

## Publication List

### Emmanuel Alejandro Flores Johnson

Google Scholar citation metrics:

<https://scholar.google.com.au/citations?user=PYVxQ-4AAAAJ&hl=en&oi=ao>

#### Journal Papers

- J1. Li, L, Muransky, O., **Flores-Johnson, E.A.**, Kabra, S., Shen, L., Proust, G. (2017), Effects of strain rate on the microstructure evolution and mechanical response of magnesium alloy AZ31, *Materials Science and Engineering: A* 684: 37-46. <http://journals.sagepub.com/doi/abs/10.1177/1056789515569088>
- J2. **Flores-Johnson, E.A.**, Wang, S., Maggi, F., El Zein, A., Gan, Y., Nguyen, G.D., Shen, L. (2016), Discrete element simulation of dynamic behaviour of partially saturated sand, *International Journal of Mechanics and Materials in Design* 12(4): 495-507. <http://link.springer.com/article/10.1007/s10999-016-9350-5>
- J3. Li, L, **Flores-Johnson, E.A.**, Shen, L., Proust, G. (2016), Effects of heat treatment and strain rate on the microstructure and mechanical properties of 6061 Al alloy, *International Journal of Damage Mechanics* 25(1): 26-41. <http://journals.sagepub.com/doi/abs/10.1177/1056789515569088>
- J4. **Flores-Johnson, E.A.**, Rupert, T.J., Hemker, K.J., Gianola, D.S., Gan, Y. (2015), Modelling wrinkling interactions produced by patterned defects in metal thin films, *Extreme Mechanics Letters* 4: 175-185. <http://www.sciencedirect.com/science/article/pii/S235243161500084X>
- J5. **Flores-Johnson, E.A.**, Shen, L., Guimatsia, I., Nguyen, G.D. (2015), A numerical study of bioinspired nacre-like composite plates under blast loading, *Composites Structures* 126: 329-336. <http://www.sciencedirect.com/science/article/pii/S0263822315001725>
- J6. Alonzo-Marroquin, F., Huang, P., Hanaor, D.A.H., **Flores-Johnson, E.A.**, Proust, G., Gan, Y., Shen, L. (2015), Static friction between rigid fractal surfaces, *Physical Review E* 92: 032405. <http://journals.aps.org/pre/abstract/10.1103/PhysRevE.92.032405>
- J7. Gamboa-Castellanos, R.A., Carrillo-Baeza, J.G., **Flores-Johnson, E.A.** (2015), Diseño y construcción de un cañón de gas de una etapa para pruebas de impacto de alta velocidad, *Ingeniería Investigación y Tecnología* 16: 185-195. <http://www.sciencedirect.com/science/article/pii/S1405774315000049>
- J8. **Flores-Johnson, E.A.**, Shen, L., Annabattula, R.K., Onck, P.R., Shen, Y.G., Chen, Z. (2014), The effect of interface adhesion on buckling and cracking of hard thin films, *Applied Physics Letters* 105: 161912. <http://scitation.aip.org/content/aip/journal/apl/105/16/10.1063/1.4900443>
- J9. **Flores-Johnson, E.A.**, Shen, L., Guimatsia, I., Nguyen, G.D. (2014), Numerical investigation of the impact behaviour of bioinspired nacre-like aluminium composite plates, *Composites Science and Technology* 96: 13-22. <http://www.sciencedirect.com/science/article/pii/S0266353814000657>
- J10. Xu, A., Vodenitcharova, T., Kabir, K., **Flores-Johnson, E.A.**, Hoffman, M. (2014), Finite element analysis of indentation of aluminium foam and sandwich panels with aluminium foam core, *Materials Science and Engineering A* 599: 125-133. <http://www.sciencedirect.com/science/article/pii/S0921509314001117>
- J11. Mendez-Mendez, J.V., Alonso-Rasgado, M.T., Correia Faria, E., **Flores-Johnson, E.A.**, Snook, R.D. (2014), Numerical study of the hydrodynamic drag force in atomic force microscopy measurements undertaken in fluids, *Micron* 66: 37-46. <http://www.sciencedirect.com/science/article/pii/S0968432814001103>
- J12. **Flores-Johnson, E.A.**, Li, Q.M., Shen, L. (2014), Numerical simulations of quasi-static indentation and low velocity impact of Rohacell 51 WF foam, *International Journal of Computational Methods* 11: 1344004. <http://www.worldscientific.com/doi/abs/10.1142/S0219876213440040>
- J13. Alonzo-Marroquin, F., Ramirez-Gomez, A., Gonzales-Montellano, C., Balaam, N., Hanaor, D.A.H., **Flores-Johnson, E.A.**, Gan, Y., Chen, S., Shen, L. (2013), Experimental and numerical determination of mechanical properties of polygonal wood particles and their flow analysis in silos, *Granular Matter* 15(6): 811-826. <http://link.springer.com/article/10.1007/s10035-013-0443-7>

- J14. **Flores-Johnson, E.A.**, Li, Q.M. (2012), Structural behaviour of composite sandwich structures with plain and fibre-reinforced foamed concrete cores and corrugated steel faces, *Composites Structures* 94(5): 1555-1563. <http://www.sciencedirect.com/science/article/pii/S0263822311004855>
- J15. Carrillo, J.G, Gamboa, R.A., **Flores-Johnson, E.A.**, Gonzalez-Chi, P.I. (2012), Ballistic performance of thermoplastic composite laminates made from aramid woven fabric and polypropylene matrix, *Polymer Testing* 31(4): 512-519. <http://www.sciencedirect.com/science/article/pii/S0142941812000414>
- J16. **Flores-Johnson, E.A.**, Muransky, O., Hamelin, C.J., Bendeich, P.J., Edwards, L. (2012), Numerical analysis of the effect of weld-induced residual stress and plastic damage on the ballistic performance of welded steel plate, *Computational Materials Science* 58: 131-139. <http://www.sciencedirect.com/science/article/pii/S0927025612000754>
- J17. **Flores-Johnson, E.A.**, Saleh, M., Edwards, L. (2011), Ballistic performance of multi-layered metallic plates impacted by a 7.62-mm APM2 projectile, *International Journal of Impact Engineering* 38(10): 1022-1032. <http://www.sciencedirect.com/science/article/pii/S0734743X11001357>
- J18. Li, Q.M., **Flores-Johnson, E.A.** (2011), Hard projectile penetration and trajectory stability, *International Journal of Impact Engineering* 38(10): 815-823. <http://www.sciencedirect.com/science/article/pii/S0734743X11000820>
- J19. **Flores-Johnson, E.A.**, Vazquez-Rodriguez, J.M., Herrera-Franco, P.J., Gonzalez-Chi, P.I. (2011), Photoelastic evaluation of fiber surface-treatments on the interfacial performance of a polyester fiber/epoxy model composite, *Composites Part A: Applied Science and Manufacturing* 42(8): 1017-1024. <http://www.sciencedirect.com/science/article/pii/S1359835X11001114>
- J20. **Flores-Johnson, E.A.**, Li, Q.M. (2011), Experimental study of the indentation of sandwich panels with carbon fibre-reinforced polymer face sheets and polymeric foam core, *Composites Part B: Engineering* 42(5): 1212-1219. <http://www.sciencedirect.com/science/article/pii/S1359836811000862>
- J21. **Flores-Johnson, E.A.**, Li, Q.M. (2011), A brief note on the counter-intuitive region of a square plate, *International Journal of Impact Engineering* 38(2-3): 136-138. <http://www.sciencedirect.com/science/article/pii/S0734743X10001363>
- J22. **Flores-Johnson, E.A.**, Li, Q.M. (2011), Low velocity impact on polymeric foams, *Journal of Cellular Plastics* 47(1): 45-63. <http://cel.sagepub.com/content/47/1/45>
- J23. Gonzalez-Chi, P.I, **Flores-Johnson, E.A.**, Carrillo-Baeza, J.G., Young R.J. (2010), Micromechanical analysis of the kink-band performance at the interface of a thermoplastic composite under tensile deformation, *Polymer Composites* 31(10): 1817-1821. <http://onlinelibrary.wiley.com/doi/10.1002/pc.20973/full>
- J24. **Flores-Johnson, E.A.**, Li, Q.M. (2010), Indentation into polymeric foams, *International Journal of Solids and Structures* 47(16): 1987-1995. <http://www.sciencedirect.com/science/article/pii/S002076831000106X>
- J25. **Flores-Johnson, E.A.**, Li, Q.M., Mines, R.A.W. (2008), Degradation of elastic modulus of progressively crushable foams in uniaxial compression, *Journal of Cellular Plastics* 44(5): 415-434. <http://cel.sagepub.com/content/44/5/415.short>

## Conference Papers

- C1. Gharehdash, S., Shen, L., Gan, Y., **Flores-Johnson, E. A.** (2016) Numerical investigation on fracturing of rock under blast using coupled finite element method and smoothed particle hydrodynamics, *Applied Mechanics and Materials* 846: 102-107.
- C2. Wang, R., **Flores-Johnson, E.A.**, Proust, G., Shen, L. (2016), Numerical Investigations of the Effect of Core Layer on the Ballistic, in *Proceedings of The 10th International Conference on Structural Integrity and Failure: Advances in Materials and Structures*, 12-15 July, Adelaide, Australia, pp. 160-164.
- C3. **Flores-Johnson, E.A.**, Li, Q.M. (2015), Effect of structurally-induced lateral confinement on split Hopkinson pressure bar test specimens of concrete-like materials, *EPJ Web of Conferences* 94: 04031.
- C4. **Flores-Johnson, E.A.**, Carrillo, J.G., Gamboa, R.A., Shen, L. (2014), Experimental characterisation of the mechanical properties and microstructure of Acrocomia Mexicana fruit from the Yucatan peninsula in Mexico, in *Proceedings of the 23rd Australasian Conference on the Mechanics of Structures and Materials*, 9-12 December, Byron Bay, Australia, pp. 887-892.
- C5. **Flores-Johnson, E.A.**, Gonzalez-Chi, P.I., Ay-Puc, G.I., Shen, L. (2014), Photoelastic characterisation of interfacial stress distribution of a single short-fibre model composite under tensile loading, in *Proceedings of the 23rd Australasian Conference on the Mechanics of Structures and Materials*, 9-12 December, Byron Bay, Australia, pp. 1149-1154.
- C6. Huang, P., Proust, G., Alonso-Marroquin, F., **Flores-Johnson, E.A.**, Gan, Y., Shen, L., Hanaor, D.A.H. (2014), Computing the friction coefficient of fractal surfaces using SPOLY, in *8th Australasian Congress on Applied Mechanics: ACAM 8. Barton, ACT: Engineers Australia*, pp. 818-825.
- C7. **Flores-Johnson, E.A.**, Carrillo, J.G., Gamboa, R.A., Shen, L. (2014), Experimental and Numerical Study of Plain-Woven Aramid Fabric, *Advanced Materials Research* 856: 74-78.
- C8. **Flores-Johnson, E.A.**, Shen, L., Annabattula, R.K., Onck, P.R., Shen, Y.G., Chen, Z. (2014) Finite element modelling of stress-induced fracture in Ti-Si-N films, *Applied Mechanics and Materials* 553:10-15.
- C9. **Flores-Johnson, E.A.**, Carrillo, J.G., Gamboa, R.A., Shen, L. (2014) Finite-element modelling of ballistic impact of plain-woven aramid fabric, *Applied Mechanics and Materials* 553:769-773.
- C10. **Flores-Johnson, E.A.**, Shen, L., Guiamatsia, I., Nguyen, G.D. (2014) Finite-element modelling of the impact behaviour of aluminium nacre-like composite, *Applied Mechanics and Materials* 566: 457-462.
- C11. **Flores-Johnson, E.A.**, Muransky, O., Hamelin, C.J., Bendeich, P.J., Edwards, L. (2011), Effect of residual-stress field on the ballistic performance of welded steel plate, in *Proceedings of the 9th International Conference on Shock and Impact Loads on Structures*, 16-18 November, Fukuoka, Japan, pp. 307-312.
- C12. **Flores-Johnson, E.A.**, Saleh, M., Edwards, L. (2011), Numerical study of the ballistic performance of multi-layered metallic plates subjected to deformable projectile impact, in *Proceedings of the 9th International Conference on Shock and Impact Loads on Structures*, 16-18 November, Fukuoka, Japan, pp. 301-306.
- C13. **Flores-Johnson, E.A.**, Li, Q.M. (2010), Indentation of CFRP-polymeric foam cored sandwich panels, in *Proceedings of the 9th International Conference on Sandwich Structures*, 14-16 June, Pasadena, California, United States, pp. 1-5.
- C14. **Flores-Johnson, E.A.**, Li, Q.M. (2009), Penetration behaviour of polymeric foams, in *Proceedings of the 8th International Conference on Shock and Impact Loads on Structures*, 2-4 December, Adelaide, Australia, pp. 233-238.