

Liste de publications de Guillaume Haïat

Publications dans des revues à comité de lecture

1. Barthel E. and **Haïat G.**, “Approximate model for the adhesive contact of viscoelastic sphere”, *Langmuir*. **18 (24)** (2002), pp. 9362-9370.
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15. Sasso M., **Haïat G.**, Yamato Y., Naili S., Matsukawa M., “Frequency dependence of ultrasonic attenuation in bovine cortical bone: an in vitro study”, *Ultrasound Med. Biol.* **33(12)** (2007), pp 1933-42.
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Brevet

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Vulgarisation

- **Haïat, G.**, Monitoring bone healing to help improve implant success, Success story of the EU Commission, 2023. [Link](#)
- **Haïat, G.**, L’innovation de rupture au service du médical, la République du Centre, 2023

Livres et ouvrages

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- Auteur du Livre : *Imagerie ultrasonore : du contrôle non destructif à la biomécanique*, Presses Académiques Francophones, 125 p, Hardcover. 2012. ISBN 978-3-8381-7511-9

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1. Laugier, P. and **Haiat G.** “Introduction to the physics of ultrasound”, in *Bone Quantitative Ultrasound*. Springer. Chapter 2. 2011
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- Vayron R., **Haiat G.**, “Ultrasound assessment of dental implant stability: finite element analysis of wave propagation” 6th International Conference on the Development of Biomedical Engineering in Vietnam, June 27-29 June 2016, Ho Chi Minh, Vietnam.
- **Haiat G.**, “Acoustical behavior of the bone-implant interface: from multiscale modeling to the patient's bed”. 26th International Congress on Sound and Vibration (ICSV26) Montreal, Canada, 7-11 Juillet 2019.
- **Haiat G.**, “The bone-implant interface: multiscale modeling and applications”. The International Conference on Modern Mechanics and Applications (ICOMMA 2020) Saigon, Vietnam, 2-4 Décembre 2020.
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Conférences invitées

1. Laugier P., **Haiat G.**, Bossy E, Padilla F., “Finite-difference computations of ultrasound wave propagation in bone”, *Third European Conference on Computational Mechanics Solids, Structures and Coupled Problems in Engineering*, actes du congrès, C.A. Mota Soares et.al. (eds.), Lisbon, Portugal, 5-8 June 2006.
2. **Haiat G.**, “ Influence d'un gradient de propriétés matérielles sur la propagation d'ondes ultrasonores dans l'os cortical: application à la transmission axiale”, *Workshop « Matériaux poreux, propagation d'ondes acoustiques et caractérisation »*, Valenciennes, 26 février 2009.
3. **Haiat G.**, “Using acoustical modeling and numerical simulation for bone quantitative ultrasound”, *2011 World Congress on Advances in Structural Engineering and Mechanics (ASEM'11^{plus})*, Seoul, Korea, 18–23 Septembre 2011.
4. Mathieu V., **Haiat G.**, “Développement d'une méthode ultrasonore pour l'estimation de l'ostéointégration d'implants dentaires”, *Journées "acoustique des milieux poreux"*, Valenciennes, 06-07 Juin 2011.
5. **Haiat G.**, “ Estimation des propriétés biomécaniques de l'os: une approche multimodalité”, *Journée scientifique de la Fédération Galileo Galilei Grenoble FR3345, "La mécanique aux interfaces avec la biologie et la santé"*. Vendredi 18 Novembre 2011, Grenoble, 18 Novembre 2011.
6. **Haiat G.**, “ Dispositif ultrasonore pour l'estimation de la stabilité d'un implant dentaire”, *25ème déjeuner de la technologie : « Durabilité et fonctionnalisation des biomatériaux »*, 21/02/2012.
7. Vayron R., **Haiat G.**, “In vitro ultrasonic assessment of the biomechanical quality of the interface surrounding a dental implant” 5th International conference on biomedical engineering in Vietnam, June 16-18 2014, Ho Chi Minh.
8. **Haiat G.**, “Multimodal determination of the biomechanical properties of the bone-implant interface” 17th U.S. National Congress on Theoretical & Applied Mechanics, June 15-20 2014, Lansing, MI, USA.
9. **Haiat G.**, “Developing healthcare technology through biomedical engineering approaches: from bench to bed”, *Journées Franco-Argentines, 50 ans pour la coopération scientifique pour l'innovation*, 5-6 Novembre 2014, Buenos Aires, Argentine.

10. Vayron, R., **Haïat G.**, “Assesment of the biomechanical properties of the interface surrounding a dental implant: an in vitro approach”, Conferencia Latino Americano en Ingeniria Biomedica, 29/10-31/10/14, Parana, Argentina
11. Vayron, R. and **Haïat G.**, “Multimodal determination of the biomechanical properties of the bone-implant interface”, Rencontres Franciliennes de Mécanique (RFM), 11-15 Mai 2015
12. **Haïat G.**, “Imagerie quantitative ultrasonore: application au rachis”. Journée Scientifique du iLAB-Spine. June 4 2016. Montreal, QC.
13. Nguyen VH., Vayron R and **Haïat G.**, “Acoustical estimation of endosseous implant stability: finite element modeling and experimental validation”, 5th Joint Meeting of the Acoustical Society of America and Acoustical Society of Japan, November 28- December 2 2016, Honolulu, Hawaii.
14. **Haïat G.**, “Characterization of the bone-implant interface”. French-Italy Workshop Bone biomechanics: multiscale and multiphysical aspects, Guliano di Roma, Italy, 26-28 September 2017
15. **Haïat G.**, “Multiscale characterization of the biomechanical properties of the bone-implant”. European Calcified Tissue Society ERC Grant webinar series, Dresden, Allemagne, 29 Novembre 2017
16. Nguyen VH., Vayron R and **Haïat G.**, “Acoustical estimation of endosseous implant stability: finite element modeling and experimental validation”, 5th Joint Meeting of the Acoustical Society of America and Acoustical Society of Japan, November 28- December 2 2016, Honolulu, Hawaii.
17. Sansalone V., Martin M., **Haïat G.**, Pivonka P, Lemaire T. Bone remodeling recast in the generalized continuum mechanics. Euromech Colloquium 594 Bone remodeling: multiscale mechanical models and multiphysical aspects, 15-19 May 2018, Nancy, France
18. **Haïat G** and Bosc, R. Biomechanical behavior of the bone-implant interface: from multiscale modeling to the patient's bed. 45ème congrès de la société de Biomécanique. 26-28 octobre 2020, Metz, France. Perspective Talk.
19. Nguyen, VH, Heriveaux, Y. and **Haïat G.**, “Characterization of bone-implant interfaces: some computational aspects” 6th International Conference on the Development of Biomedical Engineering in Vietnam, December 27-29 June 2022, Ho Chi Minh, Vietnam.
20. **Haïat G.**, “Quantitative ultrasound of the bone-implant interface” 2023 International Congress on Ultrasonics (ICU), September 18-21 2023, Beijing, China.
21. **Haïat G.**, “Assessing the Primary Stability of the acetabular cup and of the femoral stem by Impact Analyses: A Cadaveric Study” The 38th Annual Research Meeting of the Japanese Orthopaedic Association (JOAKISO2023), October 19-20 2023, Tsukuba, Japan.
22. **Haïat G.**, “An Impact hammer as a decision support system for surgeons during osteotomy” 20th World Congress of Non Destructive Testing (20th WCNDT), May 28-31 2023, Incheon, Korea.
23. Moisan, B, Bochud, N, Rosi, G, Nguyen, VH, Le Cann, S and **Haïat G** “Investigating the Bone-Implant Interface Using Quantitative Ultrasound: A Numerical Approach”, 12th European Solid Mechanics Conference, Lyon, France, 7-11 July 2025.

Actes de congrès nationaux et internationaux

1. **Haïat G.** and Barthel E., “The adhesive contact of viscoelastic spheres”, *Adhesion Society Meeting*, Actes du congrès, 25-28 février 2001, Williamsbourg, Virginia, USA.
2. Barthel E. and **Haïat G.**, “Adhérence d’aspérités viscoélastiques: un modèle minimal”, *Matériau 2002*, Actes du congrès, Tours.
3. Barthel E. and **Haïat G.**, “Adhesive contact of viscoelastic spheres : a hand-waving approach”, *Adhesion Society Meeting*, Actes du congrès, pp. 25-28 Février 2003, Myrtle Beach, South Carolina, USA.
4. **Haïat G.**, Calmon P. and Lasserre F., “Application of ultrasonic modeling to the positioning of defects in a clad component”, *Review of Progress in Quantitative NDE*, eds. by D. O. Thompson and D. E. Chimenti, Actes du congrès, 23, pp. 103-109, 27 Juillet-1^{er} août 2003, Green Bay, Wisconsin, USA, Présentation Orale.
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6. Padilla F., Bossy E., **Haïat G.**, Jenson F., Laugier P., “Numerical simulation of transmission and backscattering in cancellous bone.”, *2005 IEEE International Ultrasonics Symposium*, 18-21 Septembre 2005, Rotherdam.

7. **Haïat G.**, Padilla F., and Laugier P., “Simulation numérique de la dépendance des paramètres ultrasonores à des variations de microarchitecture et de constantes élastiques”, *8^{ème} congrès Français d’acoustique*, 24-27 avril 2006, Tours.
8. Sasso M., Talmant M., **Haïat G.**, Laugier P., Naili S., “Development of a multi-dimensional SVD based technique for multi-receivers ultrasound used in the bone status characterization”, *Fourth IEEE Workshop on Sensor Array and Multi-channel Processing*, 12-14 juillet 2006, Waltham, USA.
9. Dencks S., Barkmann R., Padilla F., **Haïat G.**, Laugier P., Schmitz G., Glüer C. C., “Optimization algorithm for improved quantitative ultrasound signal processing at the proximal femur”, *2006 IEEE International Ultrasonics Symposium*, 3-6 Octobre 2006, Vancouver, Canada.
10. Desceliers C., Grimal Q., **Haïat G.**, Naili S., Soize C., “1D-space finite element approximation with 2D-space Fourier transform and with time-domain formulation for 3D-transient elastic waves in multilayer semi-infinite media”, *13th International congress on Sound and vibration*, 2-6 juillet 2006, Vienne.
11. **Haïat G.**, Barthel E., “Adhesive contact to rough viscoelastic surfaces”, *30th Annual Meeting of The Adhesion Society*, 18-21 Février 2007, Tampa, FL, USA. Actes du congrès.
12. Sasso M., **Haïat G.**, Talmant M., Laugier P., Naili S., “Multi-modal analysis in axial transmission: application of a SVD-based extraction algorithm to ultrasonic cortical bone characterization”, *2007 International Congress on Ultrasonics*, 9-12 Avril 2007, Vienne, Autriche. Actes du congrès.
13. Sasso M., **Haïat G.**, Yamato Y., Naili S., Matsukawa M., “Broadband ultrasonic attenuation in bovine cortical bone: dependence on bone mass and microstructure”, *2007 International Congress on Ultrasonics*, 9-12 Avril 2007, Vienne, Autriche. Actes du congrès.
14. **Haïat G.**, Padilla F. and Laugier P., “3D simulations of wave propagation in a poroelastic medium: prediction of slow and fast wave mode in human trabecular bone”, *2007 International Congress on Ultrasonics*, 9-12 Avril 2007, Vienne, Autriche. Actes du congrès.
15. **Haïat G.**, Lonne S., Lhémy A., Padilla F., Laugier P. and Naili S., “Modeling the frequency dependence of phase velocity in phantoms of trabecular bone”, *2007 International Congress on Ultrasonics*, 9-12 Avril 2007, Vienne, Autriche.
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23. Naili S., Vu M., Grimal Q., Talmant M., Desceliers C., Soize C., **Haïat G.** “Finite element model of the ultrasonic propagation in cortical bone: application to the axial transmission device”, *Congrès Français de Mécanique*, Marseille, Aout 2009, actes du congrès.
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27. Mathieu V., Anagnostou F., Soffer J.E., and **Haïat G.**, “An ultrasonic device to assess the biomechanical properties of the bone implant interface”, *2010 IEEE International Ultrasonics Symposium*, 11-14 Octobre 2010, San Diego. Actes du congrès.
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29. Sansalone V., Naili S., Bousson V., Bergot C., Peyrin F., Zarka J., Laredo J.D., **Haïat G.** “Coupling a homogenization model with an imaging technique to retrieve cortical bone anisotropic biomechanical properties” *The 2011 World Congress on Advances in Structural Engineering and Mechanics (ASEM11^{plus})*, Seoul, 18-22 September 2011. Actes du congrès.
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159. Heriveaux, Y., Nguyen, VH, **Haïat, G** “Influence of compressive stresses on the ultrasonic response of the bone-implant interface”, 176th meeting of the Acoustical Society of America, 2-6 Decembre 2019, San Diego, CA, USA.
160. Heriveaux, Y., Audoin, B, Biateau, C, Nguyen, VH, **Haïat, G** “Ultrasonic guided wave propagation in a dental implant”, 176th meeting of the Acoustical Society of America, 2-6 Decembre 2019, San Diego, CA, USA.
161. Immel, Nguyen, VH, **Haïat, G** and Sauer, R “Modeling initial and long term stability of cementless hip implants”, 14th World Congress in Computational Mechanics (WCCM) ECCOMAS Congress 2020, 19 – 24 July 2020, Paris, France
162. Heriveaux, Y., Nguyen, VH, Biwa, S and **Haïat, G** “Interaction between an ultrasonic wave and a rough bone-implant interface: development of an analytical model”, The 27th International congress of sound and vibration (ICSV27), Prague, République Tchèque.
163. Immel, Duong, TX, **Haïat, G**, Mandadapu, KK and Sauer, R “A chemo-thermo-mechanical contact theory with application to biomechanics”, Contact Mechanics International Symposium, 13 – 15 May 2020, Lausanne, Suisse
164. Fraulob, Vayron, R., Le Cann, S., Lecuelle, B, Hériveaux, Y, Albini Lomami, H, Flouzat-Lachaniette, CH, **Haïat, G**. « Effect of roughness and healing time on the bone-implant interface assessed by quantitative ultrasound », 26th Congress of the European Society of Biomechanics, Milan, Italy, 12-15 juillet 2020.
165. Fraulob, M, Le Cann, S., Voumard, B, Yasui, H, Yano, K, Vayron, R., Matsukawa M, Zysset, P, **Haïat, G**. « Spatiotemporal variations of the bone elastic properties around an implant: a bimodal study », 26th Congress of the European Society of Biomechanics, Milan, Italy, 12-15 juillet 2020.
166. Le Cann, Törnquist, E, Barreto, IS, Fraulob, M, Verezhak, M, Guizar-Sicairos, M, Albini Lomani, H, Isaksson, H, **Haïat, G**. « Spatiotemporal variations of the bone elastic properties around an implant: a bimodal study », 26th Congress of the European Society of Biomechanics, Milan, Italy, 12-15 juillet 2020.
167. Martin, M, Pivonka, P, **Haïat, G**, Lemaire, T, Sansalone, V « A generalized continuum framework of bone mechanobiology and mineralization », 26th Congress of the European Society of Biomechanics, Milan, Italy, 12-15 juillet 2020.
168. Immel, K, Nguyen, VH, Sauer, R, **Haïat, G** « Numerical Modeling of Primary and Secondary stability of cementless acetabular cup implants», 26th Congress of the European Society of Biomechanics, Milan, Italy, 12-15 juillet 2020.
169. Housset, V, Rosi, G, Flouzat-Lachaniette, CH, **Haïat, G** « Arthroplasties totales de hanches impactées : validation d'un marteau instrumenté permettant d'analyser la stabilité primaire des implants fémoraux et le risque de fractures lors de l'impaction des tiges fémorales. », Journées de printemps de la société Française de Chirurgie de la Hanche et du Genou, Rennes, 12-15 Mars 2020.
170. Immel, K, Nguyen, VH, **Haïat, G** and Sauer, R, « Finite element models for primary and secondary stability of cementless hip implants », GAMM FACHAUSCHUSS 2020, COMPUTATIONAL BIOMECHANICS, 21-22 september 2020, KLOSTER BANZ, Allemagne
171. Gouet, E, Vayron, R and **Haïat, G** « Estimation of dental implant stability using quantitative ultrasound measurements », European Association of Osseointegration Digital days, 5-11 octobre 2020.
172. Guillaume, F, Le Cann, S, Tengattini, A, Törnquist, E, Falentin-Daudre, C, Albini Lomami, H, Petit, Y, Isaksson, H and Haïat G “Neutron tomography to investigate the bone-implant interface”, the Canadian Society of Biomechanics Congress 2020. May 25-28th 2021.
173. Immel, K., Nguyen, VH, **Haïat, G** and Sauer, R, “Long-Term Stability and Debonding of Cementless Implants”, 90th GAMM Annual Meeting, Wien, February 18-22, 2019

174. Immel, K., Nguyen, VH, and Sauer, R, and **Haïat, G** “Secondary stability and debonding of osseointegrated Acetabular Cup implants”, 27th Congress of the European Society of Biomechanics, Milan, Italy, 11-14 juillet 2021.
175. Poudrel, AS, Nguyen, VH, Rosi, G and **Haïat, G** “Influence of the biomechanical environment on frequency behavior of the femoral stem: a 3D Finite Element study”, 27th Congress of the European Society of Biomechanics, Milan, Italy, 11-14 juillet 2021.
176. Poudrel, AS, Nguyen, VH, Rosi, G and **Haïat, G** “3D finite element modal analysis of a femoral stem under various bone-implant contact conditions”, 17th International Symposium on Computer Methods on Biomechanics and Biomedical Engineering, Bonn, Allemagne, 7-9 septembre 2021.
177. Le Cann, S, Törnquist, E, Guillaume, F, Tengattini, A, Ando, E, Hall, SA, Isaksson, H and **Haïat G** “Neutron tomography **to investigate** the bone-implant interface -Combination with histology and x-ray tomography”, PSB Symposium Frontiers in bioimaging. Grenoble, France, July 1-2 2021.
178. Zarate, JC, Messineo, G, Colabella, L, Cisilino, A, and **Haïat G** “Estimacion de la fraccion solida de hueso trabecular mediante el analisis inverso de ensayos de ultrasasonido”, MECOM 2021 XXXVII Congreso Argentino de Mecánica Computacional. Resistencia, Argentina, November 3-5 2021.
179. Colabella L, **Haïat G**, Naili S, and Cisilino A, “Multiscale design of porous implants with a biomimetic cellular material”, 15th World Congress on Computational Mechanics (WCCM-XV). Yokohama, Japan, July 31- August 5, 2021.
180. Immel, K., **Haïat, G**, Sauer, R, and Nguyen, VH, “Evaluation of primary stability of hip implants: a numerical study”, 11th European solid mechanics conference, Galway, Ireland, 4-8 July 2022.
181. Poudrel, AS, Albini Lomami, H, Rosi, G and **Haïat, G** “Optimisation de l’insertion d’implants orthopédiques non cimentés par une méthode acoustique basée sur l’analyse de la force d’impact : application à la tige fémorale”, 16e Congrès Français d'Acoustique (CFA 2022), Marseille, 11-15 Avril 2022.
182. Poudrel, AS, Rosi, G, Nguyen, VH and **Haïat, G** “ Développement d’une méthode vibro-acoustique pour le suivi de l’insertion d’un implant orthopédique dans l’os ”, 16e Congrès Français d'Acoustique (CFA 2022), Marseille, 11-15 Avril 2022.
183. Colabella L, **Haïat G**, Naili S, and Cisilino A, “Multiscale optimization of porous implants with a Voronoi based microstructure”, The 8th European Congress on Computational Methods in Applied Sciences and Engineering ECCOMAS Congress 2022, 5-9 June 2022, Oslo, Norway
184. Törnquist, E, **Haïat G**, Heriveaux, Y, Albini-Lomami, H, Vennat, E, Le Cann, S “The osteocyte lacuna-canalicular network at the bone-implant interphase imaged with focused-ion beam – scanning electron microscopy”, 27th Congress of the European Society of Biomechanics, June 26-29, 2022, Porto, Portugal
185. Hériveaux, Y; Le Cann, S; Fraulob, M; Vennat, E; Nguyen, VH; **Haïat G** “Numerical simulation of stress-shielding at the bone-implant interface under shear loading”, 27th Congress of the European Society of Biomechanics, June 26-29, 2022, Porto, Portugal
186. Le Cann, S; Törnquist, E, Barreto, IS; Fraulob, M; Verezhak, M; Guizar-Sicairos, M; Albini Lomami, H, Isaksson, H, M; **Haïat G** “HYDROXYAPATITE CRYSTAL THICKNESS AND ORIENTATION AT THE BONE IMPLANT INTERFACE: SPATIAL AND TEMPORAL EVOLUTIONS”, 27th Congress of the European Society of Biomechanics, June 26-29, 2022, Porto, Portugal
187. Hériveaux, Y; Le Cann, S; Immel, K; Vennat, E; Nguyen, VH; Sauer, R; **Haïat G** “Combining numerical and experimental approaches to assess the tangential debonding of coin-shaped implants”, 27th Congress of the European Society of Biomechanics, June 26-29, 2022, Porto, Portugal
188. Chaboty, A, Nguyen, VH, Naili, S, **Haïat G.**, Belanger, P. “Effect of bone degradation on axially transmitted low frequency (<500 kHz) ultrasonic guided waves”, 183th Meeting of the Acoustical Society of America, 5-9 December 2022, Nashville, TN, USA.
189. Poudrel, AS, Bouffandeau, A, Rosi, G, Nguyen, VH, **Haïat G.**, “Soft tissue characterization by dynamic impact analysis: results on agar-based phantoms”, 184th Meeting of the Acoustical Society of America, 8-12 May 2023, Chicago, IL, USA.
190. Poudrel, AS, Rosi, G, Nguyen, VH, **Haïat G.**, “Vibro-acoustic characterization of the bone-implant system during insertion”, 184th Meeting of the Acoustical Society of America, 8-12 May 2023, Chicago, IL, USA.
191. Abouzaid, K, Reiss, T, **Haïat G**, Albini-Lomami, H, Vennat, E, Le Cann, S “Three-dimentional osteocyte lacuni-canalicular network at the bone-implant interface”, 28th Congress of the European Society of Biomechanics, July 9-12, 2023, Maastricht, the Netherland
192. Bouffandeau, A, Poudrel, AS, Rosi, G, Nguyen, VH, **Haïat G** “Evaluation of biomechanical properties of soft tissues mimicking phantoms by impact analyses”, 28th Congress of the European Society of Biomechanics, July 9-12, 2023, Maastricht, the Netherland

193. Colabella, L, Naili, S, Le Cann, S, **Haiat G** “Anisotropic properties of peri-implant bone tissue are affected by collagen fibre orientation”, X International Conference on Computational Bioengineering, September 20-22, 2023, Vienna, Austria
194. Seyfaddini, F, Chaboty, A, Nguyen-Xuan H, Belanger, P., **Haiat G.**, Nguyen, VH, “Simulation of guided-waves propagation in 3D visco-elastic structures coupled with fluids using semi-analytical isogeometric analysis”, The 9th European Congress on Computational Methods in Applied Sciences and Engineering, 3-7 June 2024, Lisbonne.
195. Bas-dit Nugues, M, Rosi G, Flouzat-Lachaniette CH, Khonsari, RH, **Haiat G.** “Using an instrumented hammer to detect the rupture of the pterygoid bone plate: an animal study”, 186th Meeting of the Acoustical Society of America, May 13-17, 2024, Ottawa, Canada
196. Kwak, Y, Nguyen, VH, Heriveaux, Y, Park, J, **Haiat G.** “Ultrasonic assessment of imperfect contact interface using convolutional neural network”, The 2024 World Congress on Advances in Civil, Environmental, & Materials Research (ACEM24) / The 2024 Structures Congress (Structures24), August 19-22, 2024, Seoul, Corée
197. Bouffandeau, A, Rosi, G, Nguyen, VH, Flouzat-Lachaniette, CH, Meningaud, JP and **Haiat G** “Biomechanical characterization of the skin firmness using impact analysis: towards a decision support system”, COMET 2025, 22-23 Janvier 2025
198. Moisan, B, Bochud, N, Rosi, G, Nguyen, VH, Le Cann, S and **Haiat G** “Approche numérique de l’évaluation numérique de l’interface os-implant à l’aide d’ultrasons quantitatifs”, Congrès Français d’Acoustique, Paris, France, 27-30 Avril 2025.
199. Gabriel, J, Wagnac, E, Rosi G, Flouzat-Lachaniette, CH, **Haiat G** and Petit, Y “Evaluation of Pedicle Screw Primary Stability Using an Instrumented Hammer”, Canadian Society for Mechanical Engineering International Congress, 32nd Annual Conference of the Computational Fluid Dynamics Society of Canada, Canadian Society of Rheology Symposium, CSME-CFDSC-CSR 2025. Montreal, May 25-28 2025.
200. Moisan, B, Bochud, N, Rosi, G, Nguyen, VH, Le Cann, S and **Haiat G** “A Numerical investigation of the Bone-implant Interface using Quantitative Ultrasound”, Bone and Orthopedics Interdisciplinary Symposium BONITOS 2025, Lyon, France, 13 Juin 2025.
201. Gabriel, J, Wagnac, E, Rosi G, Flouzat-Lachaniette, CH, **Haiat G** and Petit, Y “Assessing pedicle screw primary stability using an impact-based analysis method (IBAM)”, European Society of Biomechanics 2025 Congress, Zurich, July 6-9 2025.
202. Bouffandeau, A, Nguyen, VH, and **Haiat G** “Development of a decision-support system for biomechanical skin characterization using impact analysis”, 189th Meeting of the acoustical society of America– joint with the Acoustical Society of Japan, Honolulu, Hawaii, 1-5 December 2025
136. Moisan, B., Bochud, N, Rosi, G., Le Cann, S. and **Haiat G.** “Simulation of ultrasonic waves reflection at the bone-implant interface using a hybrid computational method” 189th Meeting of the acoustical society of America–joint with the Acoustical Society of Japan, Honolulu, Hawaii, 1-5 December 2025