

Análisis bibliográfico de los artículos con autoría española en materiales compuestos.

1^{er} y 2º trimestre de 2020

Prefacio

En su afán por divulgar el conocimiento en materiales compuestos generado en España y posibilitar el establecimiento de sinergias entre los distintos centros, y entre ellos y el tejido productivo, AEMAC hace un seguimiento de los artículos que se generan en revistas científicas y los condensa en estos informes periódicos.

El siguiente listado NO contiene todos los que se habrán generado. Ver los criterios de búsqueda al final de este documento. Este listado se ha generado a 2 de Septiembre de 2020.

El listado de artículos sigue a los publicados en el [1T 2018](#), [2T y 3T 2018](#), [4T 2018](#), [1T y 2T 2019](#), [3T 2019](#) y [4T 2019](#).

Listado de artículos aparecidos el 1^{er} y 2º trimestre de 2020

Aenlle-Lopez, M., Pelayo, F., Calvente, M. M., & Lamela-Rey, M. J. Buckling of laminated glass plates using the effective thickness concept. *Journal of Sandwich Structures & Materials*. doi:10.1177/1099636220927003

Alkhatib, F., Mahdi, E., & Dean, A. (2020). Development of composite double-hat energy absorber device subjected to traverser loads. *Composite Structures*, 240. doi:10.1016/j.compstruct.2020.112046

Barris, C., Sala, P., Gomez, J., & Torres, L. (2020). Flexural behaviour of FRP reinforced concrete beams strengthened with NSM CFRP strips. *Composite Structures*, 241. doi:10.1016/j.compstruct.2020.112059

Bergan, A. C., Herraez, M., Gonzalez, C., & Lopes, C. S. (2020). A constitutive model for fiber kinking: Formulation, finite element implementation, and verification. *Composites Part a-Applied Science and Manufacturing*, 129. doi:10.1016/j.compositesa.2019.105682

Bonhomme, J., Mollon, V., Vina, J., & Arguelles, A. (2020). Finite element analysis of the Longitudinal Half Fixed Beam method for mode III characterization. *Composite Structures*, 232. doi:10.1016/j.compstruct.2019.111546

Cantero, B., del Bosque, I. F. S., Matias, A., de Rojas, M. I. S., & Medina, C. (2020). Water

transport mechanisms in concretes bearing mixed recycled aggregates. *Cement & Concrete Composites*, 107. doi:10.1016/j.cemconcomp.2019.103486

Carballosa, P., Calvo, J. L. G., & Revuelta, D. (2020). Influence of expansive calcium sulfoaluminate agent dosage on properties and microstructure of expansive self-compacting concretes. *Cement & Concrete Composites*, 107. doi:10.1016/j.cemconcomp.2019.103464

Cepero-Mejias, F., Curiel-Sosa, J. L., Blazquez, A., Yu, T. T., Kerrigan, K., & Phadnis, V. A. (2020). Review of recent developments and induced damage assessment in the modelling of the machining of long fibre reinforced polymer composites. *Composite Structures*, 240. doi:10.1016/j.compstruct.2020.112006

Chataigner, S., Wahbeh, M., Garcia-Sanchez, D., Benzarti, K., Birtel, V., Fischer, M., . . . Zalbide, M. (2020). Fatigue Strengthening of Steel Bridges with Adhesively Bonded CFRP Laminates: Case Study. *Journal of Composites for Construction*, 24(3). doi:10.1061/(asce)cc.1943-5614.0001014

Conde, F. M., Coelho, P. G., Tavares, R. P., Rodrigues, H. C., Guedes, J. M., & Camanho, P. P. (2020). Optimization of the microstructure of unidirectional hybrid composites under uniaxial tensile loads. *Composite Structures*, 235. doi:10.1016/j.compstruct.2019.111795

Cruz-Gonzalez, O. L., Ramirez-Torres, A., Rodriguez-Ramos, R., Penta, R., Bravo-Castillero, J., Guinovart-Diaz, R., . . . Lebon, F. A hierarchical asymptotic homogenization approach for viscoelastic composites. *Mechanics of Advanced Materials and Structures*. doi:10.1080/15376494.2020.1722872

del Río, T. G., Rodriguez, J., Arencón, D., & Martínez, A. B. (2020). Dynamic strain rate and relative density effect on compression behavior of PP and PP/PE copolymers foamed by microcellular injection molding. *Mechanics of Advanced Materials and Structures*, 27(5), 417-425. doi:10.1080/15376494.2018.1475584

Díaz-Alvarez, A., Díaz-Alvarez, J., Cantero, J. L., & Santiuste, C. (2020). Analysis of orthogonal cutting of biocomposites. *Composite Structures*, 234. doi:10.1016/j.compstruct.2019.111734

Esmaeili, A., Sbarufatti, C., Jimenez-Suarez, A., Urena, A., & Hamouda, A. M. (2020). Piezoresistive characterization of epoxy based nanocomposites loaded with SWCNTs-DWCNTs in tensile and fracture tests. *Polymer Composites*, 41(7), 2598-2609. doi:10.1002/pc.25558

Esmaeili, A., Sbarufatti, C., Ma, D., Manes, A., Jimenez-Suarez, A., Urena, A., . . . Hamouda, A. M. S. (2020). Strain and crack growth sensing capability of SWCNT reinforced epoxy in tensile and mode I fracture tests. *Composites Science and Technology*, 186. doi:10.1016/j.compscitech.2019.107918

Galeote, E., Blanco, A., & de la Fuente, A. (2020). Design-oriented approach to determine FRC constitutive law parameters considering the size effect. *Composite Structures*, 239. doi:10.1016/j.compstruct.2020.112036

García-Rodríguez, S. M., Costa, J., Rankin, K. E., Boardman, R. P., Singery, V., & Mayugo,

J. A. (2020). Interleaving light veils to minimise the trade-off between mode-I interlaminar fracture toughness and in-plane properties. *Composites Part a-Applied Science and Manufacturing*, 128. doi:10.1016/j.compositesa.2019.105659

Goncalves, T., Silva, R. V., de Brito, J., Fernandez, J. M., & Esquinas, A. R. (2020). Mechanical and durability performance of mortars with fine recycled concrete aggregates and reactive magnesium oxide as partial cement replacement. *Cement & Concrete Composites*, 105. doi:10.1016/j.cemconcomp.2019.103420

Gonzalez-Guisasola, C., Gil-Castell, O., Teruel-Juanes, R., & Ribes-Greus, A. (2020). Influence of the Molecular Weight on PVA/GO Composite Membranes for Fuel Cell Applications. *Journal of Renewable Materials*, 8(9), 1171-1180. doi:10.32604/jrm.2020.04399

Gonzalez-Lopez, L., Claramunt, J., Hsieh, Y. L., Ventura, H., & Ardanuy, M. (2020). Surface modification of flax nonwovens for the development of sustainable, high performance, and durable calcium aluminate cement composites. *Composites Part B-Engineering*, 191. doi:10.1016/j.compositesb.2020.107955

Graciani, E., Justo, J., & Zumaquero, P. L. (2020). Determination of in-plane and through-the-thickness coefficients of thermal expansion in composite angle brackets using digital image correlation. *Composite Structures*, 238. doi:10.1016/j.compstruct.2020.111939

Guerrero, J. M., Mayugo, J. A., Costa, J., & Turon, A. (2020). Failure of hybrid composites under longitudinal tension: Influence of dynamic effects and thermal residual stresses. *Composite Structures*, 233. doi:10.1016/j.compstruct.2019.111732

Guillen-Hernandez, T., Reinoso, J., & Paggi, M. Phase field model for fracture analysis of functionally graded power-based shell structures. *Mechanics of Advanced Materials and Structures*. doi:10.1080/15376494.2020.1751354

Herraez, M., Segurado, J., Gonzalez, C., & Lopes, C. S. (2020). A microstructures generation tool for virtual ply property screening of hybrid composites with high volume fractions of non-circular fibers - VIPER. *Composites Part a-Applied Science and Manufacturing*, 129. doi:10.1016/j.compositesa.2019.105691

Hyskova, P., Gaff, M., Hidalgo-Cordero, J. F., & Hysek, S. (2020). Composite materials from totora (*Schoenoplectus californicus*. CA Mey, Sojak): Is it worth it? *Composite Structures*, 232. doi:10.1016/j.compstruct.2019.111572

Krishnaswamy, J. A., Buroni, F. C., Melnik, R., Rodriguez-Tembleque, L., & Saez, A. (2020). Advanced modeling of lead-free piezocomposites: The role of nonlocal and nonlinear effects. *Composite Structures*, 238. doi:10.1016/j.compstruct.2020.111967

Maiorano, L. P., & Molina, J. M. (2020). Guiding heat in active thermal management: One-pot incorporation of interfacial nano-engineered aluminium/diamond composites into aluminium foams. *Composites Part a-Applied Science and Manufacturing*, 133. doi:10.1016/j.compositesa.2020.105859

Martins, P., Nunes, J. S., Oliveira, J., Perinka, N., & Lanceros-Mendez, S. (2020). Spray-

printed magnetoelectric multifunctional composites. *Composites Part B-Engineering*, 187. doi:10.1016/j.compositesb.2020.107829

Milani, G., Fagone, M., Rotunno, T., Grande, E., & Bertolesi, E. (2020). Development of an interface numerical model for C-FRPs applied on flat and curved masonry pillars. *Composite Structures*, 241. doi:10.1016/j.compstruct.2020.112074

Monsef, S. A., Perez-Galme, M., Renart, J., Turon, A., & Maimi, P. (2020). The influence of mode II test configuration on the cohesive law of bonded joints. *Composite Structures*, 234. doi:10.1016/j.compstruct.2019.111689

Moreno, M. C. S., & Munoz, S. H. (2020). Elastic stability in biaxial testing with cruciform specimens subjected to compressive loading. *Composite Structures*, 234. doi:10.1016/j.compstruct.2019.111697

Moure, M. M., Herrero-Cuenca, J., Garcia-Castillo, S. K., & Barbero, E. (2020). Design tool to predict the open-hole failure strength of composite laminates subjected to in-plane loads. *Composite Structures*, 238. doi:10.1016/j.compstruct.2020.111970

Orue, A., Anakabe, J., Zaldua-Huici, A. M., Eceiza, A., & Arbelaitz, A. Preparation and characterization of composites based on poly(lactic acid)/poly(methyl methacrylate) matrix and sisal fiber bundles: The effect of annealing process. *Journal of Thermoplastic Composite Materials*. doi:10.1177/0892705720930780

Pascual-Gonzalez, C., Iragi, M., Fernandez, A., Fernandez-Blazquez, J. P., Aretxabaleta, L., & Lopes, C. S. (2020). An approach to analyse the factors behind the micromechanical response of 3D-printed composites. *Composites Part B-Engineering*, 186. doi:10.1016/j.compositesb.2020.107820

Pinto, J., Escudero, J., Solorzano, E., & Rodriguez-Perez, M. A. (2020). A novel route to produce structural polymer foams with a controlled solid skin-porous core structure based on gas diffusion mechanisms. *Journal of Sandwich Structures & Materials*, 22(3), 822-832. doi:10.1177/1099636218777434

Ranz, D., Cuartero, J., Castejon, L., Miralbes, R., & Malon, H. (2020). A cohesive zone model approach to interlaminar behaviour of carbon/epoxy laminated curved beams. *Composite Structures*, 238. doi:10.1016/j.compstruct.2020.111983

Ranz, D., Cuartero, J., Castejon, L., Miralbes, R., & Valladares, D. Enhanced cohesive zone model to predict delamination behavior of carbon/epoxy laminated curved beams. *Mechanics of Advanced Materials and Structures*. doi:10.1080/15376494.2020.1769232

Ribeiro, S., Meira, R. M., Correia, D. M., Tubio, C. R., Ribeiro, C., Baleizao, C., & Lanceros-Mendez, S. (2020). Silica nanoparticles surface charge modulation of the electroactive phase content and physical-chemical properties of poly(vinylidene fluoride) nanocomposites. *Composites Part B-Engineering*, 185. doi:10.1016/j.compositesb.2020.107786

Romero-Hermida, I., Borrero-Lopez, A. M., Alejandre, F. J., Flores-Ales, V., Santos, A., Franco, J. M., & Esquivias, L. (2020). Phosphogypsum waste lime as a promising substitute of commercial limes: A rheological approach (vol 95, pg 205, 2019). *Cement & Concrete*

Composites, 108. doi:10.1016/j.cemconcomp.2020.103541

Sabouri-Ghom, S., Nasri, A., Jahani, Y., & Bhowmick, A. K. (2020). Flexural performance of composite walls under out-of-plane loads. *Steel and Composite Structures*, 34(4), 525-545. doi:10.12989/scs.2020.34.4.525

Saenz-Dominguez, I., Tena, I., Sarrionandia, M., Torre, J., & Aurrekoetxea, J. (2020). An analytical model of through-thickness photopolymerisation of composites: Ultraviolet light transmission and curing kinetics. *Composites Part B-Engineering*, 191. doi:10.1016/j.compositesb.2020.107963

Salinier, A., Dagreou, S., Visse, A., Navascues, N., Leonardi, F., & Derail, C. (2020). Influence of specific mechanical energy during compounding in a co-kneader on electrical and rheological properties of multiscale composite materials. *Composites Communications*, 17, 154-162. doi:10.1016/j.coco.2019.12.003

Sanchez, E. D., Nallim, L. G., Bellomo, F. J., & Oller, S. H. (2020). Generalized viscoelastic model for laminated beams using hierarchical finite elements. *Composite Structures*, 235. doi:10.1016/j.compstruct.2019.111794

Sanchez-Romate, X. F., Moriche, R., Pozo, A. R., Jimenez-Suarez, A., Sanchez, M., Guemes, A., & Urena, A. (2020). Monitoring crack propagation in skin-stringer elements using carbon nanotube doped adhesive films: Influence of defects and manufacturing process. *Composites Science and Technology*, 193. doi:10.1016/j.compscitech.2020.108147

Sasikumar, A., Garcia-Rodriguez, S. M., Arbelaez, J. J., Trias, D., & Costa, J. (2020). On how unsymmetrical laminate designs with tailored ply clusters affect compression after impact strength compared to symmetric baseline. *Composite Structures*, 238. doi:10.1016/j.compstruct.2020.111958

Shu, R., Jiang, X. S., Sun, H. L., Shao, Z. Y., Song, T. F., & Luo, Z. P. (2020). Recent researches of the bio-inspired nano-carbon reinforced metal matrix composites. *Composites Part a-Applied Science and Manufacturing*, 131. doi:10.1016/j.compositesa.2020.105816

Soldatos, K. P., Shariff, M., & Merodio, J. On the constitution of polar fiber-reinforced materials. *Mechanics of Advanced Materials and Structures*. doi:10.1080/15376494.2020.1729449

Tsokanas, P., Loutas, T., Kotsinis, G., Kostopoulos, V., van den Brink, W. M., & de la Escalera, F. M. (2020). On the fracture toughness of metal-composite adhesive joints with bending-extension coupling and residual thermal stresses effect. *Composites Part B-Engineering*, 185. doi:10.1016/j.compositesb.2019.107694

Valladares, D., Castejon, L., Cuartero, E., Malon, H., Angulo, D. R., Ilijevic, S., & Agustin, X. Development of a new car C-pillar made of sandwich structures. *Journal of Sandwich Structures & Materials*. doi:10.1177/1099636220909947

Valorosi, F., De Meo, E., Blanco-Varela, T., Martorana, B., Veca, A., Pugno, N., . . . Palermo, V. (2020). Graphene and related materials in hierarchical fiber composites: Production techniques and key industrial benefits. *Composites Science and Technology*,

185. doi:10.1016/j.compscitech.2019.107848

Velez, J. C., Cornelio, J. A. C., Sierra, R. B., Santa, J. F., Hoyos-Palacio, L. M., Nevshupa, R., & Toro, A. (2020). Development of a composite friction modifier with carbon nanotubes for applications at the wheel-rail interface. *Advanced Composites Letters*, 29. doi:10.1177/2633366x20930019

Vercher, J., Fombuena, V., Diaz, A., & Soriano, M. (2020). Influence of fibre and matrix characteristics on properties and durability of wood-plastic composites in outdoor applications. *Journal of Thermoplastic Composite Materials*, 33(4), 477-500. doi:10.1177/0892705718807956

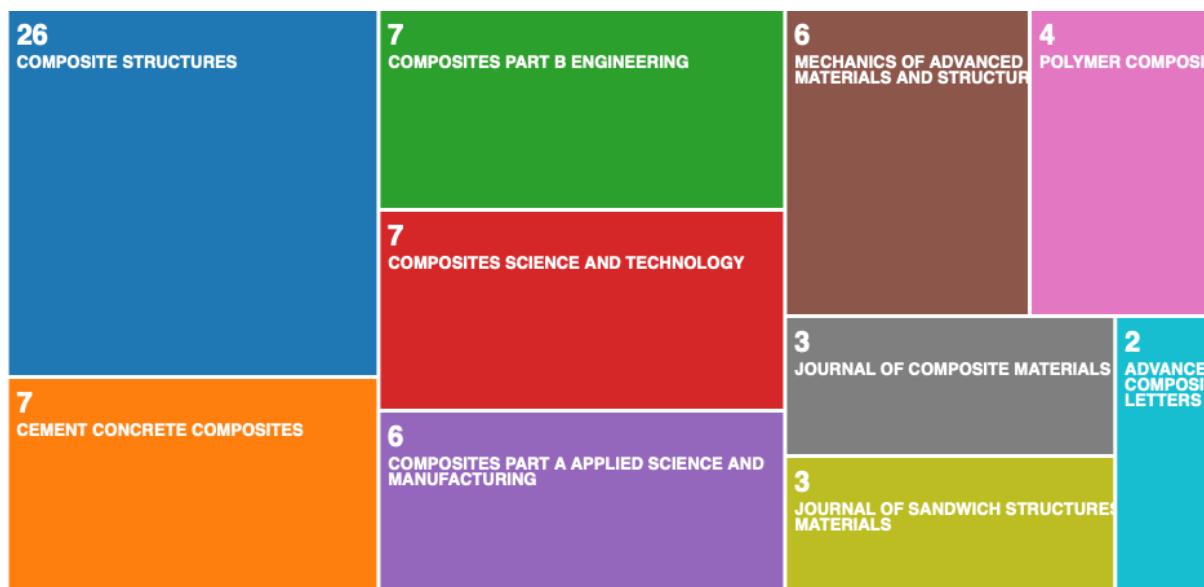
Wen, X., Liu, Z. Q., Li, Z., Zhang, J., Wang, D. Y., Szymanska, K., . . . Tang, T. (2020). Constructing multifunctional nanofiller with reactive interface in PLA/CB-g-DOPO composites for simultaneously improving flame retardancy, electrical conductivity and mechanical properties. *Composites Science and Technology*, 188. doi:10.1016/j.compscitech.2019.107988

Zhang, J., Li, Z., Qi, X. L., Zhang, W., & Wang, D. Y. (2020). Size tailored bimetallic metal-organic framework (MOF) on graphene oxide with sandwich-like structure as functional nano-hybrids for improving fire safety of epoxy. *Composites Part B-Engineering*, 188. doi:10.1016/j.compositesb.2020.107881

Zhang, L., Liu, W., Wen, X., Chen, J. Y., Zhao, C. S., Castillo-Rodriguez, M., . . . Wang, D. Y. (2020). Electrospun submicron NiO fibers combined with nanosized carbon black as reinforcement for multi-functional poly(lactic acid) composites. *Composites Part a-Applied Science and Manufacturing*, 129. doi:10.1016/j.compositesa.2019.105662

Datos bibliográficos agregados (2020)

Revistas



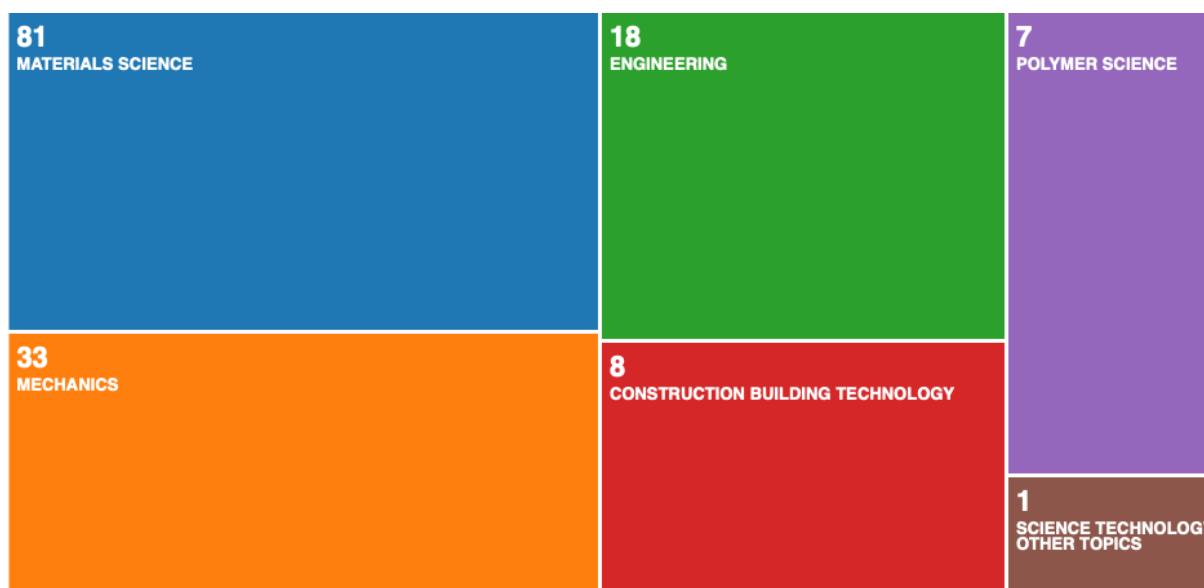
Grupos



Países colaboradores



Áreas temáticas



Agencias financieras



Criterios de búsqueda

Los artículos incluidos en el presente listado son los que aparecen en la base de datos “*Science Citation Index Expanded (SCI-EXPANDED) from Web of Knowledge Core Collection*” de Clarivate Analytics, con las restricciones: Subject = “Materials Science, Composites” y Country = “Spain”. Por lo tanto, por ejemplo, no aparecerán artículos de autores españoles afiliados a centros extranjeros ni artículos de composites publicados en revistas indexadas en otras materias (*subjects*).

Contribución a la ampliación de los criterios de búsqueda

Para identificar los artículos sobre materiales compuestos con autoría de centros de investigación españoles publicados en revistas indexadas en otras materias (*subjects*), los centros pueden enviar a AEMAC (administración@aemac.org) los criterios de “búsqueda avanzada” a utilizar en la base de datos antes citada que permitan identificar sin ambigüedad las publicaciones del centro. No se atenderá a la recepción de artículos individuales ni a criterios de “búsqueda avanzada” que no estén en el formato de la base de datos (el formato aceptable será el resultado de un “Saved Search” en la ventana de búsquedas avanzadas de la base de datos). El centro debe haber comprobado la fiabilidad del criterio de búsqueda (no debe generar ni artículos de otros campos ni de otros autores).

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La información contenida en este listado está destinada únicamente a fines informativos con objeto de fomentar su difusión en el sector español y se ha recabado de bases de datos de terceros. Por la presente nota de descargo de responsabilidad, AEMAC declina cualquier responsabilidad por omisión o inexactitud de la información recogida en este documento.