
Sacchi Silvia, PhD

Peer reviewed publications on international journals

1. **Sacchi S**, Pollegioni L, Pilone MS, Rossetti C. Determination of D-amino acids using a D-amino acid oxidase biosensor with spectrophotometric and potentiometric detection. (1998) Biotech. Techniques. 12:149-153. (IF=0.350; Cit=33)
2. Giovannardi S, Pollegioni L, Pomati F, Rossetti C, **Sacchi S**, Sessa L, Calamari D. Toxic cyanobacterial blooms in Lake Varese (Italy): A multidisciplinary approach. (1999) Environm. Toxicol. 14:127-134. (IF=2.868; Cit=16)
3. Pomati F, **Sacchi S**, Rossetti C, Giovannardi S, Onodera H, Oshima Y, Neilan BA. The freshwater cyanobacterium *planktothrix* sp. FP1: molecular identification and detection of paralytic shellfish poisoning toxins. (2000) *J. Phycol.* 36:553-562. (IF=2.536; Cit=86)
4. **Sacchi S**, Lorenzi S, Molla G, Pilone MS, Rossetti C, Pollegioni L. Engineering the substrate specificity of D-amino acid oxidase.(2002) *J. Biol. Chem.* 277: 27510-27516. (IF=4.258; Cit=51)
5. Boselli A, **Sacchi S**, Job V, Pilone MS, Pollegioni L. Role of tyrosine 238 in the active site of *Rhodotorula gracilis* D-amino acid oxidase.(2002) *Eur. J. Biochem.* 269:4762-4771. (IF=3.579; Cit=12)
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9. **Sacchi S**, Boselli A, Job V, Pilone MS, Pollegioni L, Molla G. The role of tyrosines 223 and 238 in *Rhodotorula gracilis* D-amino acid oxidase catalysis: interpretation of double mutations.(2006) *Enz. Microbial Technol.* 38:795-802. (IF=2.624; Cit=2)
10. Molla G, Bernasconi M, **Sacchi S**, Pilone MS, Pollegioni L. Expression in *Escherichia coli* and *in vitro* refolding of the human protein pLG72.(2006) *Prot. Express Pur.* 46:150-155. (IF=1.407; Cit=25)
11. Molla G, **Sacchi S**, Bernasconi M, Pilone MS, Fukui K, Pollegioni L. Characterization of human D-amino acid oxidase.(2006). *FEBS Letter.* 580:2358-2364. (IF=3.519; Cit=58)
12. Boselli A, Piubelli L, Molla G, Pilone MS, Pollegioni L, **Sacchi S**. Investigating the role os active site residues of *Rhodotorula gracilis* D-amino acid oxidase on its substrate specificity. (2007) *Biochimie.* 89:360-368. (IF=3.017; Cit=5)
13. Pollegioni L, Piubelli L, **Sacchi S**, Pilone MS, Molla G. Physiological functions of D-amino acid oxidase: from yeast to humans.(2007). *Cell. Mol. Life Sci.* 64:1373-1394. (IF=5.694; Cit=147)

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15. Pollegioni L, Sacchi S, Caldinelli L, Boselli A, Pilone MS, Piubelli L, Molla G. Engineering the properties of D-amino acid oxidases by a rational and a directed evolution approach. (2007). *Curr Protein Pept Sci.* 8:600-618. (IF=3.154; Cit=22)
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17. **Sacchi S**, Bernasconi M, Martineau M, Mothet JP, Ruzzene M, Pilone MS, Pollegioni L, Molla G. pLG72 modulates intracellular D-serine levels through its interaction with D-amino acid oxidase: effect on schizophrenia susceptibility (2008). *J. Biol. Chem.* 283:22244-22256. (IF=4.258; Cit=72)
18. Volontè F, Marinelli F, Gastaldo L, Sacchi S, Pilone MS, Pollegioni L, Molla G. Optimization of glutaryl-7-aminocephalosporanic acid acylase expression in *E. coli*. (2008). *Protein Expr. Purif.* 61:131-137. (IF=1.407; Cit=38)
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25. **Sacchi S**, Rosini E, Caldinelli L, Pollegioni L. Biosensors for D-amino acid detection. (2012) *Methods Mol. Biol.* 794:313-324. (IF=1.29; Cit=0)
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27. Papouin T, Ladépêche L, Ruel J, Sacchi S, Labasque M, Hanini M, Groc L, Pollegioni L, Mothet JP, Oliet SH. Synaptic and extrasynaptic NMDA receptors are gated by different endogenous coagonists. (2012) *Cell.* 150:633-646. (IF=28.710; Cit=194)

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32. Li Y, **Sacchi S**, Pollegioni L, Basu AC, Coyle JT, Bolshakov VY. Identity of endogenous NMDAR glycine site agonist in amygdala is determined by synaptic activity level. (2013) *Nat. Commun.* 4:1760. (IF=11.329; Cit=16)
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37. **Sacchi S**, Binelli G, Pollegioni L. G72 primate-specific gene: a still enigmatic element in psychiatric disorders. (2016) *Cell. Mol. Life Sci.* 73:2029-2039. (IF=5.694; Cit=0)
38. Punzo D, Errico F, Cristino L, **Sacchi S**, Keller S, Belardo C, Luongo L, Nuzzo T, Imperatore R, Florio E, De Novellis V, Affinito O, Migliarini S, Maddaloni G, Sisalli MJ, Pasqualetti M, Pollegioni L, Maione S, Chiariotti L, Usiello A. Age-Related Changes in D-Aspartate Oxidase Promoter Methylation Control Extracellular D-Aspartate Levels and Prevent Precocious Cell Death during Brain Aging. (2016) *J. Neurosci.* 36:3064-3078. (IF=5.924; Cit=0)
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40. Meunier CN, Dallérac G, Le Roux N, **Sacchi S**, Levasseur G, Amar M, Pollegioni L, Mothet JP, Fossier P. D-Serine and Glycine Differentially Control Neurotransmission during Visual Cortex Critical Period. (2016) *PLoS One*. 11:e0151233. (IF=3.234; Cit=1)

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Other international publications

1. Molla G, Harris CM, Boselli A, **Sacchi S**, Pilone MS, Pollegioni L. Structure and function of *Rhodotorula gracilis* D-amino acid oxidase. 1. Site-directed mutagenesis of Tyrosine 223 and 238; in Flavins and Favoproteins 1999, pp 559-562, S. Ghisla et al. Editors, R. Weber Agency for Scientific Publications.
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5. Caldinelli L, Motteran L, **Sacchi S**, Piubelli L, Boselli A, Mothet JP, Pollegioni L, Pilone MS. Detection of D-amino acids by D-amino acid oxidase, in D-Amino Acids: A New Frontier in Amino Acid and Protein Research - Practical Methods and Protocols (2007) pp 135-148, R. Konno et al. Editors. Published by Nova Biomedical Books