

# Giuseppe Gaeta – List of publications\*

## Books

- [B1 ] G. Gaeta, “Nonlinear symmetries and nonlinear equations” (series: Mathematics and Its Application, vol. 299); Kluwer Academic Publishers (Dordrecht) 1994; ISBN 0-7923-3048-X
- [B2 ] G. Gaeta and G. Cicogna, “Symmetry and perturbation theory in nonlinear dynamics” (series: *Lecture Notes in Physics*, vol. M57); Springer (Berlin) 1999; ISBN 3-540-65904
- [B3 ] G. Gaeta and M.A. Rodriguez, *Lectures on HyperHamiltonian Dynamics and Physical Applications*, Springer (series: Mathematical Physics Studies) 2017; ISBN 978-3-319-54357-4; DOI 10.1007/978-3-319-54358-1

## Monographs

- [M1 ] G. Gaeta, “Bifurcation and symmetry breaking”; *Physics Reports* **189** (1990), n. 1, 1-87
- [M2 ] G. Gaeta, C. Reiss, M. Peyrard and T. Dauxois, “Simple models of DNA nonlinear dynamics”; *Rivista del Nuovo Cimento* **17** (1994), n.4, 1-48
- [M3 ] G. Gaeta, “Symmetry of stochastic non-variational differential equations”, *Phys. Rep.* **686** (2017), 1-62

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\*Only research and review papers and monographs are listed; in particular, this list does not include contributions to conferences or schools proceedings (as these reproduce results obtained in research papers). Note that books and monographs (not edited volumes nor textbook) also appear in the list of published research works. *Last modified 17/9/2021.*

## Edited volumes

- [E1 ] D. Bambusi and G. Gaeta (eds.), “Symmetry and Perturbation Theory” (Proceedings of Torino Workshop, I.S.I., December 1996); G.N.F.M. – C.N.R. (Gruppo Nazionale di Fisica Matematica – Consiglio Nazionale delle Ricerche), Roma, 1997
- [E2 ] A. Degasperis and G. Gaeta (eds.), “Symmetry and Perturbation Theory II – SPT98” (Proceedings of Roma Workshop, Università “La Sapienza”, December 1998); World Scientific, Singapore, 1999; ISBN 981-02-4166-6
- [E3 ] D. Bambusi, G. Gaeta and M. Cadoni (eds.), “Symmetry and Perturbation Theory – SPT2001” (Proceedings of the international conference SPT2001, Cala Gonone, Sardinia, Italy, 6-13 May 2001); World Scientific, Singapore, 2001; ISBN 981-02-4793-1
- [E4 ] G. Gaeta (guest editor), Volume **70** of *Acta Applicandae Mathematicae* (tutorial papers prepared for the SPT2001 conference), Kluwer, Dordrecht 2002
- [E5 ] S. Abenda, G. Gaeta and S. Walcher (eds.), “Symmetry and Perturbation Theory – SPT2002” (Proceedings of Cala Gonone workshop, 19-26 May 2002); World Scientific, Singapore 2003
- [E6 ] G. Gaeta, B. Prinari, S. Rauch and S. Terracini (eds.), “Symmetry and Perturbation Theory – SPT2004” (Proceedings of Cala Gonone workshop, 30 May – 6 June 2004); World Scientific, Singapore 2005
- [E7 ] G. Gaeta (guest editor), Volume **87** of *Acta Applicandae Mathematicae* (tutorial papers prepared for the SPT2004 conference), Kluwer, Dordrecht 2005
- [E8 ] G. Gaeta, R. Vitolo and S. Walcher (eds.), “Symmetry and Perturbation Theory – SPT2007” (Proceedings of Otranto workshop, 2-9 June 2007); World Scientific, Singapore, 2007
- [E9 ] G. Gaeta (guest editor), Volume **18 - S2** of *Journal of Nonlinear Mathematical Physics* (Special Issue devoted to “Nonlinear Mathematical Biophysics”), World Scientific, Singapore 2011
- [E10 ] G. Gaeta (guest editor), Volume **120** of *Acta Applicandae Mathematicae* (tutorial papers prepared for the SPT2011 conference), Springer, Berlin 2012
- [E11 ] G. Gaeta (guest editor), Volume **137** of *Acta Applicandae Mathematicae* (tutorial papers prepared for the SPT2014 conference), Springer, Berlin 2015
- [E12 ] G. Gaeta (guest editor), Volume **162** of *Acta Applicandae Mathematicae* (tutorial papers prepared for the SPT2018 conference), Springer, Berlin 2019

## Textbook

- [T1 ] G. Gaeta, *Modelli Matematici in Biologia* (in Italian), Springer Italia (Milan) 2007; ISBN 978-88-470-0691-1

## Published research works

- [1 ] G. Gaeta, “Gradient property of reduced bifurcation equation for systems with rotational symmetry”; *J.Phys. A* **16** (1983), L607-L610
- [2 ] G. Gaeta and P. Rossi, “Gradient property of bifurcation equation for systems with rotational symmetry”; *J. Math. Phys.* **25** (1984), 1671-1673
- [3 ] G. Gaeta, “Proof of the chain criterion in Landau theory”; *Phys. Rev. B* **29** (1984), 6371
- [4 ] G. Cicogna and G. Gaeta, “Periodic solutions from quaternionic bifurcation”; *Lettere al Nuovo Cimento* **44** (1985), 65-68
- [5 ] G. Gaeta, “Gradient property of low order covariants and truncated bifurcation equations for SO(N) symmetries”; *Phys. Lett. A* **113** (1985), 114-116
- [6 ] G. Cicogna, G. Gaeta and P. Rossi, “Remarks on bifurcation with symmetry, gradient property, and reducible representations”; *J. Math. Phys.* **27** (1986), 447-450
- [7 ] G. Gaeta and P. Rossi, “Gradient property of standard representation for classical orthogonal groups”; *Nuovo Cimento B* **93** (1986), 66-72
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- [15 ] G. Cicogna and G. Gaeta, “Bifurcation, symmetries and maximal isotropy subgroups”; *Nuovo Cimento B* **102** (1988), 451-470
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- [22 ] G. Cicogna and G. Gaeta, “Lie-point symmetries and Poincaré normal forms for dynamical systems”; *J.Phys. A* **23** (1990), L799-L802
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