

Liste des publications et conférences

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Ouvrages et revues (co-)édités

- O1. **“Structure and defects in SiO₂ : fundamentals and applications”**
R.A.B. Devine, G. Spinolo, J.L. Autran, A. Vedda (Editors).
Special Issue, Journal of Non-Crystalline Solids, Volume 216, 217 pages (Elsevier Science B.V., 1997).
- O2. **“SiO₂ and advanced dielectrics”**
G. Spinolo, A. Vedda, J.L. Autran, R.A.B. Devine (Editors)
Special Issue, Journal of Non-Crystalline Solids, Volume 245, 253 pages (Elsevier Science B.V., 1999).
- O3. **“SiO₂ and advanced dielectrics II”**
P. Paillet, A. Vedda, G. Spinolo, J.L. Autran, (Editors)
Special Issue, Journal of Non-Crystalline Solids, Volume 280, 299 pages (Elsevier Science B.V., 2001).
- O4. **Proceedings of the 6th European Conference “Radiation and its Effects on Components and Systems”** J.L. Autran (Editor)
Proceedings IEEE 01TH8605C (The Institute of Electrical and Electronics Engineers, 2002).
- O5. **IEEE Transactions on Nuclear Science**
J.L. Autran (Guest Editor)
Volume NS-49, N°3, June 2002 (The Institute of Electrical and Electronics Engineers, 2002). J.L. Autran,
- O6. **“SiO₂ and advanced dielectrics III”**
M. Ferrari, D. Munteanu, M. Passacantando, A. Vedda (Editors)
Special Issue, Journal of Non-Crystalline Solids, Volume 322 (Elsevier Science B.V., 2003).
- O7. **Proceedings of the 7th European Conference “Radiation and its Effects on Components and Systems”** M. van Uffelen, R. Sharp (Guest Editors), J.L. Autran (IEEE Liaison Editor)
Proceedings IEEE N°03TH8776 (The Institute of Electrical and Electronics Engineers, 2002).
- O8. **IEEE Transactions on Nuclear Science**
M. van Uffelen, R. Sharp (Guest Editors), J.L. Autran (IEEE Liaison Editor)
Volume NS-51, N°5, October 2004 (The Institute of Electrical and Electronics Engineers, 2004).
- O9. **“SiO₂, advanced dielectrics and related devices”**
A. Vedda, D. Munteanu, P. Paillet, M. Ferrari, J.L. Autran (Editors)
Special Issue, Journal of Non-Crystalline Solids, Volume 351 (Elsevier Science B.V., 2005).
- O10. **Proceedings of the 8th European Conference “Radiation and its Effects on Components and Systems”** J.L. Autran (Guest Editor)
Proceedings IEEE N°05TH8849 (The Institute of Electrical and Electronics Engineers, 2006).
- O11. **IEEE Transactions on Nuclear Science**
J. S. Schwank (Guest Editor), J. Felix, P. Paillet J.L. Autran, (Assistant Editors)
Volume NS-53, N°4, August 2006 (The Institute of Electrical and Electronics Engineers, 2006).

Chapitres d'ouvrage, articles de synthèse et cours invités

- P1. **“Charge pumping techniques : the methods and their applications”**
J.L. Autran, B. Balland, G. Barbottin
in **“Instabilities in Silicon Devices - Silicon Passivation and Related Instabilities”**, edited by G. Barbottin and A. Vapaille (Elsevier Science Publishers North-Holland, Amsterdam, 1999), Volume 3, Chapitre 6, p. 405-493.

- P2. **“Tantalum pentoxide (Ta₂O₅) thin films for microelectronics applications”**
C. Chaneliere, J.L. Autran, R.A.B. Devine, B. Balland
Special Issue, Materials Science and Engineering Reports, 1998, Vol. 22, N°6, p. 263-322.
- P3. **“Challenges in interface trap characterization of deep sub-micron MOS devices using charge pumping techniques” (invited)**
J.L. Autran, P. Masson, G. Ghibaudo
Material Research Society Symposium Proceedings, 2000, Vol. 592, p. 275-288.
- P4. **“Challenges in Microelectronics : Ultimate gate dielectrics for CMOS technologies, limitations and alternative solutions” (invited)**
G. Ghibaudo, R. Clerc, E. Vincent, S. Bruyère, J.L. Autran
Comptes-rendus de l'Académie des Sciences Paris, 2000, Tome 1, Série IV, p. 911-927.
- P5. **“Electrical characterization, modeling and simulation of high-k based MOS devices”**
J.L. Autran, D. Munteanu, M. Houssa
in **“Fundamental and Technological Aspects of High-κ Gate Dielectrics”**, Edited by M. Houssa (Institute of Physics Publishing, London, 2004), Chapter 3.4, p. 251-289.
- P6. **“Electrical modeling and simulation of nanoscale MOS devices with a high-permittivity dielectric gate stack” (invited)**
J.L. Autran, D. Munteanu, M. Houssa
Material Research Society Symposium Proceedings, 2004, Vol. 811, p. D6-1.
- P7. **“Modeling of digital devices and ICs submitted to transient irradiations” (invited)**
D. Munteanu, J.L. Autran,
Short Course RADECS 2007 (9th European Conference on Radiation and Its Effects on Components and Systems, Deauville, 10-14 septembre 2007, France).
- P8. **“Compact modeling of independent double-gate MOSFETs: a physical approach”**
D. Munteanu, J.L. Autran
in **“Planar double-gate transistor: from technology to circuit”**, Edited by A. Amara and O. Rozeau (Springer-Verlag, Berlin, 2008), Chapter 3, in press.

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- P16. J.L. Autran, B. Balland, "A new 3-level charge pumping method for accurate determination of interface trap parameters in metal-oxide-semiconductor field-effect-transistors", Review of Scientific Instruments, 1994, Vol. 65, N°6, p. 2141-2142.
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- P21. J.L. Autran, C. Plossu, F. Seigneur, B. Balland, A. Straboni, "A comparison of Si-SiO₂ interface traps properties in thin-film transistors with thermal and plasma nitrided oxides", *Journal of Non-Crystalline Solids*, 1995, Vol. 187, p. 374-379.
- P22. J.L. Autran, P. Paillet, J.L. Leray, R.A.B. Devine, "Conduction mechanisms and space charge effects in typical thin film insulators (SiO₂, Ta₂O₅, PbZr_xTi_{1-x}O₃)", *Le Vide : science, technique et applications*, 1995, n°275, p. 44-53.
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