

## Publications

2012

### Livres

- N.Recho, «Fracture Mechanics and Crack growth », Editions: John WILEY (512 pages). ISBN: 978-1-84821-306-7, Mars 2012.
- N.Recho, «Hamiltonian Formalisms Applied to Continuum Mechanics: Potential Use for Fracture Mechanics», Chapitre du livre: Materials with Complex Behaviour II, Editions Springer –Verlag :Advanced Structured Materials, 2012, Volume 16, Part 1, pp 19-35, DOI: 10.1007/ISBN 978-3-642-22700-4\_2, 2012.
- N.Recho, "Mécanique de propagation et bifurcation des fissures", Editions HERMES-Sciences (288 pages)©LAVOISIER,ISBN978-2-7462-3805-3, 2012.  
4. N.Recho, "Mécanique de la Rupture par fissuration", aspects théorique, conceptuel et numérique, Editions HERMES-Sciences. (290 pages)© LAVOISIER, ISBN 978-2-7462-3118-4, 2012.
- Y. Shinohara, J. Besson, Y. Madi, "Anisotropic Damage Behavior in High-Strength Line Pipe Steels", International Journal of Offshore and Polar Engineering (ISSN 1053-5381), Vol. 22, No. 1, March 2012, pp. 83–89.
- M. Mokthari et N. Martaj. Electronique Appliquée, Electromécanique sous Simscape & SimPowerSystems (MATLAB/Simulink). ISBN : 978-3-642-24200-7, Août 2012, Ed. Springer.

### Reuves à comité de lecture et à diffusion internationale

- F. Besnard, "Simultaneity in Minkowski Spacetime: From Uniqueness to Arbitrariness", Foundations of Physics 2012, 42, 1115-1134.
- G. Gauthier, Y. Chao, O. Horner, O. Alos-Ramos, F. Hui, J. Ledion, H. Perrot, « Application of the Fast Controlled Precipitation method to assess the scale-forming ability of raw river waters", Desalination 2012, 299, 89-95.
- C.Z.Cheng, Z.R. Niu, N. Recho, H. Zhou, "Analyze the role of the non-singular stress in brittle fracture by BEM", Fatigue and Fracture of Engineering Materials and Structures. FFEMS-5059; No. of Pages 29, Submitted 19 May 2012.
- C.Z.Cheng, N. Recho, Z.R. Niu, "Influence of the non-singular stress on the crack extension and fatigue life", Nuclear Engineering and Design 248 (2012) pages 293–300
- C.Z.Cheng, Z.R. Niu, N. Recho, "Effect of non-singular stress on the brittle fracture of V-notched structure", International Journal of Fracture. Volume: 174 Issue: 2 Pages: 127-138 DOI: 10.1007/s10704-012-9680-8 Published: April 2012
- L. Bait, S. Femmam, A-C. Boccara, J-P Roger, "Optical imaging of high frequency focused ultrasonic field in continuous-wave mode using Nomarski interferometer and a multiplexed synchronous detection". Journal of Electronic Imaging, JEI-SPIE, 21(3), 033012, August 14 2012, doi: 10.1117/1.JEI.21.3.033012.
- F.M. Zerarka, S. Femmam, and R. Aschheim, "Embedding n-Dimensional Crossed Hypercube into Pancake Graphs". Vol. 2, No. 1, pp. 1-20, February 2012. British Journal of Mathematics and Computer Science.

- S. Femmam, F.M. Zerarka, I. Benakila, A. Ouahabi, "New Approach Construction for Wireless ZigBee Sensor Based on Embedding Pancake Graphs". Vol. 1, No. 1, pp. 7-25, June 2012. Network and Communication Technologies journal. DOI: 10.5539/nct.v1n1p7.
- R. ASCHHEIM, S. FEMMAM, F.M. ZERARKA, "New "Graphiton" Model: a Computational Discrete Space, Self-Encoded as a Trivalent Graph". Vol. 5, No. 1, pp. 1-12, January 2012. Computer and Information Science Journal.
- P. Rochelle, L. Grosu, N. Martaj : " Finite-Size Finite -Time Thermodynamics for an Engineer – Oriented Optimization of Stirling Engine Cycle", Int. J. Exergy,IJEX, Vol. 11, No. 2, 2012.
- P. Rochelle, L. Grosu, N. Martaj, S. Savarese et R. Bennacer «Beta type refrigerating Stirling machine - Numerical and experimental study», International Journal of Energy Environment and Economics, IJ3E, Volume 20, Issue 3, 2012.
- A. Makke, O. Lame, M. Perez, J-L. Barrat, "Influence of Tie and Loop Molecules on the Mechanical Properties of Lamellar Block Copolymers", Macromolecules 2012, 45, 8445–8452 DOI: 10.1021/ma301286y.
- B. Humblot, « Droit des brevets : éloge posthume de la licence obligatoire de dépendance » Revue Lamy Droit de l'Immatériel, juillet 2012.
- B. Humblot, « De l'absolu à l'absolument relatif : faits et méfaits de la propriété sous condition d'atteinte substantielle » Revue Lamy Droit de l'Immatériel, septembre 2012.

#### Colloques internationaux avec actes

- G.Coussan, N. Recho, J.M.Nianga, " Reliable Fatigue Design of Welded Joints following the Eurocode-3 -Conceptual Analysis and Possible Improvements.", , 8th ESIS TC2 Conference. Mansfield College, Oxford 2nd and 3rd April 2012.
- F. Besnard, "Is there a philosophy of time compatible with relativity and quantum mechanics?" (2012) AIP Conf. Proc. 1446, pp. 437-447.
- Burlot, J. Chen, Y. Madi, T. Morgener, « Anisotropic Plastic Behaviour of two 2198 Aluminum-Lithium Alloys» European Conference on Aluminium Alloys - ECAA. Bremen, October 2011.
- Y. Chao, H. Perrot, O. Horner, J.Ledion, F.Hui, « Détermination du pouvoir entartrant de l'eau d'un circuit de refroidissement par l'utilisation d'une microbalance à quartz », Journées Internationales de l'Eau (JIE), Poitiers, 25-27 Septembre 2012.

#### Conférences - Séminaires - Cours

- N. Recho, Cours d'excellence (CORSO DI ECCELLENZA) intitulé: "Advances in fracture mechanics for mechanical design activity", 23 au 25 octobre 2012. Cours destiné aux étudiants en Doctorat dans le cadre de l'école doctorale à Polytechnique de Turin en Italie.
- S. Pincemin, S. Boddaert, T. Guiot, S. Dulou, Photovoltaic energy storage for energy management in residential building: modelisation aspect, Proceeding of Innostock 2012, Lleida.
- S. Pincemin, D. Hailot, N. Calvet, R. Olives and X. PY, Conductive PCM composite materials applied to the dry cooling of CSP plants, Proceeding of SolarPaces congress 2012, Marrakech.
- G. Gauthier, Y. Chao, O. Horner, O. Alos-Ramos, F. Hui, J. Ledion, H. Perrot, « Application of the Fast Controlled Precipitation Method to Assess the Scale-Forming Ability of Waters and to Probe the in situ Formation/Growth of Calcium Carbonate", 4ème symposium franco-taiwanais « Frontières de la science", 26 - 29 juin 2012.

- F. Besnard, « What is a noncommutative spacetime ? », Géométrie Sans Frontière, Université Paris 7, 16/03/12.