



## اصلاحیه به:

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## مطالعه المان محدود رفتار چسبندگی الیاف از جنس آلیاژهای حافظه‌دار شکلی با بتن پلیمری

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نویسندگان با اظهار تاسف از اشتباه تایپی رخ داده، درخواست تغییر مرتبه علمی نویسنده دوم از مرتبه "دانشیار" به مرتبه "استادیار" را داشته‌اند که در این اصلاحیه اعمال شده است. لازم به ذکر است نشریه علوم و فناوری کامپوزیت هیچ مسئولیتی در قبال عواقب بعدی این اصلاحیه نداشته و این امر بنا به درخواست کتبی نویسندگان ایشان انجام شده است و مسئولیت هرگونه مشکلات احتمالی بعدی بر عهده خود ایشان است.

### Corrigendum to:

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### Finite Element Analysis of the Adhesive behavior of Shape Memory Alloy Fiber and Polymer Concrete

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The authors regretted the typographical error and requested a change in the second author's academic rank from "Associate Professor" to "Assistant Professor", which was applied in this amendment. It should be noted that the Journal of Science and Technology of Composites has no responsibility for the subsequent consequences of this amendment, and this has been done based on the written request of the authors, and they are responsible for any subsequent problems.

- Morphology“ *Cement and Concrete Composites*, Vol. 48, pp. 42-52, 2014.
- [16] Alwan, J. M., Naaman, A. E. and Guerrero, P., “Effect of Mechanical Clamping on the Pull-out Response of Hooked Steel Fibers Embedded in Cementitious Matrices“ *Concrete Science and Engineering*, Vol. 1, No. 1, pp. 15-25, 1999.
- [17] Yoo, D.-Y. and Kim, S., “Comparative Pullout Behavior of Half-Hooked and Commercial Steel Fibers Embedded in UhpC under Static and Impact Loads“ *Cement and Concrete Composites*, Vol. 97, pp. 89-106, 2019.
- [18] Cunha, V. M., Barros, J. A. and Sena-Cruz, J. M., “Pullout Behavior of Steel Fibers in Self-Compacting Concrete“ *Journal of Materials in Civil Engineering*, Vol. 22, No. 1, pp. 1-9, 2009.
- [19] Khalili, S. M. and Saedi, A., “Micromechanics Modeling and Experimental Characterization of Shape Memory Alloy Short Wires Reinforced Composites“ *Journal of Science and Technology of Composites*, Vol. 2, No. 1, pp. 1-6, 2015. (In Persian)
- [20] Mojabi, S. S. and Kheirikhah, M. M., “Modeling and Intelligent Control of Vibration of Cantilever Composite Plate Embedded with Shape Memory Alloy Wires“ *Journal of Science and Technology of Composites*, Vol. 4, No. 4, pp. 363-374, 2018. (In Persian)
- [21] Osfour, M., Rahmani, O. and Zamani, M. R., “An Experimental Investigation on Nitinol Shape Memory Alloy Reinforced Glares against Charpy Low Velocity Impact“ *Journal of Science and Technology of Composites*, Vol. 5, No. 3, pp. 403-414, 2018. (In Persian)
- [22] Khalili, S. M. R. and Akbari, T., “An Investigation on the Static Buckling Behavior of Laminated Cylindrical Composite Shells with Embedded Sma Wires by Experiment“ *Journal of Science and Technology of Composites*, Vol. 5, No. 4, pp. 551-564, 2019. (In Persian)
- [23] Chang, W. S. and Araki, Y., “Use of Shape-Memory Alloys in Construction: A Critical Review“ in *Proceeding of ICE Publishing*, pp. 87-95, 2018.
- [24] Khalili, S. M. R., Poormir, M. A. and Eslami-Farsani, R., “An Experimental Investigation on Tensile Properties of Self-Healing Metal Matrix Composite Reinforced by Superelastic Niti Wires Using Taguchi Method“ *Journal of Science and Technology of Composites*, Vol. 6, No. 1, pp. 1-8, 2019. (In Persian)
- [25] Freed, Y., Aboudi, J. and Gilat, R., “Thermomechanically Micromechanical Modeling of Prestressed Concrete Reinforced with Shape Memory Alloy Fibers“ *Smart materials and structures*, Vol. 16, No. 3, pp. 717, 2007.
- [26] Alam, M. S., Youssef, M. A. and Nehdi, M., “Analytical Prediction of the Seismic Behaviour of Superelastic Shape Memory Alloy Reinforced Concrete Elements“ *Engineering Structures*, Vol. 30, No. 12, pp. 3399-3411.
- [27] Abdulridha, A. and Palermo, D., “Behaviour and Modelling of Hybrid Sma-Steel Reinforced Concrete Slender Shear Wall“ *Engineering Structures*, Vol. 147, pp. 77-89, 2017.
- [28] Moser, K., Bergamini, A., Christen, R. and Czaderski, C., “Feasibility of Concrete Prestressed by Shape Memory Alloy Short Fibers“ *Materials and structures*, Vol. 38, No. 5, pp. 593-600, 2005.
- [29] Zhou, B., Yoon, S.-H. and Leng, J.-S., “A Three-Dimensional Constitutive Model for Shape Memory Alloy“ *Smart Materials and Structures*, Vol. 18, No. 9, pp. 32-45, 2009.
- [30] Fugazza, D., “Experimental Investigation on the Cyclic Properties of Superelastic Niti Shape-Memory Alloy Wires and Bars” Individual study, European School for Advanced Studies in Reduction of Seismic Risk ROSE School, Pavia, Italy, 2005.
- [1] Vahidi Pashaki, P., Pouya, M. and Maleki, V. A., “High-Speed Cryogenic Machining of the Carbon Nanotube Reinforced Nanocomposites: Finite Element Analysis and Simulation“ *Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science*, Vol. 232, No. 11, pp. 1927-1936, 2018.
- [2] Ghaderi, M., Maleki, V. A. and Andalibi, K., “Retrofitting of Unreinforced Masonry Walls under Blast Loading by Frp and Spray on Polyurea“ *Fen Bilimleri Dergisi (CFD)*, Vol. 36, No. 4, 2015.
- [3] Aghamohammadi, H., Abbandanak, S. N. H. and Siadati, S. M. H., “Effect of Various Surface Treatment Methods on the Flexural Properties of Fiber Metal Laminates“ *Journal of Science and Technology of Composites*, Vol. 6, No. 4, pp. 495-502, 2020. (In Persian)
- [4] kamani, R., Kamali Dolatabadi, M., Asghharian Jeddi, A. A. and Nasrollahzadeh, K., “Increasing the Efficiency of Carbon Fiber Bundles in Reinforcing Fine Grained Concrete: An Experimental Study of Flexural Bearing Capacity“ *Journal of Science and Technology of Composites*, Vol. 6, No. 2, pp. 310-318, 2019. (In Persian)
- [5] A, S. and Kabir, M., Numerical study of the effect of glass fiber sizing reinforcement by randomly distributed CNTs on the glass/epoxy composite transverse mechanical properties', *Journal of Science and Technology of Composites*, *Journal of Science and Technology of Composites*, Vol. 1, No. 1, pp. 45-52, 2014. (In Persian)
- [6] Sui, L., Luo, M., Yu, K., Xing, F., Li, P., Zhou, Y. and Chen, C., “Effect of Engineered Cementitious Composite on the Bond Behavior between Fiber-Reinforced Polymer and Concrete“ *Composite Structures*, Vol. 184, pp. 775-788, 2018.
- [7] Abbass, W., Khan, M. I. and Mourad, S., “Evaluation of Mechanical Properties of Steel Fiber Reinforced Concrete with Different Strengths of Concrete“ *Construction and Building Materials*, Vol. 168, pp. 556-569, 2018.
- [8] Leone, M., Centonze, G., Colonna, D., Micelli, F. and Aiello, M., “Fiber-Reinforced Concrete with Low Content of Recycled Steel Fiber: Shear Behaviour“ *Construction and Building Materials*, Vol. 161, pp. 141-155, 2018.
- [9] Wille, K., Naaman, A. E., El-Tawil, S. and Parra-Montesinos, G. J., “Ultra-High Performance Concrete and Fiber Reinforced Concrete: Achieving Strength and Ductility without Heat Curing“ *Materials and structures*, Vol. 45, No. 3, pp. 309-324, 2012.
- [10] Abdallah, S., Fan, M. and Rees, D. W., “Analysis and Modelling of Mechanical Anchorage of 4d/5d Hooked End Steel Fibres“ *Materials & Design*, Vol. 112, pp. 539-552, 2016.
- [11] Abazadeh, B. and Azimpour Shishevan, F., “An Experimental Investigation of the Low Velocity Impact Behavior of Woven Carbon-Fiber-Epoxy Composites“ *Journal of Science and Technology of Composites*, Vol. 6, No. 4, pp. 571-580, 2020.
- [12] Adli, A., Shelesh-Nezhad, K., Khoshnavan Azar, M. R. and Mohammadi-Aghdam, M., “The Effect of Vascular Self-Healing Orientation on Healing Efficiency of Epoxy/Glass Fiber Composite“ *Journal of Science and Technology of Composites*, Vol. 6, pp. 32-43, 2020. (In Persian)
- [13] Abdollahi, M., Fallahnejad, M. and Zamani, A., “Investigation the Flexural Behavior of Fiber Metal Laminates Containing Glass and Kevlar Fibers Subjected to Thermal Cycling“ *Journal of Science and Technology of Composites*, Vol. 7, No. 1, pp. 54-67, 2020. (In Persian)
- [14] Abdallah, S. and Rees, D. W., “Comparisons between Pull-out Behaviour of Various Hooked-End Fibres in Normal-High Strength Concretes“ *International Journal of Concrete Structures and Materials*, Vol. 13, No. 1, pp. 27, 2019.
- [15] Ellis, B., McDowell, D. and Zhou, M., “Simulation of Single Fiber Pullout Response with Account of Fiber