

## 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

33. Arzate-Vázquez I, Méndez-Méndez JV, Flores-Johnson EA, Nicolás-Bermúdez J, Chanona-Pérez JJ, Santiago-Cortés E (2019), Study of the porosity of calcified chicken eggshell using atomic force microscopy and image processing, *Micron* 118: 50-57. <https://doi.org/10.1016/j.micron.2018.12.008>
32. Flores-Johnson EA, Carrillo JG, Zhai C, Gamboa RA, Gan Y, Shen L (2018), Microstructure and mechanical properties of hard *Acrocomia mexicana* fruit shell, *Scientific Reports* 8: 9668. <https://doi.org/10.1038/s41598-018-27282-8>
31. Gonzalez-Canche NG, Flores-Johnson EA, Cortes P, Carrillo JG (2018), Evaluation of surface treatments on 5052-H32 aluminum alloy for enhancing the interfacial adhesion of thermoplastic-based fiber metal laminates, *International Journal of Adhesion and Adhesives* 82: 90-99. <https://doi.org/10.1016/j.ijadhadh.2018.01.003>
30. Vazquez-Rodriguez JM, Flores-Johnson EA, Herrera-Franco PJ, Gonzalez-Chi PI (2018), Photoelastic and numerical analyses of the stress distribution around a fiber in a pull-out test for a thermoplastic fiber/epoxy resin composite, *Polymer Composites* 39: E2397-E2406. <https://doi.org/10.1002/pc.24709>
29. Flores-Johnson EA, Li QM (2017), Structural effects on compressive strength enhancement of concrete-like materials in a split Hopkinson pressure bar test, *International Journal of Impact Engineering* 109: 408-418. <https://doi.org/10.1016/j.ijimpeng.2017.08.003>
28. Wang S, Flores-Johnson EA, Shen L (2017), A Technique for the Elimination of Stress Waves Overlapping in the Split Hopkinson Pressure bar, *Experimental Techniques* 41: 345-355. <https://doi.org/10.1007/s40799-017-0181-6>
27. Gonzalez-Canche NG, Flores-Johnson EA, Carrillo JG (2017), Mechanical characterization of fiber metal laminate based on aramid fiber reinforced polypropylene, *Composites Structures* 172: 259-266. <https://doi.org/10.1016/j.compstruct.2017.02.100>
26. Hanaor DAH, Flores-Johnson EA, Wang S, Quach S, Dela-Torre KN, Gan Y, Shen L (2017), Mechanical properties in crumple-formed paper derived materials subjected to compression, *Heliyon* 3: e00329. <https://doi.org/10.1016/j.heliyon.2017.e00329>
25. Li L, Muransky O, Flores-Johnson EA, 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. <https://doi.org/10.1177/1056789515569088>
24. Flores-Johnson EA, Wang S, Maggi F, El Zein A, Gan Y, Nguyen GD, 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. <https://doi.org/10.1007/s10999-016-9350-5>
23. Li L, Flores-Johnson EA, 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. <https://doi.org/10.1177/1056789515569088>

22. Flores-Johnson EA, Rupert TJ, Hemker KJ, Gianola DS, Gan Y (2015), Modelling wrinkling interactions produced by patterned defects in metal thin films, *Extreme Mechanics Letters* 4: 175-185. <https://doi.org/10.1016/j.eml.2015.07.002>
21. Flores-Johnson EA, Shen L, Guiamatsia I, Nguyen GD (2015), A numerical study of bioinspired nacre-like composite plates under blast loading, *Composites Structures* 126: 329-336. <https://doi.org/10.1016/j.compstruct.2015.02.083>
20. Alonso-Marroquin F, Huang P, Hanaor DAH, Flores-Johnson EA, Proust G, Gan Y, Shen L (2015), Static friction between rigid fractal surfaces, *Physical Review E* 92: 032405. <https://doi.org/10.1103/PhysRevE.92.032405>
19. Gamboa-Castellanos RA, Carrillo-Baeza JG, Flores-Johnson EA (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. <https://doi.org/10.1016/j.riit.2015.03.003>
18. Flores-Johnson EA, Shen L, Annabattula RK, Onck PR, Shen YG, Chen Z (2014), The effect of interface adhesion on buckling and cracking of hard thin films, *Applied Physics Letters* 105: 161912. <https://doi.org/10.1063/1.4900443>
17. Flores-Johnson EA, Shen L, Guiamatsia I, Nguyen GD (2014), Numerical investigation of the impact behaviour of bioinspired nacre-like aluminium composite plates, *Composites Science and Technology* 96: 13-22. <https://doi.org/10.1016/j.compscitech.2014.03.001>
16. Xu A, Vodenitcharova T, Kabir K, Flores-Johnson EA, 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. <https://doi.org/10.1016/j.msea.2014.01.080>
15. Mendez-Mendez JV, Alonso-Rasgado MT, Correia Faria E, Flores-Johnson EA, Snook RD (2014), Numerical study of the hydrodynamic drag force in atomic force microscopy measurements undertaken in fluids, *Micron* 66: 37-46. <https://doi.org/10.1016/j.micron.2014.05.004>
14. Flores-Johnson EA, Li QM, 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. <https://doi.org/10.1142/S0219876213440040>
13. Alonzo-Marroquin F, Ramirez-Gomez A, Gonzales-Montellano C, Balaam N, Hanaor DAH, Flores-Johnson EA, 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. <https://doi.org/10.1007/s10035-013-0443-7>
12. Flores-Johnson EA, Li QM (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. <https://doi.org/10.1016/j.compstruct.2011.12.017>
11. Carrillo JG, Gamboa RA, Flores-Johnson EA, Gonzalez-Chi PI (2012), Ballistic performance of thermoplastic composite laminates made from aramid woven fabric and polypropylene matrix, *Polymer Testing* 31(4): 512-519. <https://doi.org/10.1016/j.polymertesting.2012.02.010>
10. Flores-Johnson EA, Muransky O, Hamelin CJ, Bendeich PJ, 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. <https://doi.org/10.1016/j.commatsci.2012.02.009>
9. Flores-Johnson EA, 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. <https://doi.org/10.1016/j.ijimpeng.2011.08.005>

8. Li QM, Flores-Johnson EA (2011), Hard projectile penetration and trajectory stability, *International Journal of Impact Engineering* 38(10): 815-823. <https://doi.org/10.1016/j.ijimpeng.2011.05.005>
7. Flores-Johnson EA, Vazquez-Rodriguez JM, Herrera-Franco PJ, Gonzalez-Chi PI (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. <https://doi.org/10.1016/j.compositesa.2011.04.005>
6. Flores-Johnson EA, Li QM (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. <https://doi.org/10.1016/j.compositesb.2011.02.013>
5. Flores-Johnson EA, Li QM (2011), A brief note on the counter-intuitive region of a square plate, *International Journal of Impact Engineering* 38(2-3): 136-138. <https://doi.org/10.1016/j.ijimpeng.2010.09.004>
4. Flores-Johnson EA, Li QM (2011), Low velocity impact on polymeric foams, *Journal of Cellular Plastics* 47(1): 45-63. <https://doi.org/10.1177/0921374010384956>
3. Gonzalez-Chi PI, Flores-Johnson EA, Carrillo-Baeza JG, Young RJ (2010), Micromechanical analysis of the kink-band performance at the interface of a thermoplastic composite under tensile deformation, *Polymer Composites* 31(10): 1817-1821. <https://doi.org/10.1002/pc.20973>
2. Flores-Johnson EA, Li QM (2010), Indentation into polymeric foams, *International Journal of Solids and Structures* 47(16): 1987-1995. <https://doi.org/10.1016/j.ijsolstr.2010.03.025>
1. Flores-Johnson EA, Li QM, Mines RAW (2008), Degradation of elastic modulus of progressively crushable foams in uniaxial compression, *Journal of Cellular Plastics* 44(5): 415-434. <https://doi.org/10.1177/0021955X08095113>

## Conference Papers

20. Yan YZ, Li QM, Flores-Johnson EA (2018), Mechanical behaviour of natural fibre reinforced cellular concrete, in *Proceedings of 5th International Conference on Protective Structures (ICPS5 2018)*, 20-24 August, Poznan, Poland.
19. Flores-Johnson EA, Yan YZ, Carrillo JG, González-Chi PI, Herrera-Franco PJ, Li QM (2018) Mechanical characterization of foamed concrete reinforced with natural fibre, *Materials Research Proceedings*, 7: 1-6.
18. Agaliotis E, Bernal C, Herrera-Franco PJ, Flores-Johnson EA (2018) Experimental and numerical study of the mechanical behaviour of a commercial polypropylene woven fabric, *Materials Research Proceedings*, 7: 799-803.
17. Gamboa RA, Moo-Chale CM, Flores-Johnson EA, Carrillo JG (2018) Mechanical characterization of plaster reinforced with recycled cellulose fiber from multi-layer packaging waste for construction applications, *Materials Research Proceedings*, 7: 804-809.
16. Wang R, Shen L, Flores-Johnson EA, Li QM, Proust G. (2017) Characterisation of Mechanical Properties of Two Polymer Foams under Quasi-static and Impact Loading, in *Proceedings of 6th International Conference on Design and Analysis of Protective Structures (DAPS 2017)*, 29 Novembre-1 December, Melbourne, Australia.
15. Ramezani M, Flores-Johnson EA, Shen L, Neitzert T (2017) High Strain Rate Compressive Behaviour of Selective Laser Melted Ti-6Al-4V, *Materials Science Forum* 890: 323-326.

14. Gharehdash S, Shen L, Gan Y, Flores-Johnson EA (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.
13. Wang R, Flores-Johnson EA, 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.
12. Flores-Johnson EA, Li QM (2015), Effect of structurally-induced lateral confinement on split Hopkinson pressure bar test specimens of concrete-like materials, *EPJ Web of Conferences* 94: 04031.
11. Flores-Johnson EA, Carrillo JG, Gamboa RA, 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.
10. Flores-Johnson EA, Gonzalez-Chi PI, Ay-Puc GI, 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.
9. Huang P, Proust G, Alonso-Marroquin F, Flores-Johnson EA, Gan Y, Shen L, Hanaor DAH (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.
8. Flores-Johnson EA, Carrillo JG, Gamboa RA, Shen L (2014), Experimental and Numerical Study of Plain-Woven Aramid Fabric, *Advanced Materials Research* 856: 74-78.
7. Flores-Johnson EA, Shen L, Annabattula RK, Onck PR, Shen YG, Chen Z (2014) Finite element modelling of stress-induced fracture in Ti-Si-N films, *Applied Mechanics and Materials* 553:10-15.
6. Flores-Johnson EA, Carrillo JG, Gamboa RA, Shen L (2014) Finite-element modelling of ballistic impact of plain-woven aramid fabric, *Applied Mechanics and Materials* 553:769-773.
5. Flores-Johnson EA, Shen L, Guimatsia I, Nguyen GD (2014) Finite-element modelling of the impact behaviour of aluminium nacre-like composite, *Applied Mechanics and Materials* 566: 457-462.
4. Flores-Johnson EA, Muransky O, Hamelin CJ, Bendeich PJ, 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.
3. Flores-Johnson EA, 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.
2. Flores-Johnson EA, Li QM (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.
1. Flores-Johnson EA, Li QM (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.