

PHỤ LỤC

(Ban hành kèm theo Thông tư số 06/2020/TT-BGDĐT ngày 19 tháng 3 năm 2020 của Bộ trưởng Bộ Giáo dục và Đào tạo)

Mẫu số 03

CỘNG HÒA XÃ HỘI CHỦ NGHĨA VIỆT NAM Độc lập - Tự do - Hạnh phúc

LÝ LỊCH KHOA HỌC

(Dành cho ứng viên/thành viên các Hội đồng Giáo sư)



1. Thông tin chung

- Họ và tên: Nguyễn Xuân Hùng
- Năm sinh: 01/01/1976
- Giới tính: Nam
- Trình độ đào tạo (TS, TSKH) (năm, nơi cấp bằng): Tiến sĩ Đại học Liège (Bỉ)
- Chức danh Giáo sư (năm, nơi bổ nhiệm): 2019, ĐH Công nghệ TP.HCM

- Ngành, chuyên ngành khoa học: Cơ học, Cơ học tính toán
- Chức vụ và đơn vị công tác hiện tại (hoặc đã nghỉ hưu từ năm): Viện trưởng Viện Công nghệ Nghiên cứu Liên ngành CIRTECH, Đại học Công nghệ TP.HCM, 475A Điện Biên Phủ, P.25, Q. Bình Thạnh, TP.HCM
- Chức vụ cao nhất đã qua: Viện trưởng
- Thành viên Hội đồng Giáo sư ngành (nếu có) (năm tham gia, tên hội đồng, nhiệm kỳ): Ngành Cơ học, nhiệm kỳ 2014-2018.

2. Thành tích hoạt động đào tạo và nghiên cứu (thuộc chuyên ngành đang hoạt động)

2.1. Sách chuyên khảo, giáo trình

a) Tổng số sách đã chủ biên: 01 sách chuyên khảo; tham gia 01 giáo trình.

b) Danh mục sách chuyên khảo, giáo trình trong 05 năm liền kề với thời điểm được bổ nhiệm thành viên Hội đồng gần đây nhất (tên tác giả, tên sách, nhà xuất bản, năm xuất bản, mã số ISBN, chỉ số trích dẫn).

TT	Tên sách	Loại sách	Nhà xuất bản và năm xuất bản	Số tác giả	Viết một mình hoặc chủ biên,	Thẩm định, xác nhận sử dụng	ISBN (nếu có)
----	----------	-----------	------------------------------	------------	------------------------------	-----------------------------	---------------

					phần biên soạn	của CSGDĐ H	
1	<i>Phân tích đẳng hình học: Cầu nối hợp nhất giữa mô hình mô phỏng và thiết kế</i>	Sách chuyên khảo	ĐHQG	1	Viết một mình	ĐHCN TPHCM	978-604- 73-3302-8
2	<i>Phương pháp phân tử hữu hạn sử dụng MATLAB</i>	Sách giáo trình	NXB Xây dựng	2	Tham gia viết chung	ĐHCN TPHCM	978-604- 82-1501-9

2.2. Các bài báo khoa học được công bố trên các tạp chí khoa học

a) Tổng số đã công bố: 16 bài báo tạp chí trong nước; 216 bài báo tạp chí quốc tế.

b) Danh mục bài báo khoa học công bố trong 05 năm liền kề với thời điểm được bổ nhiệm thành viên Hội đồng gần đây nhất (*tên tác giả, tên công trình, tên tạp chí, năm công bố, chỉ số IF và chỉ số trích dẫn - nếu có*):

2020

112. T. Vu-Huu, C. Le-Thanh, H. Nguyen-Xuan, M. Abdel Wahab, Stabilization for Equal-Order Polygonal Finite Element Method for High Fluid Velocity and Pressure Gradient, CMC-Computers, Materials & Continua, 62, 1109-1123, 2020 (Q1). [Link](#)

111. T. Vu-Huu, C. Le-Thanh, H. Nguyen-Xuan, M. Abdel Wahab, Equal-Order Polygonal Analysis for Fluid Computation in Curved Domain, International Journal of Computational Methods, in press, 2020 (Q3). [Link](#)

110. Duyen L.H. Nguyen, T.Q. Tao, Vu-Hieu Nguyen, M. Abdel-Wahab, H. Nguyen-Xuan, A data-driven approach based on long short-term memory and hidden Markov model for crack propagation prediction, Engineering Fracture Mechanics, in press, 2020 (Q1).

109. Thanh Q. Nguyen, Canh M. Le, Luan C. Vuong, Nhi K. Ngo, H. Nguyen-Xuan, A data-driven approach based on wavelet analysis and deep learning for identification of multiple-cracked beam structures under moving load, Measurement, in press, 2020 (Q2) [Link](#)

108. Nam V. Nguyen, Lieu B. Nguyen, H. Nguyen-Xuan, Jaehong Lee, Analysis and active control of geometrically nonlinear responses of smart FG porous plates with graphene nanoplatelets, International Journal of Mechanical Sciences, in press, 2020 (Q1) [Link](#)

107. X. Zhuang, L.C. Nguyen, H. Nguyen-Xuan, N. Alajlan, T. Rabczuk, Efficient Deep Learning for Gradient-Enhanced Stress Dependent Damage Model, *Applied Sciences*, 10(7), 2556, 2020 (Q2) [Link](#)
106. Nam V. Nguyen, Dongkyu Lee, H. Nguyen-Xuan, Jaehong Lee, A polygonal finite element approach for fatigue crack growth analysis of interfacial cracks, *Theoretical and Applied Fracture Mechanics*, in press, 2020 (Q1) [Link](#)
105. Van-Nam Hoang, Ngoc-Linh Nguyen, Phuong Tran, Ma Qian, H. Nguyen-Xuan, Adaptive Concurrent Topology Optimization of Cellular Composites for Additive Manufacturing, *JOM*, in press, 2020 (Q1) [Link](#)
104. Huan Q. Nguyen, Lieu B. Nguyen, Hoang B. Nguyen, H. Nguyen-Xuan, A three-variable high order shear deformation theory for isogeometric free vibration, buckling and instability analysis of FGP-GPLs plates, *Composite Structures*, in press, 2020 (Q1) [Link](#)
103. Long C. Nguyen, H. Nguyen-Xuan, Deep learning for computational structural optimization, *ISA Transactions*, in press, 2020 (Q1) [Link](#)
102. Nam Nguyen V., H. Nguyen-Xuan, Dongkyu Lee, Jaehong Lee, A novel computational approach to functionally graded porous plates with graphene platelets reinforcement, *Thin-Walled Structures*, 106684, 2020 (Q1) [Link](#)
101. Thao D Nguyen, Thanh Q Nguyen, Tam N Nguyen, H. Nguyen-xuan, Nhi K Ngo, A novel approach based on viscoelastic parameters for bridge health monitoring: A case study of Saigon bridge in Ho Chi Minh City - Vietnam, *Mechanical Systems and Signal Processing*, 141, 106728, 2020 (Q1) [Link](#)
100. G. D. Huynh, X. Zhuang, H. G. Bui, G. Meschke, H. Nguyen-Xuan, Elasto-plastic large deformation analysis of multi-patch thin shells by isogeometric approach, *Finite Element Analysis and Design*, in press, 2020 (Q1) [Link](#)
99. Thanh Q. Nguyen, Hieu C. Doan, Luan C. Vuong, H. Nguyen-Xuan, Nhi K. Ngo, Fretting Fatigue Damage Nucleation and Propagation Lifetime Using a Central Point Movement of Power Spectral Density, *Shock and Vibration*, 4985134, 2020 (Q2) [Link](#)
98. Thang Duc-Le, Quoc-Hung Nguyen, H. Nguyen-Xuan, Balancing Composite Motion Optimization, *Information Sciences*, 520, 250-270, 2020 (Q1) [Link](#)
97. Hau Ngoc Nguyen, H. Nguyen-Xuan, M. Abdel-Wahab, A numerical investigation on the use of pervious concrete for seawall structures, *Ocean Engineering*, 198, 106954, 2020 (Q1) [Link](#)
96. Tan N. Nguyen, H. Nguyen-Xuan, Jaehong Lee, A novel data-driven nonlinear solver for solid mechanics using time series forecasting, *Finite Element Analysis and Design*, 171, 103377, 2020 (Q1) [Link](#)
95. P. Phung-Van, Chien H. Thai, M. Abdel-Wahab, H. Nguyen-Xuan, Optimal design of FG sandwich nanoplates using size-dependent isogeometric analysis, *Mechanics of Materials*, 142, 103277, 2020 (Q1) [Link](#)

94. Chenxi Peng, Phuong Tran, H. Nguyen-Xuan, AJM Ferreira, Mechanical performance and fatigue life prediction of lattice structures: Parametric computational approach, *Composite Structures*, 235, 111821, 2020 (Q1) [Link](#)
93. Thanh Q. Nguyen, Lam Q. Tran, H. Nguyen-Xuan, Nhi K. Ngo, A statistical approach for evaluating crack defects in structures under dynamic responses, *Nondestructive Testing and Evaluation*, in press, 2020 (Q2). [Link](#)
92. Hai D. Huynh, X. Zhuang, H. Nguyen-Xuan, A polytree-based adaptive scheme for modeling linear fracture mechanics using a coupled XFEM-SBFEM approach, *Engineering Analysis with Boundary Elements*, 115, 72-85, 2020 (Q1). [Link](#)
91. Dac-Khuong Bui, Tuan Nguyen, Tuan Ngo, H. Nguyen-Xuan, An artificial neural network (ANN) expert system enhanced with electromagnetism-based firefly algorithm (EFA) for predicting energy consumption in buildings, *Energy*, 190, 116370, 2020 (Q1). [Link](#)
90. Van-Nam Hoang, Ngoc-Linh Nguyen, H. Nguyen-Xuan, Topology Optimization of Coated Structure Using Moving Morphable Sandwich Bars, *Structural and Multidisciplinary Optimization*, 61, 491–506, 2020 (Q1). [Link](#)
89. Thanh Q. Nguyen, Luan C. Vuong, H. Nguyen- Xuan, Nhi K. Ngo, A new insight into sensitivity of natural frequency values towards stiffness degradation of beams having defects by vibration measurement signals, *Frontiers of Structural and Civil Engineering*, in press, 2020 (Q3).

2019

88. P. Phung-Van, Chien H. Thai, H. Nguyen-Xuan, Magd Abdel-Wahab, An isogeometric approach of static and free vibration analyses for porous FG nanoplates, *European Journal of Mechanics-A/Solids*, 78, 103851, 2019 (SCI, Q1). [Link](#)
87. Bao-Loi Dang, Hau Nguyen-Ngoc, H. Nguyen-Xuan, Magd Abdel-Wahab, Numerical investigation of novel prefabricated hollow concrete blocks for stepped-type seawall structures, *Engineering Structures*, 198, 109558, 2019 (SCI, Q1). [Link](#)
86. T. Vu-Huu, Cuong-Le Thanh, H. Nguyen-Xuan, Magd Abdel-Wahab, An equal-order mixed polygonal finite element for two-dimensional incompressible Stokes flows, *European Journal of Mechanics-B/Fluids*, 92, 92-108, 2019 (SCI, Q2). [Link](#)
85. Duyen L.H. Nguyen, Dieu T Do, Jaehong Lee, T. Rabczuk, H. Nguyen-Xuan, Forecasting Damage Mechanics by Deep Learning, *Computers, Materials & Continua*, 61 (3), 951-977, 2019 (SCIE, Q1). [Link](#)
84. M.H. Jalaei, A.G. Arani, H. Nguyen-Xuan, Investigation of thermal and magnetic field effects on the dynamic instability of FG Timoshenko nanobeam employing nonlocal strain gradient theory, *International Journal of Mechanical Sciences*, 161-162, 105043, 2019 (SCI, Q1). [Link](#)

83. Dieu T. Do, Jaehong Lee, H. Nguyen-Xuan, Fast evaluation of crack growth path using time series forecasting, *Engineering Fracture Mechanics*, 218,106567, 2019 (SCI, Q1). [Link](#)
82. Thanh Q. Nguyen, Thao D. Nguyen, H. Nguyen- Xuan, Nhi K. Ngo, A correlation coefficient approach for evaluation of stiffness degradation of beams under moving load, *Computers, Materials & Continua*, 61 (1), 27-53, 2019 (SCIE, Q1). [Link](#)
81. T. Vu-Huu, Cuong-Le Thanh, H. Nguyen-Xuan, Magd Abdel-Wahab, A high-order mixed polygonal finite element for incompressible Stokes flow analysis, *Computer Methods in Applied Mechanics and Engineering*, 356, 175-198, 2019 (SCI, Q1). [Link](#)
80. H. Nguyen-Xuan, Khanh N. Chau, Khai N. Chau, Polytopal composite finite elements, *Computer Methods in Applied Mechanics and Engineering*, 355, 405-437, 2019 (SCI, Q1). [Link](#)
79. Tan N. Nguyen, Seunghye Lee, H. Nguyen-Xuan, Jaehong Lee, A novel analysis-prediction approach for geometrically nonlinear problems using group method of data handling, *Computer Methods in Applied Mechanics and Engineering*, 354, 506-526, 2019 (SCI, Q1). [Link](#)
78. Cuong-Le Thanh, Loc V Tran, T Vu-Huu, H. Nguyen-Xuan, M Abdel-Wahab, Size-dependent nonlinear analysis and damping responses of FG-CNTRC micro-plates, *Computer Methods in Applied Mechanics and Engineering*, 353, 253-276, 2019 (SCI, Q1). [Link](#)
77. Nam V. Nguyen, Jaehong Lee, H. Nguyen-Xuan, Active vibration control of GPLs-reinforced FG metal foam plates with piezoelectric sensor and actuator layers, *Composite Part B*, 172, 769-784, 2019 (SCI, Q1). [Link](#)
76. Lieu B. Nguyen, Chien H. Thai, A.M. Zenkour, H. Nguyen-Xuan, An isogeometric Bézier finite element method for vibration analysis of functionally graded piezoelectric material porous plates, *International Journal of Mechanical Sciences*, 157-158, 165-183, 2019 (SCI, Q1). [Link](#)
75. Hau Nguyen-Ngoc, P. Phung-Van, Bao-Loi Dang, H. Nguyen-Xuan, Magd Abdel-Wahab, Static and dynamic analyses of three-dimensional hollow concrete block revetments using polyhedral finite element method, *Applied Ocean Research*, 88, 15-28, 2019 (SCIE, Q2). [Link](#)
74. Q.B. Tao, L. Benabou, T.A. Nguyen Van, H. Nguyen-Xuan, Isothermal aging and shear creep behavior of a novel lead-free solder joint with small additions of Bi, Sb and Ni, *Journal of Alloys and Compounds*, 789, 183-192, 2019 (SCI, Q1). [Link](#)
73. Hoang X. Nguyen, Elena Atroshchenko, Tuan Ngo, H. Nguyen-Xuan, Thuc P. Vo, Vibration of cracked functionally graded microplates by the strain gradient theory and extended isogeometric analysis, *Engineering Structures*, 187, 251-266, 2019 (SCI, Q1). [Link](#)

72. Lieu B. Nguyen, Nam V. Nguyen, Chien H. Thai, A.M. J. Ferreira, H. Nguyen-Xuan, An isogeometric Bezier finite element analysis for piezoelectric FG porous plates reinforced by graphene platelets, *Composite Structures*, 214, 227-245, 2019 (SCIE, Q1). [Link](#)

71. Hai D. Huynh, Phuong Tran, X. Zhuang, H. Nguyen-Xuan, An extended polygonal finite element method for large deformation fracture analysis, *Engineering Fracture Mechanics*, 209, 344 - 368, 2019 (SCI, Q1). [Link](#)

70. Tan N. Nguyen, Chien H. Thai, Anh-Tuan Luu, H. Nguyen-Xuan, Jaehong Lee, NURBS-based postbuckling analysis of functionally graded carbon nanotube-reinforced composite shells, *Computer Methods in Applied Mechanics and Engineering*, 347, 983-1003, 2019 (SCI, Q1). [Link](#)

69. Khai N. Chau, Phuong Tran, H. Nguyen-Xuan, Multi-material topology optimization for additive manufacturing using polytree-based adaptive polygonal finite elements, *Automation in Construction*, 99, 79-90, 2019 (SCIE, Q1). [Link](#)

68. Hien V. Do, H. Nguyen-Xuan, Computation of limit and shakedown loads for pressure vessel components using isogeometric analysis based on Lagrange extraction, *International Journal of Pressure Vessels and Piping*, 169, 57-70, 2019 (SCIE, Q2). [Link](#)

67. Hien V. Do, T. Lahmer, X. Zhuang, N. Alajlan, H. Nguyen-Xuan, T. Rabczuk, An isogeometric analysis to identify the full flexoelectric complex material properties based on electrical impedance curve, *Computers & Structures*, 214, 1-14, 2019 (SCI, Q1). [Link](#)

66. P. Phung-Van, Chien H. Thai, H. Nguyen-Xuan, M. Abdel-Wahab, Porosity-dependent nonlinear transient responses of functionally graded nanoplates using isogeometric analysis, *Composite Part B*, 164, 215-255, 2019 (SCI, Q1). [Link](#)

65. Duc Thang Le, Dac-Khuong Bui, Tuan Duc Ngo, Quoc-Hung Nguyen, H. Nguyen-Xuan, A novel hybrid method combining electromagnetism-like mechanism and firefly algorithms for constrained design optimization of discrete truss structures, *Computers & Structures*, 212, 20-42, 2019 (SCI, Q1). [Link](#)

64. L. Leonetti, H. Nguyen-Xuan, A mixed edge-based smoothed solid-shell finite element method (MES-FEM) for laminated shell structures, *Composite Structures*, 208, 168 -179, 2019 (SCIE, Q1). [Link](#)

63. G.D. Huynh, X. Zhuang, H. Nguyen-Xuan, Implementation aspects of a phase-field approach for brittle fracture, *Frontiers of Structural and Civil Engineering*, 13, 417-428, 2019 (SCIE, Q3). [Link](#)

2018

62. Nam V. Nguyen, Hoang X. Nguyen, S. Lee, H. Nguyen-Xuan, Geometrically nonlinear polygonal finite element analysis of functionally graded porous plates, *Advances in Engineering Software*, 126, 110-126, 2018 (SCIE, Q1). [Link](#)

61. Dung T. Tran, Chien H. Thai, H. Nguyen-Xuan, A size-dependent functionally graded higher order plate analysis based on modified couple stress theory and moving Kriging meshfree method, *Computers, Materials & Continua*, 57, 447-483, 2018 (SCIE, Q1). [Link](#)
60. Chien H. Thai, A.M. J. Ferreira, T. Rabczuk, H. Nguyen-Xuan, Size-dependent analysis of FG-CNTRC microplates based on modified strain gradient elasticity theory, *European Journal of Mechanics-A/Solids*, 72, 521-538, 2018 (SCI, Q1). [Link](#)
59. P. Phung-Van, Cuong-Le Thanh, H. Nguyen-Xuan, M. Abdel-Wahab, Nonlinear transient isogeometric analysis of FG-CNTRC nanoplates in thermal environments, *Composite Structures*, 201, 882-892, 2018 (SCIE, Q1). [Link](#)
58. H. Nguyen-Xuan, Hien V. Do, Khanh N. Chau, An adaptive strategy based on conforming quadtree meshes for kinematic limit analysis, *Computer Methods in Applied Mechanics and Engineering*, 341, 485-516, 2018 (SCI, Q1). [Link](#)
57. Truong H. Vu, P. Phung-Van, H. Nguyen-Xuan, M. Abdel-Wahab, A polytree-based adaptive polygonal finite element method for topology optimization of fluid-submerged breakwater interaction, *Computers and Mathematics with Applications*, 76, 1198-1218, 2018 (SCI, Q1). [Link](#)
56. Tan N. Nguyen, Chien H. Thai, H. Nguyen-Xuan, Jaehong Lee, NURBS-based analyses of functionally graded carbon nanotube-reinforced composite shells, *Composite Structures*, 203, 349-360, 2018 (SCIE, Q1). [Link](#)
55. Dac-Khuong Bui, Tuan Nguyen, Jui-Sheng Chou, H. Nguyen-Xuan, Tuan Ngo, A modified firefly algorithm-artificial neural network expert system for predicting compressive and tensile strength of high-performance concrete, *Construction & Building Materials*, 180, 320-333, 2018 (SCIE, Q1). [Link](#)
54. V. M. Nguyen-Thanh, X. Zhuang, H. Nguyen-Xuan, T. Rabczuk, P. Wriggers, A Virtual Element Method for 2D linear elastic fracture analysis, *Computer Methods in Applied Mechanics and Engineering*, 340, 366-395, 2018 (SCI, Q1). [Link](#)
53. Chien H. Thai, A.M. J. Ferreira, J. Lee, H. Nguyen-Xuan, An efficient size-dependent computational approach for FG isotropic and sandwich microplates based on modified couple stress theory and moving Kriging-based meshfree method, *International Journal of Mechanical Sciences*, 142-143, 322-338, 2018 (SCI, Q1). [Link](#)
52. Tan N. Nguyen, Chien H. Thai, H. Nguyen-Xuan, J. Lee, Geometrically nonlinear analysis of FGM plates using an improving moving Kriging interpolation meshfree method based on a refined plate theory, *Composite Structures*, 193, 268-290, 2018 (SCIE, Q1). [Link](#)
51. Chien H. Thai, A.M. J. Ferreira, M. Abdel Wahab, H. Nguyen-Xuan, A moving Kriging interpolation meshfree method based on naturally stabilized nodal integration for analysis of isotropic and sandwich FG plates, *Acta Mechanica*, 229, 2997-3023, 2018 (SCI, Q1). [Link](#)

50. Chien H. Thai, A.M. J. Ferreira, H. Nguyen-Xuan, Isogeometric analysis of size-dependent isotropic and sandwich FG microplates based on modified strain gradient elasticity theory, *Composite Structures*, 192, 274-288, 2018 (SCIE, Q1). [Link](#)

49. Chien H. Thai, H. Nguyen-Xuan, A moving Kriging interpolation meshfree method based on naturally stabilized nodal integration scheme for plate analysis, *International Journal of Computational Methods*, 16 (04), 1850100, 2019 (SCIE, Q3). [Link](#)

48. Khai N. Chau, Khanh N. Chau, Tuan D Ngo, K. Hackl, H. Nguyen-Xuan, A polytree-based adaptive polygonal finite element method for multi-material topology optimization, *Computer Methods in Applied Mechanics and Engineering*, 332, 712-739, 2018 (SCI, Q1). [Link](#)

47. Chien H. Thai, M. Abdel Wahab, H. Nguyen-Xuan, A layerwise C0-type higher order shear deformation theory for laminated composite and sandwich plates, *Comptes Rendus Mecanique*, 346, 57-76, 2018 (SCI, Q2). [Link](#)

46. Chien H. Thai, A.M. J. Ferreira, T. Rabczuk, H. Nguyen-Xuan, A naturally stabilized nodal integration meshfree formulation for carbon nanotube-reinforced composite plate analysis, *Engineering Analysis with Boundary Elements*, 92, 136-155, 2018 (SCI, Q1). [Link](#)

45. Cuong-Le Thanh, P. Phung-Van, Chien H. Thai, H. Nguyen-Xuan, M. Abdel Wahab, Isogeometric analysis of functionally graded carbon nanotube reinforced composite nanoplates using modified couple stress theory, *Composite Structures*, 184, 633-649, 2018 (SCIE, Q1). [Link](#)

2017

44. Son Thai, Huu-Tai Thai, Thuc P. Vo, H. Nguyen-Xuan, Nonlinear static and transient isogeometric analysis of functionally graded microplates based on the modified strain gradient theory, *Engineering Structures*, 153, 598-612, 2017 (SCI, Q1). [Link](#)

43. Nam V. Nguyen, Hoang X. Nguyen, Duc-Huynh Phan, H. Nguyen-Xuan, A polygonal finite element method for laminated composite plates, *International Journal of Mechanical Sciences*, 113, 863-882, 2017 (SCI, Q1). [Link](#)

42. Tuan N. Nguyen, Tuan D Ngo, H. Nguyen-Xuan, A novel three-variable shear deformation plate formulation: Theory and isogeometric implementation, *Computer Methods in Applied Mechanics and Engineering*, 326, 376-401, 2017 (SCI, Q1). [Link](#)

41. H.X. Nguyen, Elena Atroshchenko, H. Nguyen-Xuan, P. Vo, Geometrically nonlinear isogeometric analysis of FG microplates with the modified couple stress theory, *Computers and Structures*, 193, 110-127, 2017 (SCI, Q1). [Link](#)

40. Chien H. Thai, A.M. J. Ferreira, H. Nguyen-Xuan, Naturally stabilized nodal integration meshfree formulations for analysis of laminated composite and sandwich plates, *Composite Structures*, 178, 260-276, 2017 (SCIE, Q1). [Link](#)

39. H. Nguyen-Xuan, A polygonal finite element method for plate analysis, *Computers and Structures*, 188, 45-62, 2017 (SCI, Q1). [Link](#)

38. P. Phung-Van, A.M. J. Ferreira, H. Nguyen-Xuan, M. Abdel-Wahab, An isogeometric approach for size-dependent geometrically nonlinear transient analysis of functionally graded nanoplates, *Composite Part B*, 118, 125-134, 2017 (SCI, Q1). [Link](#)
37. Thanh Chau-Dinh, Quang Nguyen-Duy, H. Nguyen-Xuan, Improvement on MITC3 plate finite element using edge-based strain smoothing enhancement for plate analysis, *Acta Mechanica*, 228, 2141-2163, 2017 (SCI, Q1). [Link](#)
36. H.X. Nguyen, T.D. Hien, J. Lee, H. Nguyen-Xuan, Stochastic buckling behaviour of laminated composite plate structures with uncertain material properties, *Aerospace Science and Technology*, 64, 274-283, 2017 (SCI, Q1). [Link](#)
35. P. Phung-Van, Q. Lieu-Xuan, H. Nguyen-Xuan, M. Abdel-Wahab, Size-dependent isogeometric analysis of functionally graded carbon nanotube-reinforced composite nanoplates, *Composite Structures*, 166, 120-135, 2017 (SCIE, Q1). [Link](#)
34. Hien V. Do, H. Nguyen-Xuan, Limit and shakedown isogeometric analysis of structures based on Bezier extraction, *European Journal of Mechanics- A/Solids*, 63, 149-164, 2017 (SCI, Q1). [Link](#)
33. N. Nguyen-Thanh, K. Zhou, X. Zhuang, P. Areias, H. Nguyen-Xuan, Y. Bazilevs, T. Rabczuk, Isogeometric analysis of large-deformation thin shells using PHT-splines for multiple-patch coupling, *Computer Methods in Applied Mechanics and Engineering*, 316, 1157-1178, 2017 (SCI, Q1). [Link](#)
32. L. Leonetti, G. Garcea, H. Nguyen-Xuan, A mixed node-based smoothed finite element method (MNS-FEM) for elasticity, *Engineering with Computers*, 33, 819-834, 2017 (SCIE, Q2). [Link](#)
31. H. Nguyen-Xuan, A polytree-based adaptive polygonal finite element method for topology optimization, *International Journal for Numerical Methods in Engineering*, 110, 972-1000, 2017 (SCI, Q1). [Link](#)
30. H.X. Nguyen, Tuan N. Nguyen, S.P.A. Bordas, M. Abdel-Wahab, H. Nguyen-Xuan, P. Vo, A refined quasi-3D isogeometric analysis for FGM microplates based on the modified couple stress theory, *Computer Methods in Applied Mechanics and Engineering*, 313, 904-940, 2017 (SCI, Q1). [Link](#)
29. T. Le-Manh, Q. Huynh-Van, Thu D. Phan, Huan D. Phan, H. Nguyen-Xuan, Isogeometric nonlinear bending and buckling analysis of variable-thickness composite plate structures, *Composite Structures*, 159, 818-826, 2017 (SCIE, Q1). [Link](#)
28. H. Nguyen-Xuan, S. Nguyen-Hoang, T. Rabczuk, K. Hackl, A polytree-based adaptive approach to limit analysis of cracked structures, *Computer Methods in Applied Mechanics and Engineering*, 313, 1006-1039, 2017 (SCI, Q1). [Link](#)
27. P. Phung-Van, Loc V. Tran, A.M. J. Ferreira, H. Nguyen-Xuan, M. Abdel-Wahab, Nonlinear transient isogeometric analysis of smart piezoelectric functionally graded material plates based on generalized shear deformation theory under thermo-electro-mechanical loads, *Nonlinear Dynamics*, 87, 879-894, 2017 (SCI, Q1). [Link](#)

2016

26. Trung-Kien Nguyen, Van-Hau Nguyen, Thanh Chau-Dinh, Thuc P. Vo, H. Nguyen-Xuan, Static and vibration analysis of isotropic and functionally graded sandwich plates using an edge-based MITC3 finite elements, *Composite: Part B*, 107, 162-173, 2016 (SCI, Q1). [Link](#)
25. H.H. Phan-Dao, Chien H. Thai, J. Lee, H. Nguyen-Xuan, Analysis of laminated composite and sandwich plate structures using generalized layerwise HSDT and improved meshfree radial point interpolation method, *Aerospace Science and Technology*, 58, 641-660, 2016 (SCI, Q1). [Link](#)
24. Chien H. Thai, Tan N. Nguyen, T. Rabczuk, H. Nguyen-Xuan, An improved moving Kriging meshfree method for plate analysis using a refined plate theory, *Computers & Structures*, 176, 34-49, 2016 (SCI, Q1). [Link](#)
23. Tan N. Nguyen, Chien H. Thai, H. Nguyen-Xuan, A novel computational approach for functionally graded isotropic and sandwich plate structures based on a rotation-free meshfree method, *Thin-Walled Structures*, 107, 473-488, 2016 (SCIE, Q1). [Link](#)
22. L. Leonetti, G. Garcea, H. Nguyen-Xuan, A mixed edge-based smoothed finite element method, *Computers & Structures*, 173, 123-138, 2016 (SCI, Q1). [Link](#)
21. H. Nguyen-Xuan, C.T. Wu, G.R. Liu, An adaptive selective ES-FEM for plastic collapse analysis, *European Journal of Mechanics- A/Solids*, 58, 278-290, 2016 (SCI, Q1). [Link](#)
20. Tuan N. Nguyen, Chien H. Thai, H. Nguyen-Xuan, On the general framework of high order shear deformation theories for laminated composite plate structures: A novel unified approach, *International Journal of Mechanical Sciences*, 110, 242-255, 2016 (SCI, Q1). [Link](#)
19. Chien H. Thai, Vuong N.V. Do, H. Nguyen-Xuan, An improved moving Kriging-based meshfree method for static, dynamic and buckling analyses of functionally graded isotropic and sandwich plates, *Engineering Analysis with Boundary Elements*, 64, 122-136, 2016 (SCI, Q1). [Link](#)
18. Loc V. Tran, P. Phung-Van, J. Lee, M. Abdel-Wahab, H. Nguyen-Xuan, Isogeometric analysis for nonlinear thermomechanical stability of functionally graded plates, *Composite Structures*, 140, 655-667, 2016 (SCIE, Q1). [Link](#)
17. Chien H. Thai, A.M. J. Ferreira, M. Abdel-Wahab, H. Nguyen-Xuan, A generalized layerwise higher-order shear deformation theory for laminated composite and sandwich plates based on isogeometric analysis, *Acta Mechanica*, 227, 1225-1250, 2016 (SCI, Q1). [Link](#)
16. Chien H. Thai, A.M. Zenkour, M. Abdel-Wahab, H. Nguyen-Xuan, A simple four-unknown shear and normal deformations theory for FG isotropic and sandwich plates based on isogeometric analysis, *Composite Structures*, 139, 77-95, 2016 (SCIE, Q1). [Link](#)

15. Lieu B. Nguyen, Chien H. Thai, H. Nguyen-Xuan, A generalized unconstrained theory and isogeometric finite element analysis based on Bezier extraction for laminated composite plates, *Engineering with Computers*, 32, 457-475, 2016 (SCIE, Q2). [Link](#)

2015

14. Tuan N. Nguyen, D. Hui, J. Lee, H. Nguyen-Xuan, An efficient computational approach for size-dependent analysis of functionally graded nanoplates, *Computer Methods in Applied Mechanics and Engineering*, 297, 191-218, 2015 (SCI, Q1). [Link](#)

13. Thanh Hai Ong, Thi Thao Phuong Hoang, S.P.A. Bordas, H. Nguyen-Xuan, A staggered cell-centered finite element method for compressible and nearly-incompressible linear elasticity on general meshes, *SIAM Journal on Numerical Analysis*, 53 (4), 2051-2073, 2015 (SCI, Q1). [Link](#)

12. P. Phung-Van, Lieu B. Nguyen, Loc V. Tran, Dung T. Dinh, Chien H. Thai, S.P.A. Bordas, M. Abdel-Wahab, H. Nguyen-Xuan, An efficient computational approach for control of nonlinear transient responses of smart piezoelectric composite plates, *International Journal of Nonlinear Mechanics*, 76, 190-202, 2015 (SCI, Q1). [Link](#)

11. Khuong D. Nguyen, H. Nguyen-Xuan, An isogeometric finite element approach for three-dimensional static and dynamic analysis of FGM plates structures, *Composite Structures*, 132, 423-439, 2015 (SCIE, Q1). [Link](#)

10. Loc V. Tran, Hung Anh Ly, J. Lee, M. Abdel-Wahab, H. Nguyen-Xuan, Vibration analysis of cracked FGM plates using higher-order shear deformation theory and extended isogeometric approach, *International Journal of Mechanical Sciences*, 96, 65-78, 2015 (SCI, Q1). [Link](#)

9. H. Nguyen-Xuan, T. Rabczuk, An adaptive selective ES-FEM limit analysis of cracked plane-strain structures, *Frontiers of Structural and Civil Engineering*, 9, 478-490, 2015 (SCIE, Q2). [Link](#)

8. Loc V. Tran, J. Lee, H. Nguyen-Van, H. Nguyen-Xuan, M. Abdel-Wahab, Geometrically nonlinear isogeometric analysis of laminated composite plates based on higher-order shear deformation theory, *International Journal of Nonlinear Mechanics*, 72, 42-52, 2015 (SCI, Q1). [Link](#)

7. P. Phung-Van, M. Abdel-Wahab, K.M. Liew, S.P.A. Bordas, H. Nguyen-Xuan, Isogeometric analysis of functionally graded carbon nanotube-reinforced composite plates using higher-order shear deformation theory, *Composite Structures*, 123, 137-149, 2015 (SCIE, Q1). [Link](#)

6. H. Nguyen-Xuan, G.R. Liu, An edge-based finite element method (ES-FEM) with adaptive scaled-bubble functions for plane strain limit analysis, *Computer Methods in Applied Mechanics and Engineering*, 285, 877-905, 2015 (SCI, Q1). [Link](#)

5. Thanh Hai Ong, Claire E. Heaney, Chang-Kye Lee, G.R. Liu, H. Nguyen-Xuan, On stability, convergence and accuracy of bES-FEM and bFS-FEM for nearly

incompressible elasticity, *Computer Methods in Applied Mechanics and Engineering*, 285, 315-345, 2015 (SCI, Q1). [Link](#)

4. Chien H. Thai, H. Nguyen-Xuan, S. Bordas, N. Nguyen-Thanh, T. Rabczuk, Isogeometric analysis of laminated composite plates using the higher-order shear deformation theory, *Mechanics of Advanced Materials and Structures*, 22(6), 2015 (SCIE, Q2). [Link](#)

3. N. Nguyen-Thanh, N. Valizadeh, M.N. Nguyen, H. Nguyen-Xuan, X. Zhuang, P. Areias, G. Zi, Y. Bazilevs, L. De Lorenzis, T. Rabczuk, An extended isogeometric thin shell analysis based on Kirchhoff-Love theory, *Computer Methods in Applied Mechanics and Engineering*, 284, 265-291, 2015 (SCI, Q1). [Link](#)

2. Loc V. Tran, T. Nguyen-Thoi, Chien H. Thai, H. Nguyen-Xuan, An edge-based smoothed discrete shear gap method (ES-DSG) using the C0-type higher-order shear deformation theory for analysis of laminated composite plates, *Mechanics of Advanced Materials and Structures*, 22 (4), 248-268, 2015 (SCIE, Q2). [Link](#)

1. P. Phung-Van, L. De Lorenzis, Chien H. Thai, M. Abdel-Wahab, H. Nguyen-Xuan, Analysis of laminated composite plates integrated with piezoelectric sensors and actuators using higher-order shear deformation theory and isogeometric finite elements, *Computational Materials Sciences*, 96, 495-505, 2015 (SCI, Q1). [Link](#)

2.3. Các nhiệm vụ khoa học và công nghệ (chương trình và đề tài tương đương cấp Bộ trở lên)

a) Tổng số chương trình, đề tài đã chủ trì/chủ nhiệm: 03 cấp Nhà nước; 02 cấp Bộ và tương đương.

b) Danh mục đề tài tham gia đã được nghiệm thu trong 05 năm liền kề với thời điểm được bổ nhiệm thành viên Hội đồng gần đây nhất (*tên đề tài, mã số, thời gian thực hiện, cấp quản lý đề tài, trách nhiệm tham gia trong đề tài*):

Danh sách đề tài

2017 – 2019	03 Grants (~ 2bVND) from The National Foundation for Science and Technology Development (NAFOSTED) (Key member).
2017 – 2020	An innovative solution to protect Vietnamese coastal riverbanks from floods and erosion, Grant No.: TEAM2017SEL64, VLIR-UOS (300k€) (International cooperation between Belgium and Vietnam universities) (Co-PI).
2017 – 2020	Environmentally best practices and optimisation in hydraulic fracturing for shale gas/oil development, Grant No.: 734370, Horizon 2020 (1,690,000€) (Exchange project between EU and Vietnam universities) (Co-PI).
2015 – 2017	Integration of modeling and simulation of laminated structures with size effects, Grant No.: 107.02-2014.24 (1.1bVND), The National

Foundation for Science and Technology Development NAFOSTED (PI).

2013 – 2015 Integration of modeling and simulation of coupled multi-physics problems by isogeometric analysis. Grant No.: B2013-18-04 (400mVND), Key research, Vietnam National University HCM (PI).

2.4. Công trình khoa học khác (nếu có)

a) Tổng số công trình khoa học khác:

- Tổng số có: sáng chế, giải pháp hữu ích
- Tổng số có: tác phẩm nghệ thuật
- Tổng số có: thành tích huấn luyện, thi đấu

b) Danh mục bằng độc quyền sáng chế, giải pháp hữu ích, tác phẩm nghệ thuật, thành tích huấn luyện, thi đấu trong 5 năm trở lại đây (*tên tác giả, tên công trình, số hiệu văn bằng, tên cơ quan cấp*):

.....

2.5. Hướng dẫn nghiên cứu sinh (NCS) đã có quyết định cấp bằng tiến sĩ

a) Tổng số: 04 NCS đã hướng dẫn chính

b) Danh sách NCS hướng dẫn thành công trong 05 năm liền kề với thời điểm được bổ nhiệm thành viên Hội đồng gần đây nhất (*Họ và tên NCS, đề tài luận án, cơ sở đào tạo, năm bảo vệ thành công, vai trò hướng dẫn*):

- TS. Thái Hoàng Chiến, Đại học QG TP.HCM (2015)
- TS. Phùng Văn Phúc, Đại học Ghent-Bỉ (2015)
- TS. Trần Vĩnh Lộc, Đại học Ghent-Bỉ (2016)
- TS. Nguyễn Thị Bích Liễu, Đại học Sư Phạm Kỹ thuật TP.HCM (2019)

3. Các thông tin khác

3.1. Danh mục các công trình khoa học chính trong cả quá trình (*Bài báo khoa học, sách chuyên khảo, giáo trình, sáng chế, giải pháp hữu ích, tác phẩm nghệ thuật, thành tích huấn luyện, thi đấu...; khi liệt kê công trình, có thể thêm chú dẫn về phân loại tạp chí, thông tin trích dẫn...)*:

.....

3.2. Giải thưởng về nghiên cứu khoa học trong và ngoài nước (nếu có):

2019 The Outstanding Humboldtian Award <https://www.humboldtclubsea.net/the-ou>

2019 Clarivate Analysis Highly Cited Researchers

2018 Clarivate Analysis Highly Cited Researchers

2017 Clarivate Analysis Highly Cited Researchers

2016 Clarivate Analysis Highly Cited Researchers

2016 Georg Forster Research Award <https://www.humboldt-foundation.de>

2015 Thompson Reuters Highly Cited Researchers

2014 Thompson Reuters Highly Cited Researchers

2008 – 2013: 5 năm liền bằng khen của Giám đốc Đại học Quốc gia Tp.HCM về thành tích nghiên cứu

2011 Giải thưởng Nguyễn Văn Đạo, Hội Cơ học

3.3. Các thông tin về chỉ số định danh ORCID, hồ sơ Google scholar, H-index, số lượt trích dẫn (nếu có):

Google scholar

<u>Citation indices</u>	All	Since 2015
<u>Citations</u>	10777	8115
<u>h-index</u>	59	52
<u>i10-index</u>	139	130

ResearcherID Citations: 8477; h-index:54 <http://www.researcherid.com/rid/A-3817-2009>

Scopus:

Citations: 9214; h-index:57
<http://www.scopus.com/authid/detail.uri?authorId=24503383800>

3.4. Ngoại ngữ

- Ngoại ngữ thành thạo phục vụ công tác chuyên môn: Anh ngữ
- Mức độ giao tiếp bằng tiếng Anh: Thành thạo

Tôi xin cam đoan những điều khai trên là đúng sự thật, nếu sai tôi xin hoàn toàn chịu trách nhiệm trước pháp luật.

TP.HCM, ngày 15 tháng 5 năm 2020

NGƯỜI KHAI

(Ký và ghi rõ họ tên)

Nguyễn Xuân Hùng