



## Publications on EOS

- Elbuluk AM, Wright-Chisem J, Vigdorichik JM, Nunley RM.. Applying the Hip-Spine Relationship: What X-Rays and Measurements are Important?. *The Journal of Arthroplasty*. 2021
- Buller LT, McLawhorn AS, Maratt JD, Carroll KM, Mayman DJ.. EOS Imaging is Accurate and Reproducible for Preoperative Total Hip Arthroplasty Templating.. *The Journal of Arthroplasty*. 2020
- Severijns P, Moke L, Overbergh T, Beaucage-Gauvreau E, Ackermans T, Desloovere K, Scheys L.. Dynamic sagittal alignment and compensation strategies in adult spinal deformity during walking.. *The Spine Journal*. 2021
- Di Laura A, Henckel J, Dal Gal E, Monem M, Moravidou M, Hart AJ.. Reconstruction of acetabular defects greater than Paprosky type 3B: the importance of functional imaging.. *BMC Musculoskeletal Disorders*. 2021
- Vaynrub, M., Tishelman, J., Buckland, A. J., Errico, T. J., & Protopsaltis, T. S.. The Ankle-Pelvic Angle (APA) and Global Lower Extremity Angle (GLA): Summary Measurements of Pelvic and Lower Extremity Compensation.. *International Journal of Spine Surgery*. 2021
- Innmann, M. M., Reichel, F., Schaper, B., Merle, C., Beaulé, P. E., & Grammatopoulos, G.. How does spinopelvic mobility and sagittal functional cup orientation affect patient reported outcome 1 year after THA?—A prospective diagnostic cohort study.. *The Journal of Arthroplasty*. 2021
- Pasha, S., Rajapaske, C. R., Reddy, R., Diebo, B., Knott, P., Jones, B. C., ... & Jaramillo, D. . Quantitative imaging of the spine in adolescent idiopathic scoliosis: shifting the paradigm from diagnostic to comprehensive prognostic evaluation.. *European Journal of Orthopaedic Surgery & Traumatology*. 2021
- Kim, Y. C., Lee, K. H., Park, G. T., Cui, J. H., & Kim, K. T.. How does long thoracolumbar realignment surgery of adult spinal kyphotic deformity affect lower extremity compensation? Using full body radiograph.. *British Journal of Neurosurgery*. 2021
- Wu, J., Wei, F., Ma, L., Li, J., Zhang, N., Tian, W., & Sun, Y.. Accuracy and Reliability of Standing Lateral Lumbar Radiographs for Measurements of Spinopelvic Parameters.. *Spine*. 2021
- Cho, B. W., Kwon, H. M., Lee, K. Y., Park, K. K., Yang, I. H., & Lee, W. S.. The effect of hamstring tightness on intraoperative extension gap in posterior stabilized total knee arthroplasty.. *Scientific Reports*. 2021
- Yoo HJ, Kim JE, Kim SC, Kim JS, Yang HJ, Kim TW, Lee YS. Pitfalls in assessing limb alignment affected by rotation and flexion of the knee after total knee arthroplasty: Analysis using sagittal and coronal whole-body EOS radiography. *The Knee*. 2020
- Edouard T, Guillaume-Czitrom S, Bacchetta J, Sermet-Gaudelus I, Dugelay E, Martinez-Vinson C, Salles JP, Linglart A. Guidelines for the management of children at risk of secondary bone fragility: Expert opinion of a French working group. *Archives de Pédiatrie*. 2020
- Kato S, Zeller RD, Magana S, Ganau M, Oshima Y, Tanaka S, Lewis SJ. Post-operative Distal Coronal Decompensation after Fusion to L3 for Adolescent Idiopathic Scoliosis is affected by Sagittal Pelvic Parameters. *Spine*. 2020
- Perronne L, Haehnel O, Chevret S, Wybier M, Hannouche D, Nizard R, Bousson V. How is quality of life after total hip replacement related to the reconstructed anatomy? A study with low-dose stereoradiography. *Diagnostic and Interventional Imaging*. 2020

- 
- Kaddiou H, Duong L, Joncas J, Bellefleur C, Nahle I, Chémaly O, Nault ML, Parent S, Grimard G, Labelle H. Convolutional Neural Networks for Automatic Risser Stage Assessment. *Radiology: Artificial Intelligence*. 2020
  - Connolly, L. E., Schmid, S., Moschini, G., Meier, M. L., & Senteler, M.. Motion Capture-driven Musculoskeletal Spine Modeling: An OpenSim-based Inverse Kinematics Approach.. *arXiv preprint*. 2021
  - Canetti, R., de Saint Vincent, B., Vieira, T. D., Fièrè, V., & Thauinat, M.. Spinopelvic parameters in greater trochanteric pain syndrome: a retrospective case-control study.. *Skeletal radiology*. 2019
  - Galbusera, F., Cina, A., Panico, M., Bassani, T.. The importance of curve severity, type and instrumentation strategy in the surgical correction of adolescent idiopathic scoliosis: an in silico clinical trial on 64 cases. *Scientific Reports*. 2021
  - Orfeuvre, B., Tonetti, J., Kerschbaumer, G., Barthelemy, R., Moreau-Gaudry, A., & Boudissa, M.. EOS stereographic assessment of femoral shaft malunion after intramedullary nailing. A prospective series of 48 patients at 9 months' follow-up.. *Orthopaedics & Traumatology: Surgery & Research*. 2021
  - Schlösser, T. P., Abelin-Genevois, K., Homans, J., Pasha, S., Kruyt, M., Roussouly, P., ... & Castelein, R. M. . Comparison of different strategies on three-dimensional correction of AIS: which plane will suffer?. *European Spine Journal*. 2020
  - Kikuchi, S., Nakashima, D., Yamada, Y., Yamada, M., Yokoyama, Y., Kanaji, A., ... & Jinzaki, M.. Relationship between hip joint proximity area and sagittal balance parameters: an upright computed tomography study.. *European Spine Journal*. 2020
  - Loisel, F., Durand, S., Persohn, S., Aubry, S., Lepage, D., Bonnet, X., & Skalli, W.. Scapholunate kinematics after flexible anchor repair.. *Medical Engineering & Physics*. 2020
  - Kim, G. U., Chang, M. C., Kim, T. U., & Lee, G. W.. Diagnostic Modality in Spine Disease: A Review. . *Asian Spine Journal*. 2020
  - Vighorchik, J. M., Sharma, A. K., Jerabek, S. A., Mayman, D. J., & Sculco, P. K.. Templating for Total Hip Arthroplasty in the Modern Age.. *J Am Acad Orthop Surg*. 2020
  - Vergari, C., Chen, Z., Robichon, L., Courtois, I., Ebermeyer, E., Vialle, R., ... & Skalli, W. . Towards a predictive simulation of brace action in adolescent idiopathic scoliosis.. *Computer Methods in Biomechanics and Biomedical Engineering*. 2020
  - Pasha, S., Ho-Fung, V., Eker, M., Nossov, S., & Francavilla, M.. Three-dimensional classification of the Lenke 1 adolescent idiopathic scoliosis using coronal and lateral spinal radiographs.. *BMC Musculoskeletal Disorders*. 2020
  - Kim, H. J., Yang, J. H., Chang, D. G., Suk, S. I., Suh, S. W., Song, K. S., ... & Cho, W.. Adult Spinal Deformity: Current Concepts and Decision-Making Strategies for Management.. *Asian Spine Journal*. 2020
  - Barba, N., Ignasiak, D., Villa, T. M. T., Galbusera, F., & Bassani, T.. Assessment of trunk muscle activation and intervertebral load in adolescent idiopathic scoliosis by musculoskeletal modelling approach.. *Journal of Biomechanics*. 2020
  - Störmann, S., Chruga-Urban, A., Lüring, C., Bouillon, B., Gutteck, N., & Arbab, D.. Comparison of medial distal tibial angle in EOS imaging and weightbearing X-ray.. *Foot and Ankle Surgery*. 2020
  - Haffer H, Adl Amini D, Perka C, Pumberger M. The Impact of Spinopelvic Mobility on Arthroplasty: Implications for Hip and Spine Surgeons.. *Journal of Clinical Medicine*. 2020
  - Sebaaly, A., Silvestre, C., Rizkallah, M., Grobost, P., Chevillotte, T., Kharrat, K., & Roussouly, P.. Revisiting thoracic kyphosis: a normative description of the thoracic sagittal curve in an asymptomatic population.. *European Spine Journal*. 2020

- Kluck, D., Sullivan, T. B., Bastrom, T. P., Bartley, C. E., Yaszay, B., & Newton, P. O. . Predictors of spontaneous lumbar curve correction in thoracic-only fusions: 3D analysis in AIS.. Spine Deformity. 2020
- Koliogiannis, V. K. A., Brandlhuber, M., Messerschmidt, V., Stahl, R., Melcher, C., Schinner, R., ... & Baur-Melnyk, A. Is the EOS imaging system as accurate as conventional radiography in grading osteoarthritis of the knee?. European Radiology. 2020
- Moralidou, M., Di Laura, A., Henckel, J., Hothi, H., & Hart, A. J.. Three-dimensional pre-operative planning of primary hip arthroplasty: a systematic literature review.. EFORT Open Reviews, 2020
- Zhao JX, Su XY, Zhao Z, Xiao RX, Zhang LC, Tang PF.. Radiographic assessment of the cup orientation after total hip arthroplasty: a literature review. Ann Transl Med. 2020
- Buckland AJ, Ayres EW, Shimmin AJ, Bare JV, McMahon SJ, Vigdorich JM.. Prevalence of Sagittal Spinal Deformity Among Patients Undergoing Total Hip Arthroplasty. J Arthroplasty. 2020
- Sakka, S. D., & Cheung, M. S. . Management of primary and secondary osteoporosis in children.. Therapeutic Advances in Musculoskeletal Disease, 2020
- Basel, J., Simonetti, E., Bergamini, E., Bascou, J., Vannozzi, G., & Pillet, H.. Definition of an optimal model based on segments' contribution for the estimation of the acceleration of the center of mass in people with lower-limb amputation.. Computer Methods in Biomechanics and Biomedical Engineering, 2020
- Fougeron, N., Bonnet, X., Panhelleux, B., Rose, J. L., Rohan, P. Y., & Pillet, H.. Prediction of muscle forces in residual limb during walking: comparison of transfemoral and Gritti–Stokes amputations. . Computer Methods in Biomechanics and Biomedical Engineering, 2020
- Vermue, H., Luyckx, T., de Grave, P. W., Ryckaert, A., Cools, A. S., Himpe, N., & Victor, J. . Robot-assisted total knee arthroplasty is associated with a learning curve for surgical time but not for component alignment, limb alignment and gap balancing.. Knee Surgery, Sports Traumatology, Arthroscopy, 2020
- Poulet, Y., Eyssartier, C., Marsan, T., Valdes-Tamayo, L., Robert, M., Billard, P., ... & Sauret, C.. Lumbar lordosis obtained with and without intervertebral thoracic spine motions during rhythmic gymnastics movements: a preliminary study. Computer Methods in Biomechanics and Biomedical Engineering, 2020
- Eyssartier, C., Poulet, Y., Marsan, T., Valdes-Tamayo, L., El Oujaji, S., Robert, M., ... & Sauret, C.. Contribution of hip extension and lumbar lordosis during back walkover performed by rhythmic and woman artistic gymnasts: a preliminary study.. Computer Methods in Biomechanics and Biomedical Engineering, 2020
- Ha, A. S., Lee, N., Blake, R., Mathew, J., Cerpa, M., & Lenke, L. G. Can spinal deformity patients maintain proper arm positions while undergoing full-body X-ray?. Spine Deformity, 2020
- Gomez-Rice, A., Madrid, C., Izquierdo, E., Marco-Martínez, F., Tresguerres, J. A., & Sanchez-Mariscal, F.. Photographic sagittal plane analysis and its clinical correlation after surgery for adult spinal deformity: a preliminary study.. Spine Deformity, 2020
- Kim, S. C., Kim, J. S., Choi, H. G., Kim, T. W., & Lee, Y. S.. Spinal Flexibility Is an Important Factor for Improvement in Spinal and Knee Alignment after Total Knee Arthroplasty: Evaluation Using a Whole Body EOS System. Journal of clinical medicine 2020
- Powell, J., Gibly, R. F., Faulk, L. W., Carry, P., Mayer, S. W., & Selberg, C. M.. Can EOS Imaging Substitute for Conventional Radiography in Measurement of Acetabular Morphology in the Young Dysplastic Hip?. Journal of Pediatric Orthopaedics 2020
- Zeighami, A., Dumas, R., Bleau, J., Lavoie, F., de Guise, J., & Aissaoui, R.. A method for quantitative evaluation of a valgus knee orthosis using biplane x-ray images.. 42nd Annual

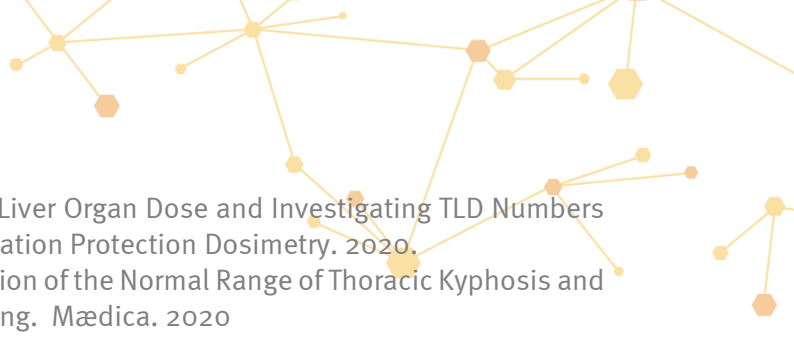
International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC) 2020

- Anari, J. B., Flynn, J. M., Campbell, R. M., & Cahill, P. J.. Evaluation and Treatment of Early-Onset Scoliosis: A Team Approach.. JBJS Reviews 2020
- Nault, M. L., Beauséjour, M., Roy-Beaudry, M., Mac-Thiong, J. M., de Guise, J., Labelle, H., & Parent, S. A predictive model of progression for adolescent idiopathic scoliosis based on 3D spine parameters at first visit. Spine. 2020
- Kwan, K. Y. H., Cheung, A. K. P., Koh, H. Y., & Cheung, K. M. C. Brace Effectiveness Is Related to 3-Dimensional Plane Parameters in Patients with Adolescent Idiopathic Scoliosis. The Journal of Bone and Joint Surgery 2020
- Jun Huang, Ye Zhu, Wenxia Ma, Zhigang Zhang, Weidong Shi, Jun Lin. A Novel Method for Accurate Preoperative Templating for Total Hip Arthroplasty Using a Biplanar Digital Radiographic (EOS) System. The Journal of Bone and Joint Surgery 2020
- Brooks, J. T., Bomar, J. D., Jeffords, M. E., Farnsworth, C. L., Pennock, A. T., & Upasani, V. V. Reliability of Low-dose Biplanar Radiography in Assessing Pediatric Torsional Pathology. Journal of Pediatric Orthopedics. 2020
- Zimmermann, E. A., Fiedler, I. A., & Busse, B. Breaking new ground in mineralized tissue: Assessing tissue quality in clinical and laboratory studies. Journal of the Mechanical Behavior of Biomedical Materials. 2020
- Zeighami, A., Dumas, R., Bleau, J., Lavoie, F., de Guise, J., & Aissaoui, R. A method for quantitative evaluation of a valgus knee orthosis using biplane x-ray images. 42nd Annual International Conference of the IEEE Engineering in Medicine & Biology Society. 2020
- Hey HW, Ramos MR, Lau ET, Tan JH, Tay HW, Liu G, Wong HK. Risk Factors Predicting C-Versus S-shaped Sagittal Spine Profiles in Natural, Relaxed Sitting: An Important Aspect in Spinal Realignment Surgery. Spine. 2020
- Kadoury, S., Labelle, H., & Parent, S.. Postoperative 3D spine reconstruction by navigating partitioning manifolds. Medical physics. 2016
- Jiang, F., Simões, L., Ouellet, J., & Saran, N. . Accuracy of EOS Imaging Technology in Comparison to Computed Tomography in the Assessment of Vertebral Rotational Orientation in Instrumented Spines in Adolescent Idiopathic Scoliosis.. Spine.. 2020
- Gatehouse, S.. Spinal deformity correlations with the use of EOS imaging in adolescent idiopathic scoliosis patients undertaking brace management. Doctoral dissertation. 2020
- Mandel, W., Parent, S., & Kadoury, S.. Intra-operative Forecasting of Growth Modulation Spine Surgery Outcomes with Spatio-Temporal Dynamic Networks.. International Conference on Medical Image Computing and Computer-Assisted Intervention. 2020
- D'Andrea, C. R.. Prediction of Anterior Vertebral Body Tethering Outcomes with Patient-Specific Finite Element Modelling. Doctoral dissertation. 2020
- Brun-Cottan, B., Assemat, P., Doyeux, V., Accadbled, F., de Gauzy, J. S., Compagnon, R., & Swider, P.. An energy approach describes spine equilibrium in adolescent idiopathic scoliosis. Biomechanics and Modeling in Mechanobiology. 2020
- Arginteanu, T., DeTurck, D., & Pasha, S. . Global 3D parameter of the spine: application of Călugăreanu–White–Fuller theorem in classification of pediatric spinal deformity. Medical & Biological Engineering & Computing. 2020
- Kim, C. W., Hyun, S. J., & Kim, K. J. . Surgical Impact on Global Sagittal Alignment and Health-Related Quality of Life Following Cervical Kyphosis Correction Surgery: Systematic Review. Neurospine. 2020
- Hasegawa, K., Okamoto, M., Hatsushikano, S., Watanabe, K., Ohashi, M., Vital, J. M., & Dubousset, J.. Compensation for standing posture by whole-body sagittal alignment in relation to health-related quality of life. The Bone & Joint Journal. 2020

- 
- Buckland, A. J., Burapachaisri, A., Stekas, N., Vasquez-Montes, D., Protopsaltis, T., & Vigdorichik, J.. Obesity Alters Spinopelvic Alignment Changes From Standing to Relaxed Sitting: the Influence of the Soft-tissue Envelope.. *Arthroplasty Today*. 2020
  - Fischer, M. C., Tokunaga, K., Okamoto, M., Habor, J., & Rademacher, K.. Preoperative factors improving the prediction of the postoperative sagittal orientation of the pelvis in standing position after total hip arthroplasty. *Scientific reports*, 2020
  - Cellini, M., Biamonte, E., Mazza, M., Trenti, N., Ragucci, P., Milani, D., ... & Mantovani, G.. Vertebral fractures associated with spinal sagittal imbalance and quality of life in acromegaly: a radiographic study with EOS 2D/3D technology.. *Neuroendocrinology*. 2020
  - Gaume, M., Persohn, S., Vergari, C., Glorion, C., Skalli, W., & Miladi, L.. Biomechanical cadaver study of proximal fixation in a minimally invasive bipolar construct. *Spine Deformity*. 2020
  - Innmann, M. M., Weishorn, J., Beaulé, P. E., Grammatopoulos, G., & Merle, C.. Pathologic spinopelvic balance in patients with hip osteoarthritis. *Der Orthopäde*. 2020
  - Ntilikina, Y., Charles, Y. P., Persohn, S., & Skalli, W.. Influence of double rods and interbody cages on quasistatic range of motion of the spine after lumbopelvic instrumentation. *European Spine Journal*. 2020
  - József, K., Schlégl, Á. T., Burkus, M., Márkus, I., O'Sullivan, I., Than, P., Csapó, M. T. Maximal Axial Vertebral Rotation in Adolescent Idiopathic Scoliosis: Is the Apical Vertebra the Most Rotated?. *Global Spine Journal* . 2020
  - Shigeo Hagiwara, Sumihisa Orita, Junichi Nakamura, Kazuhide Inage, Yohei Kawasaki, Yuki Shiko, Yawara Eguchi, Seiji Ohtori . Impact of spinal alignment and stiffness on impingement after total hip arthroplasty: a radiographic study of pre- and post-operative spinopelvic alignment. *European Spine Journal*. 2020
  - Cobetto N, Aubin CE, Parent S. Anterior Vertebral Body Growth Modulation: Assessment of the 2-year Predictive Capability of a Patient-specific Finite-element Planning Tool and of the Growth Modulation Biomechanics. *Spine*. 2020
  - Ohashi M, Bastrom TP, Bartley CE, Yaszay B, Upasani VV, Newton PO. Associations between three-dimensional measurements of the spinal deformity and preoperative SRS-22 scores in patients undergoing surgery for major thoracic adolescent idiopathic scoliosis.. *Spine Deformity*. 2020
  - Kim Y, Pour AE, Lazennec JY. Low pelvic incidence is a risk factor for intraoperative complications in minimally invasive anterolateral approach for total hip arthroplasty. *HIP International*. 2020
  - Hau MY, Menon DK, Chan RJ, Chung KY, Chau WW, Ho KW. Two-dimensional/three-dimensional EOS™ imaging is reliable and comparable to traditional X-ray imaging assessment of knee osteoarthritis aiding surgical management. *The Knee*. 2020
  - Bassani R, Morselli C, Querenghi AM, Nuara A, Sconfienza LM, Peretti GM. Functional and radiological outcome of anterior retroperitoneal versus posterior transforaminal interbody fusion in the management of single-level lumbar degenerative disease. *Neurosurgical Focus*. 2020
  - Ni QK, Song GY, Zhang ZJ, Zheng T, Feng Z, Cao YW, Feng H, Zhang H.. Steep Posterior Tibial Slope and Excessive Anterior Tibial Translation Are Predictive Risk Factors of Primary Anterior Cruciate Ligament Reconstruction Failure: A Case-Control Study With Prospectively Collected Data. *The American Journal of Sports Medicine*. 2020
  - Heath MR, Aitchison AH, Schlichte LM, Goodbody C, Cordasco FA, Fabricant PD, Green DW. Use Caution When Assessing Preoperative Leg-Length Discrepancy in Pediatric Patients With Anterior Cruciate Ligament Injuries. *The American Journal of Sports Medicine*. 2020
  - Compton J, Owens J, Otero J, Noiseux N, Brown T.. Extramedullary Guide Alignment Is not Affected by Obesity in Primary Total Knee Arthroplasty. *The Journal of Knee Surgery*. 2020

- Sikora-Klak J, Upasani VV, Ilharreborde B, Cross M, Bastrom TP, Mazda K, Yaszay B, Newton PO. Three-dimensional analysis of spinal deformity correction in adolescent idiopathic scoliosis: comparison of two distinct techniques. *Child's Nervous System*. 2020
- Overbergh T, Severijns P, Beaucage-Gauvreau E, Jonkers I, Moke L, Scheys L. Development and validation of a modeling workflow for the generation of image-based, subject-specific thoracolumbar models of spinal deformity. *Journal of Biomechanics*. 2020
- Hirsch BP, Vaynrub M, Tishelman JC, Siow MY, Anil U, Vasquez-Montes D, Protopsaltis TS. Visualization of the Cervicothoracic Junction with EOS Imaging is Superior to Conventional Lateral Cervical Radiographs. *Global Spine Journal* . 2020
- Shen K, Clement RC, Yaszay B, Bastrom T, Upasani VV, Newton PO.. Three-dimensional analysis of the sagittal profile in surgically treated Lenke 5 curves in adolescent idiopathic scoliosis.. *Spine Deformity*. 2020
- Sato Y, Hasegawa K, Okamoto M, Hatsushikano S, Ishii Y, Watanabe K, Oshima Y, Shimoda H, Homma T.. Correction surgery for adult spinal deformity improves not only spinopelvic alignment but also the three-dimensional alignment of the lower extremities. *Journal of Orthopaedic Science*. 2020
- Wu HD, Wong MS. Assessment of Maximum Spinal Deformity in Scoliosis: A Literature Review. *Journal of Medical and Biological Engineering*. 2020
- Kobayashi D, Choe H, Kobayashi N, Tezuka T, Ike H, Inaba Y. Association of Femoral Rotation With Whole-Body Alignment in Patients Who Underwent Total Hip Arthroplasty. *Arthroplasty Today*. 2020
- Albano D, Messina C, Gambino A, Gurgitano M, Sciabica C, Pavan GR, Gitto S, Sconfienza LM. Segmented lordotic angles to assess lumbosacral transitional vertebra on EOS. *European Spine Journal*. 2020
- Yeung KH, Man GC, Lam TP, Ng BK, Cheng JC, Chu WC. Accuracy on the preoperative assessment of patients with adolescent idiopathic scoliosis using biplanar low-dose stereoradiography: a comparison with computed tomography.. *BMC Musculoskeletal Disorders*. 2020
- Mayr HO, Schmidt JP, Haasters F, Bernstein A, Schmal H, Prall WC. Anteversion angle measurement in suspected torsional malalignment of the femur in 3-dimensional EOS versus computed tomography-a validation study. *The Journal of Arthroplasty*. 2020
- Lazennec JY, Kim Y, Folinais D, Pour AE. Sagittal Spinopelvic Translation Is Combined With Pelvic Tilt During the Standing to Sitting Position: Pelvic Incidence Is a Key Factor in Patients Who Underwent THA.. *Arthroplasty Today*. 2020
- Di Laura A, Henckel J, Wescott R, Hothi H, Hart AJ. The effect of metal artefact on the design of custom 3D printed acetabular implants. *3D Printing in Medicine*. 2020
- Moon HS, Choi CH, Jung M, Lee DY, Kim JH, Kim SH.. The effect of knee joint rotation in the sagittal and axial plane on the measurement accuracy of coronal alignment of the lower limb. *BMC Musculoskeletal Disorders*. 2020
- St-Georges M, Teles AR, Rabau O, Saran N, Ouellet JA, Ferland CE. Adolescent idiopathic scoliosis: evaluating perioperative back pain through a simultaneous morphological and biomechanical approach. *BMC Musculoskeletal Disorders*. 2020
- Dagneaux L, Dufrenot M, Bernasconi A, Bedard NA, de Cesar Netto C, Lintz F. Three-Dimensional Biometrics to Correlate Hindfoot and Knee Coronal Alignments Using Modern Weightbearing Imaging. *Foot & Ankle International*. 2020
- Cauchon AM, Tétreault P, Bascans C, Skalli W, Hagemeister N. Morphological and Radiological Parameters Correlating to Shoulder Function at Diagnosis for Patients with Rotator Cuff Tear (RCT). *Journal of Shoulder and Elbow Surgery*. 2020
- Skaggs K, Lin AJ, Andras LM, Illingworth KD, Skaggs DL. Standing in Schroth trained position significantly changes Cobb angle and leg length discrepancy: a pilot study. *Spine Deformity*. 2020

- Jud L, Roth T, Fürnstahl P, Vlachopoulos L, Sutter R, Fucentese SF. The impact of limb loading and the measurement modality (2D versus 3D) on the measurement of the limb loading dependent lower extremity parameters. BMC Musculoskeletal Disorders. 2020
- Buckland AJ, Woo D, Vasquez-Montes D, Marks M, Jain A, Samdani A, Betz RR, Errico TJ, Lonner B, Newton PO. The Relationship Between 3-dimensional Spinal Alignment, Thoracic Volume, and Pulmonary Function in Surgical Correction of Adolescent Idiopathic Scoliosis: A 5-year Follow-up Study. Spine. 2020
- Berg BI, Laville A, Courvoisier DS, Rouch P, Schouman T. Experiences with a new biplanar low-dose X-ray device for imaging the facial skeleton: A feasibility study. PloS one. 2020
- Garg B, Mehta N, Bansal T, Malhotra R. EOS® imaging: Concept and current applications in spinal disorders. Journal of Clinical Orthopaedics and Trauma. 2020
- Mekhael M, Labaki C, Bizdikian AJ, Bakouny Z, Otayek J, Yared F, Massaad A, Skalli W, Ghanem I, Assi A. How do skeletal and postural parameters contribute to maintain balance during walking?. Human Movement Science. 2020
- Ball JR, Konigsberg MW, Plachta S, Fields MW, Matsumoto H, Roye BD, Arora S, Roye DP, Lenke LG, Skaggs DL, Vitale MG. Variability in stable sagittal vertebra (SSV) during full-length biplanar xrays can affect the choice of fusion levels in patients with adolescent idiopathic scoliosis (AIS). Spine Deformity. 2020
- Menon KV. Classification systems in adolescent idiopathic scoliosis revisited: Is a three-dimensional classification needed?. Indian Spine Journal. 2020
- Shu S, Hu Z, Bao H, Shi J, Hu A, Grelat M, Liu Z, Sun X, Qian B, Cheng JC, Lam TP. An analysis of the interactions between the spine, pelvis, and lower limbs in asymptomatic adults with limited pelvic compensation.. Quantitative Imaging in Medicine and Surgery. 2020
- Wegner AM, Iyer S, Lenke LG, Kim HJ, Kelly MP. Global alignment and proportion (GAP) scores in an asymptomatic, nonoperative cohort: a divergence of age-adjusted and pelvic incidence-based alignment targets. European Spine Journal. 2020
- Lum ZC, Giordani M, Meehan JP. Total Hip Instability and the Spinopelvic Link. Current Reviews in Musculoskeletal Medicine. 2020
- Teles AR, St-Georges M, Abduljabbar F, Simões L, Jiang F, Saran N, Ouellet JA, Ferland CE. Back pain in adolescents with idiopathic scoliosis: the contribution of morphological and psychological factors.. European Spine Journal. 2020
- Carender CN, Meyer MD, Wynn MS, Bedard NA, Otero JE, Brown TS.. The Prevalence of Abnormal Spinopelvic Relationships in Patients Presenting for Primary Total Hip Arthroplasty. Arthroplasty Today. 2020
- Gaume M, Pietton R, Vialle R, Chaves C, Langlais T. Is daily walking distance affected in adolescent idiopathic scoliosis?. Archives de Pédiatrie. 2020
- Huang J, Tian F, Zhang Z, Shi W, Lin J, Chen L, Yang H. Reliability and concurrent validity of angle measurements in lower limb: EOS 3D goniometer versus 2D manual goniometer. Journal of Orthopaedic Translation. 2020
- von Treuheim TD, Li DT, Mikhail C, Cataldo D, Cooperman DR, Smith BG, Lonner B. Reliable skeletal maturity assessment for an AIS patient cohort: external validation of the proximal humerus ossification system (PHOS) and relevant learning methodology. Spine deformity. 2020
- Kluck D, Newton PO, Sullivan TB, Yaszay B, Jeffords M, Bastrom TP, Bartley CE. A 3D Parameter Can Guide Concave Rod Contour for the Correction of Hypokyphosis in Adolescent Idiopathic Scoliosis.. Spine. 2020
- Montreuil J, Saleh J, Cresson T, De Guise JA, Lavoie F. Femoral Tunnel Placement Analysis in ACL Reconstruction Through Use of a Novel 3-Dimensional Reference With Biplanar Stereoradiographic Imaging.. Orthopaedic Journal of Sports Medicine. 2020
- Pedersen PH, Petersen AG, Ostgaard SE, Tvedebrink T, Eiskjær SP.. How Many Dosemeters are Needed for Correct Mean Organ Dose Assessment When Performing Phantom



Dosimetry? A Phantom Study Evaluating Liver Organ Dose and Investigating TLD Numbers and Ways of Dosimeter Placement.. Radiation Protection Dosimetry. 2020.

- Jalil AS, Sobhan AM, Babae MM. Evaluation of the Normal Range of Thoracic Kyphosis and Lumbar Lordosis Angles Using EOS Imaging. Mædica. 2020
- Vergari C, Skalli W, Gajny L. A convolutional neural network to detect scoliosis treatment in radiographs.. International Journal of Computer Assisted Radiology and Surgery. 2020
- Floyd E, Cohn P, Ferguson J, Kalantar SB. A Review of Preoperative Planning Technologies for Spinal Deformity Correction. Seminars in Spine Surgery 2020
- Wise KL, Kelly BJ, Agel J, Murette S, Macalena JA. Reliability of EOS compared to conventional radiographs for evaluation of lower extremity deformity in adult patients. Skeletal Radiology. 2020
- Watanabe S, Choe H, Kobayashi N, Ike H, Kobayashi D, Higashihira S, Inaba Y. Utility of CT-based navigation in revision total hip arthroplasty for a patient with severe posterior pelvic tilt-case report. BMC Musculoskeletal Disorders. 2020
- Hughes JL, Newton PO, Bastrom T, Fabricant PD, Pennock AT. The Clavicle Continues to Grow During Adolescence and Early Adulthood. HSS Journal, 2020
- Savarese LG, Menezes-Reis R, Bonugli GP, Herrero CF, Defino HL, Nogueira-Barbosa MH. Spinopelvic sagittal balance: what does the radiologist need to know?. Radiologia Brasileira. 2020
- Shu S, Gu Q, Zhang T, Zhu Z, Liu Z, Qiu Y, Bao H. Skeletal growth velocity of adolescent idiopathic scoliosis: abnormal in spine but normal in lower limbs. Annals of Translational Medicine. 2020
- Powell J, Gibly R, Faulk W, Mayer SW, O'Donnell CM. Can EOS imaging substitute traditional AP pelvis radiographs? A Comparative study. Orthopaedic Journal of Sports Medicine. 2020
- Zheng Q, Shellikeri S, Huang H, Hwang M, Sze RW. Deep learning measurement of leg length discrepancy in children based on radiographs.. Radiology. 2020
- Karam M, Bizdikian AJ, Khalil N, Bakouny Z, Obeid I, Ghanimeh J, Labaki C, Mjaess G, Karam A, Skalli W, Kharrat K, Ghanem I, Assi A.. Alterations of 3D acetabular and lower limb parameters in adolescent idiopathic scoliosis.. European Spine Journal . 2020
- Rampal V, Rohan PY, Pillet H, Bonnet-Lebrun A, Fonseca M, Desailly E, Wicart P, Skalli W. Combined 3D analysis of lower-limb morphology and function in children with idiopathic equinovarus clubfoot: A preliminary study. Orthopaedics & Traumatology: Surgery & Research. 2020
- Tillaux C. Radiographie biplanaires des membres inférieurs chez l'enfant en microdose: évaluation de la qualité diagnostique et des reconstructions 3D des membres inférieurs. Medical thesis. 2019
- Mjaess G, Karam A, Labaki C, Karam M, Bakouny Z, Ghanimeh J, Saliby RM, Bizdikian AJ, Ghanem I, Assi A. What is the most reliable radiographic method to evaluate the longitudinal foot arch? Application in subjects with Adolescent Idiopathic Scoliosis. Orthopaedics & Traumatology: Surgery & Research. 2020
- Vergari C, Karam M, Pietton R, Vialle R, Ghanem I, Skalli W, Assi A. Spine slenderness and wedging in adolescent idiopathic scoliosis and in asymptomatic population: an observational retrospective study.. European Spine Journal. 2020
- Haddas R, Kisinde S, Mar D, Lieberman I. Does improved radiographic alignment truly enhance dynamic functional balance?. Spine Deformity. 2020
- Hey HW, Tan KA, Thadani VN, Liu GK, Wong HK. Characterisation of Sagittal Spine Alignment With Reference to the Gravity Line and Vertebral Slopes—An Analysis of Different Rousouly Curves. Spine. 2020
- Clavel L, Rémy-Neris S, Skalli W, Rouch P, Lespert Y, Similowski T, Sandoz B, Attali V. Cervical spine hyperextension and altered posturo-respiratory coupling in patients with obstructive sleep apnea syndrome. Frontiers in Medicine. 2020



- Hu Z, Man GC, Yeung KH, Cheung WH, Chu WC, Law SW, Lam TP, Zhu Z, Qiu Y, Cheng JC. Age-and Gender-related Normative Value of Whole-body Sagittal Alignment Based on 584 Asymptomatic Chinese Adult Population From Age 20 to 89. *Spine*. 2019
- Hey HW, Ng NL, Loh KY, Tan YH, Tan KA, Moorthy V, Lau ET, Liu G, Wong HK. Sagittal Radiographic Parameters of the Spine in Three Physiological Postures Characterized Using a Slot Scanner and Their Potential Implications on Spinal Weight-Bearing Properties. *Asian Spine Journal*. 2020
- Machino M, Kawakami N, Ohara T, Saito T, Tauchi R, Imagama S. Accuracy of rib cage parameters from 3-Dimensional reconstruction images obtained using simultaneous biplanar radiographic scanning technique in adolescent idiopathic scoliosis: Comparison with conventional computed tomography.. *Journal of Clinical Neuroscience*. 2020
- Ould-Slimane M, Cantogrel P, Lefèvre E, Parent HF, Gauthé R. Minimally invasive unilateral lumbar interbody fusion (UNILIF) in over-80-year-olds. Continuous series of 42 patients at 1.4 years' follow-up. *Orthopaedics & Traumatology: Surgery & Research*. 2020
- Abrisham SM, Ardekani MR, Zarch MA. Evaluation of the Normal Range of Thoracic Kyphosis and Lumbar Lordosis Angles Using EOS Imaging.. *Maedica A Journal of Clinical Medicine*. 2020
- Pratali RD, Daher MT, Meves R. Biplanar imaging with tridimensional capabilities: applicability of this new examination to spinal deformities. *Coluna/Columna* 2020
- Ilharreborde B, de Saint Etienne A, Presedo A, Simon AL. Spinal sagittal alignment and head control in patients with cerebral palsy. *Journal of Children's Orthopaedics*. 2020
- Clement RC, Anari J, Bartley CE, Bastrom TP, Shah R, Talwar D, Upasani VV. What are normal radiographic spine and shoulder balance parameters among adolescent patients?. *Spine Deformity*. 2020
- Roye, B.D., Simhon, M.E., Matsumoto, H. et al. Establishing consensus on the best practice guidelines for the use of bracing in adolescent idiopathic scoliosis. *Spine Deformity*. 2020
- Shen J, Parent S, Wu J, Aubin CÉ, Mac-Thiong JM, Kadoury S, Newton P, Lenke LG, Lafage V, Barchi S, Labelle H. Towards a new 3D classification for adolescent idiopathic scoliosis. *Spine Deformity*. 2020
- Lee YC, Lee R. Minimal invasive surgical algorithm for revision lumbar spinal surgery. *Journal of Spine Surgery*. 2019
- Vigdorich JM, Sharma AK, Feder OI, Buckland AJ, Mayman DJ, Carroll KM, Sculco PK, Long WJ, Jerabek SA. Stiffness After Total Knee Arthroplasty: Is It a Result of Spinal Deformity?. *The Journal of Arthroplasty*. 2020
- Cheung JP, Cheung PW, Cheung KM. The effect of magnetically controlled growing rods on three-dimensional changes in deformity correction. *Spine Deformity*. 2020
- Shimizu T, Lenke LG, Cerpa M, Lehman RA, Pongmanee S, Sielatycki JA.. Preoperative halo-gravity traction for treatment of severe adult kyphosis and scoliosis. *Spine Deformity*. 2020
- Martini C, Langella F, Mazzucchelli L, Lamartina C. Revision strategies for failed adult spinal deformity surgery. *European Spine Journal*. 2020
- Gaume M, Persohn S, Vergari C, Glorion C, Skalli W, Miladi L. Biomechanical cadaver study of proximal fixation in a minimally invasive bipolar construct. *Spine Deformity*. 2020
- Knez D, Nahle IS, Vrtovec T, Parent S, Kadoury S. Computer-assisted pedicle screw trajectory planning using CT-inferred bone density: A demonstration against surgical outcomes. *Medical physics*. 2019
- Larson AN, Schueler BA, Dubousset J. Radiation in spine deformity: state-of-the-art reviews. *Spine deformity*. 2019
- Guevara-Villazón F, Boissiere L, Hayashi K, Larrieu D, Ghailane S, Vital JM, Gille O, Pointillart V, Obeid I, Bourghli A. Multiple-rod constructs in adult spinal deformity surgery for pelvis-fixated long instrumentations: an integral matched cohort analysis. *European Spine Journal*. 2020

- Ferenczi A, Moraux A, Gall FL, Thevenon A, Wieczorek V. Relationship Between Spinal-Pelvic Sagittal Balance and Pelvic-Femoral Injuries in Professional Soccer Players. *Orthopaedic Journal of Sports Medicine*. 2020
- Gu J, Feng H, Feng X, Zhou Y. Degeneration of three or more lumbar discs significantly decreases lumbar spine/hip ROM ratio during position change from standing to sitting in AVN patients before THA.. *BMC Musculoskeletal Disorders*. 2020
- Simon AL, Ferrero E, Mazda K, Ilharreborde B. Bivertebral autostable claws for the proximal fixation in thoracic adolescent idiopathic scoliosis surgery. *Spine Deformity*. 2020
- Zhang Y, Shu S, Gu Q, Liu Z, Zhu Z, Qiu Y, Bao H. Cervical vertebral maturation (CVM) stage as a supplementary indicator for the assessment of peak height velocity (PHV) in adolescent idiopathic scoliosis (AIS). *Quantitative Imaging in Medicine and Surgery*. 2020
- Girdler S, Cho B, Mikhail CM, Cheung ZB, Maza N, Cho SK. Emerging Techniques in Diagnostic Imaging for Idiopathic Scoliosis in Children and Adolescents: A Review of the Literature. *World Neurosurgery*. 2020
- Dubousset, J. The EOS System: Overall Assessment of Balance of the Vertebral Column and Its Movements. *Spinal Anatomy*, 2020
- Skalli, W., Mitton, D., Rouch, P., & Dubousset, J. . *Biomechanics and Spinal Modelling*. *Spinal Anatomy*, 2020
- Pasha, S.. 3D Deformation Patterns of S Shaped Elastic Rods as a Pathogenesis Model for Spinal Deformity in Adolescent Idiopathic Scoliosis. *Scientific reports*, 2019
- Chiyanika, C., & Chu, W. C. W.. *Weight-bearing Imaging in Adolescent Idiopathic Scoliosis*. *Seminars in musculoskeletal radiology*, 2019
- DelSole, E. M., & Mercuri, J. J.. *Utility of Upright Weight-bearing Imaging in Total Hip Arthroplasty*. *Seminars in musculoskeletal radiology*, 2019
- Otayek, J., Bizdikian, A. J., Yared, F., Saad, E., Bakouny, Z., Massaad, A., ... & Assi, A. Influence of spino-pelvic and postural alignment parameters on gait kinematics. *Gait & Posture*, 2019
- Ferrero, E., Skalli, W., Lafage, V., Maillot, C., Carlier, R., Feydy, A., ... & Guigui, P.. Relationships between radiographic parameters and spinopelvic muscles in adult spinal deformity patients.. *European Spine Journal*, 2019
- Muir, J. M., Vincent, J., Schipper, J., Gobin, V. D., Govindarajan, M., Fiaes, K., & Vigdorichik, J.. *A Novel Method for Correcting Pelvic Tilt on Anteroposterior Pelvic Radiographs*. *Cureus*, 2019
- Premkumar, A., Almeida, B., Ranawat, C. S., Jerabek, S. A., Esposito, C. I., & Mayman, D. J.. Variability of pelvic axial rotation in patients undergoing total hip arthroplasty. *HIP International*, 2019
- Hasegawa, K., Okamoto, M., Hatsushikano, S., Shimoda, H., Sato, Y., & Watanabe, K. Etiology and clinical manifestations of double-level versus single-level lumbar degenerative spondylolisthesis. *Journal of Orthopaedic Science*, 2019
- Innmann MM, Merle C, Gotterbarm T, Ewerbeck V, Beaulé PE and Grammatopoulos G. Can spinopelvic mobility be predicted in patients awaiting total hip arthroplasty? A prospective, diagnostic study of patients with end-stage hip osteoarthritis. *The bone & joint journal*, 2019
- Ferrero, E., Compagnon, R., Pesenti, S., Lefèvre, Y., Polirsztok, E., Ilharreborde, B., & de Gauzy, J. S.. *Surgical management of burst fractures in children and adolescents: A Multicentre Retrospective Study*. *Orthopaedics & Traumatology: Surgery & Research*, 2019
- Buckland, A. J., Abotsi, E., Vasquez-Montes, D., Ayres, E. W., Varlotta, C., & Vigdorichik, J. M. Lumbar Spine Degeneration and Flatback Deformity Alter Sitting-Standing Spinopelvic Mechanics—Implications for Total Hip Arthroplasty.. *The Journal of Arthroplasty*, 2019

- Fruergaard, S., Jain, M. J., Deveza, L., Liu, D., Heydemann, J., Ohrt-Nissen, S., ... & Dahl, B.. Evaluation of a new sagittal classification system in adolescent idiopathic scoliosis. *European Spine Journal*, 2019
- Buckland, A. J., Steinmetz, L., Zhou, P., Vasquez-Montes, D., Kingery, M., Stekas, N. D., ... & Errico, T. Spinopelvic Compensatory Mechanisms for Reduced Hip Motion (ROM) in the Setting of Hip Osteoarthritis. *Spine deformity*, 2019
- van Drongelen, S., Kaldowski, H., Tarhan, T., Assi, A., Meurer, A., & Stief, F.. Are changes in radiological leg alignment and femoral parameters after total hip replacement responsible for joint loading during gait? *BMC musculoskeletal disorders*, 2019
- Pasha, S., Baldwin, K. Surgical outcome differences between the 3D subtypes of right thoracic adolescent idiopathic scoliosis. *European Spine Journal* 2019
- Almansour, H., Pepke, W., Bruckner, T., Diebo, B. G., & Akbar, M.. Three-Dimensional Analysis of Initial Brace Correction in the Setting of Adolescent Idiopathic Scoliosis. *Journal of clinical medicine*. 2019
- Colombi, A., Schena, D., & Castelli, C. C. Total hip arthroplasty planning. *EFORT Open Reviews*. 2019
- Milas, J., Garayt, M., Oriot, E., & Hobeika, J.. EOS Imaging Low-Dose Imaging and Three-Dimensional Value Along the Entire Patient Care Pathway for Spine and Lower Limb Pathologies. *Handbook of Robotic and Image-Guided Surgery*, 2020
- Yang, Z., Skalli, W., Vergari, C., Angelini, E. D., & Gajny, L.. Automated Spinal Midline Delineation on Biplanar X-Rays Using Mask R-CNN. *ECCOMAS Thematic Conference on Computational Vision and Medical Image Processing*, 2019
- Heo, J., Min, W. K., Min, S. G., & Kim, K. R.. Effect of thoracic and pelvic anteroposterior diameters on spinal sagittal alignment. *Journal of Orthopaedic Surgery*, 2019
- Ebrahimi, S., Gajny, L., Vergari, C., Angelini, E. D., & Skalli, W. Vertebral rotation estimation from frontal X-rays using a quasi-automated pedicle detection method. *European Spine Journal*, 2019
- Stiebel, M., & Paley, D.. Derotational Osteotomies of the Femur and Tibia for Recurrent Patellar Instability. *Operative Techniques in Sports Medicine*. 2019
- Galbusera, F., Niemeyer, F., Bassani, T., Sconfienza, L. M., & Wilke, H. J.. Estimating the three-dimensional vertebral orientation from a planar radiograph: Is it feasible?. *Journal of Biomechanics*. 2019
- Pierce, K. E., Horn, S. R., Jain, D., Segreto, F. A., Bortz, C., Vasquez-Montes, D., ... & Frangella, N. J.. The Impact of Adult Thoracolumbar Spinal Deformities on Standing to Sitting Regional and Segmental Reciprocal Alignment. *International journal of spine surgery*. 2019
- Shimizu, T., Lehman Jr, R. A., Sielatycki, J. A., Pongmanee, S., Cerpa, M., Takemoto, M., & Lenke, L. G. Reciprocal change of sagittal profile in unfused spinal segments and lower extremities after complex adult spinal deformity surgery including spinopelvic fixation: a full-body x-ray analysis.. *The Spine Journal*. 2019
- Yan, W., Xu, X., Xu, Q., Yan, W., Sun, Z., Jiang, Q., & Shi, D.. Femoral and tibial torsion measurements based on EOS imaging compared to 3D CT reconstruction measurements. *Ann Transl Med*, 2019
- Duray, C., Ferrero, E., Julien-Marsollier, F., Simon, A. L., Michelet, D., Mazda, K., & Ilharborde, B.. Pulmonary Function After Convex Thoracoplasty in Adolescent Idiopathic Scoliosis Patients Treated by Posteromedial Translation. *Spine deformity*, 2019
- Pasha, S., Smith, L., & Sankar, W. N.. Bone remodeling and disc morphology in the distal unfused spine after spinal fusion in adolescent idiopathic scoliosis. *Spine deformity*, 2019
- Dzialo, C. M., Pedersen, P. H., Jensen, K. K., de Zee, M., & Andersen, M. S.. Evaluation of predicted patellofemoral joint kinematics with a moving-axis joint model. *Medical engineering & physics*, 2019

- 
- Vigdorichik J, Eftekhary N, Elbuluk A, Abdel MP, Buckland AJ, Schwarzkopf RS, Jerabek SA, Mayman DJ. Evaluation of the spine is critical in the workup of recurrent instability after total hip arthroplasty. *The bone & joint journal*. 2019
  - Ezra, D., Been, E., Alperovitch-Najenson, D., & Kalichman, L. Cervical posture, pain, and pathology: developmental, evolutionary and occupational perspective. *Spinal Evolution*. Springer, Cham, 2019
  - Haider, I. T., Schneider, P. S., & Edwards, W. B.. The Role of Lower-Limb Geometry in the Pathophysiology of Atypical Femoral Fracture. *Current osteoporosis reports*, 2019
  - Eftekhary N, Shimmin A, Lazennec JY, Buckland A, Schwarzkopf R, Dorr LD, Mayman D, Padgett D, Vigdorichik J. A systematic approach to the hip-spine relationship and its applications to total hip arthroplasty. *The bone & joint journal*. 2019
  - Simon, A. L., Meyblum, J., Roche, B., Vidal, C., Mazda, K., Husson, I., & Ilharreborde, B. Scoliosis in Patients With Friedreich Ataxia: Results of a Consecutive Prospective Series. *Spine deformity*, 2019
  - Bassani T, Galbusera F, Luca A, Lovi A, Gallazzi E and Brayda-Bruno M . Physiological variations in the sagittal spine alignment in an asymptomatic elderly population. *The Spine Journal*, 2019.
  - Vo QN, Le LH and Lou E. A semi-automatic 3D ultrasound reconstruction method to assess the true severity of adolescent idiopathic scoliosis. *Medical & biological engineering & computing*, 2019
  - Wong YS, Lai KKL, Zheng YP, Wong LLN, Ng BKW, Hung ALH, ... and Cheng, JCY. Is Radiation-Free Ultrasound Accurate for Quantitative Assessment of Spinal Deformity in Idiopathic Scoliosis (IS): A Detailed Analysis With EOS Radiography on 952 Patients. *Ultrasound in medicine & biology*, 2019
  - Neiryneck, J., Proost, R., & Van Campenhout, A.. The migration percentage measured on EOS® standing full-leg radiographs: equivalent and advantageous in ambulant children with cerebral palsy. *BMC Musculoskeletal Disorders*, 2019
  - Okamoto, M., Hasegawa, K., Hatsushikano, S., Watanabe, K., Shimoda, H., Kobayashi, K., & Sakamoto, M. . Relative position of sacral base in the pelvis and its correlation with spino-pelvic parameters. *European Spine Journal*, 2019
  - Hong JY, Han K, Jung JH, & Kim JS. Association of Exposure to Diagnostic Low-Dose Ionizing Radiation With Risk of Cancer Among Youths in South Korea. *JAMA network open*, 2019
  - Viktor S, Denisov A, & Khadizhat M. The optimization of the length of the lower limbs after hip arthroplasty. *International orthopaedics*, 2019
  - Lau, L. C. M., Hung, A. L. H., Chau, W. W., Hu, Z., Kumar, A., Lam, T. P., ... & Cheng, J. C. Y.. Sequential spine-hand radiography for assessing skeletal maturity with low radiation EOS imaging system for bracing treatment recommendation in adolescent idiopathic scoliosis: a feasibility and validity study. *Journal of Children's Orthopaedics*, 2019
  - Sutphen, S. A., Lipman, J. D., Jerabek, S. A., Mayman, D. J., & Esposito, C. I. Treatment of Recurrent Dislocation after Total Hip Arthroplasty Using Advanced Imaging and Three-Dimensional Modeling Techniques: A Case Series. *HSS Journal*. 2019
  - Mokawem M, Katzouraki G, Harman C L, Lee R. Lumbar interbody fusion rates with 3D-printed lamellar titanium cages using a silicate-substituted calcium phosphate bone graft. *Journal of Clinical Neuroscience* 2019
  - Yenigul E A, Batibay G. Accurate calculation of limb length discrepancy using scoliosis radiography. *Annals of Medical Research* 2019
  - Le Huec, J. C., Thompson, W., Mohsinaly, Y., Barrey, C., & Faundez, A. Sagittal balance of the spine. *European Spine Journal*. 2019
  - Ohyama S, Hoshino M, Terai H, Toyoda H, Suzuki A, Takahashi S, Nakamura H. Sarcopenia is related to spinal sagittal imbalance in patients with spinopelvic mismatch. *European Spine Journal*. 2019

- El Hawary R, Zaaroor-Regev D, Floman Y, Lonner B S, Alkhalife Y I, Betz R. Brace Treatment in AIS: Risk Factors for Failure-A Literature Review. *The Spine Journal*. 2019
- Muth-seng C, Brauge D, Soriau N, Sandoz B, Van den Abbeele M, Skalli W, Laporte S. Experimental analysis of the lower cervical spine in flexion with a focus on facet tracking. *Journal of Biomechanics*. 2019
- Babu S, Turner J, Seewoonarain S, Chougule S. Madelung's Deformity of the Wrist—Current Concepts and Future Directions. *Journal of wrist surgery*. 2019
- Carvajal AG, Deloivre L, Herbette M, Garrigues F, Gossec L, Simon A, Feydy A, Reijnierse M, van der Heijde D, Loeuille D, Claudepierre P. Spinal-pelvic orientation: potential effect on the diagnosis of spondyloarthritis. *Rheumatology*. 2019
- Violas P, Bryand C, Gomes C, Sauleau P, Lucas G. . Correction of thoracic adolescent idiopathic scoliosis via a direct convex rod manoeuvre. *Orthopaedics & Traumatology: Surgery & Research*. 2019
- Ferràs-Tarragó J, Valencia JM, Belmar PR, Vergara SP, Gómez PJ, Hermida JB, Hermida PB, Hermida TB. Cobb angle measurement with a conventional convex echography probe and a smartphone. *European Spine Journal*. 2019
- Catonné Y, Sariali E, Khiami F, Rouvillain JL, Wajsfisz A, Pascal-Moussellard H. Same-stage total knee arthroplasty and osteotomy for osteoarthritis with extra-articular deformity. Part I: Tibial osteotomy, prospective study of 26 cases. . *Orthopaedics & Traumatology: Surgery & Research*. 2019
- Thenard T, Vergari C, Hernandez T, Vialle R, Skalli W. Analysis of Center of Mass and Gravity-Induced Vertebral Axial Torque on the Scoliotic Spine by Barycentremetry. *Spine deformity*. 2019
- Bachmann KR, Yaszay B, Bartley CE, Bastrom TP, Reighard FG, Upasani VV, Newton PO, Harms Study Group Investigators. A three-dimensional analysis of scoliosis progression in non-idiopathic scoliosis: is it similar to adolescent idiopathic scoliosis?. *Child's Nervous System*. 2019
- Facione J, Villa C, Bonnet X, Barrey C, Thomas-Pohl M, Lapeyre E, Lavaste F, Pillet H, Skalli W. Spinopelvic sagittal alignment of patients with transfemoral amputation. *European Spine Journal*. 2019
- Schwab PE, Chen AF, Vigdorchnik J, Iorio R. Cost Effectiveness of Dual Mobility in Hip-Spine Patients: A Value-Based Algorithm of Utilization. *Seminars in Arthroplasty* 2019
- Passias PG, Jalai CM, Diebo BG, Cruz DL, Poorman GW, Buckland AJ, Day LM, Horn SR, Liabaud B, Lafage R, Soroceanu A. Full-Body Radiographic Analysis of Postoperative Deviations From Age-Adjusted Alignment Goals in Adult Spinal Deformity Correction and Related Compensatory Recruitment. *International Journal of Spine Surgery*. 2019
- Kim Y, Vergari C, Girinon F, Lazennec JY, Skalli W. Stand to Sit Kinematics of the Pelvis is not always as Expected: Hip and Spine Pathologies can Have Impact. *The Journal of Arthroplasty*. 2019
- Boyer, L., Shen, J., Parent, S., Kadoury, S., & Aubin, C. E.. Accuracy and Precision of Seven Radiography-Based Measurement Methods of Vertebral Axial Rotation in Adolescent Idiopathic Scoliosis. *Spine Deformity*, 2019
- Lee TT, Jiang WW, Cheng CL, Lai KK, To MK, Castelein RM, Cheung JP, Zheng YP. A Novel Method to Measure the Sagittal Curvature in Spinal Deformities: The Reliability and Feasibility of 3-D Ultrasound Imaging. *Ultrasound in Medicine & Biology*. 2019
- Horn, S. R., Ramchandran, S., Poorman, G. W., Siow, M. Y., Suré, A., Vasquez-Montes, D. et al.. Suboptimal Age-Adjusted Lumbo-Pelvic Mismatch Predicts Negative Cervical-Thoracic Compensation in Obese Patients. *International Journal of Spine Surgery*, 2019
- Wanke-Jellinek L, Heese O, Krenauer A, Würtinger C, Siepe C J, Wiechert K, Mehren C. Is there any use? Validity of 4D rasterstereography compared to EOS 3D X-ray imaging in patients with degenerative disk disease. *European Spine Journal*. 2019

- 
- Lv P, Chen J, Dong L, Wang L, Deng Y, Li K, Huang X, Zhang C. Evaluation of Scoliosis With a Commercially Available Ultrasound System. *Journal of Ultrasound in Medicine*. 2019
  - HEY HW, Kimberly-Anne TA, CHIN BZ, Gabriel LI, Hee-Kit WO. Comparison of whole body sagittal alignment during directed versus natural, relaxed standing postures in young, healthy adults. *The Spine Journal*. 2019
  - Morton J, Eftekhary N, Schwarzkopf R, Vigdorichik JM. The spinopelvic relationship made simple: What every hip surgeon needs to know to prevent instability in high-risk patients undergoing total hip arthroplasty. *Seminars in Arthroplasty* 2019
  - Kim YC, Cui JH, Kim KT, Park GT, Lee KH, Kim SM, Lenke LG. Novel radiographic parameters for the assessment of total body sagittal alignment in adult spinal deformity patients. *Journal of Neurosurgery: Spine*. 2019
  - Aubert B, Vazquez C, Cresson T, Parent S, De JG. Towards automated 3D spine reconstruction from biplanar radiographs using CNN for statistical spine model fitting. *IEEE transactions on medical imaging*. 2019
  - Vergari C, Gajny L, Courtois I, Ebermeyer E, Abelin-Genevois K, Kim Y, Langlais T, Vialle R, Assi A, Ghanem I, Dubousset J, Skalli W. Quasi-automatic early detection of progressive idiopathic scoliosis from biplanar radiography: a preliminary validation. *European Spine Journal*. 2019
  - Passias PG, Jalai CM, Diebo BG, Cruz DL, Poorman GW, Buckland AJ, Day LM, Horn SR, Liabaud B, Lafage R, Soroceanu A. Full-Body Radiographic Analysis of Postoperative Deviations From Age-Adjusted Alignment Goals in Adult Spinal Deformity Correction and Related Compensatory Recruitment. *International Journal of Spine Surgery*. 2019
  - Vergari C, Courtois I, Ebermeyer E, Pietton R, Bouloussa H, Vialle R, Skalli W. Head to pelvis alignment of adolescent idiopathic scoliosis patients both in and out of brace. *European Spine Journal*. 2019
  - Moses MJ, Tishelman JC, Zhou PL, Moon JY, Beaubrun BM, Buckland AJ, Protopsaltis TS. McGregor's Slope and Slope of Line of Sight: Two Surrogate Markers for Chin-Brow Vertical Angle in the Setting of Cervical Spine Pathology. *The Spine Journal*. 2019
  - Marsan T, Rouch P, Thoreux P, Jacquet-Yquel R, Sauret C. Comparison of hip joint mechanical energy in table tennis forehand and backhand drives: a preliminary study. *16th ITTF Sports Science Congress*. 2019
  - Kim Y, Vergari C, Girinon F, Lazennec JY, Skalli W. Stand to Sit Kinematics of the Pelvis is not always as Expected: Hip and Spine Pathologies can Have Impact. *The Journal of Arthroplasty*. 2019
  - Jobidon-Lavergne H, Kadoury S, Knez D, Aubin CE. Biomechanically driven intraoperative spine registration during navigated anterior vertebral body tethering. *Physics in Medicine and Biology*. 2019
  - Reina N, Hourtal J, Salib CG, Gracia G, Cavaignac E, Chiron P. The Delta of Correction a novel, more reliable variable than limb-length discrepancy at predicting outcome after total hip arthroplasty. *HIP International*. 2019
  - Blache Y, Kouevidjin B, de Guise J, Dumas R, Saithna A, Sonnery-Cottet B, Thaunat M. Lateral extra-articular reconstruction length changes during weightbearing knee flexion and pivot shift: A simulation study. *Orthopaedics & Traumatology: Surgery & Research*. 2019
  - Alzakri A, Labelle H, Hresko MT, Parent S, Sucato DJ, Lenke LG, Marks MC, Mac-Thiong JM. Restoration of normal pelvic balance from surgical reduction in high-grade spondylolisthesis. *European Spine Journal*. 2019
  - Hess S, Moser LB, Amsler F, Behrend H, Hirschmann MT. Highly variable coronal tibial and femoral alignment in osteoarthritic knees: a systematic review. *Knee Surgery, Sports Traumatology, Arthroscopy*. 2019

- 
- Tournemine S, Angelliaume A, Simon AL, Ilharreborde B. Are postoperative standing radiographs relevant before hospital discharge in adolescent idiopathic scoliosis? *European Spine Journal* 2019
  - Attali V, Clavel L, Rouc P, Rivals I, Remy-Neris S, Skalli W, Similowski T. Compensation of respiratory-related postural perturbation is achieved by maintenance of head-to-pelvis alignment in healthy humans. *Frontiers in Physiology* 2019
  - Pesenti S, Prost S, Blondel B, Pomeroy V, Severyns M, Roscigni L, Authier G, Viehweger E, Jouve JL. Correlations linking static quantitative gait analysis parameters to radiographic parameters in adolescent idiopathic scoliosis. *Orthopaedics & Traumatology: Surgery & Research*. 2019
  - Burkus M, Schlégl AT, József K, O'Sullivan I, Márkus I, Tunyogi-Csapó M. Analysis of Proximal Femoral Parameters in Adolescent Idiopathic Scoliosis. *Advances in Orthopedics* 2019
  - Chen CC, Su TY, Yang WT, Cheng TC, He YF, Lin CL, Fang YH. Reconstruction of the spine structure with bi-planar x-ray images using the generative adversarial network. *International Forum on Medical Imaging in Asia* 2019
  - Mac-Thiong JM, Hresko MT, Alzakri A, Parent S, Sucato DJ, Lenke LG, Marks M, Labelle H. Criteria for surgical reduction in high-grade lumbosacral spondylolisthesis based on quality of life measures. *European Spine Journal*. 2019
  - Bailly R, Lempereur M, Pons C, Houx L, Thepaut M, Borotikar B, Gross R, Brochard S. 3-D lower extremity bone morphology in ambulant children with cerebral palsy and its relation to gait. *Annals of physical and rehabilitation medicine*. 2019
  - Fitzgerald R, Upasani VV, Bastrom TP, Bartley CE, Reighard FG, Yaszay B, Newton PO. Three-Dimensional Radiographic Analysis of Two Distinct Lenke 1A Curve Patterns. *Spine Deformity* 2019
  - Esposito CI, Miller TT, Lipman JD, Carroll KM, Padgett DE, Mayman DJ, Jerabek SA. Biplanar Low-Dose Radiography Is Accurate for Measuring Combined Anteversion After Total Hip Arthroplasty. *HSS Journal* 2019
  - Burkus M. 3D sagittal plane examination of the spino-pelvic complex in adolescent idiopathic scoliosis. PhD Thesis, 2019
  - Toquart A, Barrey CY. Parameters of Spino-Pelvic Balance, Etiology and Pathogenesis of Disturbed Spino-Pelvic Balance. *Spine Surgery* 2019
  - Barrey CY, Le Huec JC. Chronic low back pain: Relevance of a new classification based on the injury pattern. *Orthopaedics & Traumatology: Surgery & Research* 2019
  - Lambert AS, Zhukouskaya V, Rothenbuhler A, Linglart A. X-Linked Hypophosphatemia: Management and Treatment Prospects. *Joint Bone Spine* 2019
  - Fritz B, Agten CA, Boldt FK, Zingg PO, Pfirrmann CW, Sutter R. Acetabular coverage differs between standing and supine positions: model-based assessment of low-dose biplanar radiographs and comparison with CT. *European Radiology*, 2019
  - Pasha S, Hassanzadeh P, Ecker M, Ho V. A hierarchical classification of adolescent idiopathic scoliosis: Identifying the distinguishing features in 3D spinal deformities. *PloS one*. 2019
  - Bouloussa H, Pietton R, Vergari C, Haen TX, Skalli W, Vialle R. Biplanar stereoradiography predicts pulmonary function tests in adolescent idiopathic scoliosis: a cross-sectional study. *European Spine Journal*. 2019
  - Almansour H, Pepke W, Rehm J, Bruckner T, Spira D, Akbar M. Interrater reliability of three-dimensional reconstruction of the spine: Low-dose stereoradiography for evaluating bracing in adolescent idiopathic scoliosis. *Der Orthopäde*. 2019
  - Courvoisier A, Nesme M, Gerbelot J, Moreau-Gaudry A, Faure F. Prediction of brace effect in scoliotic patients: blinded evaluation of a novel brace simulator—an observational cross-sectional study. *European Spine Journal*. 2019

- 
- Galbusera F, Niemeyer F, Wilke HJ, Bassani T, Casaroli G, Anania C, Costa F, Brayda-Bruno M, Sconfienza LM. Fully automated radiological analysis of spinal disorders and deformities: a deep learning approach. *European Spine Journal*. 2019
  - Tschoeke SK. Thoracolumbar Instrumentation and Fusion for Degenerative Disc Disease. *Spine Surgery* 2019
  - Franke J, Michalitsis S. Adjacent Segment Disease with 13 Years Follow Up and Five Operations. *Spine Surgery* 2019
  - Knafo Y, Houfani F, Zaharia B, Egrise F, Clerc-Urmès I, Mainard D. Value of 3D Preoperative Planning for Primary Total Hip Arthroplasty Based on Biplanar Weightbearing Radiographs. *BioMed Research International* 2019
  - Abdi AJ, Mussmann B, Mackenzie A, Klaerke B, Andersen PE. COMPARISON OF RADIATION EXPOSURE TO THE PATIENT AND CONTRAST DETAIL RESOLUTIONS ACROSS LOW DOSE 2D/3D SLOT SCANNER AND TWO CONVENTIONAL DIGITAL RADIOGRAPHY X-RAY IMAGING SYSTEMS. *Radiation Protection Dosimetry*. 2019
  - Studer D, Heidt C, Büchler P, Hasler CC. Treatment of early onset spinal deformities with magnetically controlled growing rods: a single centre experience of 30 cases. *Journal of Children's Orthopaedics*. 2019"
  - Grobost P, Boudissa M, Kerschbaumer G, Ruatti S, Tonetti J. Early versus delayed corpectomy in thoracic and lumbar spine trauma. A long-term clinical and radiological retrospective study. *Orthopaedics & Traumatology: Surgery & Research*. 2019
  - Trac S, Zheng R, Hill DL, Lou E. Intra- and Interrater Reliability of Cobb Angle Measurements on the Plane of Maximum Curvature Using Ultrasound Imaging Method. *Spine Deformity* 2019
  - Pasha S, Sankar WN, Castelein RM. The Link Between the 3D Spino-pelvic Alignment and Vertebral Body morphology in Adolescent Idiopathic Scoliosis. *Spine Deformity* 2019
  - Alrehily F, Hogg P, Twiste M, Johansen S, Tootell AK. Scoliosis imaging : an analysis of radiation risk in the CT scan projection radiograph and a comparison with projection radiography and EOS. *Radiography* 2019
  - Mussmann B, Jensen C, Bensen AS, Torfing T, Ovesen O, Overgaard S. Radiographic signs of acetabular retroversion using a low-dose slot-scanning radiographic system (EOS). *Radiography* 2019
  - Ilharreborde B, Simon AL, Ferrero E, Mazda K. How to Optimize Axial Correction Without Altering Thoracic Sagittal Alignment in Hybrid Constructs With Sublaminar Bands: Description of the "Frame" Technique. *Spine Deformity* 2019
  - Pepke W, Almansour H, Lafage R, Diebo BG, Wiedenhöfer B, Schwab F, Lafage V, Akbar M. Cervical spine alignment following surgery for adolescent idiopathic scoliosis (AIS): a pre-to-post analysis of 81 patients. *BMC Surgery* 2019
  - Alzakri A, Vergari C, Van den Abbeele M, Gille O, Skalli W, Obeid I. Global Sagittal Alignment and Proximal Junctional Kyphosis in Adolescent Idiopathic Scoliosis. *Spine Deformity* 2019



- 
- Kamal Z, Rouhi G, Arjmand N, Adeeb S. A stability-based model of a growing spine with adolescent idiopathic scoliosis: A combination of musculoskeletal and finite element approaches. *Medical Engineering & Physics* 2019
  - Bassani T, Stucovitz E, Galbusera F, Brayda-Bruno M. Is rasterstereography a valid noninvasive method for the screening of juvenile and adolescent idiopathic scoliosis?. *European Spine Journal* 2019
  - Tabard-Fougère A, Bonnefoy-Mazure A, Dhouib A, Valaikaite R, Armand S, Dayer R. Radiation-free measurement tools to evaluate sagittal parameters in AIS patients: a reliability and validity study. *European Spine Journal* 2019
  - Zhao S, Qian B, Qiu Y, Qiao M, Liu Z, Huang J. The relationship between global spinal alignment and pelvic orientation from standing to sitting following pedicle subtraction osteotomy in ankylosing spondylitis patients with thoracolumbar kyphosis. *Archives of Orthopaedic and Trauma Surgery* 2019
  - Esposito CI, Miller TT, Lipman JD, Carroll KM, Padgett DE, Mayman DJ, Jerabek SA. Biplanar Low-Dose Radiography Is Accurate for Measuring Combined Anteversion After Total Hip Arthroplasty. *HSS Journal* 2019
  - Newton PO, Osborn EJ, Bastrom TP, Doan JD, Reighard FG. The 3D Sagittal Profile of Thoracic Versus Lumbar Major Curves in Adolescent Idiopathic Scoliosis. *Spine Deformity* 2019
  - Trac S, Zheng R, Hill DL, Lou E. Intra- and Interrater Reliability of Cobb Angle Measurements on the Plane of Maximum Curvature Using Ultrasound Imaging Method. *Spine Deformity* 2019
  - Fitzgerald R, Upasani VV, Bastrom TP, Bartley CE, Reighard FG, Yaszay B, Newton PO. Three-Dimensional Radiographic Analysis of Two Distinct Lenke 1A Curve Patterns. *Spine Deformity* 2019
  - Pasha S, Sankar WN, Castelein RM. The Link Between the 3D Spino-pelvic Alignment and Vertebral Body morphology in Adolescent Idiopathic Scoliosis. *Spine Deformity* 2019
  - Dagneaux L, Marouby S, Maillot C, Canovas F, Riviere C. Dual mobility device reduces the risk of prosthetic hip instability for patients with degenerated spine: A case-control study. *Orthopaedics and Traumatology: Surgery and Research* 2018
  - Chung CL, Kelly DM, Steele JR, DiAngelo DJ. A mechanical analog thoracolumbar spine model for the evaluation of scoliosis bracing technology. *Journal of Rehabilitation and Assistive Technologies Engineering*
  - Ilharreborde B, Pesenti S, Ferrero E, Accadbled F, Jouve JL, De Gauzy JS, Mazda K. Correction of hypokyphosis in thoracic adolescent idiopathic scoliosis using sublaminar bands: a 3D multicenter study. *Eur Spine J* 2018
  - Sebaaly A, Grobost P, Mallam L, Roussouly P. Description of the sagittal alignment of the degenerative human spine. *Eur Spine J* 2018
  - Bao HD, Shu SB, Shi J, Liu SN, Sun MH, Hu AN, Liu Z, Zhu ZZ, Qian BP, Qiu Y. [Similar coronal curvature may not represent the same 3-dimensional deformity in adolescent idiopathic scoliosis: a matched-pair study using EOS imaging system].. *Zhonghua yi xue za zhi* 2018
  - Chung N, Cheng YH, Po HL, Ng WK, Cheung KC, Yung HY, Lai YM. Spinal phantom comparability study of Cobb angle measurement of scoliosis using digital radiographic imaging. *Journal of Orthopaedic Translation* 2018
  - Le Goic M, Wang D, Chiarovano E, Lecompte J, Laporte S, Duysens J, Vidal P. An Initial Passive Phase That Limits the Time to Recover and Emphasizes the Role of Proprioceptive Information. *Frontiers in Neurology* 2018

- Bahadir T, Werner J, Clair AJ, Walker PS. Guidelines for Instrumentation for Total Knee Replacement Based on Frontal Plane Radiographs. *Bulletin of the NYU Hospital for Joint Diseases* 2018
- Hasegawa K, Okamoto M, Hatsushikano S, Caseiro G and Watanabe K. Difference in whole spinal alignment between supine and standing positions in patients with adult spinal deformity using a new comparison method with slot- scanning three-dimensional X-ray imager and computed tomography through digital reconstructed radiography. *BMC musculoskeletal disorders* 2018
- Post M, Verdun S, Roussouly P, Abelin-Genevois K. New sagittal classification of AIS: validation by 3D characterization. *Eur Spine J* 2018
- Theologis A, Iyer S, Lenke LG, Sides BA, Kim HJ, Kelly MP. Cervical and Cervicothoracic Sagittal Alignment According to Roussouly's Thoracolumbar Subtypes. *Spine* 2018
- Kim SB, Heo YM, Hwang CM, Kim TG, Hong JY, Won YG, Ham CU, Min YK, Yi JW. Reliability of the EOS Imaging System for Assessment of the Spinal and Pelvic Alignment in the Sagittal Plane. *Clin Orthop Surg* 2018
- Iorio J, Lafage V, Lafage R, Henry JK, Stein D, Lenke LG Gupta M, Kelly MP, Sides B, Kim HJ. The Effect of Aging on Cervical Parameters in a Normative North American Population. *Global Spine J* 2018
- Vergari C, Aubert B, Lallemand-Dudek P, Haen TX, Skalli W. A novel method of anatomical landmark selection for rib cage 3D reconstruction from biplanar radiography. *CMBBE: Imaging & Visualization* 2018
- Pasha S, Flynn J. Data-driven Classification of the 3D Spinal Curve in Adolescent Idiopathic Scoliosis with an Applications in Surgical Outcome Prediction. *Scientific Reports* 2018
- Gajny L, Ebrahimi S, Vergari C, Angelini E, Skalli W. Quasi-automatic 3D reconstruction of the full spine from low-dose biplanar X-rays based on statistical inferences and image analysis. *Eur Spine J* 2018
- Pedersen D, Vanheule V, Wirix-Speetjens R, Taylan O, Delpont HP, Scheys L, Andersen MS. A novel non-invasive method for measuring knee joint laxity in four dof: In vitro proof-of-concept and validation. *J Biomech* 2018
- Passmore E, Graham HK, Pandy, MG, Sangeux M. Hip- and patellofemoral-joint loading during gait are increased in children with idiopathic torsional deformities. *Gait & Posture* 2018
- Roszkopf A, Sutter R, Pfirmann C, Buck F. 3D hindfoot alignment measurements based on low-dose biplanar radiographs: a clinical feasibility study. *Skeletal Radiol.* 2018
- Pedersen PH, Vergari C, Alzakri A, Vialle R, Skalli W. A reduced micro-dose protocol for 3D reconstruction of the spine in children with scoliosis: results of a phantom-based and clinically validated study using stereo-radiography. *Eur Radiol* 2018
- Garcia-Cano E, Arambula Cosio F, Duong L, Bellefleur C, Roy-Beaudry M, Joncas J, Parent S, Labelle H. Prediction of spinal curve progression in Adolescent Idiopathic Scoliosis using Random Forest regression. *Comput Biol Med* 2018
- Tokunaga K, Okamoto M, Watanabe K. Implant Orientation Measurement After THA Using the EOS X-Ray Image Acquisition System. *Adv Exp Med Biol* 2018
- Lecoanet P, Vargas M, Pallaro J, Thelen T, Ribes C, Fabre T. Leg length discrepancy after total hip arthroplasty: Can leg length be satisfactorily controlled via anterior approach without a traction table? Evaluation in 56 patients with EOS 3D. *Orthop Traumatol Surg Res* 2018
- Berliner JL, Esposito CI, Miller TT, Padgett DE, Mayman DJ, Jerabek SA. What preoperative factors predict postoperative sitting pelvic position one year following total hip arthroplasty?. *The Bone & Joint Journal* 2018

- 
- Fader RR, Tao MA, Gaudiani MA, Turk R, Nwachukwu BU, Esposito CI, Ranawat AS. The role of lumbar lordosis and pelvic sagittal balance in femoroacetabular impingement. *The Bone & Joint Journal* 2018
  - Staub BN, Lafage R, Kim HJ, Shaffrey CI, Mundis GM, Hostin R, Burton D, Lenke L, Gupta MC, Ames C, Klineberg E, Bess S, Schwab S, Lafage V. Cervical mismatch: the normative value of T1 slope minus cervical lordosis and its ability to predict ideal cervical lordosis. *JNS Spine* 2018
  - Rampal V, Rohan PY, Saksik R, Wicart P, Skalli W. Assessing 3D paediatric foot morphology using low-dose biplanar radiography: Parameter reproducibility and preliminary values. *Orthop Traumatol Surg Res* 2018
  - Macron A, Pillet H, Doridam J, Verney A, Rohan PY. Development and evaluation of a new methodology for the fast generation of patient-specific Finite Element models of the buttock for sitting-acquired deep tissue injury prevention. *J Biomech*, 2018
  - Mustafy T, Arnoux PJ, Benoit A, Bianco RJ, Aubin CE, Villemure I. Load-sharing biomechanics at the thoracolumbar junction under dynamic loadings are modified by anatomical features in adolescent and pediatric vs adult functional spinal units. *J Mech Behav Biomed Mater*, 2018
  - Khalil N, Bizdikian AJ, Bakoury Z, Salameh M, Bou Zeid N, Yared F, Otayek J, Kharrat K, Kreichati G, Ghanem J, Lafage R, Lafage V, Obeid I, Assi A. Cervical and postural strategies for maintaining horizontal gaze in asymptomatic adults. *Eur Spine J*, 2018
  - Hu Z, Man GCW, Kwok AKL, Law SW, Chu WWC, Cheung WH, Qiu Y, Cheng JCY. Global sagittal alignment in elderly patients with osteoporosis and its relationship with severity of vertebral fracture and quality of life. *Arch Osteoporos*, 2018
  - Horn SR, Segreto FA, Ramchandran S, Poorman GR, Sure A, Marascalachi B, Bortz CA, Varlotta CG, Tishelman J, Vasquez-Montes D, Ihejirika Y, Zhou P, Moon J, Lafage R, Diebo BG, Vira S, Jalai CM, Wang C, Shenoy K, Errico T, Lafage V, Buckland A, Passias PG . The Influence of BMI on Achieving Age Adjusted Alignment Goals in Adult Spinal Deformity Corrective Surgery with Full Body Analysis at 1 Year. *World Neurosurgery*, 2018
  - Akbar M, Almansour H, Lafage R, Diebo BG, Wiedenhofer B, Schwab F, Lafage V, Pepke W. Sagittal alignment of the cervical spine in the setting of adolescent idiopathic scoliosis. *J Neurosurg Spine*, 2018
  - Cobetto N, Aubin CE, Parent S. Contribution of Lateral Decubitus Positioning and Cable Tensioning on Immediate Correction in Anterior Vertebral Body Growth Modulation. *Spine Deformity*, 2018
  - Sullivan T, Marino N, Reighard F, Newton P. Relationship Between Lumbar Lordosis and Pelvic Incidence in the Adolescent Patient: Normal Cohort Analysis and Literature Comparison. *Spine Deformity*, 2018
  - Yoshihara H, Hasegawa K, Okamoto M, Hatsushikano S, Watanabe K. Relationship between sagittal radiographic parameters and disability in patients with spinal disease using 3D standing analysis. *Orthop Traumatol Surg Res*, 2018
  - Donaldson TK, Smith EJ, Koutalos A, John A, Lazennec J, Clarke I. Adverse Wear in MOM Hip-Arthroplasty Related to the Production of Metal Fragments at Impingement Sites. *Open Journal of Orthopedics* 2018
  - Turner A, Edwards J, Kinene E. Digital radiography vs low dose 3D imaging technology: A comparison of radiation doses and image quality. *RAD Magazine*, 2018
  - Bakouny Z, Khalil N, Otayek J, Bizdikian AJ, Yared F, Salameh M, Bou Zeid N, Ghanem I, Kharrat Km Kreichati G, Lafage R, Lafage V, Assi A. Are the sagittal cervical radiographic modifiers of the Ames-ISSG classification specific to adult cervical deformity?. *J Neurosurg Spine*, 2018

- Bakouny Z, Assi A, Yared F, Khalil N, Mansour E, Yaacoub JJ, Skalli W, Ghanem I. Combining acetabular and femoral morphology improves our understanding of the down syndrome hip. *Clinical Biomechanics*, 2018
- van Drongelen S, Fey B, Stief F, Kaldowski H, Ipek D, Meurer A. Changes in leg alignment after total hip replacement detected with the EOS system. *Gait & Posture*, 2018
- Choisne J, Valiadis JM, Travert C, Kolta S, Roux C, Skalli W. Vertebral strength prediction from Bi-Planar dual energy x-ray absorptiometry under anterior compressive force using a finite element model: An in vitro study. *Journal of the Mechanical Behavior of Biomedical Materials*, 2018
- Yu P, Qiu JR, Xie L, Wu WJ, Zhang XK, Cao P, Liang Y. [Two-year clinical and radiological outcomes of minimally invasive surgery for severe adult degenerative scoliosis]. *Zhonghua yi xue za zhi*, 2018
- Bailly R, Lempereur M, Thepaut M, Rémy Neris O, Pons C, Houx L, Brochard S. 3D lower limb bone morphology in ambulant children with cerebral palsy and its relation to gait. *Annals of Physical and Rehabilitation Medicine*, 2018
- Blandin C, Boisson M, Segretin F, Feydy A, Rannou F, Nguyen C. Pelvic parameters in patients with chronic low back pain and an active disc disease: A case-control study. *Annals of Physical and Rehabilitation Medicine*, 2018
- Massaad A, Assi A, Bizdikian AJ, Yared F, Bakouny Z, Khalil N, Ghanem I, Pillet H, Bonnet X, Skalli W. How do postural parameters vary during gait in children with cerebral palsy? A 3D subject-specific skeletal segment registration technique.. *Gait Posture*, 2018
- Bizdikian AJ, Assi A, Bakouny Z, Yared F, Saghbini E, Bakhos GE, Esber S, Khalil N, Otayek J, Ghanimeh J, Sauret C, Skalli W, Ghanem I. Validity and reliability of different techniques of neck–shaft angle measurement. *Clinical Radiology*, 2018
- Rohan PY, Perrier A, Ramanoudjame M, Hausselle J, Lelièvre H, Seringe R, Skalli W, Wicart P. Three-Dimensional Reconstruction of Foot in the Weightbearing Position From Biplanar Radiographs: Evaluation of Accuracy and Reliability. *J Foot and Ankle Surgery*, 2018
- Tono O, Hasegawa K, Okamoto M, Hatsushikano S, Shimoda H, Watanabe K, Harimaya K. Lumbar lordosis does not correlate with pelvic incidence in the cases with the lordosis apex located at L3 or above. *European Spine Journal*, 2018
- Kolta S, Etcheto A, Fechtenbaum J, Feydy A, Roux C, Briot K. Measurement of Trabecular Bone Score of the spine by low-dose imaging system (EOS®); a feasibility study. *J Clinical Densitometry*, 2018
- De Francesco CJ, Pasha S, Miller DJ, Betz, RR, Clements DH, Fletcher ND, Glotzbecker MG, Hwang SW, Kelly MP, Lehman RA, Lonner BS, Newton PO, Roye BD, Sponseller PD, Upasani VV, Cahill PJ. Agreement Between Manual and Computerized Designation of Neutral Vertebra in Idiopathic Scoliosis. *Spine Deform* 2018
- Fougeron N, Rohan PY, Macron A, Travert C, Pillet H & Skalli W . Subject specific finite element mesh generation of the pelvis from biplanar x-ray images: application to 120 clinical cases. *Computer Methods in Biomechanics and Biomedical Engineering*, 2018
- Assi A, Bakouny Z, Bizdikian AJ, Otayek J, Yared F, Lafage V, Khalil N, Massaad A, Ghanem I, Skalli W.. Variation of the sagittal vertical axis during walking and its determinants.. *Gait Posture*. 2018
- García-Cano E, Arámbula Cosío F, Duong L, Bellefleur C, Roy-Beaudry M, Joncas J, Parent S, Labelle H. Dynamic ensemble selection of learner-descriptor classifiers to assess curve types in adolescent idiopathic scoliosis.. *Med Biol Eng Comput*. 2018
- Sterba M, Arnoux PJ, Labelle H, Warner WC, Aubin CE. Biomechanical analysis of spino-pelvic postural configurations in spondylolysis subjected to various sport-related dynamic loading conditions. *European Spine Journal*, 2018
- Passmore E, Sangeux M. Is it the right moment to change how we report kinetics?. *Gait & Posture*, 2018

- Bao HD, Shu SB, Shi J, Liu SN, Sun MH, Hu AN, Liu Z, Zhu ZZ, Qian BP, Qiu Y. Similar coronal curvature may not represent the same 3-dimensional deformity in adolescent idiopathic scoliosis: a matched-pair study using EOS imaging system. *Zhonghua Yi Xue Za Zhi*, 2018
- Celestre PC, Dimar JR, Glassman SD. Spinopelvic Parameters: Lumbar Lordosis, Pelvic Incidence, Pelvic Tilt, and Sacral Slope
- What Does a Spine Surgeon Need to Know to Plan a Lumbar Deformity Correction?. *Neurosurgery Clinics*, 2018"
- Markus I, Schlegl AT, Burkus M, Jozsef K, Niklai B, Than P, Tunyogi-Csapo M. The effect of coronal decompensation on the biomechanical parameters in lower limbs in adolescent idiopathic scoliosis. *Orthopaedics and Traumatology: Surgery and Research*, 2018
- Jackson TJ, Miller D, Nelson S, Cahill PJ, Flynn JM. Two for One: A Change in Hand Positioning During Low-Dose Spinal Stereoradiography Allows for Concurrent, Reliable Sanders Skeletal Maturity Staging. *Spine Deformity*, 2018
- Hernandez T, Thenard T, Vergari C, Robichon L, Skalli W, Vialle R. Coronal Trunk Imbalance in Idiopathic Scoliosis: Does Gravity Line Localisation Confirm the Physical Findings?. *Orthopaedics and Traumatology: Surgery and Research*, 2018
- Burkus M, Schlégl AT, O'Sullivan I, Markus I, Vermes C, Tunyogi-Csapo M. Sagittal plane assessment of spino-pelvic complex in a Central European population with adolescent idiopathic scoliosis: a case control study. *Scoliosis and Spinal Disorders*, 2018
- Cobetto N, Aubin CE, Parent S. Surgical Planning and Follow-up of Anterior Vertebral Body Growth Modulation in Pediatric Idiopathic Scoliosis Using a Patient-Specific Finite Element Model Integrating Growth Modulation. *Spine Deformity*, 2018
- Assi A, Bakouny Z, Mansour E, Yaacoub JJ, Yared F, Ghanem I. Spinopelvic Alignment in Subjects With Down Syndrome. *Clinical Spine Surgery*, 2018
- Hurry JK, Rehan S, Spurway AJ, Laende EK, Astephen Wilson JL, Logan KJ, Dunbar MJ, El-Hawary R. The reliability of radiostereometric analysis in determining physeal motion in slipped capital femoral epiphysis in standard uniplanar and low-dose EOS biplanar radiography: a phantom model study. *Journal of Pediatric Orthopaedics B*, 2018
- Abelin-Genevois K, Sassi D, Verdun S, Roussouly P. Sagittal classification in adolescent idiopathic scoliosis: original description and therapeutic implications. *Eur Spine J*, 2018
- Passmore E, Kerr Graham H, Pandy MG, Sangeux M. Hip- and patellofemoral-joint loading during gait are increased in children with idiopathic torsional deformities. *Gait & Posture*, 2018
- Thompson W, Cogniet A, Challali M, Saddiki R, Rigal J, Le Huec JC. Analysis of cervical sagittal alignment variations after lumbar pedicle subtraction osteotomy for severe imbalance: study of 59 cases. *European Spine Journal*, 2018
- Bagheri A, Liu X-C, Tassone C, Thometz J, Tarima S. Reliability of Three-Dimensional Spinal Modeling of Patients With Idiopathic Scoliosis Using EOS System. *Spine Deformity*, 2018
- Ben-Sira L, Shiran SI, Pratt L-T, Precel R, Ovadia D, Constantini S, Roth J. Use of EOS® low-dose biplanar X-ray for shunt series in children with hydrocephalus: a preliminary study. *World Neurosurgery*, 2018
- Jankowski PP, Yaszay B, Cidambi KR, Bartley CE, Bastrom TP, Newton PO. The Relationship Between Apical Vertebral Rotation and Truncal Rotation in Adolescent Idiopathic Scoliosis Using 3D Reconstructions . *Spine Deformity*, 2018
- Sekiya T, Aota Y, Yamada K, Kaneko K, Ide M, Saito T. Evaluation of functional and structural leg length discrepancy in patients with adolescent idiopathic scoliosis using the EOS imaging system: a prospective comparative study. *Scoliosis and Spinal Disorders*, 2018
- Illés TS, Burkus M, Somoskeőy S, Lauer F, Lavaste F, Dubousset JF. Axial plane dissimilarities of two identical Lenke-type 6C scoliosis cases visualized and analyzed by vertebral vectors. *Eur Spine J*, 2018

- Lahkar BK, Rohan P-Y, Pillet H, Thoreux P, Skalli W. Fast subject specific finite element mesh generation of knee joint from biplanar X-ray images. CMBBE, 2018
- Girinon F, Gajny L, Ebrahimi S, Dagneaux L, Rouch P, Skalli W. Quasi automated reconstruction of the femur from bi-planar X-rays. CMBBE, 2018
- Gajny L, Robichon L, Hernandez T, Vialle R, Skalli W. 3D reconstruction of adolescent scoliotic trunk shape from biplanar X-rays: a feasibility study. CMBBE, 2018
- Obid P, Yiu KKL, Cheung KM, Kwan K, Ruf M, Cheung JPY. Reliability of Rod lengthening, Thoracic and Spino-Pelvic Measurements on Biplanar Stereoradiography in Patients Treated with Magnetically Controlled Growing Rods. Spine, 2018
- Aubry S, Padoin P, Petegnief Y, Vidal C, Riethmuller D, Delabrousse E. Can three-dimensional pelvimetry using low-dose stereoradiography replace low-dose CT pelvimetry?. Diag & Interventional Imaging, 2018
- Westberry DE, Wack LI, Davis RB, Hardin JW. Femoral anteversion assessment: Comparison of physical examination, gait analysis, and EOS biplanar radiography. Gait & Posture, 2018
- Rivière C, Lazic S, Villet L, Wiart Y, Muirhead Allwood S, Cobb J. Kinematic alignment technique for total hip and knee arthroplasty: the personalized implant positioning surgery. EFORT open reviews, 2018
- Pea R, Dansereau J, Caouette C, Cobetto N, Aubin CE. Computer-assisted design and finite element simulation of braces for the treatment of adolescent idiopathic scoliosis using a coronal plane radiograph and surface topography. Clin Biomech, 2018
- Pasha S, Flynn JM, Sankar WN. Outcomes of selective thoracic fusion for Lenke 1 adolescent idiopathic scoliosis: predictors of success from the sagittal plane. Eur Spine J, 2018
- Pasha S, Ecker M, Deeney V. Considerations in sagittal evaluation of the scoliotic spine. Eur J Ortho Surg & Trauma, 2018
- Nielsen E, Goldstein RY. Adolescent spine patients have an increased incidence of acetabular overcoverage. J Hip Preserv Surg. 2018
- Madkouri R, Brauge D, Vidon-Buthion A, Fahed E, Mourier KL, Beaurain J, Grelat M. Improvement in Sagittal Balance After Decompression Surgery without Fusion in Patients with Degenerative Lumbar Stenosis: Clinical and Radiographic Results at 1 Year. World Neurosurgery, 2018
- Ferrero E, Ilharberorde B, Mas V, Vidal C, Simon A-L, Mazda K. Radiological and functional outcomes of high-grade spondylolisthesis treated by intrasacral fixation, dome resection and circumferential fusion: a retrospective series of twenty consecutive cases with a minimum of 2 years follow-up. European Spine Journal, 2018
- Elkin JM, Simoens KJ, Callaghan JJ. Lower Extremity Geometry in Morbid Obesity – Considerations for TKA. J Arthroplasty, 2018
- Dzialo Cm, Pedersen PH, Simonsen CW, Jensen KK, de Zee M, Andersen MS. Development and validation of a subject-specific moving-axis tibiofemoral joint model using MRI and EOS imaging during a quasi-static lunge. J Biomech, 2018
- Barbier O, Skalli W, Mainard D. Changes in pelvic orientation after total hip arthroplasty: a prospective study with EOS™. Acta Orthop Belg, 2018
- Law M, Ma WK, Lau D, Cheung K, Ip J, Yip L, Lam W. Cumulative effective dose and cancer risk for pediatric population in repetitive full spine follow-up imaging: how micro dose is the EOS microdose protocol?. Eur J Radiol, 2018
- Lazennec JY, Folinis D, Florequin C, Pour AE. Does patients' perception of leg length after total hip arthroplasty correlate with anatomical leg length?. J Arthroplasty. 2018
- Kaya O, Ulusoy OL, Karadereler S, Hamzaoglu A. Cervicothoracic spine duplication: a 10-year follow up of a neurological intact boy. European Spine Journal, 2018
- Diebo BG, Shah NV, Stroud SG, Paulino CB, Schwab FJ, Lafage V. Realignment surgery in adult spinal deformity. Der Orthopäde, 2018

- 
- Zeighami A, Aissaoui R, Dumas R. Knee medial and lateral contact forces in a musculoskeletal model with subject-specific contact point trajectories. *Journal of Biomechanics*, 2018
  - Day LM, DelSole EM, Beaubrun BM, Zhou PL, Moon JY, Tishelman JC, Vigdorichik JM, Schwarzkopf R, Lafage R, Lafage V, Protosaltis T, Buckland AJ. Radiological severity of hip osteoarthritis in patients with adult spinal deformity: the effect on spinopelvic and lower extremity compensatory mechanisms. *European Spine Journal*, 2018
  - Yeganeh A, Moghtadaei M, Motalebi M. A challenge on orthopedic sciences: The Influence of Spinal Disease and Deformities on Total Hip Arthroplasty: A review on literature. *European Spine Journal*, 2018
  - Langlais T, Vergari C, Pietton R, Dubousset J, Skalli W, Vialle R. Shear-wave elastography can evaluate annulus fibrosus alteration in adolescent scoliosis. *European Radiology*, 2018
  - Lonner BS, Parent S, Shah SA, Sponseller P, Yaszay B, Samdani AF, Cahill PJ, Pahys JM, Betz R, Ren Y, Shufflebarger HL, Newton PO. Reciprocal Changes in Sagittal Alignment With Operative Treatment of Adolescent Scheuermann Kyphosis - Prospective Evaluation of 96 Patients. *Spine Deformity*, 2018
  - Passmore EHP, Graham HK, Sangeux M. Defining the medial-lateral axis of the femur: Medical imaging, conventional and functional calibration methods lead to differences in hip rotation kinematics for children with torsional deformities. *Journal of Biomechanics*, 2018
  - Bernard JC, Berthonnaud E, Deceuninck J, Journoud-Rozand L, Notin G, Chaleat-Valayer E. Three-dimensional reconstructions of Lenke 1A curves. *Scoliosis and Spinal Disorders*, 2018
  - Morel B, Moueddeb S, Blondiaux E, Richard S, Bacy M, Vialle R, Ducou Le Pointe H. Dose, image quality and spine modeling assessment of biplanar EOS micro-dose radiographs for the follow-up of in-brace adolescent idiopathic scoliosis patients. *European Spine Journal*, 2018
  - Bourghli A, Cawley D, Novoa F, Rey M, Alzakri A, Larrieu D, Vital JM, Gille O, Boissiere L, Obeid I. 102 lumbar pedicle subtraction osteotomies: one surgeon's learning curve. *European Spine Journal*, 2018
  - Clément J, de Guise JA, Fuentes A, Hagemeister N. Comparison of soft tissue artifact and its effects on knee kinematics between non-obese and obese subjects performing a squatting activity recorded using an exoskeleton. *Gait & Posture*, 2018
  - Pedersen PH, Petersen AG, Ostgaard SE, Tvedebrink T, Eiskjaer SP. EOS® Micro-Dose Protocol: First Full-Spine Radiation Dose Measurements in Anthropomorphic Phantoms and Comparisons with EOS Standard-Dose and Conventional Digital Radiology (CR). *Spine*, 2018
  - Ling FP, Chevillotte T, Ieglise A, Thompson W, Bouthors C, Le Huec JC. Which parameters are relevant in sagittal balance analysis of the cervical spine? A literature review. *European Spine Journal*, 2018
  - Hey HWD, Tan KLM, Moorthy V, Lau ETC, Lau LL, Liu G, Wong HK. Normal variation in sagittal spinal alignment parameters in adult patients: an EOS study using serial imaging. *European Spine Journal*, 2018
  - Bakouny Z, Assi A, Yared F, Bizdikian AJ, Otayek J, Nacouzi R, Lafage V, Lafage R, Ghanem I, Kreichati G. Normative Spino-Pelvic Sagittal Alignment of Lebanese Asymptomatic Adults: Comparisons with Different Ethnicities. *Orthopaedics and Traumatology: Surgery and Research*. 2018
  - Henao J, Labelle H, Arnoux P-J, Aubin C-E. Biomechanical Simulation of Stresses and Strains Exerted on the Spinal Cord and Nerves During Scoliosis Correction Maneuvers. *Spine Deformity*. 2018

- Passias PG, Horn SR, Frangella NJ, Poorman GW, Vasquez-Montes D, Diebo BG, Bortz CA, Segreto FA, Moon JY, Zou PL, Vira S, Sure A, Beaubrun B, Tishelman JC, Ramchandran S, Jalai CM, Bronson W, Wang C, Lafage V, Buckland AJ, Errico TJ. Full-Body Analysis of Adult Spinal Deformity Patients' Age-Adjusted Alignment at 1 Year. *World Neurosurgery*, 2018
- Van den Abbeele M, Li F, Pomeroy V, Bonneau D, Sandoz B, Laporte S, Skalli W. A subject-specific biomechanical control model for the prediction of cervical spine muscle forces. *Clin Biomech*. 2018
- Simon AL, Apostolou N, Vidal C, Ferrero E, Mazda K, Ilharreborde B. Paediatric tibial shaft fractures treated by open reduction and stabilization with monolateral external fixation. *J Child Orthop*. 2018
- Lazennec JY, Kim Y, Pour AE. Total Hip Replacement in patients with Parkinson's disease: improved outcomes with dual mobility implants and cementless fixation. *J Arthroplasty*. 2018
- Ferrero E, Mazda K, Simon A-L, Ilharreborde B. Preliminary experience with SpineEOS, a new software for 3D planning in AIS surgery. *Eur Spine J*, 2018
- Pasha S, Cahill PJ, Flynn JM, Sponseller P, Newton P. Relationships Between the Axial Derotation of the Lower Instrumented Vertebra and Uninstrumented Lumbar Curve Correction: Radiographic Outcome in Lenke 1 Adolescent Idiopathic Scoliosis With a Minimum 2-Year Follow-up. *Journal of Pediatric Orthopaedics*, 2018
- Ilharreborde B. Sagittal balance and idiopathic scoliosis: does final sagittal alignment influence outcomes, degeneration rate or failure rate?. *European Spine Journal*, 2018
- Le Huec JC, Gille O, Fabre T. Sagittal balance and spine-pelvis relation: a French speciality?. *Orthopaedics and Traumatology: Surgery and Research*, 2018
- Okamoto M, Jabour F, Sakai K, Hatsushikano S, Le Huec JC, Hasegawa K. Sagittal balance measures are more reproducible when measured in 3D vs in 2D using full-body EOS® images. *European Radiology*, 2018
- Alqroom R. The Quest of Sagittal Balance Parameters and Clinical Outcome after Short Segment Spinal Fusion. *Acta Informatica Medica*, 2018
- Janjua MB, Tishelman JC, Vasquez-Montes D, Vaynrub M, Errico TJ, Buckland AJ, Protopsaltis T. The value of sitting radiographs: analysis of spine flexibility and its utility in preoperative planning for adult spinal deformity surgery. *J Neurosurgery Spine* 2018
- Esposito C, Carroll KM, Sculco PK, Padgett DE, Jerabek SA, Mayman DJ. Total hip Arthroplasty patients With Fixed Spinopelvic Alignment are at Higher Risk of hip Dislocation. *J Arthroplasty*. 2018
- Yamato Y, Matsuyama Y. Will a low-dose biplanar radiograph become "gold standard" for three-dimensional assessment of spinal deformity in patients with adolescent idiopathic scoliosis?. *J Spine Surg*, 2018
- Rehm J, Germann T, Akbar M, Pepke W, Kauczor HU, Weber MA, Spira D. 3D-modeling of the spine using EOS imaging system: Inter-reader reproducibility and reliability. *PLoS One*. 2017 Feb 2;12(2):e0171258
- Gille O, Bouloussa H, Mazas S, Vergari C, Challier V, Vital JM, Coudert P, Ghailane S. A new classification system for degenerative spondylolisthesis of the lumbar spine. *Eur Spine J*. 2017 Aug 23
- Mainard D, Barbier O, Knafo Y, Belleville R, Mainard-Simard L, Gross JB. Accuracy and reproducibility of preoperative three-dimensional planning for total hip arthroplasty using biplanar low-dose radiographs: A pilot study. *Orthop Traumatol Surg Res*. 2017 Jun;103(4):531-536
- Berven SH, Kamper SJ, Germscheid NM, Dahl B, Shaffrey CI, Lenke LG, Lewis SJ, Cheung KM, Alanay A, Ito M, Polly DW, Qiu Y, de Kleuver M, A OSpine Knowledge Forum Deformity. An international consensus on the appropriate evaluation and treatment for adults with spinal deformity. *Eur Spine J*, 2017



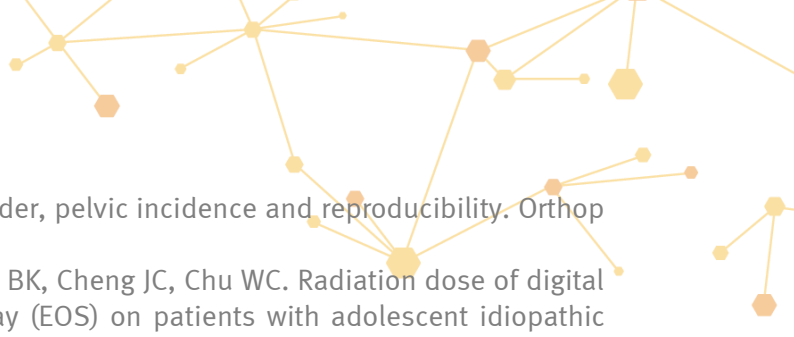
- Lerisson H, Amzallag-Bellenger É, Cebulski-Delebarre A, Nectoux E, Desmulliez G, Duhamel A, Drumez E, Herbaux B, Boutry N. Assessment of micro-dose biplanar radiography in lower limb measurements in children. *Eur Radiol.* 2017 Nov 21
- Issa SP, Angelliaume A, Vidal C, Mazda K, Ilharreborde B. Do Sublaminar Polyester Bands Affect the Outcomes of Postoperative Infections After Adolescent Idiopathic Scoliosis Surgery?. *J Pediatr Orthop.* 2017
- Ilharreborde B, Pesenti S, Ferrero E, Accadbled F, Jouve JL, De Gauzy JS, Mazda K. Correction of hypokyphosis in thoracic adolescent idiopathic scoliosis using sublaminar bands: a 3D multicenter study. *Eur Spine J.* 2017 Jun 13
- Cobetto N. Planification chirurgicale pour la correction 3D de la scoliose pédiatrique proressive à l'aide d'un dispositif sans fusion flexible. PhD thesis, 2017
- Law M, Ma WK, Chan E, Lau D, Mui C, Cheung K, Yip L, Lam W. Evaluation of cumulative effective dose and cancer risk from repetitive full spine imaging using EOS system: Impact to adolescent patients of different populations. *Eur J Radiol.* 2017 Nov;96:1-5
- Morvan G, Guerini H, Carré G, Vuillemin V. Femoral Torsion: Impact of Femur Position on CT and Stereoradiography Measurements. *AJR Am J Roentgenol.* 2017 Jun 1
- Ng S-Y, Bettany-Saltikov J. Imaging in the Diagnosis and Monitoring of Children with Idiopathic Scoliosis. *The Open Orthopaedics Journal.* 2017
- Passmore, EHP. Effect of lower-limb torsional deformities on muscle and joint function during gait. PhD thesis, 2017
- Burkus M, Márkus I, Niklai B, Tunyogi-Csapó M. Assessment of sacroiliacal joint mobility in patients with low back pain. *Orv Hetil.* 2017
- Le Huec JC, Richards J, Tsoupras A, Price R, Léglise A, Faundez AA. The mechanism in junctional failure of thoraco-lumbar fusions. Part I: Biomechanical analysis of mechanisms responsible of vertebral overstress and description of the cervical inclination angle (CIA). *Eur Spine J.* 2017 Dec 14
- Faundez AA, Richards J, Maxy P, Price R, Léglise A, Le Huec JC. The mechanism in junctional failure of thoraco-lumbar fusions. Part II: Analysis of a series of PJK after thoraco-lumbar fusion to determine parameters allowing to predict the risk of junctional breakdown. *Eur Spine J.* 2017 Dec 15
- Alzakri A, Boissière L, Cawley DT, Bourghli A, Pointillart V, Gille O, Vital JM, Obeid I. L5 pedicle subtraction osteotomy: indication, surgical technique and specificities. *Eur Spine J.* 2017 Nov 29
- Pasha S, Baldwin K. Are we simplifying balance evaluation in adolescent idiopathic scoliosis?. *Clin Biomech.* 2017
- Nerot A, Skalli W, Wang X. Estimation of spinal joint centers from external back profile and anatomical landmarks. *Journal of Biomechanics.* 2017
- Buckland A, DelSole E, George S, Vira S, Lafage V, Errico T, Vigdorichik J. Sagittal Pelvic Orientation: A Comparison of Two Methods of Measurement. *Bull Hosp Jt Dis.* 2017 Dec;75(4):234-240
- Branchini M, Del Vecchio A, Gigliotti CR, Loria A, Zerbi A, Calandrino R. Organ doses and lifetime attributable risk evaluations for scoliosis examinations of adolescent patients with the EOS imaging system. *Radiol Med.* 2017 Nov 21
- Yoshida G, Alzakri A, Pointillart V, Boissiere L, Obeid I, Matsuyama Y, Vital JM, Gille O. Global Spinal Alignment in Patients with Cervical Spondylotic Myelopathy. *Spine (Phila Pa 1976).* 2017 May 24
- Cobetto N, Parent S, Aubin CE. 3D correction over 2 years with anterior vertebral body growth modulation tethering: A finite element analysis of screw positioning, cable tensioning and postoperative. *Clin Biomech.* 2017

- Pietton R, Bouloussa H, Vergari C, Skalli W, Vialle R. Rib Cage Measurement Reproducibility Using Biplanar Stereoradiographic 3D Reconstructions in Adolescent Idiopathic Scoliosis. *J Pediatr Orthop.* 2017
- Choisne J, Travert C, Valiadis JM, Follet H, Skalli W. A new method to determine volumetric bone mineral density from bi-planar dual energy radiographs using a finite element model: an ex-vivo study. *J. Musculoskelet. Res.* 2017
- Rampal V, Rohan PY, Assi A, Ghanem I, Rosello O, Simon AL, Gaumetou E, Merzoug V, Skalli W, Wicart P. Lower-Limb Lengths and Angles in Children Older than Six Years: Reliability and Reference Values by EOS® Stereoradiography. *Orthop Traumatol Surg Res.* 2017 Nov 6
- Bistazzoni S, De Angelis M, D'ercole M, Chiaramonte C, Carotenuto A, Cardarelli G, Ricciardi F, Innocenzi G, Guizzardi G. Evaluation of Effect of Posterior Dynamic Stabilization IntraSPINE System on Sagittal Spinal Balance using EOS® X-Ray Imaging System. *J Neurol Neurophysiol* 2017, 8:4
- Fuller CB, Farnsworth CL, Bomar JD, Jeffords ME, Murphy JS, Edmonds EW, Pennock AT, Wenger DR, Upasani VV. Femoral Version: Comparison Among Advanced Imaging Methods. *J Orthop Res.* 2017 Oct 27
- Fougeron N, Macron A, Pillet H, Skalli W, Rohan PY. Subject specific hexahedral Finite Element mesh generation of the pelvis from bi-Planar X-ray images. *Comput Methods Biomech Biomed Engin.* 2017 Oct;20(sup1):75-76
- Ramchandran S, Foster N, Sure A, Errico TJ, Buckland AJ. Normal Age-Adjusted Sagittal Spinal Alignment Is Achieved with Surgical Correction in Adolescent Idiopathic Scoliosis. *Asian Spine J.* 2017 Oct; 11(5): 770–779
- Hey D, Tan K, Ho VC, Azhar SB, Lim JL, Liu GK, Wong HK. Radiologically defining horizontal gaze using EOS® imaging – a prospective study of healthy subjects and a retrospective audit. *Spine J.* 2017 Oct 18
- Pasha S, Flynn J, Sponseller P, Orlando G, Newton PO, Cahill PJ. Timing of Changes in Three-Dimensional Spinal Parameters After Selective Thoracic Fusion in Lenke 1 Adolescent Idiopathic Scoliosis: Two-Year Follow-up. *Spine Deformity.* 2017; 5(6) 409-415
- Goodbody C, Kedem P, Thompson M, Do HT, Mintz DN, Widmann RF, Dodwell ER. Reliability and Reproducibility of Subject Positioning with EOS Low-Dose Biplanar X-ray. *HSS J.* 2017 Oct;13(3):263-266
- Bao H, Liabaud B, Varghese J, Lafage R, Diebo BG, Jalai C, Ramchandran S, Poorman G, Errico T, Zhu F, Protosaltis T, Passias P, Buckland A, Schwab F, Lafage V. Lumbosacral stress and age may contribute to increased pelvic incidence: an analysis of 1625 adults. *Eur Spine J.* 2017 Oct 12
- Mainard-Simard L, Lan L, Fort D. The advantages of 3D imagery in diagnosing and supervising children's and teenagers' scoliosis. *Arch Pediatr.* 2017 Sep 8
- Alnachoukati O, Emerson R, Ennin K, Vidal A. How well do lower femoral neck shaft angled stems match patients with coxa vara hip deformities?. *Clin Trials Orthop Disord,* 2017 Sep 20;2:91-6
- Illés TS, Burkus M, Somoskeőy S, Lauer F, Lavaste F, Dubousset JF. The horizontal plane appearances of scoliosis: what information can be obtained from top-view images?. *Int Orthop.* 2017 Aug 11
- Chiron P, Demoulin L, Wytrykowski K, Cavaignac E, Reina N, Murgier J. Radiation dose and magnification in pelvic X-ray: EOS™ imaging system versus plain radiographs. *Orthop Traumatol Surg Res.* 2017 Sep 20
- Hey HWD, Tan KA, Kantharajanna SB, Teo AQA, Chan CX, Liu KG, Wong HK. Using spinopelvic parameters to estimate residual lumbar lordosis assuming previous lumbosacral fusion—a study of normative values. *Spine J.* 2017 Aug 16

- Westberry DE, Carpenter AM. 3D Modeling of Lower Extremities With Biplanar Radiographs: Reliability of Measures on Subsequent Examinations. *J Pediatr Orthop.* 2017 Aug 2
- Lazennec JY, Thauron F, Robbins CB, Pour AE. Acetabular and Femoral Anteversions in Standing Position are Outside the Proposed Safe Zone After Total Hip Arthroplasty. *J Arthroplasty.* 2017 Jun 20
- Pasha S, Schlösser T, Zhu X, Mellor X, Castelein R, Flynn J. Application of Low-dose Stereoradiography in In Vivo Vertebral Morphologic Measurements: Comparison With Computed Tomography. *J Pediatr Orthop.* 2017 Jun 30
- Hey HWD, Wong GC, Chan CX, Lau LL, Kumar N, Thambiah JS, Ruiz JN, Liu KG, Wong HK. Reproducibility of sagittal radiographic parameters in adolescent idiopathic scoliosis-a guide to reference values using serial imaging. *Spine J.* 2017 Jun;17(6):830-836
- Hey HWD, Tan KA, Neo CS, Lau ET, Choong DA, Lau LL, Liu GK, Wong HK. T9 versus T10 as the upper instrumented vertebra for correction of adult deformity-rationale and recommendations. *Spine J.* 2017 May;17(5):615-621
- Hey HW, Lau ET, Wong CG, Tan KA, Liu GK, Wong HK. Cervical Alignment Variations in Different Postures and Predictors of Normal Cervical Kyphosis - A New Understanding. *Spine (Phila Pa 1976).* 2017 Mar 16
- Loppini M, Longo UG, Caldarella E, Rocca AD, Denaro V, Grappiolo G. Femur first surgical technique: a smart non-computer-based procedure to achieve the combined anteversion in primary total hip arthroplasty. *BMC Musculoskelet Disord.* 2017 Aug 1;18(1):331
- Loppini M, Longo UG, Ragucci P, Trenti N, Balzarini L, Grappiolo G. Analysis of the Pelvic Functional Orientation in the Sagittal Plane: A Radiographic Study With EOS 2D/3D Technology. *J Arthroplasty.* 2017 Mar;32(3):1027-1032
- Lafage R, Liabaud B, Diebo BG, Oren JH, Vira S, Pesenti S, Protosaltis TS, Errico TJ, Schwab FJ, Lafage V. Defining the Role of the Lower Limbs in Compensating for Sagittal Malalignment. *Spine (Phila Pa 1976).* 2017 Mar 16
- Cobetto N, Aubin CE, Parent S, Barchi S, Turgeon I, Labelle H. 3D correction of AIS in braces designed using CAD/CAM and FEM: a randomized controlled trial. *Scoliosis and Spinal Disorders.* 2017, 12:24
- Bao H, Varghese J, Lafage R, Liabaud B, Diebo B, Ramchandran S, Day L, Jalai C, Cruz D, Errico T, Protosaltis T, Passias P, Buckland A, Qiu Y, Schwab F, Lafage V. Principal radiographic characteristics for cervical spinal deformity: A health-related quality of life analysis. *Spine (Phila Pa 1976).* 2017 Mar 8
- Obeid I, Diebo BG, Boissiere L, Bourghli A, Cawley DT, Larrieu D, Pointillart V, Challier V, Vital JM, Lafage V. Single Level Proximal Thoracic Pedicle Subtraction Osteotomy for Fixed Hyperkyphotic Deformity: Surgical Technique and Patient Series. *Operative Neurosurgery,* 2017
- Aubin CE, Clin J, Rawlinson J. Biomechanical simulations of costo-vertebral and anterior vertebral body tethers for the fusionless treatment of pediatric scoliosis. *J Orthop Res.* 2017 Jul 7
- Smith JS, Shaffrey CI, Bess S, Shamji MF, Brodke D, Lenke LG, Fehlings MG, Lafage V, Schwab F, Vaccaro AR, Ames CP. Recent and Emerging Advances in Spinal Deformity. *Neurosurgery.* 2017 Mar 1;80(3S):S70-S85
- Sullivan TB, Bastrom T, Reighard F, Jeffords M, Newton PO. A Novel Method for Estimating Three-Dimensional Apical Vertebral Rotation Using Two-Dimensional Coronal Cobb Angle and Thoracic Kyphosis. *Spine Deform.* 2017 Jul;5(4):244-249
- Bao H, Lafage R, Liabaud B, Elysée J, Diebo BG, Poorman G, Jalai C, Passias P, Buckland A, Bess S, Errico T, Lenke LG, Gupta M, Kim HJ, Schwab F, Lafage V. Three types of sagittal alignment regarding compensation in asymptomatic adults: the contribution of the spine and lower limbs. *Eur Spine J.* 2017 Jun 6

- Clavé A, Maurer DG, Nagra NS, Fazilleau F, Lefèvre C, Stindel E. Reproducibility of length measurements of the lower limb by using EOS™. *Musculoskelet Surg.* 2017 Nov 1
- Ilharreborde B, Ferrero E, Angelliaume A, Lefèvre Y, Accadbled F, Simon AL, de Gauzy JS, Mazda K. Selective versus hyperselective posterior fusions in Lenke 5 adolescent idiopathic scoliosis: comparison of radiological and clinical outcomes. *Eur Spine J.* 2017 Jun;26(6):1739-1747
- Angelliaume A, Ferrero E, Mazda K, Le Hanneur M, Accadbled F, de Gauzy JS, Ilharreborde B. Titanium vs cobalt chromium: what is the best rod material to enhance adolescent idiopathic scoliosis correction with sublaminar bands?. *Eur Spine J.* 2017 Jun;26(6):1732-1738
- Abrisham SM, Bouzarjomehri F, Nafisi-Moghadam R, Sobhan MR, Gadimi M, Omidvar F. A Comparison of Patients Absorption Doses with Bone Deformity Due to the EOS Imaging and Digital Radiology. *Arch Bone Jt Surg.* 2017; 5(3): 145-148
- Pesenti S, Ghailane S, Varghese JJ, Ollivier M, Peltier E, Choufani E, Bollini G, Blondel B, Jouve JL. Bone substitutes in adolescent idiopathic scoliosis surgery using sublaminar bands: is it useful? A case-control study. *Int Orthop.* 2017 May 24
- Buckland AJ, Ramchandran S, Day L, Bess S, Protosaltis T, Passias PG, Diebo BG, Lafage R, Lafage V, Sure A, Errico TJ. Radiological lumbar stenosis severity predicts worsening sagittal malalignment on full-body standing stereoradiographs. *Spine J.* 2017 May 17
- Giudici F, Galbusera F, Zagra A, Wilke HJ, Archetti M, Scaramuzzo L. Determinants of the biomechanical and radiological outcome of surgical correction of adolescent idiopathic scoliosis surgery: the role of rod properties and patient characteristics. *Eur Spine J.* 2017 May 23
- Jensen J, Mussmann BR, Hjarbæk J, Al-Aubaidi Z, Pedersen NW, Gerke O, Torfing T. Microdose acquisition in adolescent leg length discrepancy using a low-dose biplane imaging system. *Acta Radiol.* 2017 Jan
- Zeighami A, Dumas R, Kanhonou M, Hagemester N, Lavoie F, de Guise JA, Aissaoui R. Tibio-femoral joint contact in healthy and osteoarthritic knees during quasi-static squat: A bi-planar X-ray analysis. *J Biomech.* 2017 Jan 19
- Hasegawa K, Okamoto M, Hatsushikano S, Shimoda H, Ono M, Homma T, Watanabe K. Standing sagittal alignment of the whole axial skeleton with reference to the gravity line in humans. *J Anat.* 2017 Jan 27
- Nicholson KF, Richardson RT, Miller F, Richards JG. Determining 3D scapular orientation with scapula models and biplane 2D images. *Med Eng Phys.* 2017 Jan 23
- Kadoury S, Mandel W, Roy-Beaudry M, Nault ML, Parent S. 3D Morphology Prediction of Progressive Spinal Deformities from Probabilistic Modeling of Discriminant Manifolds. *IEEE Trans Med Imaging.* 2017 Jan 23
- Le Navéaux F, Aubin CE, Parent S, O Newton P, Labelle H. 3D rod shape changes in adolescent idiopathic scoliosis instrumentation: how much does it impact correction? *Eur Spine J.* 2017 Feb 8
- Bassani T, Ottardi C, Costa F, Brayda-Bruno M, Wilke HJ, Galbusera F. Semiautomated 3D Spine Reconstruction from Biplanar Radiographic Images: Prediction of Intervertebral Loading in Scoliotic Subjects. *Front Bioeng Biotechnol.* 2017 Jan 20;5:1
- Roskopf AB, Buck FM, Pfirmann CW, Ramseier LE. Femoral and tibial torsion measurements in children and adolescents: comparison of MRI and 3D models based on low-dose biplanar radiographs. *Skeletal Radiol.* 2017 Feb 3
- Bakouny Z, Assi A, Massaad A, Saghbini E, Lafage V, Skalli W, Ghanem I, Kreichati G. Roussouly's sagittal spino-pelvic morphotypes as determinants of gait in asymptomatic adult subjects. *Gait Posture.* 2017 Feb 22;54:27-33

- Sailhan F, Jacob L, Hamadouche M. Differences in limb alignment and femoral mechanical-anatomical angles using two dimension versus three dimension radiographic imaging. *Int Orthop.* 2017 Feb 24
- Agten CA, Jonczy M, Ullrich O, Pfirrmann CW, Sutter R, Buck FM. Measurement of Acetabular Version based on Biplanar Radiographs with 3D Reconstructions in Comparison to CT as Reference Standard in Cadavers. *Clin Anat.* 2017 Mar 13
- Ortiz A. The EOS Imaging System: Promising Technology in Skeletal Imaging. *Radiol Technol.* 2017 Mar;88(4):448-450
- Assi A, Bakouny Z, Sauret C, Saghbini E, Khalil N, Chelala L, Naoum E, Yared F, Skalli W, Ghanem I. Influence of patient rotational malpositioning on pelvic parameters assessed on lateral radiographs. *Clin Radiol.* 2017 Apr 22
- Parvaresh K, Osborn E, Reighard F, Doan J, Bastrom TP, Newton P. Predicting 3D Thoracic Kyphosis Using Traditional 2D Radiographic Measurements in Adolescent Idiopathic Scoliosis. *Spine Deformity, Volume 5, Issue 3, May 2017, Pages 159-165.*
- Lazennec JY, Clark IC, Folinais D, Tahar IN, Pour A. What is the impact of a spinal fusion on acetabular implant orientation in functional standing and sitting positions? *J Arthroplasty.* 2017
- Le Navéaux F, Labelle H, Parent S, Newton PO, Aubin CE. Are there 3D Changes in Spine and Rod Shape in the 2 Years After Adolescent Idiopathic Scoliosis Instrumentation? *Spine.* 2017
- Sullivan TB, Reighard FG, Osborn EJ, Parvaresh KC, Newton PO. Thoracic Idiopathic Scoliosis Severity Is Highly Correlated with 3D Measures of Thoracic Kyphosis. *J Bone Joint Surg Am.* 2017 Jun 7;99(11):e54
- DelSole EM, Vigdorich JM, Schwarzkopf R, Errico TJ, Buckland AJ. Total Hip Arthroplasty in the Spinal Deformity Population: Does Degree of Sagittal Deformity Affect Rates of Safe Zone Placement, Instability, or Revision? *J Arthroplasty.* 2017 Jun;32(6):1910-1917
- Ferrero E, Lafage R, Diebo BG, Challier V, Illharreborde B, Schwab F, Skalli W, Guigui P, Lafage V. Tridimensional Analysis of Rotatory Subluxation and Sagittal Spinopelvic Alignment in the Setting of Adult Spinal Deformity. *Spine Deform.* 2017 Jul;5(4):255-264
- Lazennec JY, Chometon Q, Folinais D, Robbins CB, Pour AE. Are advanced three-dimensional imaging studies always needed to measure the coronal knee alignment of the lower extremity? *Int Orthop.* 2016 Nov 14
- Ben Abdennebi A, Aubry S, Ounalli L, Fayache MS, Delabrousse E, Petegnief Y. Comparative dose levels between CT-scanner and slot-scanning device (EOS system) in pregnant women pelvimetry. *Phys Med.* 2016 Dec 16
- Le Navéaux F, Larson AN, Labelle H, Wang X, Aubin CE. How does implant distribution affect 3D correction and bone-screw forces in thoracic adolescent idiopathic scoliosis spinal instrumentation?. *Clin Biomech.* 2016
- Hui SCN, Chu WCW. Supplementary Addendum to “Radiation dose of digital radiography (DR) versus micro-dose x-ray (EOS) on patients with adolescent idiopathic scoliosis: 2016 SOSORT- IRSSD “John Sevastic Award” Winner in Imaging Research”. *Scoliosis Spinal Disord,* 2018
- Skalli W, Vergari C, Ebermeyer E, Courtois I, Drevelle X, Kohler R, Abelin-Genevois K, Dubousset J. Early Detection of Progressive Adolescent Idiopathic Scoliosis: A Severity Index. *Spine (Phila Pa 1976).* 2016 Oct 24
- Rouissi J, Arvieu R, Dubory A, Vergari C, Bachy M, Vialle R. Intra and inter-observer reliability of determining degree of pelvic obliquity in neuromuscular scoliosis using the EOS-CHAIR® protocol. *Childs Nerv Syst.* 2016 Dec 27
- Thelen T, Thelen P, Demezou H, Aunoble S, Le Huec JC. Normative 3D acetabular orientation measurements by the low-dose EOS imaging system in 102 asymptomatic subjects in



standing position: analyses by side, gender, pelvic incidence and reproducibility. *Orthop Traumatol Surg Res.* 2016 Dec 23

- Hui SC, Pialasse JP, Wong JY, Lam TP, Ng BK, Cheng JC, Chu WC. Radiation dose of digital radiography (DR) versus micro-dose x-ray (EOS) on patients with adolescent idiopathic scoliosis: 2016 SOSORT- IRSSD "John Sevastic Award" Winner in Imaging Research. *Scoliosis Spinal Disord.* 2016 Dec 29;11:46
- Tabard-Fougère A, Bonnefoy-Mazure A, Hanquinet S, Lascombes P, Armand S, Dayer R. Validity and Reliability of Spine Rasterstereography in Patients with Adolescent Idiopathic Scoliosis. *Spine (Phila Pa 1976).* 2016 May 11
- Assi A, Sauret C, Massaad A, Bakouny Z, Pillet H, Skalli W, Ghanem I. Validation of hip joint center localization methods during gait analysis using 3D EOS imaging in typically developing and cerebral palsy children. *Gait Posture.* 2016 Jul;48:30-5
- Yaszay B, Bastrom TP, Bartley CE, Parent S, Newton PO. The effects of the three-dimensional deformity of adolescent idiopathic scoliosis on pulmonary function. *Eur Spine J.* 2016 Aug 11.
- Singhatanadgige W, Kang DG, Luksanapruksa P, Peters C, Riew KD. Correlation and Reliability of Cervical Sagittal Alignment Parameters between Lateral Cervical Radiograph and Lateral Whole-Body EOS Stereoradiograph. *Global Spine J.* 2016 Sep;6(6):548-54.
- Pytiak A, Bomar JD, Peterson JB, Schmitz MR, Pennock AT, Wenger DR, Upasani VV. Analysis of spinal alignment and pelvic parameters on upright radiographs: implications for acetabular development. *J Hip Preserv Surg.* 2016 Apr 4;3(3):208-14
- Lazennec JY, Folinais D, Bendaya S, Rousseau MA, Pour AE. The global alignment in patients with lumbar spinal stenosis: our experience using the EOS full-body images. *Eur J Orthop Surg Traumatol.* 2016 Oct;26(7):713-24
- Schlégl ÁT, O'Sullivan I, Varga P, Than P, Vermes C. Determination and correlation of lower limb anatomical parameters and bone age during skeletal growth (based on 1005 cases). *J Orthop Res.* 2016 Aug 11.
- Sauret C, Pillet H, Skalli W, Sangeux M. On the use of knee functional calibration to determine the medio-lateral axis of the femur in gait analysis: comparison with EOS biplanar radiographs as reference. *Gait Posture.* 2016 Sep 12;50:180-184
- Price R, Okamoto M, Le Huec JC, Hasegawa K. Normative spino-pelvic parameters in patients with the lumbarization of S1 compared to a normal asymptomatic population. *Eur Spine J.* 2016 Sep 26
- Knafo J, Thelen T, Verdier D, Creppy L, Tournier C, Fabre T. Reproducibility of low-dose stereography measurements of femoral torsion after IM nailing of femoral shaft fractures and in normal femurs. *Orthop Traumatol Surg Res.* 2016
- Hey HW, Wong CG, Lau ET, Tan KA, Lau LL, Liu KG, Wong HK. Differences in erect sitting and natural sitting spinal alignment-insights into a new paradigm and implications in deformity correction. *Spine J.* 2016 Aug 22
- Nerot A, Skalli W, Wang X. A principal component analysis of the relationship between the external body shape and internal skeleton for the upper body. *J Biomech.* 2016 Sep 14
- Vidal C, Mazda K, Ilharreborde B. Sagittal spino-pelvic adjustment in severe Lenke 1 hypokyphotic adolescent idiopathic scoliosis patients. *Eur Spine J.* 2016 Oct;25(10):3162-3169
- Kim YC, Lenke LG, Lee SJ, Gum JL, Wilaratrasi S, Blanke KM. The cranial sagittal vertical axis (CrSVA) is a better radiographic measure to predict clinical outcomes in adult spinal deformity surgery than the C7 SVA: a monocentric study. *Eur Spine J.* 2016 Oct 14
- Day LM, Ramchandran S, Jalai CM, Diebo BG, Liabaud B, Lafage R, Protosaltis T, Passias PG, Schwab FJ, Bess S, Errico TJ, Lafage V, Buckland AJ. Thoracolumbar Realignment Surgery Results in Simultaneous Reciprocal Changes in Lower Extremities and Cervical Spine. *Spine (Phila Pa 1976).* 2016 Oct 17

- Donzelli S, Zaina F, Lusini M, Minnella S, Respizzi S, Balzarini L, Poma S, Negrini S. The three dimensional analysis of the Sforzesco brace correction. *Scoliosis Spinal Disord.* 2016 Oct 14;11(Suppl 2):34
- Ferrero E, Lafage R, Vira S, Rohan PY, Oren J, Delsole E, Guigui P, Schwab F, Lafage V, Skalli W. Three-dimensional reconstruction using stereoradiography for evaluating adult spinal deformity: a reproducibility study. *Eur Spine J.* 2016 Nov 5
- Ruzbarsky JJ, Goodbody C, Dodwell E. Closing the growth plate: a review of indications and surgical options. *Curr Opin Pediatr.* 2016 Nov 14
- Jalai CM, Cruz DL, Diebo BG, Poorman G, Lafage R, Bess S, Ramachandran S, Day LM, Vira S, Liabaud B, Henry JK, Schwab FJ, Lafage V, Passias PG. Full-Body Analysis of Age-Adjusted Alignment in Adult Spinal Deformity Patients and Lower-Limb Compensation. *Spine (Phila Pa 1976).* 2016 Aug 23
- Morvan A, Moreau S, Combourieu B, Pansard E, Marmorat JL, Carlier R, Judet T, Lonjon G. Standing radiological analysis with a low-dose biplanar imaging system (EOS system) of the position of the components in total hip arthroplasty using an anterior approach: a cohort study of 102 patients. *Bone Joint J.* 2016 Mar;98-B(3):326-33
- Newton P, Khandwala Y, Bartley C, Reighard F, T. Bastrom T, Yaszay B. New EOS Imaging Protocol Allows a Substantial Reduction in Radiation Exposure for Scoliosis Patients. *Spine Deformity,* 2016.
- Roskopf AB, Pfirrmann CW, Buck FM. Assessment of two-dimensional (2D) and three-dimensional (3D) lower limb measurements in adults: Comparison of micro-dose and low-dose biplanar radiographs. *Eur Radiol.* 2016
- Hocquet A, Cornelis F, Jirrot A, Castaings L, de Sèze M, Hauger O. Patient-specific 3D models created by 3D imaging system or bi-planar imaging coupled with Moiré-Fringe projections: a comparative study of accuracy and reliability on spinal curvatures and vertebral rotation data. *Eur Spine J.* 2016
- Kato S, Debaud C, Zeller RD. Three-dimensional EOS Analysis of Apical Vertebral Rotation in Adolescent Idiopathic Scoliosis. *J Pediatr Orthop.* 2016
- Massaad A, Assi A, Bakouny Z, Sauret C, Khalil N, Skalli W, Ghanem I. Three-dimensional evaluation of skeletal deformities of the pelvis and lower limbs in ambulant children with cerebral palsy. *Gait Posture.* 2016 Jun 23;49:102-107.
- Hasegawa K, Okamoto M, Hatsushikano S, Shimoda H, Ono M, Watanabe K. Normative values of spino-pelvic sagittal alignment, balance, age, and health-related quality of life in a cohort of healthy adult subjects. *Eur Spine J,* 2016
- Mahboub-Ahari A, Hajebrahimi S, Yusefi M, Velayati A. EOS imaging versus current radiography: A health technology assessment study. *Med J Islam Repub Iran* 2016 (17 February). Vol. 30:331
- Clément J, Dumas R, Hagemester N, de Guise JA. Can generic knee joint models improve the measurement of osteoarthritic knee kinematics during squatting activity? *Comput Methods Biomech Biomed Engin.* 2016
- Zhang C, Skalli W, Lagacé PY, Billuart F, Ohl X, Cresson T, Bureau NJ, Rouleau DM, Roy A, Tétreault P, Sauret C, de Guise JA, Hagemester N. Investigation of 3D glenohumeral displacements from 3D reconstruction using biplane X-ray images: Accuracy and reproducibility of the technique and preliminary analysis in rotator cuff tear patients. *J Electromyogr Kinesiol.* 2016
- Kaneko K, Aota Y, Sekiya T, Yamada K, Saito T. Validation study of arm positions for evaluation of global spinal balance in EOS imaging. *Eur J Orthop Surg Traumatol.* 2016 Jul 7.
- Sattout A, Clin J, Cobetto N, Labelle H, Aubin CE. Biomechanical Assessment of Providence Nighttime Brace for the Treatment of Adolescent Idiopathic Scoliosis. *Spine Deform.* 2016 Jul;4(4):253-260

- Melhem E, Assi A, El Rachkidi E, Ghanem I. EOS® biplanar X-ray imaging: concept, developments, benefits, and limitations. *J Child Orthop*. 2016.
- Verdier N, Billaud A, Masquefa T, Pallaro J, Fabre T, Tournier C. EOS-based cup navigation: Randomised controlled trial in 78 total hip arthroplasties. *Orthop Traumatol Surg Res*. 2016 Jun;102(4):417-21
- Obeid I, Boissière L, Yilgor C, Larrieu D, Pellisé F, Alanay A, Acaroglu E, Perez-Gruoso FJ, Kleinstück F, Vital JM, Bourghli A; European Spine Study Group, ESSG. Global tilt: a single parameter incorporating spinal and pelvic sagittal parameters and least affected by patient positioning. *Eur Spine J*. 2016 Nov;25(11):3644-3649
- Hirsch C, Ilharberde B, Mazda K. Flexibility analysis in adolescent idiopathic scoliosis on side-bending images using the EOS imaging system. *Orthop Traumatol Surg Res*. 2016 Jun;102(4):495-500
- Ferrero E, Liabaud B, Challier V, Lafage R, Diebo BG, Vira S, Liu S, Vital JM, Ilharberde B, Protopsaltis TS, Errico TJ, Schwab FJ, Lafage V. Role of pelvic translation and lower-extremity compensation to maintain gravity line position in spinal deformity. *J Neurosurg Spine*. 2016 Mar;24(3):436-46
- Simon AL, Ferrero E, Noelle Larson A, Kaufman KR. Stereoradiography imaging motion artifact: does it affect radiographic measures after spinal instrumentation? *Eur Spine J*. 2016 Mar 3
- Morin SN, Wall M, Belzile EL, Godbout B, Moser TP, Michou L, Ste-Marie LG, de Guise JA, Rahme E, Brown JP. Assessment of femur geometrical parameters using EOS™ imaging technology in patients with atypical femur fractures; preliminary results. *Bone*. 2016 Feb;83:184-9
- Amabile C, Pillet H, Lafage V, Barrey C, Vital JM, Skalli W. A new quasi-invariant parameter characterizing the postural alignment of young asymptomatic adults. *Eur Spine J*. 2016
- Cogniet A, Aunoble S, Rigal J, Demezou H, Sadikki R, Le Huec JC. Clinical and radiological outcomes of lumbar posterior subtraction osteotomies are correlated to pelvic incidence and FBI index: Prospective series of 63 cases. *Eur Spine J*. 2016
- Vira S, Diebo B, Spiegel M, Liabaud B, Henry J, Oren J, Lafage R, Tanzi E, Protopsaltis T, Errico T, Schwab F, Lafage V. Is There a Gender-Specific Full Body Sagittal Profile for Different Spinopelvic Relationships? A Study on Propensity-Matched Cohorts? *Spine Deformity*. 2016
- Buckland AJ, Vira S, Oren JH, Lafage R, Harris BY, Spiegel MA, Diebo BG, Liabaud B, Protopsaltis TS, Schwab FJ, Lafage V, Errico TJ, Bendo JA. When is compensation for lumbar spinal stenosis a clinical sagittal plane deformity? *Spine J*. 2016
- Iyer S, Lenke LG, Nemani VM, Fu M, Shifflett GD, Albert TJ, Sides BA, Metz LN, Cunningham ME, Kim HJ. Variations in Occipitocervical and Cervicothoracic Alignment Parameters based on Age: A Prospective Study of Asymptomatic Volunteers using Full-Body Radiographs. *Spine*. 2016
- Iyer S, Lenke LG, Nemani VM, Albert TJ, Sides BA, Metz LN, Cunningham ME, Kim HJ. Variations in Sagittal Alignment Parameters based on Age: A Prospective Study of Asymptomatic Volunteers using Full-Body Radiograph. *Spine*. 2016
- Nam D, Vajapey S, Nunley R, Barrack R. The Impact of Imaging Modality on the Measurement of Coronal Plane Alignment Following Total Knee Arthroplasty. *J Arthroplasty*. 2016 Oct;31(10):2314-9
- Meijer MF, Boerboom AL, Bulstra SK, Reininga IH, Stevens M. Do CAS measurements correlate with EOS 3D alignment measurements in primary TKA? *Knee Surg Sports Traumatol Arthrosc*. 2016
- Meijer MF, Velleman T, Boerboom AL, Bulstra SK, Otten E, Stevens M, Reininga IH. The Validity of a New Low-Dose Stereoradiography System to Perform 2D and 3D Knee Prosthetic Alignment Measurements. *Plos one*. 2016



- Caouette C, Ikin N, Villemure I, Arnoux PJ, Rauch F, Aubin CÉ. Geometry reconstruction method for patient-specific finite element models for the assessment of tibia fracture risk in osteogenesis imperfecta. *Med Biol Eng Comput.* 2016
- Liow L, Tsai T, Dimitriou D, Li G, Kwon Y. Does 3D In-Vivo Component Rotation Affect Clinical Outcomes In Unicompartmental Knee Arthroplasty? *J Arthroplasty.* 2016
- Flecher X, Ollivier M, Argenson JN. Lower limb length and offset in total hip arthroplasty. *Orthop Traumatol Surg Res.* 2016 Feb;102(1 Suppl):S9-20
- Esposito CI, Miller TT, Kim HJ, Barlow BT, Wright TM, Padgett DE, Jerabek SA, Mayman D. Does Degenerative Lumbar Spine Disease Influence Femoroacetabular Flexion in Patients Undergoing Total Hip Arthroplasty? *Clin Orthop Relat Res.* 2016
- Bendaya S, Anglin C, Lazennec JY, Allena R, Thoumie P, Skalli W. Good vs. Poor Results after Total Hip Arthroplasty: An Analysis Method using Implant and Anatomical Parameters with the EOS® Imaging System. *J Arthroplasty.* 2016
- Lazennec JY, Brusson A, Rousseau MA, Robbins C, Pour AE. Do Patients' Perceptions of Leg Length Correlate with Standing 2- and 3-dimensional Radiographic Imaging? *J Arthroplasty.* 2016
- Tsai TY, Dimitriou D, Hosseini A, Liow MH, Torriani M, Li G, Kwon YM. Assessment of accuracy and precision of 3D reconstruction of unicompartmental knee arthroplasty in upright position using biplanar radiography. *Med Eng Phys.* 2016 Jul;38(7):633-638
- Irrera P, Bloch I, Delplanque M. A flexible patch based approach for combined denoising and contrast enhancement of digital X-ray images. *Med Image Anal.* 2016 Feb;28:33-45
- Dubois G, Rouch P, Bonneau D, Gennisson JL, Skalli W. Muscle parameters estimation based on biplanar radiography. *Comput Methods Biomech Biomed Engin.* 2016
- Rochcongar G, Pillet H, Bergamini E, Moreau S, Thoreux P, Skalli W, Rouch P. A new method for the evaluation of the end-to-end distance of the knee ligaments and popliteal complex during passive knee flexion. *Knee.* 2016
- Amabile C, Choisne J, Nérot A, Pillet H, Skalli W. Determination of a new uniform thorax density representative of the living population from 3D external body shape modeling. *J Biomech.* 2016.
- La Barbera L, Costa F, Villa T. ISO 12189 standard for the preclinical evaluation of posterior spinal stabilization devices - II: A parametric comparative study. *Proc Inst Mech Eng H.* 2016 Feb;230(2):134-44
- Cebulski-Delebarre A, Boutry N, Szymanski C, Maynou C, Lefebvre G, Amzallag-Bellenger E, Cotten A. Correlation between primary flat foot and lower extremity rotational misalignment in adults. *Diagn Interv Imaging.* 2016 Jun 13
- Clavel A, Thevenard-Berger P, Verdun F, Létang J, Darbon A. Organ radiation exposure with EOS: GATE simulations versus TLD measurements. *Physics of Medical Imaging,* 2016
- Dominguez D, Faundez A, Demezou H, Cogniet A, Le Huec JC. Normative values for the L5 incidence in a subgroup of transitional anomalies extracted from 147 asymptomatic subjects. *Eur Spine J.* 2016
- Hey H, Teo AQ, Tan KA, Ng LW, Lau LL, Liu KG, Wong HK. How the spine differs in standing and in sitting-important considerations for correction of spinal deformity. *Spine J.* 2016
- Henao J, Aubin CÉ, Labelle H, Arnoux PJ. Patient-specific finite element model of the spine and spinal cord to assess the neurological impact of scoliosis correction: preliminary application on two cases with and without intraoperative neurological complications. *Comput Methods Biomech Biomed Engin.* 2016;19(8):901-10.
- Le Huec JC, Hasegawa K. Normative values for the spine shape parameters using 3D standing analysis from a database of 268 asymptomatic Caucasian and Japanese subjects. *Eur Spine J.* 2016

- Pasha S, Capraro A, Cahill PJ, Dormans JP, Flynn JM. Bi-planar spinal stereoradiography of adolescent idiopathic scoliosis: considerations in 3D alignment and functional balance. *Eur Spine J.* 2016
- Pasha S, Ho M, Ho-Fung V, Davidson RS. Application of weight bearing biplanar stereoradiography in assessment of lower limb deformity. *Journal of Limb Lengthening & Reconstruction,* 2016
- Pasha S, Cahill PJ, Dormans JP, Flynn JM. Characterizing the differences between the 2D and 3D measurements of spine in adolescent idiopathic scoliosis. *Eur Spine J.* 2016
- Vergari C, Courtois I, Ebermeyer E, Bouloussa H, Vialle R, Skalli W. Experimental validation of a patient-specific model of orthotic action in adolescent idiopathic scoliosis. *Eur Spine J.* 2016
- Schmid SL, Buck FM, Böni T, Farshad M. Radiographic measurement error of the scoliotic curve angle depending on positioning of the patient and the side of scoliotic curve. *Eur Spine J.* 2015 Sep 30
- Ilharreborde B, Ferrero E, Alison M, Mazda K. EOS microdose protocol for the radiological follow-up of adolescent idiopathic scoliosis. *Eur Spine J.* April 2015.
- Lazenec JY, Brusson A, Folinais D, Zhang A, Pour AE, Rousseau MA. Measuring extension of the lumbar-pelvic-femoral complex with the EOS system. *Eur J Orthop Surg Traumatol.* 2015 Feb.
- Demzik A, Alvi H, Delagrammaticas D, Martell J, Beal M, Manning M. Inter and Intra-rater Repeatability & Reliability of EOS Three Dimensional Imaging Analysis Software. *Journal of arthroplasty.* Nov 2015.
- Thépaut M, Brochard S, Leboucher J, Lempereur M, Stindel E, Tissot V, Borotikar BS. Measuring physiological and pathological femoral anteversion using a biplanar low-dose X-ray system: validity, reliability, and discriminative ability in cerebral palsy. *Skeletal Radiol.* 2015 Nov.
- Barbier O, Mainard D. Comments on: Acetabular component navigation in lateral decubitus based on EOS imaging: A preliminary study of 13 cases of A. Billaud, N. Verdier, R. de Bartolo, N. Lavoine, D. Chauveaux, T. Fabre. Published in *Orthop Traumatol Surg Res* 2015;101(3):271-5. *Orthop Traumatol Surg Res.* 2015 Nov;101(7):883.
- Dervaux B, Szwarcensztein K, Jossieran A; participants of round table N°4 of Giens XXX.; Barna A, Carbonneil C, Chevrie K, Debroucker F, Grumblat A, Grumel O, Massol J, Maugendre P, Méchin H, Orlikowski D, Roussel C, Rumeau-Pichon C, Sales JP, Vicaut E. Assessment and non-clinical impact of medical devices. *Thérapie.* 2015 Jan-Feb;70(1):57-68
- Galbusera F, Bassani T, La Barbera L, Ottardi C, Schlager B, Brayda-Bruno M, Villa T, Wilke HJ. Planning the Surgical Correction of Spinal Deformities: Toward the Identification of the Biomechanical Principles by Means of Numerical Simulation. *Front Bioeng Biotechnol.* 2015 Nov 3;3:178
- Nérot A, Choisne J, Amabile C, Travert C, Pillet H, Wang X, Skalli W. A 3D reconstruction method of the body envelope from biplanar X-rays: Evaluation of its accuracy and reliability. *J Biomech.* 2015 Dec 16;48(16):4322-6
- Dagneaux L, Thoreux P, Eustache B, Canovas F, Skalli W. Sequential 3D analysis of patellofemoral kinematics from biplanar x-rays: In vitro validation protocol. *Orthop Traumatol Surg Res.* 2015 Nov;101(7):811-8
- Courvoisier A, Garin C, Vialle R, Kohler R. The change on vertebral axial rotation after posterior instrumentation of idiopathic scoliosis. *Childs Nerv Syst.* 2015
- Newton PO, Fujimori T, Doan J, Reighard FG, Bastrom TP, Misaghi A. Defining the "Three-Dimensional Sagittal Plane" in Thoracic Adolescent Idiopathic Scoliosis. *J Bone Joint Surg Am.* 2015 Oct 21

- Vergari C, Ribes G, Aubert B, Adam C, Miladi L, Ilharreborde B, Abelin-Genevois K, Rouch P, Skalli W. Evaluation of a Patient-Specific Finite-Element Model to Simulate Conservative Treatment in Adolescent Idiopathic Scoliosis. *Spine Deformity*, 2015
- Hull NC, Binkovitz LA, Schueler BA, Kolbe AB, Larson AN. Upright Biplanar Slot Scanning in Pediatric Orthopedics: Applications, Advantages, and Artifacts. *AJR Am J Roentgenol*. 2015.
- Luo D, Stans A, Schueler B, Larson N. Cumulative radiation exposure with EOS imaging compared with standard spine radiographs. *Spine Deformity*. 2015 Mar.
- Yvert M, Diallo A, Bessou P, Rehel JL, Lhomme E, Chateil JF. Radiography of scoliosis: Comparative dose levels and image quality between a dynamic flat-panel detector and a slot-scanning device (EOS system). *Diagn Interv Imaging*. 2015 Aug 14.
- Tarhan T, Froemel D, Meurer A. EOS imaging acquisition system: 2D/3D diagnostics of the skeleton. *Orthopade*. 2015 Nov 13. German.
- Hirsch C, Ilharreborde B, Mazda K. EOS suspension test for the assessment of spinal flexibility in adolescent idiopathic scoliosis. *Eur Spine J*. 2015 Feb.
- Bouloussa H, Dubory A, Seiler C, Morel B, Bachy M, Vialle R. A radiolucent chair for sitting-posture radiographs in non-ambulatory children: use in biplanar digital slot-scanning. *Pediatr Radiol*. 2015
- Newton P, Farnsworth C, Parvaresh K. Imaging and three-dimensional analysis of adolescent idiopathic scoliosis. *Seminars in Spine Surgery*. 2015.
- Briot K, Fechtenbaum J, Etcheto A, Kolta S, Feydy A, Roux C. Diagnosis of vertebral fractures using a low-dose biplanar imaging system. *Osteoporos Int*. 2015.
- Fechtenbaum J, Etcheto A, Kolta S, Feydy A, Roux C, Briot K. Sagittal balance of the spine in patients with osteoporotic vertebral fractures. *Osteoporos Int*. 2015 Aug 14.
- Ferrero E, Lafage R, Challier V, Diebo B, Guigui P, Mazda K, Schwab F, Skalli W, Lafage V. Clinical and stereoradiographic analysis of adult spinal deformity with and without rotatory subluxation. *Orthop Traumatol Surg Res*. 2015 Jul 17.
- Lazennec JY, Rousseau MA, Brusson A, Folinais D, Amel M, Clarke I, Pour AE. Total Hip Prostheses in Standing, Sitting and Squatting Positions: An Overview of Our 8 Years Practice Using the EOS Imaging Technology. *Open Orthop J*. 2015 Feb.
- Tiberi JV 3rd, Antoci V, Malchau H, Rubash HE, Freiberg AA, Kwon YM. What Is the Fate of THA Acetabular Component Orientation When Evaluated in the Standing Position? *The Journal of arthroplasty*. 2015 Mar.
- Nam D, Williams B, Hirsch J, Johnson S, Nunley R, Barrack R. Planned Bone Resections Using an MRI-Based Custom Cutting Guide System Versus 3-Dimensional, Weight-Bearing Images in Total Knee Arthroplasty. *The Journal of arthroplasty*. 2015 Apr.
- Billaud A, Verdier N, De Bartolo R, Lavoine N, Chauveaux T, Fabre T. Acetabular component navigation in lateral decubitus based on EOS imaging: A preliminary study of 13 cases. *Orthop Traumatol Surg Res*. 2015 May.
- Masquefa T, Verdier N, Gille O, Boissière L, Obeid I, Maillot C, Tournier C, Fabre T. Change in acetabular version after lumbar pedicle subtraction osteotomy to correct post-operative flat back: EOS measurements of 38 acetabula. *Orthop Traumatol Surg Res*. 2015 Sept.
- Clavé A, Fazilleau F, Cheval D, Williams T, Lefèvre C, Stindel E. Comparison of the reliability of leg length and offset data generated by three hip replacement CAOS systems using EOS™ imaging. *Orthop Traumatol Surg Res*. 2015 Aug 20.
- Bredow J, Katinakis F, Schlüter-Brust K, Krug B, Pfau D, Eysel P, Dargel J, Wegmann K. Influence of hip replacement on sagittal alignment of the lumbar spine: An EOS study. *Technol Health Care*. 2015.
- Tsai, T-Y. Dimitrou D, Lincoln Liow M-H, Rubah H, Li G, Kwon Y-M. 3D Imaging Analysis of Unicompartmental Knee Arthroplasty Evaluated in Standing Position: Component Alignment and In-Vivo Articular Contact. *Journal of arthroplasty*. Nov 2015.

- Garner MR, Dow M, Bixby E, Mintz DN, Widmann RF, Dodwell ER. Evaluating Length: The Use of Low-dose Biplanar Radiography (EOS) and Tantalum Bead Implantation. *J Pediatr Orthop.* 2015 Apr.
- Duprey S, Billuart F, Sah S, Ohl X, Robert T, Skalli W, Wang X. Three-Dimensional Rotations of the Scapula During Arm Abduction: Evaluation of the AMC Method by Comparison With a Model-Based Approach Using Biplanar X-ray. *J Appl Biomech.* 2015
- Cidambi K, Glaser D, Doan J, Newton P. Generation of a Patient-Specific Model of Normal Sagittal Alignment of the Spine. *Spine Deformity* 2015.
- Nérot A, Wang X, Pillet H, Skalli W. Estimation of hip joint center from the external body shape: a preliminary study. *CMBBE* 2015 Aug 3.
- Langlois K, Pillet H, Lavaste F, Rochcongar G, Rouch P, Thoreux P, Skalli W. Assessing the accuracy and precision of manual registration of both femur and tibia using EOS imaging system with multiple views. *CMBBE* 2015.
- Zhang C, Skalli W, Lagacé PY, Billuart F, Ohl X, Cresson T, Bureau NJ, Rouleau DM, Roy A, Tétreault P, Sauret C, de Guise JA, Hagemeister N. Investigation of 3D glenohumeral displacements from 3D reconstruction using biplane X-ray images: Accuracy and reproducibility of the technique and preliminary analysis in rotator cuff tear patients. *J Electromyogr Kinesiol.* 2015
- Clavel AH, Monnin P, Létang JM, Verdun FR, Darbon A. Characterising the EOS Slot-Scanning System with the Effective Detective Quantum Efficiency. *Radiat Prot Dosimetry.* 2015
- Nérot A, Choisine J, Amabile C, Travert C, Pillet H, Wang X, Skalli W. A 3D reconstruction method of the body envelope from biplanar X-rays: Evaluation of its accuracy and reliability. *J Biomech.* 2015 Nov 6.
- Ohl X, Hagemeister N, Zhang C, Billuart F, Gagey O, Bureau NJ, Skalli W. 3D scapular orientation on healthy and pathologic subjects using stereoradiographs during arm elevation. *J Shoulder Elbow Surg.* 2015
- Schlégl ÁT, Szuper K, Somoskeöy S, Than P. Three dimensional radiological imaging of normal lower-limb alignment in children. *Int Orthop.* 2015 Oct;39(10):2073-80
- Clément J, Dumas R, Hagemeister N, de Guise JA. Soft tissue artifact compensation in knee kinematics by multi-body optimization: Performance of subject-specific knee joint models. *J Biomech.* 2015 Nov 5;48(14):3796-802
- Nérot A, Skalli W, Wang X. An assessment of the realism of digital human manikins used for simulation in ergonomics. *Ergonomics.* 2015 May 28:1-13
- Gaumétou E, Mallet C, Souchet P, Mazda K, Ilharreborde B. Poor Efficiency of Eight-Plates in the Treatment of Lower Limb Discrepancy. *J Pediatr Orthop.* 2015 May 15
- Diebo BG, Ferrero E, Lafage R, Challier V, Liabaud B, Liu S, Vital JM, Errico TJ, Schwab FJ, Lafage V. Recruitment of compensatory mechanisms in sagittal spinal malalignment is age and regional deformity dependent: a full-standing axis analysis of key radiographical parameters. *Spine (Phila Pa 1976).* 2015 May 1;40(9):642-9
- Carreau J, Bastrom T, Petcharaporn M, Schulte C, Marks M, Illés T, Somoskeöy S, Newton P. Computer-Generated Three-Dimensional Spine Model From Biplanar Radiographs: A Validity Study in Idiopathic Scoliosis Curves Greater than 50 degrees. *Spine Deformity.* March 2014.
- Guggenberger R, Pfirrmann CW, Koch PP, Buck FM. Assessment of Lower Limb Length and Alignment by Biplanar Linear Radiography: Comparison With Supine CT and Upright Full-Length Radiography. *AJR.* 2014
- Sigmann M, Delabrousse E, Riethmuller D, Runge M, Peyron C, Aubry S. An evaluation of the EOS X-ray imaging system in pelvimetry. *Diagnostic and interventional imaging.* 2014.
- Barbier O, Skalli W, Mainard L, Mainard D. The reliability of the anterior pelvic plane for computer navigated acetabular component placement during total hip arthroplasty: Prospective study with the EOS imaging system. *Orthop Traumatol Surg Res.* 2014

- Rungprai C, Goetz JE, Arunakul M, Gao Y, Femino JE, Amendola A, Phisitkul P. Foot and Ankle Radiographic Parameters: Validation and Reproducibility With a Biplanar Imaging System Versus Conventional Radiography. *Foot Ankle Int.* 2014
- Guenoun B, El Hajj F, Biau D, Anract P, Courpied JP. Reliability of a New Method for Evaluating Femoral Stem Positioning After Total Hip Arthroplasty Based on Stereoradiographic 3D Reconstruction. *J Arthroplasty.* 2014
- Lazennec JY, Brusson A, Folinais D, Rousseau M, Pour AE. Offset and anteversion reconstruction after cemented and uncemented total hip arthroplasty: an evaluation with the low-dose EOS system comparing two- and three-dimensional imaging. *Int Orthop.* 2014.
- Pomerantz ML, Glaser D, Doan J, Kumar S, Edmonds EW. Three-dimensional biplanar radiography as a new means of accessing femoral version: a comparative study of EOS three-dimensional radiography versus computed tomography. *Skeletal Radiol.* 2014
- Blumer SL, Dinan D, Grissom LE. Benefits and unexpected artifacts of biplanar digital slot-scanning imaging in children. *Pediatr Radiol.* 2014 Feb 22.
- Molto A, Freire V, Feydy A, Paternotte S, Maksymowych P, Benhamou M, Rannou F, Dougados M, Gossec L. Assessing structural changes in axial spondyloarthritis using a low dose biplanar imaging system. *Rheumatology.* 2014.
- Dubousset J, Ilharreborde B, Le Huec JC. Use of EOS imaging for the assessment of scoliosis deformities: application to postoperative 3D quantitative analysis of the trunk. *Eur Spine J.* 2014.
- Le Huec JC, Faundez A, Dominguez D, Hoffmeyer P, Aunoble S. Evidence showing the relationship between sagittal balance and clinical outcomes in surgical treatment of degenerative spinal diseases: A literature review. *Int Orthop.* 2014 Sep 06.
- Amzallag-Bellenger E, Uyttenhove F, Nectoux E, Moraux A, Bigot J, Herbaux B, Boutry N. Idiopathic scoliosis in children and adolescents: assessment with a biplanar X-ray device. *Insights Imaging.* 2014 Sep 13.
- Le Huec JC, Demezou H, Aunoble S. Sagittal parameters of global cervical balance using EOS imaging: normative values from a prospective cohort of asymptomatic volunteers. *Eur Spine J* Oct 2014.
- Boissière L, Vital JM, Aunoble S, Fabre T, Gille O, Obeid I. Lumbo-pelvic related indexes: impact on adult spinal deformity surgery. *Eur Spine J.* 2014
- Ferre R, Gibon E, Hamadouche M, Feydy A, Drapé JL. Evaluation of a method for the assessment of anterior acetabular coverage and hip joint space width. *Skeletal Radiol.* 2014
- Roskopf AB, Ramseier LE, Sutter R, Pfirmann CW, Buck FM. Femoral and Tibial Torsion Measurement in Children and Adolescents: Comparison of 3D Models Based on Low-Dose Biplanar Radiography and Low-Dose CT. *AJR.* 2014
- Pailhé R, Bedes L, Sales de Gauzy J, Tran R, Cavaignac E, Accadbled F. Derotational femoral osteotomy technique with locking nail fixation for adolescent femoral antetorsion: surgical technique and preliminary study. *J Pediatr Orthop B.* 2014.
- Szuper K, Schlégl AT, Leidecker E, Vermes C, Somoskeöy S, Than P. Three-dimensional quantitative analysis of the proximal femur and the pelvis in children and adolescents using an upright biplanar slot-scanning X-ray system. *Pediatr Radiol.* 2014
- Schlegl AT, Szuper K, Somoskeoy S, Than P. Evaluation of the usefulness of the EOS 2D/3D system for the measurement of lower limbs anatomical and biomechanical parameters in children. *Orv Hetil* Oct, 2014.
- Meijer MF, Boerboom AL, Stevens M, Bulstra SK, Reininga IHF. Assessment of prosthesis alignment after revision total knee arthroplasty using EOS 2D and 3D imaging: a reliability study. *Plos one.* 2014

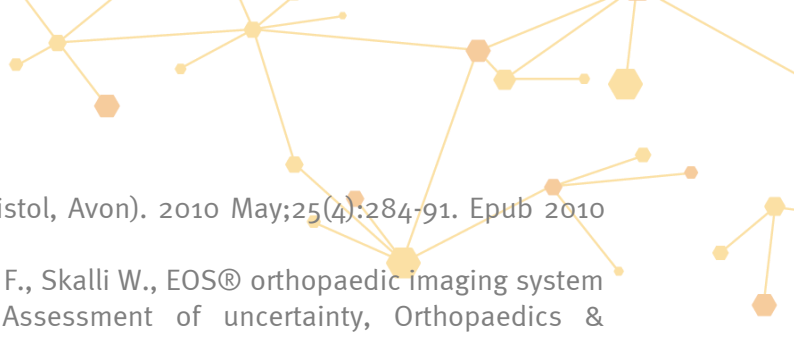
- Meyrignac O, Moreno R, Baunin C, Vial J, Accadbled F, Sommet A, de Gauzy JS, Sans N. Low-dose biplanar radiography can be used in children and adolescents to accurately assess femoral and tibial torsion and greatly reduce irradiation. *Eur Radiol*, 2014
- Bendaya S, Lazennec JY, Anglin C, Allena R, Sellam N, Thoumie P, Skalli W. Healthy vs. osteoarthritic hips: A comparison of hip, pelvis and femoral parameters and relationships using the EOS® system. *Clin Biomech*, 2014
- Sangeux M, Pillet H, Skalli W. Which method of hip joint centre localisation should be used in gait analysis?. *Gait and Posture*. 2014.
- Damet J, Fournier P, Monnin P, Sans-Merce M, Ceroni D, Zand T, Verdun FR, Baechler S. Occupational and patient exposure as well as image quality for full spine examinations with the EOS imaging system. *Medical physics*. 2014.
- Aubert B, Vergari C, Ilharreborde B, Courvoisier A, Skalli W. 3D reconstruction of rib cage geometry from biplanar radiographs using a statistical parametric model approach. *CMBBE*. 2014.
- Begon M, Scherrer SA, Coillard C, Rivard CH, Allard P. Three-dimensional vertebral wedging and pelvic asymmetries in the early stages of adolescent idiopathic scoliosis. *Spine J*, 2014.
- Al-Aubaidi Z, Lebel D, Oudjhane K, Zeller R. Three-dimensional imaging of the spine using the EOS system: is it reliable? A comparative study using computed tomography imaging. *J Pediatr Orthop B*. 2013.
- Folinai D, Thelen P, Delin C, Radier C, Catonne Y, Lazennec JY. Measuring femoral and rotational alignment: EOS system versus computed tomography. *Orthop Traumatol Surg Res*. 2013.
- Rousseau MA, Brusson A, Lazennec JY. Assessment of the axial rotation of the pelvis with the EOS imaging system: intra- and inter-observer reproducibility and accuracy study. *Eur J Orthop Surg Traumatol*. 2013.
- Escott BG, Ravi B, Weathermon AC, Acharya J, Gordon CL, Babyn PS, Kelley SP, Narayanan UG. EOS low-dose radiography: a reliable and accurate upright assessment of lower-limb lengths. *J Bone Joint Surg Am*. Dec 2013.
- Quijano S, Serrurier A, Aubert B, Laporte S, Thoreux P, Skalli W. Three-dimensional reconstruction of the lower limb from biplanar calibrated radiographs. *Med Eng Phys*. 2013.4
- Schmitz MR, Bittersohl B, Zaps D, Bomar JD, Pennock AT, Hosalkar HS. Spectrum of Radiographic Femoroacetabular Impingement Morphology in Adolescents and Young Adults: An EOS-Based Double-Cohort Study. *J Bone Joint Surg*. July 2013
- Monazzam S, Agashe M, Hosalkar HS. Reliability of Overcoverage Parameters With Varying Morphologic Pincer Features: Comparison of EOS1 and Radiography. *Clin Orthop Relat Res*. 2013 May 9
- Ilharreborde B, Sebag G, Skalli W, Mazda K. Adolescent idiopathic scoliosis treated with posteromedial translation: radiologic evaluation with a 3D low-dose system. *Eur Spine J*. 2013 Apr 12
- Gaumétou E, Quijano S, Ilharreborde B, Presedo A, Thoreux P, Mazda K, Skalli W. EOS analysis of lower extremity segmental torsion in children and young adults. *Orthop Traumatol Surg Res*. 2013
- Dietrich TJ, Pfirrmann CW, Schwab A, Pankalla K, Buck FM. Comparison of radiation dose, workflow, patient comfort and financial break-even of standard digital radiography and a novel biplanar low-dose X-ray system for upright full-length lower limb and whole spine radiography. *Skeletal Radiol*. 2013.
- Boutry N, Dutouquet B, Leleu X, Vieillard MH, Duhamel A, Cotten A. Low-dose biplanar skeletal survey versus digital skeletal survey in multiple myeloma. *Eur Radiol*. 2013.

- Delin C, Silvera S, Bassinet C, Thelen P, Rehel JL, Legmann P, Folinais D. Ionizing radiation doses during lower limb torsion and anteversion measurements by EOS stereoradiography and computed tomography. *Eur J Radiol.* 2013.
- Lazennec JY, Brusson A, Rousseau MA. Lumbar-pelvic-femoral balance on sitting and standing lateral radiographs. *Orthop Traumatol Surg Res.* 2013;99(1 Suppl):S87-103.
- Boissiere L, Bourghli A, Vital JM, Gille O, Obeid I. The lumbar lordosis index: a new ratio to detect spinal malalignment with a therapeutic impact for sagittal balance correction decisions in adult scoliosis surgery. *Eur Spine J.* 2013.
- Illes T, Somoskeoy S. Comparison of scoliosis measurements based on three-dimensional vertebra vectors and conventional two-dimensional measurements: advantages in evaluation of prognosis and surgical results. *Eur Spine J.* 2013. Epub 2013/01/24.
- Vidal C, Ilharreborde B, Azoulay R, Sebag G, Mazda K. Reliability of cervical lordosis and global sagittal spinal balance measurements in adolescent idiopathic scoliosis. *Eur Spine J.* 2013.
- Lebel DE, Al-Aubaidi Z, Shin EJ, Howard A, Zeller R. Three dimensional analysis of brace biomechanical efficacy for patients with AIS. *Eur Spine J.* 2013.
- Ilharreborde B, Dubousset J, Skalli W, Mazda K. Spinal penetration index assessment in adolescent idiopathic scoliosis using EOS low-dose biplanar stereoradiography. *Eur Spine J.* 2013.
- Courvoisier A, Drevelle X, Vialle R, Dubousset J, Skalli W. 3D analysis of brace treatment in adolescent idiopathic scoliosis. *Eur Spine J.* 2013.
- Courvoisier A, Vialle R, Skalli W. EOS 3D imaging: assessing the impact of brace treatment in adolescent idiopathic scoliosis. *Expert Rev Med Devices.* 2013.
- Scherrer SA, Begon M, Leardini A, Coillard C, Rivard CH, Allard P. Three-dimensional vertebral wedging in mild and moderate adolescent idiopathic scoliosis. *Plos One.* 2013.
- Nam D, Shab R, Nunley R, Barrack R. Evaluation of the 3-Dimensional, weight-bearing orientation of the normal adult knee. *Journal of arthroplasty.* 2013.
- Assi A, Chaibi Y, Presedo A, Dubousset J, Ghanem I, Skalli W. Three-dimensional reconstructions for asymptomatic and cerebral palsy children's lower limbs using a biplanar X-ray system. *Eur J Radiol.* 2013.
- Pillet H, Sangeux M, Hausselle J, El Rachkidi R, Skalli W. A reference method for the evaluation of femoral head joint center location technique based on external markers. *Gait & Posture.* 2013.
- Wade R, Yang H, McKenna C, Faria R, Gummerson N, Woolacott N. A systematic review of the clinical effectiveness of EOS 2D/3D X-ray imaging system. *Eur Spine J.* 2013 Feb;22(2):296-304
- Courvoisier A, Ilharreborde B, Constantinou B, Aubert B, Vialle R, Skalli W. Evaluation of a three-dimensional reconstruction method of the rib cage of mild scoliotic patients. *Spine deformity.* 2013.
- Somoskeoy S, Tunyogi-Csapo M, Bogyo C, Illes T. Accuracy and reliability of coronal and sagittal spinal curvature data based on patient-specific three-dimensional models created by the EOS 2D/3D imaging system. *Spine J*2012 Oct 23.
- Somoskeoy S, Tunyogi-Csapo M, Bogyo C, Illes T. Clinical validation of coronal and sagittal spinal curve measurements based on three-dimensional vertebra vector. *Spine J*2012 Sep 24.
- Glaser DA, Doan J, Newton PO. Comparison of 3D Spinal Reconstruction Accuracy: Biplanar Radiographs with EOS Versus Computed Tomography. *Spine (Phila Pa 1976)*2012 Mar 13.
- Sutter R, Pfirmann CW, Espinosa N, Buck FM. Three-dimensional hindfoot alignment measurements based on biplanar radiographs: comparison with standard radiographic measurements. *Skeletal Radiol*2012 Nov 20.

- Buck FM, Guggenberger R, Koch PP, Pfirrmann CW. Femoral and Tibial Torsion Measurements With 3D Models Based on Low-Dose Biplanar Radiographs in Comparison With Standard CT Measurements. *AJR Am J Roentgenol* 2012 Nov;199(5):W607-12.
- Journe A, Sadaka J, Belicourt C, Sautet A. New method for measuring acetabular component positioning with EOS imaging: feasibility study on dry bone. *Int Orthop* 2012 Sep 5.
- Guenoun B, Zadegan F, Aim F, Hannouche D, Nizard R. Reliability of a new method for lower-extremity measurements based on stereoradiographic three-dimensional reconstruction. *Orthop Traumatol Surg Res* 2012 Jul 31.
- Thelen P, Delin C, Folinais D, Radier C. Evaluation of a new low-dose biplanar system to assess lower-limb alignment in 3D: a phantom study. *Skeletal Radiol* 2012 Jun 9.
- Wybier M, Bossard P. Musculoskeletal imaging in progress: The EOS imaging system. *Joint Bone Spine* 2012 Nov 21.
- Illes T, Somoskeoy S. The EOS imaging system and its uses in daily orthopaedic practice. *Int Orthop* 2012 Feb 28.
- Ilharreborde B, Vidal C, Skalli W, Mazda K. Sagittal alignment of the cervical spine in adolescent idiopathic scoliosis treated by posteromedial translation. *Eur Spine J* 2012 Sep 11.
- Illes T, Somoskeoy S. [Principles of the EOS X-ray machine and its use in daily orthopedic practice]. *Orv Hetil* 2012 Feb 19;153(8):289-95.
- Lazennec JY, Brusson A, Rousseau MA. THA Patients in Standing and Sitting Positions: A Prospective Evaluation Using the Low-Dose "Full-Body" EOS® Imaging System. *Semin Arthro. 2012*;23(4):220-5.
- Polkowski GG, Nunley RM, Ruh EL, Williams BM, Barrack RL. Does Standing Affect Acetabular Component Inclination and Version After THA? *Clin Orthop Relat Res. 2012* May 19.
- Lazennec JY. Hip-Spine Relations: An Innovative Paradigm in THR Surgery. In: Fokter SK, editor. *Recent Advances in Arthroplasty: InTech*; 2012. p. 69-94.
- Humbert L, Steffen JS, Vialle R, Dubousset J, Vital JM, Skalli W. 3D analysis of congenital scoliosis due to hemivertebra using biplanar radiography. *Eur Spine J* 2012 Oct 17.
- Foley G, Aubin CE, Labelle H, Sanders J, d'Astous J, Johnston C, Parent S. The Rib Vertebra Angle Difference and its Measurement in 3D for the evaluation of early onset scoliosis. *Stud Health Technol Inform* 2012;176:238-41.
- Sapin-de Brosses E, Jolivet E, Travert C, Mitton D, Skalli W. Prediction of the vertebral strength using a finite element model derived from low-dose biplanar imaging: benefits of subject-specific material properties. *Spine (Phila Pa 1976)* 2012 Feb 1;37(3):E156-62.
- McKenna C, Wade R, Faria R, Yang H, Stirk L, Gummerson N, Sculpher M, Woolacott N. EOS 2D/3D X-ray imaging system: a systematic review and economic evaluation. *Health Technol Assess. 2012*;16(14):1-188
- Rampal V, Hausselle J, Thoreux P, Wicart P, Skalli W. Three-dimensional Morphologic Study of the Child's Hip: Which Parameters Are Reproducible? *Clin Orthop Relat Res* 2012 Oct 26.
- Serrurier A, Quijano S, Nizard R, Skalli W. Robust femur condyle disambiguation on biplanar X-rays. *Med Eng Phys* 2012 Feb 18.
- Lagace PY, Billuart F, Ohl X, Skalli W, Tetreault P, de Guise J, Hagemeister N. Analysis of humeral head displacements from sequences of biplanar X-rays: repeatability study and preliminary results in healthy subjects. *Comput Methods Biomech Biomed Engin* 2012 Mar;15(3):221-9.
- Ilharreborde B, Steffen JS, Nectoux E, Vital JM, Mazda K, Skalli W, Obeid I. Angle measurement reproducibility using EOS three-dimensional reconstructions in adolescent idiopathic scoliosis treated by posterior instrumentation. *Spine (Phila Pa 1976)* 2011 Sep 15;36(20):E1306-13.



- Lazennec JY, Rousseau MA, Rangel A, Gorin M, Belicourt C, Brusson A, Catonne Y. Pelvis and total hip arthroplasty acetabular component orientations in sitting and standing positions: measurements reproductibility with EOS imaging system versus conventional radiographies. *Orthop Traumatol Surg Res* 2011 Jun;97(4):373-80.
- Chaibi Y, Cresson T, Aubert B, Hausselle J, Neyret P, Hauger O, de Guise JA, Skalli W. Fast 3D reconstruction of the lower limb using a parametric model and statistical inferences and clinical measurements calculation from biplanar X-rays. *Comput Methods Biomech Biomed Engin* 2011 Jan 1:1.
- Lazennec JY, Brusson A, Rousseau MA. Hip-spine relations and sagittal balance clinical consequences. *Eur Spine J* 2011 Sep;20 Suppl 5:686-98.
- Le Huec JC, Leijssen P, Duarte M, Aunoble S. Thoracolumbar imbalance analysis for osteotomy planification using a new method: FBI technique. *Eur Spine J* 2011 Sep;20 Suppl 5:669-80.
- Obeid I, Hauger O, Aunoble S, Bourghli A, Pellet N, Vital JM. Global analysis of sagittal spinal alignment in major deformities: correlation between lack of lumbar lordosis and flexion of the knee. *Eur Spine J* 2011 Sep;20 Suppl 5:681-5.
- Morvan G, Mathieu P, Vuillemin V, Guerini H, Bossard P, Zeitoun F, Wybier M. Standardized way for imaging of the sagittal spinal balance. *Eur Spine J* 2011 Sep;20 Suppl 5:602-8.
- Illes T, Tunyogi-Csapo M, Somoskeoy S. Breakthrough in three-dimensional scoliosis diagnosis: significance of horizontal plane view and vertebra vectors. *Eur Spine J* 2011 Jan;20(1):135-43.
- Illes T. [Comparison of classical 2D measurement of scoliosis and 3D measurement using vertebral vectors; advantages for prognostication and treatment evaluation]. *Bull Acad Natl Med* 2011 Mar;195(3):629-42; discussion 42-3.
- Than P, Szuper K, Somoskeoy S, Warta V, Illes T. Geometrical values of the normal and arthritic hip and knee detected with the EOS imaging system. *Int Orthop* 2011 Nov 18.
- Gheno R, Nectoux E, Herbaux B, Baldisserotto M, Glock L, Cotten A, Boutry N. Three-dimensional measurements of the lower extremity in children and adolescents using a low-dose biplanar X-ray device. *Eur Radiol* 2011 Oct 20.
- Dubousset J, Lavaste F, Skalli W, Lafage V. [Modeling the spine and spinal cord]. *Bull Acad Natl Med* 2011 Nov;195(8):1831-42.
- Travert C, Jolivet E, Sapin-de Brosses E, Mitton D, Skalli W. Sensitivity of patient-specific vertebral finite element model from low dose imaging to material properties and loading conditions. *Med Biol Eng Comput* 2011 Dec;49(12):1355-61.
- Rousseau MA. Three-dimensional assessment of the intervertebral kinematics after Mobi-C total disc replacement at the cervical spine in vivo using the EOS stereoradiography system. *SAS Journal* 2011 Sept;5(3):63-8.
- Deschenes S., Charron G., Beaudoin G., Miron M., Labelle H. and Dubois J., "Diagnostic imaging of spinal deformities: Reducing patients radiation dose with a new slot-scanning x-ray imager" *Spine*, (avril 2010)
- Dubousset J., Charpak G., Skalli W., De Guise J.A., Kalifa G. EOS : A new imaging system with low dose radiation in standing position for spine and bone & joint disorders. *Journal of Musculoskeletal Research* 13(1):1 – 12, 2010.
- Steffen JS, Obeid I, Aurouer N, Hauger O, Vital JM, Dubousset J, Skalli W. " 3D postural balance with regard to gravity line: an evaluation in the transversal plane on 93 patients and 23 asymptomatic volunteers. ». *Eur Spine J*. 2010 May;19(5)
- Sandoz B, Laporte S, Skalli W, Mitton D. "Subject-specific body segment parameters' estimation using biplanar X-rays: a feasibility study". *Comput Methods Biomech Biomed Engin*. 2010 Dec;13(6)
- Sabourin M, Jolivet E, Miladi L, Wicart P, Rampal V, Skalli W. "Three-dimensional stereoradiographic modeling of rib cage before and after spinal growing rod procedures in

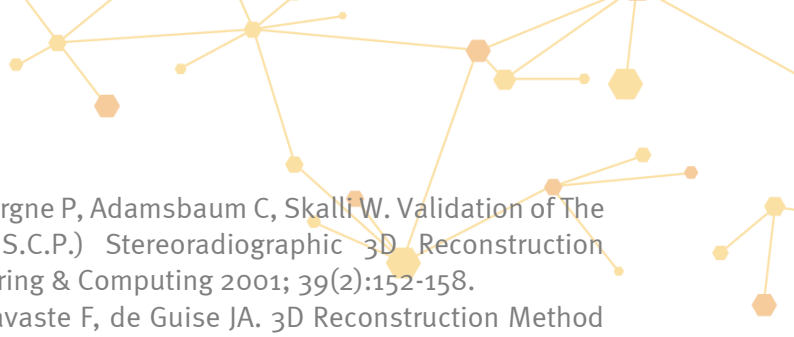


early-onset scoliosis". Clin Biomech (Bristol, Avon). 2010 May;25(4):284-91. Epub 2010 Feb 2.

- Azmy C., Guérard S., Bonnet X., Gabrielli F., Skalli W., EOS® orthopaedic imaging system to study patellofemoral kinematics: Assessment of uncertainty, Orthopaedics & Traumatology : Surgery & Research, 96(1) : 28-36, 2010.
- Ohl X., Stanchina C., Billuart F., Skalli W. Shoulder bony landmarks location using the EOS® low-dose stereoradiography system: a reproducibility study. Surgical and radiologic anatomy (Surg Radiol Anat), 32(2):153-8, 2010.
- Jolivet E., Sandoz B., Laporte S., Mitton D., Skalli W. Fast 3D reconstruction of the rib cage from biplanar radiographs. Medical & biological engineering & computing 48(8):821-828, 2010.
- Humbert, L. et al. "3D reconstruction of the spine from biplanar X-rays using parametric models based on transversal and longitudinal inferences." Medical Engineering and Physics (2009)
- Schlatterer, B. and I. Suedhoff. "Skeletal landmarks for TKR implantations: Evaluation of their accuracy using EOS imaging acquisition system." Orthopaedics and Traumatology: Surgery and Research (2009)
- JM Vital, J Dubousset, O Gille, O Hauger, N Aurouer, I Obeid, « Clinical Applications of the EOS System in diseases of the locomotor apparatus ». Argos Spine Journal, Springer, N° 20 dec. 2008, ISSN 1967-7729
- Mezghani N, Chav R, Humbert L, Parent S, Skalli W, de Guise JA. "A Computer Based Classifier of Three-Dimensional Spinal Scoliosis Severity." International Journal of Computer Assisted Radiology and Surgery, avril 2008.
- Feydy, S. Ferey, V. Merzoug, H. Guerini, A. Chevrot, J. Dubousset, G. Kalifa, J.-L. Drapé. Imagerie De La Scoliose. Place Du Système Eos Société D'imagerie Musculo Squelettique, Getroa Gel Opus Xxxv Rachis. Sauramps Medical / Isbn : 9782840235767. 2008 425-441
- G. Morvan, M. Wybier, P. Mathieu, V. Vuillemin et H. Guerini, Clichés simples du rachis : statique et relations entre rachis et bassin. J. Radiol. 2008 ;89 :654-66.
- Dubousset J, Charpak G, Skalli W, de Guise J, Kalifa G, Wicart P. [Skeletal and spinal imaging with EOS system]. Arch Pediatr. 2008 Jun;15(5):665-6.
- Baudouin, A. and W. Skalli. "Parametric subject-specific model for in vivo 3D reconstruction using bi-planar X-rays: application to the upper femoral extremity." Medical and Biological Engineering and Computing 46 (2008): 799-805.
- Humbert L, Carlioz H, Baudoin A, Skalli W, Mitton D. 3D Evaluation of the acetabular coverage assessed by biplanar X-rays or single anteroposterior X-ray compared with CT-scan. Computer Methods in Biomechanics and Biomedical Engineering 2008.
- Bertrand, S. and S. Laporte. "Three dimensional reconstruction of the rib cage from biplanar radiography." IRBM 29 (2008): 278-286.
- Sapin, E. and K. Briot. "Bone mineral density assessment using the EOS low-dose X-ray device: a feasibility study." Journal of Engineering in Medicine 222 (2008): 1263-1271.
- Dubousset J, Charpak G, Skalli W, Kalifa G, Lazennec JY. « EOS stereo-radiography system: whole-body simultaneous anteroposterior and lateral radiographs with very low radiation dose". Rev Chir Orthop Reparatrice Appar Mot. 2007 Oct;93(6 Suppl):141-3. French.
- Rousseau, M.A. and M.S. Laporte. "Reproducibility of measuring the shape and three-dimensional position of cervical vertebrae in upright position using the EOS stereoradiography system." Spine 32.23 (2007): 2569-2572.
- J.Y Lazennec, M.A. Rousseau, E. Sari-Ali, E. Rolland, Y. Catonne. Biomécanique du complexe lombo-pelvi-fémoral. Conséquences fonctionnelles des relations hanche rachis. Société d'Imagerie Musculo Squelettique, Getroa Gel Opus XXXIV Bassin et Hanche. Sauramps Medical / ISBN : 9782840235125 . 2007 17-33

- Vallée, C. Marty, R. Carlier. Etude critique des mesures de l'équilibre pelvien. Société d'Imagerie Musculo Squelettique Getroa Gel Opus XXXIV Bassin et Hanche. Sauramps Medical / ISBN : 9782840235125 . 2007 35-50
- Südhoff I, Van Driessche S, Laporte S, de Guise JA, Skalli W. (2007) « Comparing Three Attachment Systems Used to Determine Knee Kinematics During Gait.» *Gait & Posture*, 25 (4): 533-543
- Skalli W, Mitton D, de Guise JA, Dubousset J. (2006) "The EOS System: New Perspectives for Musculoskeletal Biomechanics." *Journal of Biomechanics*, 39(S1): S460
- Gangnet N, Dumas R, Pomero V, Mitulescu A, Skalli W, Vital JM. Three-dimensional spinal and pelvic alignment in an asymptomatic population. *Spine* 2006 ; 31(15):E507 - 512.
- Sari Ali el H, Lemaire JP, Pascal-Mousselard H, Carrier H, Skalli W. In vivo study of the kinematics in axial rotation of the lumbar spine after total intervertebral disc replacement: long-term results: a 10-14 years follow up evaluation. *European Spine Journal* 2006; 21:1 - 10.
- G. Biette, D. Zeitoun, E. Dion, J. Dubousset, Y. Catonne. Apports du système EOS dans l'analyse tridimensionnelle des déformations du membre inférieur. 12e journée de la Pitié Salpêtrière. Sauramps Médical / ISBN : 2840234688. 2006 25-37
- J.Y Lazennec, M.A. Rousseau, S. Hansen, A. Riwan, F. Gravez, M. Gorin, P. Piriou, N. Mora, M. Karouia, F. Khiami, W. Skalli, Y. Catonné. Influence du bloc lombo-pelvien sur l'orientation fonctionnelle des membres inférieurs. 12e journée de la Pitié Salpêtrière. Sauramps Médical / ISBN : 2840234688. 2006 59-82
- Mitton D, Deschenes S, Laporte S, Godbout B, Bertrand S, de Guise JA, Skalli W. 3D Reconstruction of the pelvis from bi-planar radiography. *Computer Methods in Biomechanics and Biomedical Engineering* 2006; 9(1):1 - 5.
- Skalli W, Zeller R, Miladi L, Bourcereau G, Savidan M, Lavaste F, Dubousset J. Importance of Pelvic Compensation in Posture and Motion after Posterior Spinal Fusion Using CD Instrumentation for Idiopathic Scoliosis. *Spine* 2006; 31(12):E 359 - 366.
- Le Bras A, Kolta S, Soubrane P, Skalli W, Roux C, Mitton D. Assessment of femoral neck strenght by 3 dimensional X-ray absorptiometry (3D-XA). *Journal of Clinical Densitometry* 2006; 9(4):425 - 430.
- Bertrand S, Skalli W, Delacherie L, Bonneau D, Kalifa G, Mitton D. External and internal geometry of European adults. *Ergonomics* 2006; 49(15):1547-1564
- Rousseau M-A, Laporte S, Chavary E, Skalli W. Reproducibility of measuring the shape and 3D position of cervical vertebrae in standing position using the EOS stereoradiography system. *Spine* 2006
- Després P, Gravel P, Beaudoin G, de Guise JA. (2005) "Physical Characteristics of a Low-dose Gas Microstrip Detector for Orthopedic X-rays Imaging", *AAPM - Medical Physics*, 32(4):1193-1204.
- Després P, Beaudoin G, Gravel P, de Guise JA. (2005) "Evaluation of a Full-Scale Gas Microstrip Detector for Low-Dose X-Ray Imaging". *Nuclear Instruments and Methods in Physics Research*
- Dubousset J, Charpak G., Dorion I., Skalli W., Lavaste F., de Guise J., Kalifa G., Ferey S. A new 2D and 3D imaging approach to musculoskeletal physiology and pathology with low-dose radiation and the standing position: the EOS system. *Bulletin de l'Académie Nationale de Médecine* 2005; 189(2):287-297; discussion 297-300.
- Dubousset J., Charpak G., Dorion I., Skalli W., Lavaste F., Deguise J. et al. – Une nouvelle imagerie ostéoarticulaire basse dose en position debout : le système EOS. *Radioprotection* 2005; 40: 245 à 255.
- Benchikh E-F, A., Schwab F, Gamez L, Champain N, Skalli W, Farcy JP. Center of Gravity and Radiographic Posture Anaysis: A Preliminary Review of Adult Volunteers and Adult Patients Affected by Scoliosis. *Spine* 2005; 30(13):1535 - 1540.

- Rillardon L, Campana S, Mitton D, Skalli W, Feydy A. Evaluation of the intervertebral disc spaces with a low dose radiographic system]. *J Radiol.* 2005 Mar;86(3):311-9. French. PubMed PMID: 15908871.
- Dumas R, Lafage V, Lafon Y, Steib JP, Mitton D, Skalli W. Finite Element Simulation of Spinal Deformities Correction by In Situ Contouring Technique. *Computer Methods in Biomechanics and Biomedical Engineering* 2005; 8(5):331 - 337
- Kolta S, Le Bras A, Mitton D, Bousson V, de Guise JA, Fechtenbaum J, Laredo JD, Roux C, Skalli W. Three-dimensional X-ray absorptiometry (3D-XA): a method for reconstruction of human bones using a dual X-ray absorptiometry device. *Osteoporosis International* 2005;16(8):969-76.
- Dumas R, Aissaoui R, Mitton D, Skalli W, de Guise JA. Personalized Body Segment Parameters from Biplanar Low-Dose Radiography. *IEEE Transactions on Biomedical Engineering.* 2005:1756 - 1763.
- Dumas R, Le Bras A, Champain N, Savidan M, Mitton D, Kalifa G, Steib JP, de Guise JA, Skalli W. Validation of The Relative 3D Orientation of Vertebrae Reconstructed by Bi-Planar Radiography. *Medical Engineering & Physics* 2004; 26(5):415 - 422.
- Lafage V, Dubousset J, Lavaste F, Skalli W. 3D Finite Element Simulation of CD Correction. *Computer Aided Surgery* 2004; 9(1/2):17-25.
- Le Bras A, Laporte S, Bousson V, Mitton D, de Guise JA, Laredo JD, Skalli W. 3D Reconstruction of The Proximal Femur with Low-Dose Digital Stereoradiography. *Computer Aided Surgery.* 2004:51-57.
- Pomero V, Mitton D, Laporte S, de Guise JA, Skalli W. Fast Accurate Stereoradiographic 3D-Reconstruction of The Spine Using a Combined Geometric and Statistic Model. *Clinical biomechanics* 2004; 19(3):240 - 247.
- Steib JP, Dumas R, Mitton D, Skalli W. Surgical Correction of Scoliosis by The In Situ Contouring: a Detorsion Analysis. *Spine* 2004; 29(2):193 - 199.
- Dorion I, Le Bras A, Pomero V, Campana S, Teyssseyre S, Meynadier M, Skalli W, Maccia C. Rhumatologie et orthopédie : apport d'une nouvelle modalité d'imagerie radiologique tridimensionnelle multi-énergie, faible dose, et haute résolution à l'imagerie du système ostéo-articulaire. *ITBM-RBM (Revue Européenne de Technologie Biomédicale)* 2004; 25:274 - 279.
- Dumas R, Mitton D, Laporte S, Dubousset J, Steib JP, Lavaste F, Skalli W. Explicit Calibration Method and Specific Device Designed for Stereoradiography. *Journal of Biomechanics* 2003; 36(6):827- 834.
- Dumas R, Steib JP, Mitton D, Lavaste F, Skalli W. Three-Dimensional Quantitative Segmental Analysis of Scoliosis Corrected by the In situ Contouring Technique. *Spine* 2003; 28(11):1158 -1162
- Gangnet N, Pomero V, Dumas R, Skalli W, Vital JM. Variability of The Spine and Pelvis Location with Respect toThe Gravity Line:A 3D Stereoradiographic Study Using a Force Platform. *Surgical and Radiologic Anatomy* 2003; 25(5/6):424 - 433.
- Laporte S, Skalli W, de Guise JA, Lavaste F, Mitton D. A Biplanar Reconstruction Method Based on 2D and 3D Contours: Application to the Distal Femur. *Computer Methods in Biomechanics and Biomedical Engineering* 2003; 6(1):1-6.
- Le Bras A, Laporte S, Mitton D, de Guise JA, Skalli W. Three-Dimensional (3D) Detailed Reconstruction of Human Vertebrae from Low-Dose Digital stereoradiography. *European Journal of orthopaedic Surgery and Traumatology* 2003; 13(2):57-62.
- Mitulescu A, Skalli W, Mitton D, de Guise JA. Three-Dimensional Surface Rendering Reconstruction of Scoliotic Vertebrae Using a Non Stereo-corresponding Points Technique. *European Spine Journal* 2002; 11(4):(344 - 352).

- 
- Mitulescu A, Semaan I, de Guise JA, Le Borgne P, Adamsbaum C, Skalli W. Validation of The Non Stereo Corresponding Points (N.S.C.P.) Stereoradiographic 3D Reconstruction Technique. *Medical & Biological Engineering & Computing* 2001; 39(2):152-158.
  - Mitton D, Landry C, Véron S, Skalli W, Lavaste F, de Guise JA. 3D Reconstruction Method from Biplanar Radiography Using Non-Stereocorresponding Points and Elastic Deformable Meshes. *Medical & Biological Engineering & Computing* 2000; 38(2):133 -139.
  - Kalifa G, Charpak, Y, Maccia C, Fery-Lemonnier E, Bloch J, Bousard J, Attal M, Dubousset J, Adamsbaym C. Evaluation of a new low-dose digital x-ray device: first dosimetric and clinical results in children. *Pediatr Radiol*; 28(7):557-61. 1998.
  - Lavaste F, Skalli W, Robin S, Roy-Camille R, Mazel C. Three-Dimensional Geometrical and Mechanical Modelling of the Lumbar Spine. *Journal of Biomechanics* 1992; 25(10):1153 - 1164.