

YVES REMOND

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Faculty of Chemical Engineering and Polymers (ECPM)
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EDUCATION

Habilitation, 1990, Mechanics, University and Ecole Centrale at Nantes, France
Ph.D., Mechanics, 1984, Ecole Normale Supérieure at Cachan - University of Paris VI, CNRS France
M.Sc., Mechanics, 1982, University of Paris VI, France
Agrégation de mécanique, 1981 (National Ranking : 8th), (National Competitive Examination for posts on the teaching staff)
B.Sc and M.Sc., Mechanical Engineering, 1980, Ecole Normale Supérieure at Cachan, Paris, France

PROFESSIONAL EXPERIENCE

Co-Director of the Institute for Health Technology from the National Coordination Network in Science for Live and Health (CNRS, INSERM, CEA, INRIA, Pasteur, Curie, etc.)
Deputy-Director, CNRS, Engineering Sciences, 2012-2018
University of Strasbourg, France, 1992- now, Professor of Mechanical Engineering and Bioengineering
University of Strasbourg, 1989-1992, Associate Professor of Mechanical Engineering
University of Mulhouse, Assistant Professor, 1985-1989

RESEARCH INTERESTS

Mechanical Modeling of Composite Materials and Polymer Materials Behavior
Modeling and Simulation in Biophysics, Biomechanics and Medical Applications
Multiscale Modeling

MEMBERSHIPS

Member, Association Française de Mécanique AFM (1984- now)
President, Association pour les Matériaux Composites AMAC (1984- 2012)
Member, European Association of Composites Materials, EACM, (1998 - now)
Member, French Association of BioMechanics, (1998-now)
Member, European Association of Mechanics (EUROMECH), 2003-now

UNIVERSITY and RESEARCH RESPONSABILITIES

Dean of the graduate school of Mathematics and Engineering Science (2010 – 2017)
Head of the Institute of Fluid and Solid Mechanics (2001- 2010)
President of the French German Institute of Environment sciences (2001-2007)
Chair of the Master in Mechanical Engineering (2000-2004)
Member of the Research Committee at the University Louis Pasteur (2002-2006)
Chair of the professional master of applied mechanics, (1989-1994)
Director of the Institute of Professional Education in Industrial Engineering (1989-1994)
Adviser of the Head of Educational District from Alsace (1989-1997)

AWARDS

Adjunct Professor at the university of Tehran, (2018-now)
Invited Professor in the Pacific Northwest National Laboratory, Washington, 2005, 2007
Invited Professor in Georgia Institute of Technology, Atlanta, 2007

Invited Professor In Moscow State Univ. and Chernogolovka, Russian Acad.of Sciences, 2005
Keynotes of different conferences like : Europe China Colloquium on polymers, 2004, etc.
Chair and co-Chair of different international conferences : ICPB3, ICPB4-IUPAC, EUROMECH, etc.
National French Teaching Award (Ch. Palmes Académiques, 1995, Off. 2014)
Committee coordinator in bioengineering, ISTE – Wiley Editor

GRADUATE STUDENTS ADVISING

PhD Theses and Habilitation : 30, Master Theses and DEA Research Project : 35
PhD and Habilitation Reviewing : 160

RESEARCH GRANTS

Principal investigator and co-investigator for several research grants from different sources in France and Europe : FP6 and FP7, ANR (French Research Agency), CNRS, Ministry of Education and Research, AERES, several companies like EADS, CEA, AREVA, EDF.

PUBLICATIONS

> 120 Books/Chapters and Journals Publications and Editions
160 Proceedings publications in National and International conferences

SELECTION OF PAPERS

1. Mossi Idrissa, A.K., K. Wang, S. Ahzi, S. Patlazhan, and **Y. Rémond**, *A composite approach for modeling deformation behaviors of thermoplastic polyurethane considering soft-hard domains transformation*. International Journal of Material Forming, 2018. **11**(3): p. 381-388.

2. Lutz, J.C., A. Hostettler, V. Agnus, S. Nicolau, D. George, L. Soler, and **Y. Rémond**, *A New Software Suite in Orthognathic Surgery : Patient Specific Modeling, Simulation and Navigation*. Surgical Innovation, 2018.

3. Lauzeral, N., D. Borzacchiello, M. Kugler, D. George, **Y. Rémond**, A. Hostettler, and F. Chinesta, *Shape parametrization of bio-mechanical finite element models based on medical images*. Computer Methods in Biomechanics and Biomedical Engineering: Imaging and Visualization, 2018: p. 1-10.

4. Kugler, M., A. Hostettler, L. Soler, **Y. Remond**, and D. George, *A new algorithm for volume mesh refinement on merging geometries: Application to liver and vascularisation*. Journal of Computational and Applied Mathematics, 2018. **330**: p. 429-440.

5. George, D., R. Allena, and **Y. Rémond**, *Integrating molecular and cellular kinetics into a coupled continuum mechanobiological stimulus for bone reconstruction*. Continuum Mechanics and Thermodynamics, 2018.

6. Figgis, B., et al., *Investigation of factors affecting condensation on soiled PV modules*. Solar Energy, 2018. **159**: p. 488-500.

7. Figgis, B., B. Guo, W. Javed, S. Ahzi, and **Y. Rémond**, *Dominant environmental parameters for dust deposition and resuspension in desert climates*. Aerosol Science and Technology, 2018. **52**(7): p. 788-798.

8. Fadaei Naeini, V., M. Foroutan, M. Maddah, **Y. Rémond**, and M. Baniassadi, *Determinative factors in inhibition of aquaporin by different pharmaceuticals: Atomic scale overview by molecular dynamics simulation*. *Biochimica et Biophysica Acta - General Subjects*, 2018. **1862**(12): p. 2815-2823.

9. Chavoshnejad, P., M. Ayati, A. Abbaspour, M. Karimpur, D. George, **Y. Rémond**, A. Heidary Rouchi, and M. Baniassadi, *Optimization of Taylor spatial frame half-pins diameter for bone deformity correction: Application to femur*. *Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine*, 2018. **232**(7): p. 673-681.

10. Bernard, C.A., N. Bahlouli, C. Wagner-Kocher, J. Lin, S. Ahzi, and **Y. Rémond**, *Multiscale description and prediction of the thermomechanical behavior of multilayered plasticized PVC under a wide range of strain rate*. *Journal of Materials Science*, 2018. **53**(20): p. 14834-14849.

11. Barth, N., **Y. Rémond**, F. Bumbieler, F. Buscaïl, A. Schwartz, S. Ahzi, and D. George, *Effects of short-term mechanical loads on the cracking of glass tubes in a 500-m-deep rock formation*. *Journal of Geotechnical and Geoenvironmental Engineering*, 2018. **144**(3).

12. Wandeto, J.M., H. Nyongesa, **Y. Rémond**, and B. Dresp-Langley, *Detection of small changes in medical and random-dot images comparing self-organizing map performance to human detection*. *Informatics in Medicine Unlocked*, 2017. **7**: p. 39-45.

13. Wagner, D., Y. Bolender, **Y. Rémond**, and D. George, *Mechanical equilibrium of forces and moments applied on orthodontic brackets of a dental arch: Correlation with literature data on two and three adjacent teeth*. *Bio-Medical Materials and Engineering*, 2017. **28**(s1): p. S169-S177.

14. Scala, I., C. Spingarn, **Y. Rémond**, A. Madeo, and D. George, *Mechanically-driven bone remodeling simulation: Application to LIPUS treated rat calvarial defects*. *Mathematics and Mechanics of Solids*, 2017. **22**(10): p. 1976-1988.

15. Patlazhan, S.A., I.V. Kravchenko, R. Muller, Y. Hoarau, **Y. Remond**, and A.A. Berlin, *Bifurcation of a Newtonian-fluid flow in a planar channel with sudden contraction and expansion*. *Doklady Physics*, 2017. **62**(3): p. 145-148.

16. Kugler, M., A. Hostettler, L. Soler, D. Borzacchiello, F. Chinesta, D. George, and **Y. Rémond**, *Numerical simulation and identification of macroscopic vascularised liver behaviour: Case of indentation tests*. *Bio-Medical Materials and Engineering*, 2017. **28**(s1): p. S107-S111.

17. George, D., C. Spingarn, C. Dissaux, M. Nierenberger, R.A. Rahman, and **Y. Rémond**, *Examples of multiscale and multiphysics numerical modeling of biological tissues*. *Bio-Medical Materials and Engineering*, 2017. **28**(s1): p. S15-S27.

18. Figgis, B., A. Ennaoui, S. Ahzi, and **Y. Rémond**, *Review of PV soiling particle mechanics in desert environments*. *Renewable and Sustainable Energy Reviews*, 2017. **76**: p. 872-881.

19. **Rémond, Y.**, S. Ahzi, M. Baniassadi, and H. Garmestani, *Applied RVE Reconstruction and Homogenization of Heterogeneous Materials*. Applied RVE Reconstruction and Homogenization of Heterogeneous Materials. 2016: wiley. 1-186.
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20. Nierenberger, M., **Y. Rémond**, S. Ahzi, and P. Choquet, *Assessing the three-dimensional collagen network in soft tissues using contrast agents and high resolution micro-CT: Application to porcine iliac veins*. Comptes Rendus - Biologies, 2015. **338**(7): p. 425-433.
-
21. Nierenberger, M., G. Fargier, S. Ahzi, and **Y. Rémond**, *Evolution of the three-dimensional collagen structure in vascular walls during deformation: An in situ mechanical testing under multiphoton microscopy observation*. Biomechanics and Modeling in Mechanobiology, 2015. **14**(4): p. 693-702.
-
22. Lutz, J.C., S. Nicolau, V. Agnus, F. Bodin, A. Wilk, C. Bruant-Rodier, **Y. Rémond**, and L. Soler, *A novel navigation system for maxillary positioning in orthognathic surgery: Preclinical evaluation*. Journal of Cranio-Maxillofacial Surgery, 2015. **43**(9): p. 1723-1730.
-
23. Wang, K., F. Addiego, N. Bahlouli, S. Ahzi, **Y. Rémond**, and V. Toniazzo, *Impact response of recycled polypropylene-based composites under a wide range of temperature: Effect of filler content and recycling*. Composites Science and Technology, 2014. **95**: p. 89-99.
-
24. Barth, N., D. George, S. Ahzi, **Y. Rémond**, N. Joulaee, M.A. Khaleel, and F. Bouyer, *Simulation of cooling and solidification of three-dimensional bulk borosilicate glass: Effect of structural relaxations*. Mechanics of Time-Dependent Materials, 2014. **18**(1): p. 81-96.
-
25. Baniassadi, M., M. Safdari, H. Garmestani, S. Ahzi, P.H. Geubelle, and **Y. Remond**, *An optimum approximation of n-point correlation functions of random heterogeneous material systems*. Journal of Chemical Physics, 2014. **140**(7).
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26. Amani Hamedani, H., M. Baniassadi, A. Sheidaei, F. Pourboghrat, **Y. Rémond**, M. Khaleel, and H. Garmestani, *Three-dimensional reconstruction and microstructure modeling of porosity-graded cathode using focused ion beam and homogenization techniques*. Fuel Cells, 2014. **14**(1): p. 91-95.
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27. Wang, K., N. Bahlouli, F. Addiego, S. Ahzi, **Y. Rémond**, D. Ruch, and R. Muller, *Effect of talc content on the degradation of re-extruded polypropylene/talc composites*. Polymer Degradation and Stability, 2013. **98**(7): p. 1275-1286.
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28. Wang, K., S. Ahzi, R. Matadi Boumbimba, N. Bahlouli, F. Addiego, and **Y. Rémond**, *Micromechanical modeling of the elastic behavior of polypropylene based organoclay nanocomposites under a wide range of temperatures and strain rates/frequencies*. Mechanics of Materials, 2013. **64**: p. 56-68.
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29. Nierenberger, M., **Y. Rémond**, and S. Ahzi, *A new multiscale model for the mechanical behavior of vein walls*. Journal of the Mechanical Behavior of Biomedical Materials, 2013. **23**: p. 32-43.

30. Lhadi, S., S. Ahzi, **Y. Rémond**, S. Nikolov, and H. Fabritius, *Effects of homogenization technique and introduction of interfaces in a multiscale approach to predict the elastic properties of arthropod cuticle*. Journal of the Mechanical Behavior of Biomedical Materials, 2013. **23**: p. 103-116.
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31. Ghazavizadeh, A., G.C. Rutledge, A.A. Atai, S. Ahzi, **Y. Rémond**, and N. Soltani, *Micromechanical characterization of the interphase layer in semi-crystalline polyethylene*. Journal of Polymer Science, Part B: Polymer Physics, 2013. **51**(16): p. 1228-1243.
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32. Ghazavizadeh, A., G.C. Rutledge, A.A. Atai, S. Ahzi, **Y. Rémond**, and N. Soltani, *Hyperelastic characterization of the interlamellar domain and interphase layer in semicrystalline polyethylene*. Journal of Polymer Science, Part B: Polymer Physics, 2013. **51**(23): p. 1692-1704.
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33. Çolak, O.U., S. Ahzi, and **Y. Remond**, *Cooperative viscoplasticity theory based on the overstress approach for modeling large deformation behavior of amorphous polymers*. Polymer International, 2013. **62**(11): p. 1560-1565.
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34. Zhu, W., S. Nicolau, L. Soler, A. Hostettler, J. Marescaux, and **Y. Rémond**, *Fast segmentation of abdominal wall: Application to sliding effect removal for non-rigid registration*, in *4th International Workshop on Computational and Clinical Applications in Abdominal Imaging, Held in Conjunction with the 15th International Conference on Medical Image Computing and Computer-Assisted Intervention, MICCAI 2012*. 2012: Nice. p. 198-207.
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35. Wang, K., F. Addiego, N. Bahlouli, S. Ahzi, **Y. Rémond**, V. Toniazzo, and R. Muller, *Analysis of thermomechanical reprocessing effects on polypropylene/ethylene octene copolymer blends*. Polymer Degradation and Stability, 2012. **97**(8): p. 1475-1484.
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36. Rahman, R.A., D. George, D. Baumgartner, M. Nierenberger, **Y. Rémond**, and S. Ahzi, *An asymptotic method for the prediction of the anisotropic effective elastic properties of the cortical vein: Superior sagittal sinus junction embedded within a homogenized cell element*. Journal of Mechanics of Materials and Structures, 2012. **7**(6): p. 593-611.
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37. Patlazhan, S. and **Y. Remond**, *Structural mechanics of semicrystalline polymers prior to the yield point: A review*. Journal of Materials Science, 2012. **47**(19): p. 6749-6767.
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38. Nibennanoune, Z., D. George, F. Antoni, S. Ahzi, D. Ruch, J. Gracio, and **Y. Remond**, *Improving diamond coating on Ti6Al4V substrate using a diamond like carbon interlayer: Raman residual stress evaluation and AFM analyses*. Diamond and Related Materials, 2012. **22**: p. 105-112.
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39. Mossi Idrissa, A.K., S. Ahzi, S. Patlazhan, **Y. Rémond**, and D. Ruch, *A constitutive model for stress-strain response and Mullins effect in filled elastomers*. Journal of Applied Polymer Science, 2012. **125**(6): p. 4368-4375.
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40. Mortazavi, B., **Y. Rémond**, S. Ahzi, and V. Toniazzo, *Thickness and chirality effects on tensile behavior of few-layer graphene by molecular dynamics simulations*. Computational Materials Science, 2012. **53**(1): p. 298-302.

41. Mortazavi, B. and **Y. Rémond**, *Investigation of tensile response and thermal conductivity of boron-nitride nanosheets using molecular dynamics simulations*. Physica E: Low-Dimensional Systems and Nanostructures, 2012. **44**(9): p. 1846-1852.
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42. Mortazavi, B., A. Rajabpour, S. Ahzi, Y. Rmond, and S. Mehdi Vaez Allaei, *Nitrogen doping and curvature effects on thermal conductivity of graphene: A non-equilibrium molecular dynamics study*. Solid State Communications, 2012. **152**(4): p. 261-264.
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43. Mortazavi, B., J. Bardon, S. Ahzi, A. Ghazavizadeh, **Y. Rémond**, and D. Ruch, *Atomistic-continuum modeling of the mechanical properties of silica/epoxy nanocomposite*. Journal of Engineering Materials and Technology, Transactions of the ASME, 2012. **134**(1).
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44. Mortazavi, B., S. Ahzi, V. Toniazzo, and **Y. Rémond**, *Nitrogen doping and vacancy effects on the mechanical properties of graphene: A molecular dynamics study*. Physics Letters, Section A: General, Atomic and Solid State Physics, 2012. **376**(12-13): p. 1146-1153.
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45. Matadi Boubimba, R., K. Wang, N. Bahlouli, S. Ahzi, **Y. Rémond**, and F. Addiego, *Experimental investigation and micromechanical modeling of high strain rate compressive yield stress of a melt mixing polypropylene organoclay nanocomposites*. Mechanics of Materials, 2012. **52**: p. 58-68.
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46. Madeo, A., D. George, T. Lekszycki, M. Nierenberger, and **Y. Rémond**, *A second gradient continuum model accounting for some effects of micro-structure on reconstructed bone remodelling*. Comptes Rendus - Mecanique, 2012. **340**(8): p. 575-589.
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47. Davami, K., B. Mortazavi, H.M. Ghassemi, R.S. Yassar, J.S. Lee, **Y. Rémond**, and M. Meyyappan, *A computational and experimental investigation of the mechanical properties of single ZnTe nanowires*. Nanoscale, 2012. **4**(3): p. 897-903.
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48. Barth, N., D. George, S. Ahzi, **Y. Rémond**, V. Doquet, F. Bouyer, and S. Bétremieux, *Modeling and simulation of the cooling process of borosilicate glass*. Journal of Engineering Materials and Technology, Transactions of the ASME, 2012. **134**(4).
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49. Baniassadi, M., A. Ghazavizadeh, **Y. Rémond**, S. Ahzi, D. Ruch, and H. Garmestani, *Qualitative equivalence between electrical percolation threshold and effective thermal conductivity in polymer/carbon nanocomposites*. Journal of Engineering Materials and Technology, Transactions of the ASME, 2012. **134**(1).
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50. Baniassadi, M., S. Ahzi, H. Garmestani, D. Ruch, and **Y. Remond**, *New approximate solution for N-point correlation functions for heterogeneous materials*. Journal of the Mechanics and Physics of Solids, 2012. **60**(1): p. 104-119.
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51. Rogueda-Berriet, C., N. Bahlouli, D. Pessey, and **Y. Rémond**, *Mechanical behavior of recycled polypropylene composites under tensile, bending, and creep loading: Experimental and modeling*. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011. **133**(3).

52. Idrissa, A.K.M., S. Ahzi, **Y. Rémond**, and J. Gracio, *Modeling of the stress-birefringence-stretch behavior in rubbers using the Gent model*. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011. **133**(3).
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53. Hizoum, K., **Y. Rémond**, and S. Patlazhan, *Coupling of nanocavitation with cyclic deformation behavior of high-density polyethylene below the yield point*. Journal of Engineering Materials and Technology, Transactions of the ASME, 2011. **133**(3).
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54. Nibennaoune, Z., D. George, F. Antoni, J. Santos, G. Cabral, S. Ahzi, D. Ruch, J. Gracio, and **Y. Remond**, *Towards optimization of time modulated chemical vapour deposition for nanostructured diamond films on Ti6Al4V*. Journal of Nanoscience and Nanotechnology, 2010. **10**(4): p. 2838-2843.
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55. Nibennaoune, Z., D. George, S. Ahzi, D. Ruch, **Y. Remond**, and J.J. Gracio, *Numerical simulation of residual stresses in diamond coating on Ti-6Al-4V substrate*. Thin Solid Films, 2010. **518**(12): p. 3260-3266.
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56. Mikdam, A., A. Makradi, S. Ahzi, H. Garmestani, D.S. Li, and **Y. Remond**, *Statistical continuum theory for the effective conductivity of fiber filled polymer composites: Effect of orientation distribution and aspect ratio*. Composites Science and Technology, 2010. **70**(3): p. 510-517.
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57. Hostettler, A., S.A. Nicolau, **Y. Rémond**, J. Marescaux, and L. Soler, *A real-time predictive simulation of abdominal viscera positions during quiet free breathing*. Progress in Biophysics and Molecular Biology, 2010. **103**(2-3): p. 169-184.
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58. Hostettler, A., D. George, **Y. Rémond**, S.A. Nicolau, L. Soler, and J. Marescaux, *Bulk modulus and volume variation measurement of the liver and the kidneys in vivo using abdominal kinetics during free breathing*. Computer Methods and Programs in Biomedicine, 2010. **100**(2): p. 149-157.
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59. Dubé, M., V. Doquet, A. Constantinescu, D. George, **Y. Rémond**, and S. Ahzi, *Modeling of thermal shock-induced damage in a borosilicate glass*. Mechanics of Materials, 2010. **42**(9): p. 863-872.
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60. Bouhala, L., S. Belouettar, A. Makradi, and **Y. Remond**, *Study of interface influence on crack growth: Application to Solid Oxide Fuel Cell like materials design*. Materials and Design, 2010. **31**(3): p. 1033-1041.
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61. Mikdam, A., A. Makradi, S. Ahzi, H. Garmestani, D.S. Li, and **Y. Remond**, *Effective conductivity in isotropic heterogeneous media using a strong-contrast statistical continuum theory*. Journal of the Mechanics and Physics of Solids, 2009. **57**(1): p. 76-86.
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62. Mikdam, A., A. Makradi, S. Ahzi, H. Garmestani, D.S. Li, and **Y. Remond**, *A new approximation for the three-point probability function*. International Journal of Solids and Structures, 2009. **46**(21): p. 3782-3787.
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63. Mathis, R. and **Y. Remond**, *Kinematic and dynamic simulation of epicyclic gear trains*. Mechanism and Machine Theory, 2009. **44**(2): p. 412-424.

64. Dong, L., A. Makradi, S. Ahzi, and **Y. Rémond**, *Three-dimensional transient finite element analysis of the selective laser sintering process*. Journal of Materials Processing Technology, 2009. **209**(2): p. 700-706.
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65. Patlazhan, S.A. and **Y. Rémond**, *International colloquium "structure-Sensitive Mechanics of Polymer Materials: Physical and Mechanical Aspects"*. Polymer Science - Series A, 2008. **50**(5): p. 481-482.
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66. Patlazhan, S.A., K. Hizoum, and **Y. Rémond**, *Stress-strain behavior of high-density polyethylene below the yield point: Effect of unloading rate*. Polymer Science - Series A, 2008. **50**(5): p. 507-513.
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67. Dong, L., A. Makradi, S. Ahzi, **Y. Rémond**, and X. Sun, *Simulation of the densification of semicrystalline polymer powders during the selective laser sintering process: Application to Nylon 12*. Polymer Science - Series A, 2008. **50**(6): p. 704-709.
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68. Oshmyan, V.G., S.A. Patlazhan, and **Y. Rémond**, *Principles of structural-mechanical modeling of polymers and composites*. Polymer Science - Series A, 2006. **48**(9): p. 1004-1013.
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69. Richeton, J., G. Schlatter, K.S. Vecchio, **Y. Rémond**, and S. Ahzi, *A unified model for stiffness modulus of amorphous polymers across transition temperatures and strain rates*. Polymer, 2005. **46**(19 SPEC. ISS.): p. 8194-8201.
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70. Richeton, J., S. Ahzi, L. Daridon, and **Y. Rémond**, *Yield and post-yield modeling of solid amorphous polymers: Application of the cooperative model for high strain rates*. Polymer Science - Series A, 2005. **47**(4): p. 332-338.
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71. Richeton, J., S. Ahzi, L. Daridon, and **Y. Rémond**, *A formulation of the cooperative model for the yield stress of amorphous polymers for a wide range of strain rates and temperatures*. Polymer, 2005. **46**(16): p. 6035-6043.
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- 72. Rémond, Y.**, *Constitutive modelling of viscoelastic unloading of short glass fibre-reinforced polyethylene*. Composites Science and Technology, 2005. **65**(3-4): p. 421-428.
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73. Oshmyan, V.G., S.A. Patlazhan, and **Y. Rémond**, *The effect of structural changes and nonlinear character of plastic flow on low strains in semicrystalline polymers*. Polymer Science - Series A, 2005. **47**(4): p. 346-351.
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- 74. Rémond, Y.** and M. Védrines, *Measurement of local elastic properties of injection moulded polymer structures by analysis of flexural resonant frequencies. Applications in POM, PA66, filled PA 66*. Polymer Testing, 2004. **23**(3): p. 267-274.
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75. Oshmyan, V., S. Patlazhan, and **Y. Rémond**, *Simulation of small-strain deformations of semi-crystalline polymer: Coupling of structural transformations with stress-strain response*. Journal of Materials Science, 2004. **39**(11): p. 3577-3586.
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76. Stehly, M. and **Y. Rémond**, *On numerical simulation of cyclic viscoplastic and viscoelastic constitutive laws with the large time increment method*. Mechanics Time-Dependent Materials, 2002. **6**(2): p. 147-170.

77. Mathis, R. and **Y. Rémond**, *A unified theory of epicydic gear trains*. Comptes Rendus de l'Academie de Sciences - Serie IIb: Mécanique, Physique, Chimie, Astronomie, 1999. **327**(11): p. 1115-1121.
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78. Mathis, R. and **Y. Rémond**, *A new approach to solving the inverse problem for compound gear trains*. Journal of Mechanical Design, Transactions of the ASME, 1999. **121**(1): p. 98-106.
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79. **Rémond, Y.** and C. Wagner, *Subsurface damage evaluation on carbon-carbon composite structures after high dissipative wear*. Comptes Rendus de l'Academie de Sciences - Serie IIb: Mécanique, Physique, Chimie, Astronomie, 1998. **326**(12): p. 833-838.
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80. Dumont, J.P., P. Ladeveze, M. Poss, and **Y. Remond**, *Damage mechanics for 3-D composites*. Composite Structures, 1987. **8**(2): p. 119-141.