol and Its Analogue 4,4'-Dihydroxy-Trans-Stilbene Toward the Endothelin Axis in Human Endothelial Cells.

J Med Food. 2011 May 9

47) STIVALA L.A., CAZZALINI O., PROSPERI E.

The cyclin-dependent kinase inhibitor p21CDKN1A as a target of anti-cancer drugs.

Curr Cancer Drug Targets. 2012 Feb;12(2):85-96.

48) MACCARIO C, SAVIO M, FERRARO D, BIANCHI L, PIZZALA R, PRETALI L, FORTI L, STIVALA L.A. The resveratrol analogue 4,4'-dihydroxy-trans-stilbene suppresses transformation in normal mouse fibroblasts and inhibits proliferation and invasion of human breast cancer cells.

Carcinogenesis, 2012, **DOI:** 10.1093/carcin/bgs244

49) M. TILLHON, O. CAZZALINI, T. NARDO, D. NECCHI, S. SOMMATIS, L.A. STIVALA, A.I. SCOVASSI, E. PROSPERI.

p300/CBP acetyl transferases interact with and acetylate the nucleotide excision repair factor XPG.

DNA Repair (Amst),11(10):844-52, 2012.

50) O. CAZZALINI, P. PERUCCA, R. MOCCHI, S. SOMMATIS, E. PROSPERI, L.A. STIVALA. DDB2 association with PCNA is required for its degradation after UV-induced DNA damage.

Cell Cycle;13(2):240-8, 2014.

51) O. CAZZALINI, S. SOMMATIS, M. TILLHON, I. DUTTO, A. BACHI, A. RAPP, T. NARDO, A.I. SCOVASSI, D. NECCHI, M.C. CARDOSO, L.A. STIVALA, E. PROSPERI.
CBP and p300 acetylate PCNA to link its degradation with nucleotide excision repair synthesis.
Nucleic Acids Res., 42(13):8433-48, 2014.

52) P. PERUCCA, M. SAVIO, O. CAZZALINI, R. MOCCHI, C. MACCARIO, S. SOMMATIS, D. FERRARO, R. PIZZALA, L. PRETALI, E. FASANI, A. ALBINI, L.A. STIVALA.
Structure-activity relationship and role of oxygen in the potential antitumour activity of fluoroquinolones in human epithelial cancer cells.
J Photochem Photobiol B;140:57-68, 2014.

53) I. DUTTO, M. TILLHON, O. CAZZALINI, L.A. STIVALA, E. PROSPERI.
Biology of the cell cycle inhibitor p21CDKN1A: molecular mechanisms and relevance in chemical toxicology.
Arch Toxicol, 89 (2):155-78, 2015.

54) PERUCCA P, SOMMATIS S, MOCCHI R, PROSPERI E, STIVALA LA, CAZZALINI O.
A DDB2 mutant protein unable to interact with PCNA promotes cell cycle progression of human transformed embryonic kidney cells.
Cell cycle, 14 (24):3920-8, 2015.

55) DUTTO I, SUKHANOVA M, TILLHON M, CAZZALINI O, STIVALA LA, SCOVASSI AI, LAVRIK O, PROSPERI E.
p21CDKN1A regulates the binding of Poly(ADP-Ribose) Polymerase-1 to DNA repair intermediates.
PLoS One. 2016 Jan 5;11(1):e0146031. doi: 10.1371/journal.pone.0146031.

56) M. SAVIO , D. FERRARO, C. MACCARIO, R. VACCARONE, L.D. JENSEN, F. CORANA, B. MANNUCCI, L. BIANCHI, Y. CAO, L.A. STIVALA. Resveratrol analogue 4,4'-dihydroxy-trans-stilbene potently inhibits cancer invasion and metastasis.
Sci Rep., 6, 19973-19985, 2016.

57) DUTTO I, CAZZALINI O, STIVALA L.A., PROSPERI E.
An improved method for the detection of nucleotide excision repair factors at local UV DNA damage sites.
DNA Repair (Amst), 51, 79-84. doi: 10.1016/j.dnarep.2017.01.005.

58) VETRO A, SAVASTA S, RUSSO RAUCCI A, CERQUA C, SARTORI G, LIMONGELLI I, FORLINO A, MARUELLI S, PERUCCA P, VERGANI D, MAZZINI G, MATTEVI A, STIVALA LA, SALVIATI L, ZUFFARDI O
MCM5: a new actor in the link between DNA replication and Meier-Gorlin syndrome.
Eur J Hum Genet. 2017 Feb 15. doi: 10.1038/ejhg.2017.5.

59) DI FRANCESCO S, SAVIO M, BLOISE N, BORRONI G, STIVALA LA, BORRONI RG.
Red grape (*Vitis vinifera* L.) flavonoids down-regulate collagen type III expression after UV-A in primary human dermal blood endothelial cells.
Exp Dermatol. 2018 May 9. doi: 10.1111/exd.13682. [Epub ahead of print]

60) PERUCCA P, MOCCHI R, GUARDAMAGNA I, BASSI E, SOMMATIS S, NARDO T, PROSPERI E, STIVALA L.A., CAZZALINI O.

A damaged DNA binding protein 2 mutation disrupting interaction with proliferating-cell nuclear antigen affects DNA repair and confers proliferation advantage.

Biochim Biophys Acta. 2018 Jun;1865(6):898-907. doi: 10.1016/j.bbamcr.2018.03.012. Epub 2018

BOOK CHAPTERS

LAZZÈ M.C., SAVIO M., PIZZALA R., STIVALA L.A., PROSPERI E., BIANCHI L.

Anthocyanins protect against DNA damage. Functionalities of pigments in Food: 73-77, 2002. Jos Abecassis Empis. Sociedade Portuguesa de Química. ISBN: 9729606587

TILLHON M., CAZZALINI O., STIVALA L.A., SCOVASSI A.I., PROSPERI E. Involvement of the cell cycle inhibitor p21CDKN1A in DNA repair. DNA damage repair, Repair mechanisms and aging: 123-140, 2010. Editore Allison E. Thomas. Nova Science Publishers INC, ISBN: 9781616689148

STIVALA L.A., VANIO VANNINI. Alterazioni della funzione circolatoria: i vasi. Patologia generale: 1041-1064, 2012. Casa Editrice Idelson-Gnocchi. ISBN: 9788879475426

M. TILLHON, CAZZALINI O., DUTTO I., STIVALA L.A. and PROSPERI E.

p21CDKN1A and DNA Repair Systems: Recent Findings and Future Perspectives. DNA Repair - New Research Direction. Clark Chen Editor, University of California, San Diego, USA. ISBN 980-953-307-746-3. INTECH Open Access. <http://dx.doi.org/10.5772/54173>.

STIVALA L.A., VANIO VANNINI. Guida allo studio della Patologia generale. University Books Ed. ISBN 978880657474.