

CURRICULUM VITAE



1. Personal detail

Name : Phuc Phung-Van (P. Phung-Van)
Nationality : Vietnamese
Day of birth : March 28th, 1986
Place of birth : Kien Giang, Vietnam
Email address : phucphungvan@gmail.com; pv.phuc86@hutech.edu.vn

2. Citation indices

Google Scholar: <https://scholar.google.com.vn/citations?user=fOPiziAAAAAJ&hl=en>
Citations: 4172, h-index: 39 (updated on 03/12/2023)
Scopus: <https://www.scopus.com/authid/detail.uri?authorId=55181714100#>
Citations: 3684, h-index: 38 (updated on 03/12/2023)

3. Employment history

09/2019 – now : researcher and lecturer at Ho Chi Minh City University of Technology (HUTECH), Vietnam
10/2016 – 09/2019 : researcher at Ghent University, Belgium
09/2013 – 04/2016 : Ph.D. research fellow at Ghent University, Belgium
04/2012 – 08/2013 : researcher and lecturer at Division of Computational Mechanics, Ton Duc Thang University, Vietnam
06/2009 – 03/2012 : lecturer at Department of Civil Engineering of Nguyen Tat Thanh University, Vietnam

4. Education

09/2013 – 04/2016 : Ph.D. in Electromechanical Engineering, Ghent University, Belgium
08/2009 – 03/2011 : Master of Engineering Mechanics, Ho Chi Minh City University of Technology and Education, Vietnam
10/2004 – 03/2009 : Bachelor of Engineering in Mechanical Engineering. Ho Chi Minh City University of Technology and Education, Vietnam

5. Research interests

- Numerical methods (FEM, S-FEM, IGA) for 2D, 3D structures, plates, shells, nanocomposites, nanostructures.
- Composites, functionally graded materials (FGMs), piezoelectric, carbon nanotubes (CNTs), shape memory alloys, graphene nanoplatelets, porous materials.
- Multi-physic environments, thermal dynamics, nonlinear transient responses.

6. Research projects

- Principal Investigator: “Computational optimization of porous nanostructures”. National Foundation for Science and Technology Development (NAFOSTED). Project No.: 107.02-2019.09. (Result: Good).
- Principal Investigator: “Multiscale isogeometric analysis of shape memory materials”. Special Research Fund Ghent University (BOF). Project No.: BOF.PD0.2016.0016.01. (Result: Good).
- Key researcher: “Development of smoothed finite element methods for computation and optimization of some problems in the multi-physics environments”. National Foundation for Science and Technology Development (NAFOSTED), 2012 – 2014. Project No.: 107.02-2012.05. (Result: Good)
- Key researcher: “Research and development of the smoothed finite element methods for modeling and simulating the interaction problems in the multi-physics environments”. NAFOSTED, 2010 – 2012. Project No.: 107.02.2010.01. (Result: Good)
- Principal Investigator: “Development of the smoothed finite element methods for simulating the fluid – solid interaction problems”. Nguyen Tat Thanh University, 2010-2012. Project No.: 2011-KTXD-02. (Result: Good)

7. Publication list

Books/ Editors

- [1] Nguyen-Xuan Hung, **Phung-Van Phuc**, Timon Rabczuk. Proceedings of the International Conference on Advances in Computational Mechanics 2017. Lecture Notes in Mechanical Engineering, Springer Singapore, 2018.
<http://www.springer.com/br/book/9789811071485>

ISI papers (listed in Web of Science)

- [64] PT. Hung, CH. Thai, **P. Phung-Van**. Isogeometric bending and free vibration analyses of carbon nanotube-reinforced magneto-electric-elastic microplates using a four variable refined plate theory. Computers & Structures 2023; 287, 107121 (Q1, IF: 4.7)

- <https://www.sciencedirect.com/science/article/pii/S0045794923001517>
- [63] PT. Hung, CH. Thai, **P. Phung-Van**. A C0-HSDT free vibration of magneto-electro-elastic functionally graded porous plates using a moving Kriging meshfree method. *Aerospace Science and Technology* 2023; 137, 108266 (Q1, IF: 5.457)
<https://www.sciencedirect.com/science/article/pii/S1270963823001633>
- [62] PT. Hung, **P. Phung-Van**, CH. Thai. Small scale thermal analysis of piezoelectric–piezomagnetic FG microplates using modified strain gradient theory. *International Journal of Mechanics and Materials in Design* 2023; 1-23 (Q2, IF: 3.561)
<https://link.springer.com/article/10.1007/s10999-023-09651-y>
- [61] LB. Nguyen, H. Nguyen-Xuan, CH. Thai, **P. Phung-Van**. A size-dependent effect of smart functionally graded piezoelectric porous nanoscale plates. *International Journal of Mechanics and Materials in Design* 2023; 1-14 (Q2, IF: 3.561)
<https://link.springer.com/article/10.1007/s10999-023-09660-x>
- [60] CH. Thai, AMJ. Ferreira, H. Nguyen-Xuan, PT. Hung, **P. Phung-Van**. A nonlocal strain gradient isogeometric model for free vibration analysis of magneto-electro-elastic functionally graded nanoplates. *Composite Structures* 2023; 316, 117005 (Q1, IF: 6.603)
<https://www.sciencedirect.com/science/article/abs/pii/S0263822323003495>
- [59] NV. Nguyen, KQ. Tran, **P. Phung-Van**, J. Lee, H. Nguyen-Xuan. An isogeometric analysis of functionally graded triply periodic minimal surface microplates. *Aerospace Science and Technology* 2023; 137, 108270 (Q1, IF: 5.457)
<https://www.sciencedirect.com/science/article/abs/pii/S1270963823001670>
- [58] **P. Phung-Van**, Chien H. Thai. A novel size-dependent nonlocal strain gradient isogeometric model for functionally graded carbon nanotube-reinforced composite nanoplates. *Engineering with Computers* 2022; (Q1, IF: 7.555)
<https://link.springer.com/article/10.1007/s00366-021-01353-3>
- [57] Chien H. Thai, H. Nguyen-Xuan, **P. Phung-Van**. Nonlocal strain gradient analysis of FG GPLRC nanoscale plates based on isogeometric approach. *Engineering with Computers* 2022; (Q1, IF: 7.555)
<https://link.springer.com/article/10.1007/s00366-022-01689-4>
- [56] PT Hung, Chien H. Thai, **P. Phung-Van**. NURBS-based refined plate theory for metal foam plates with porosities. *Thin-Walled Structures* 2022; 175:109246 (Q1, IF: 5.881)
<https://www.sciencedirect.com/science/article/pii/S0263823122001975>

- [55] PT Hung, Chien H. Thai, **P. Phung-Van**. A refined isogeometric plate analysis of porous metal foam microplates using modified strain gradient theory. *Composite Structures* 2022; 289:115467 (Q1, IF: 7.963)
<https://www.sciencedirect.com/science/article/pii/S0263822322002604>
- [54] Chien H. Thai, H. Nguyen-Xuan, **P. Phung-Van**. A size-dependent isogeometric analysis of laminated composite plates based on the nonlocal strain gradient theory. *Engineering with Computers* 2022; (Q1, IF: 7.963)
<https://link.springer.com/article/10.1007/s00366-021-01559-5>
- [53] **P. Phung-Van**, Chien H. Thai. A novel size-dependent nonlocal strain gradient isogeometric model for functionally graded carbon nanotube-reinforced composite nanoplates. *Engineering with Computers* 2021; (Q1, IF: 7.963)
<https://link.springer.com/article/10.1007/s00366-021-01353-3>
- [52] **P. Phung-Van**, AJM. Ferreira, H. Nguyen-Xuan, Chien H. Thai. Scale-dependent nonlocal strain gradient isogeometric analysis of metal foam nanoscale plates with various porosity distributions. *Composite Structures* 2021; 268:113949 (Q1, IF: 5.407)
<https://www.sciencedirect.com/science/article/abs/pii/S0263822321004098>
- [51] **P. Phung-Van**, QX. Lieu, AJM. Ferreira, Chien H. Thai. A refined nonlocal isogeometric model for multilayer functionally graded graphene platelet-reinforced composite nanoplates. *Thin-Walled Structures* 2021; 164:107862 (Q1, IF: 4.442)
<https://www.sciencedirect.com/science/article/abs/pii/S0263823121002664>
- [50] CH. Thai, AJM. Ferreira, H. Nguyen-Xuan, **P. Phung-Van**. A size dependent meshfree model for functionally graded plates based on the nonlocal strain gradient theory. *Composite Structures* 2021; 272:114169 (Q1, IF: 5.138)
<https://www.sciencedirect.com/science/article/abs/pii/S0263822321006310>
- [49] CH. Thai, AJM. Ferreira, H. Nguyen-Xuan, LB. Nguyen, **P. Phung-Van**. A nonlocal strain gradient analysis of laminated composites and sandwich nanoplates using meshfree approach. *Engineering with Computers* 2021 (Q1, IF: 7.963)
<https://link.springer.com/article/10.1007/s00366-021-01501-9>
- [48] **P. Phung-Van**, AJM. Ferreira, H. Nguyen-Xuan, CH. Thai. A nonlocal strain gradient isogeometric nonlinear analysis of nanoporous metal foam plates. *Engineering Analysis with Boundary Elements* 2021; 130:58-68 (Q1, IF: 2.964)
<https://www.sciencedirect.com/science/article/abs/pii/S0955799721001314>
- [47] CH. Thai, H. Nguyen-Xuan, LB. Nguyen, **P. Phung-Van**. A modified strain gradient meshfree approach for functionally graded microplates. *Engineering with Computers* 2021 (Q1, IF: 7.963)

- <https://link.springer.com/article/10.1007/s00366-021-01493-6>
- [46] CH. Thai, LB. Nguyen, H. Nguyen-Xuan, **P. Phung-Van**. Size-dependent nonlocal strain gradient modeling of hexagonal beryllium crystal nanoplates. *International Journal of Mechanics and Materials in Design* 2021; 1-15 (Q1, IF: 4.011)
<https://link.springer.com/article/10.1007/s10999-021-09561-x>
- [45] **P. Phung-Van**, AJM. Ferreira, Chien H. Thai. Computational optimization for porosity-dependent isogeometric analysis of functionally graded sandwich nanoplates. *Composite Structures* 2020; 239:112029 (Q1, IF: 4.829)
<https://www.sciencedirect.com/science/article/pii/S0263822319339650>
- [44] Chien H. Thai, AJM. Ferreira, **P. Phung-Van**. A nonlocal strain gradient isogeometric model for free vibration and bending analyses of functionally graded plates. *Composite Structures* 2020; 251:112634 (Q1, IF: 4.829)
<https://www.sciencedirect.com/science/article/pii/S026382232030934X>
- [43] **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* 2020; 143:103277 (Q1, IF: 2.958)
<https://www.sciencedirect.com/science/article/pii/S0167663619305320>
- [42] CH Thai, AJM. Ferreira, **P Phung-Van**. Free vibration analysis of functionally graded anisotropic microplates using modified strain gradient theory. *Engineering Analysis with Boundary Elements* 2020; 117:284-298 (Q1, IF: 2.243)
<https://www.sciencedirect.com/science/article/pii/S0955799720301272>
- [41] CH Thai, **P Phung-Van**. A meshfree approach using naturally stabilized nodal integration for multilayer FG GPLRC complicated plate structures. *Engineering Analysis with Boundary Elements* 2020; 117:346-358 (Q1, IF: 2.243)
<https://www.sciencedirect.com/science/article/pii/S0955799720301028>
- [40] CH Thai, TD Tran, **P Phung-Van**. A size-dependent moving Kriging meshfree model for deformation and free vibration analysis of functionally graded carbon nanotube-reinforced composite nanoplates. *Engineering Analysis with Boundary Elements* 2020; 115:52-63 (Q1, IF: 2.243)
<https://www.sciencedirect.com/science/article/pii/S0955799720300461>
- [39] Chien H. Thai, AJM. Ferreira, TD. Tran, **P. Phung-Van**. A size-dependent quasi-3D isogeometric model for functionally graded graphene platelet-reinforced composite microplates based on the modified couple stress theory. *Composite Structures* 2020; 234: 111695 (Q1, IF: 4.823)

<https://www.sciencedirect.com/science/article/pii/S0263822319330661>

- [38] **P. Phung-Van**, Chien H. Thai, AJM. Ferreira, T. Rabczuk. Isogeometric nonlinear transient analysis of porous FGM plates subjected to hygro-thermo-mechanical loads. *Thin-Walled Structures* 2020; 148: 106497 (Q1, IF: 3.488)
<https://www.sciencedirect.com/science/article/pii/S0263823119302757>
- [37] **P. Phung-Van**, Chien H. Thai, H. Nguyen-Xuan, M. Abdel-Wahab. Porosity-dependent nonlinear transient responses of functionally graded nanoplates using isogeometric analysis. *Composites Part B: Engineering* 2019; 164:215-225 (Q1, IF: 6.864)
<https://www.sciencedirect.com/science/article/pii/S1359836818324132>
- [36] **P. Phung-Van**, CH. Thai, H. Nguyen-Xuan, M. Abdel-Wahab. An isogeometric approach of static and free vibration analyses for porous FG nanoplates. *European Journal of Mechanics-A/Solids* 2019; 78: 103851 (Q1, IF: 2.931)
<https://www.sciencedirect.com/science/article/pii/S0997753818306296>
- [35] CH. Thai, AJM. Ferreira, **P. Phung-Van**. Size dependent free vibration analysis of multilayer functionally graded GPLRC microplates based on modified strain gradient theory. *Composites Part B: Engineering* 2019; 169:174-188 (Q1, IF: 6.864)
<https://www.sciencedirect.com/science/article/pii/S1359836818342203>
- [34] CH. Thai, AJM. Ferreira, TD. Tran, **P. Phung-Van**. Free vibration, buckling and bending analyses of multilayer functionally graded graphene nanoplatelets reinforced composite plates using the NURBS formulation. *Composite Structures* 2019; 220:749-759 (Q1, IF: 4.829)
<https://www.sciencedirect.com/science/article/pii/S0263822318347135>
- [33] H. Nguyen-Ngoc, **P. Phung-Van**, BL. Dang, H. Nguyen-Xuan, MA Wahab. Static and dynamic analyses of three-dimensional hollow concrete block revetments using polyhedral finite element method. *Applied Ocean Research* 2019; 88:15-28 (Q1, IF: 2.436)
<https://www.sciencedirect.com/science/article/pii/S0141118718306989>
- [32] **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* 2018; 201:882-892 (Q1, IF: 4.829)
<https://www.sciencedirect.com/science/article/pii/S026382231830936X>
- [31] T. Vu-Huu, **P. Phung-Van**, Chien H. Thai, 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* 2018; 76(5):1198-1218 (Q1, IF: 2.811)
<https://www.sciencedirect.com/science/article/pii/S0898122118303328>
- [30] 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* 2018; 184:633-649 (Q1, IF: 4.829)
<http://www.sciencedirect.com/science/article/pii/S0263822317324601>
- [29] **P. Phung-Van**, AJM. Ferreira, H. Nguyen-Xuan, M. Abdel-Wahab. An isogeometric approach for size-dependent geometrically nonlinear transient analysis of functionally graded nanoplates. *Composites Part B: Engineering* 2017; 118:125-134 (Q1, IF: 6.864)
<http://www.sciencedirect.com/science/article/pii/S1359836817302524>
- [28] **P. Phung-Van**, Qui X. Lieu, H. Nguyen-Xuan, M. Abdel-Wahab. Size-dependent isogeometric analysis of functionally graded carbon nanotube-reinforced composite nanoplates. *Composite Structures* 2017; 166:120-135 (Q1, IF: 4.829)
<http://www.sciencedirect.com/science/article/pii/S0263822316324151>
- [27] **P. Phung-Van**, Loc V. Tran, AJM. 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* 2017; 87:879-894 (Q1, IF: 4.604)
<http://link.springer.com/article/10.1007/s11071-016-3085-6>
- [26] 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* 2016; 140:655-667 (Q1, IF: 4.829)
<http://www.sciencedirect.com/science/article/pii/S0263822316000131>
- [25] S. Nguyen-Hoang, **P. Phung-Van**, S. Natarajan, HG. Kim. A combined scheme of edge-based and node-based smoothed finite element methods for Reissner–Mindlin flat shells. *Engineering with Computers* 2016; 32:267-284 (Q1, IF: 3.551)
<http://link.springer.com/article/10.1007/s00366-015-0416-z>
- [24] **P. Phung-Van**, LB. Nguyen, Loc V. Tran, TD. Dinh, Chien H. Thai, SPA. 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 Non-Linear Mechanics* 2015; 76:190-202 (Q1, IF: 2.225)

<http://www.sciencedirect.com/science/article/pii/S0020746215001134>

- [23] **P. Phung-Van**, M. Abdel-Wahab, KM. Liew, SPA. Bordas, H. Nguyen-Xuan. Isogeometric analysis of functionally graded carbon nanotube-reinforced composite plates using higher-order shear deformation theory. *Composite Structures* 2015; 123:137-149 (Q1, IF: 4.829)
<http://www.sciencedirect.com/science/article/pii/S0263822314006771>
- [22] **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 Science* 2015; 96:495-505 (Q1, IF: 2.644)
<http://www.sciencedirect.com/science/article/pii/S0927025614003243>
- [21] **P. Phung-Van**, T. Nguyen-Thoi, T. Bui-Xuan, Q. Lieu-Xuan. A cell-based smoothed three-node Mindlin plate element (CS-FEM-MIN3) based on the C0-type higher-order shear deformation for geometrically nonlinear analysis of laminated composite plates. *Computational Materials Science* 2015; 96:549-558 (Q1, IF: 2.644)
<http://www.sciencedirect.com/science/article/pii/S0927025614002857>
- [20] T. Nguyen-Thoi, **P. Phung-Van**, MH. Nguyen-Thoi, H. Dang-Trung. An upper-bound limit analysis of Mindlin plates using CS-DSG3 method and second-order cone programming. *Journal of Computational and Applied Mathematics* 2015; 281:32-48 (Q2, IF: 1.883)
<http://www.sciencedirect.com/science/article/pii/S0377042714005470>
- [19] T. Nguyen-Thoi, **P. Phung-Van**, V. Ho-Huu, L. Le-Anh. An edge-based smoothed finite element method (ES-FEM) for dynamic analysis of 2D Fluid-Solid interaction problems. *KSCE Journal of Civil Engineering* 2015; 19:641-650 (Q2, IF: 1.428)
<http://link.springer.com/article/10.1007/s12205-015-0293-4>
- [18] **P. Phung-Van**, T. Nguyen-Thoi, H. Luong-Van, Q. Lieu-Xuan. Geometrically nonlinear analysis of functionally graded plates using a cell-based smoothed three-node plate element (CS-MIN3) based on the C0-HSDT. *Computer Methods in Applied Mechanics and Engineering* 2014; 270: 15–36 (Q1, IF: 4.821)
<http://www.sciencedirect.com/science/article/pii/S0045782513003277>
- [17] **P. Phung-Van**, T. Nguyen-Thoi, H. Luong-Van, C. Thai-Hoang, H. Nguyen-Xuan. A cell-based smoothed discrete shear gap method (CS-FEM-DSG3) using layerwise deformation theory for dynamic response of composite plates resting on viscoelastic

- foundation. *Computer Methods in Applied Mechanics and Engineering* 2014; 272: 138-159 (Q1, IF: 4.821)
<http://www.sciencedirect.com/science/article/pii/S0045782514000140>
- [16] **P. Phung-Van**, Chien. H. Thai, T. Nguyen-Thoi, H. Nguyen-Xuan. Static and free vibration analyses of composite and sandwich plates by an edge-based smoothed discrete shear gap method (ES-DSG3) using triangular elements based on layerwise theory. *Composites part B - Engineering* 2014; 60: 227-238 (Q1, IF: 6.864)
<http://www.sciencedirect.com/science/article/pii/S1359836813007749>
- [15] **P. Phung-Van**, T. Nguyen-Thoi, H. Dang-Trung, N. Nguyen-Minh. A cell-based smoothed discrete shear gap method (CS-FEM-DSG3) using layerwise theory based on the C0-type higher-order shear deformation for static and free vibration analyses of sandwich and composite plates. *Composite Structures* 2014; 111: 553-565 (Q1, IF: 4.829)
<http://www.sciencedirect.com/science/article/pii/S0263822314000518>
- [14] **P. Phung-Van**, H. Luong-Van, T. Nguyen-Thoi, H. Nguyen-Xuan. A cell-based smoothed discrete shear gap method (CS-FEM-DSG3) based on the C0-type higher-order shear deformation theory for dynamic responses of Mindlin plates on viscoelastic foundations subjected to a moving sprung vehicle. *International Journal for Numerical Methods in Engineering* 2014; 98: 988-1014 (Q1, IF: 2.746)
<http://onlinelibrary.wiley.com/doi/10.1002/nme.4662/full>
- [13] H. Luong-van, T. Nguyen-Thoi, GR. Liu, **P. Phung-Van**. A cell-based smoothed finite element method using Mindlin plate element (CS-FEM-MIN3) for dynamic response of composite plates on viscoelastic foundation. *Engineering Analysis with Boundary Elements* 2014; 42: 8-19 (Q1, IF: 2.243)
<http://www.sciencedirect.com/science/article/pii/S0955799713002439>
- [12] T. Nguyen-Thoi, **P. Phung-Van**, S. Nguyen-Hoang, Q. Lieu-Xuan. A smoothed coupled NS/nES-FEM for dynamic analysis of 2D fluid-solid interaction problems. *Applied Mathematics and Computation* 2014; 232: 324-346 (Q1, IF: 3.092)
<http://www.sciencedirect.com/science/article/pii/S0096300314000897>
- [11] T. Nguyen-Thoi, T. Rabczuk, T. Lam-Phat, V. Ho-Huu, **P. Phung-Van**. Free vibration analysis of cracked Mindlin plate using an extended cell-based smoothed discrete shear gap method (XCS-DSG3). *Theoretical and Applied Fracture Mechanics* 2014; 72:150-163 (Q1, IF: 2.848)

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- [10] T. Nguyen-Thoi, **P. Phung-Van**, S. Nguyen-Hoang, Q. Lieu-Xuan. A coupled alpha-FEM for dynamic analyses of 2D fluid-solid interaction problems. *Journal of Computational and Applied Mathematics* 2014; 271:130-049 (Q2, IF: 1.883)
<http://www.sciencedirect.com/science/article/pii/S037704271400185X>
- [9] T. Nguyen-Thoi, T. Bui-Xuan, **P. Phung-Van**, S. Nguyen-Hoang, H. Nguyen-Xuan. An edge-based smoothed three-node Mindlin plate element (ES-MIN3) for static and free vibration analyses of plates. *KSCE Journal of Civil Engineering* 2014; 18:1072-1082 (Q2, IF: 1.428)
<http://link.springer.com/article/10.1007/s12205-014-0002-8>
- [8] **P. Phung-Van**, T. Nguyen-Thoi, T. Le-Dinh, H. Nguyen-Xuan. Static, free vibration analyses and dynamic control of composite plates integrated with piezoelectric sensors and actuators by the cell-based smoothed discrete shear gap method (CS-FEM-DSG3). *Smart Materials and Structures* 2013; 22: 095026 (Q1, IF: 3.543)
<http://iopscience.iop.org/article/10.1088/0964-1726/22/9/095026>
- [7] **P. Phung-Van**, T. Nguyen-Thoi, Loc V. Tran, H. Nguyen-Xuan. A cell-based smoothed discrete shear gap method (CS-DSG3) based on the C^0 -type higher-order shear deformation theory for static and free vibration analyses of functionally graded plates. *Computational Materials Science* 2013; 79:857-872 (Q1, IF: 2.644)
<http://www.sciencedirect.com/science/article/pii/S0927025613003248>
- [6] T. Nguyen-Thoi, **P. Phung-Van**, C. Thai-Hoang, H. Nguyen-Xuan. A cell-based smoothed discrete shear gap method (CS-DSG3) using triangular elements for static and free vibration analyses of shell structures. *International Journal of Mechanical Sciences* 2013; 74: 32-45 (Q1, IF: 4.134)
<http://www.sciencedirect.com/science/article/pii/S002074031300129X>
- [5] T. Nguyen-Thoi, T. Bui-Xuan, **P. Phung-Van**, H. Nguyen-Xuan, P. Ngo-Thanh. Static, free vibration and buckling analyses of stiffened plates by CS-FEM-DSG3 using triangular elements. *Computers and Structures* 2013; 125: 100-113 (Q1, IF: 3.354)
<http://www.sciencedirect.com/science/article/pii/S0045794913001582>
- [4] T. Nguyen-Thoi, **P. Phung-Van**, T. Rabczuk, H. Nguyen-Xuan, C. Le-Van. Free and forced vibration analysis using the n-sided polygonal cell-based smoothed finite element method (nCS-FEM). *International Journal of Computational Methods* 2013; 10(1): 1340008 (Q2, IF: 1.221)

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- [3] T. Nguyen-Thoi, **P. Phung-Van**, T. Rabczuk, H. Nguyen-Xuan, C. Le-Van. An application of the ES-FEM in solid domain for dynamic analysis of 2D fluid-solid interaction problems. *International Journal of Computational Methods* 2013; 10(1): 1340003 (Q2, IF: 1.221)
<http://www.worldscientific.com/doi/abs/10.1142/S0219876213400033>
- [2] T. Nguyen-Thoi, **P. Phung-Van**, H. Luong-Van, H. Nguyen-Van, H. Nguyen-Xuan. A cell-based smoothed three-node Mindlin plate element (CS-MIN3) for static and free vibration analyses of plates. *Computational Mechanics* 2013; 51 (1): 65-81 (Q1, IF: 3.159)
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- [1] T. Nguyen-Thoi, **P. Phung-Van**, H. Nguyen-Xuan, C. Thai-Hoang. A cell-based smoothed discrete shear gap method using triangular elements for static and free vibration analyses of Reissner-Mindlin plates. *International Journal for Numerical Methods in Engineering* 2012; 91(7): 705-741 (Q1, IF: 2.746)
<http://onlinelibrary.wiley.com/doi/10.1002/nme.4289/abstract>

 *Peer-reviewed papers*

- [2] CH. Thai, **P. Phung-Van**, H. Nguyen-Xuan. Buckling analysis of FG GPLRC plate using a naturally stabilized nodal integration meshfree method. *Modern Mechanics and Applications* 2022; 189-202.
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8. Communications in conferences

- [15] T. Vu-Huu, **P. Phung Van**, H. Nguyen-Xuan, M. Abdel Wahab. Polygonal analysis and polytree-based adaptive topology optimization of fluid-submerged breakwater interaction. The 13th World Congress in Computational Mechanics, 22-27 July 2018, New York, USA.

- [14] **P. Phung-Van**, H. Nguyen-Xuan, M. Abdel Wahab. Nonlinear analysis of nanoplates using isogeometric analysis. International Conference on Modelling in Mechanics & Materials, 23-25 March 2018, San Francisco, USA.
- [13] C.L. Thanh, **P. Phung-Van**, C.H. Thai, M. Abdel Wahab. Isogeometric analysis of functionally graded carbon nanotube reinforced composite nanoplates using modified couple stress theory. International Conference on Modelling in Mechanics & Materials, 23-25 March 2018, San Francisco, USA.
- [12] T. Vu-Huu, C. Le-Thanh, M. Abdel Wahab, H. Nguyen-Xuan, **P. Phung Van**. Fluid-structure interaction analysis of revetment structures – an overview. The International Conference on Advances in Computational Mechanics - ACOME, 2-4 August 2017, Phu Quoc Island, Vietnam.
- [11] **P. Phung Van**, M. Abdel Wahab, H. Nguyen-Xuan. Buckling analysis of nanoplates using IGA. 6th International Conference on Fracture Fatigue and Wear, 26-27 July 2017, Porto, Portugal.
- [10] **P. Phung Van**, M. Abdel Wahab, H. Nguyen-Xuan. An isogeometric approach for size-dependent buckling analysis of FGM nanoplates. 12th International Conference on Damage Assessment of Structures, 10-12 July 2017, Kyushu Institute of Technology, Japan.
- [9] **P. Phung Van**, Loc V. Tran, H. Nguyen-Xuan, M. Abdel Wahab. Nonlinear control of smart plates using isogeometric analysis. 5th International Conference on Fracture Fatigue and Wear, 26-28 August 2016, Kyushu Institute of Technology, Japan.
- [8] Loc V. Tran, **P. Phung Van**, H. Nguyen-Xuan, M. Abdel Wahab. Nonlinear transient isogeometric analysis of laminated composite plates based on higher order plate theory. 5th International Conference on Fracture Fatigue and Wear, 26-28 August 2016, Kyushu Institute of Technology, Japan.
- [7] **P. Phung-Van**, Nguyen B. Lieu, Tran V. Loc, M. Abdel-Wahab, H. Nguyen-Xuan. Nonlinear analysis of piezoelectric composite plates using isogeometric approach. Structural Engineering and Construction (EASEC-14), 6-8 January 2016, Ho Chi Minh City, Vietnam.
- [6] **P. Phung Van**, Loc V. Tran, M. Abdel-Wahab, H. Nguyen-Xuan. An efficient computational approach for nonlinear analysis of smart piezoelectric plates. 4th International Conference on Fracture Fatigue and Wear, 27-28 August 2015, Ghent University, Belgium.

- [5] **P. Phung-Van**, Tran V. Loc, M. Abdel-Wahab, H. Nguyen-Xuan. Buckling analysis of piezoelectric composite plates using NURBS-based isogeometric finite elements and higher-order shear deformation theory. International Journal of Fracture Fatigue and Wear (FFW), 1-3 September 2014, Kitakyushu University, Japan.
- [4] T. Nguyen-Thoi, **P. Phung-Van**, H. Nguyen-Xuan. Formulation and development of the cell-based smoothed discrete shear gap plate element (CS-FEM-DSG3) using three-node triangles. The 5th Asia Pacific Congress on Computational Mechanics (APCOM V) and the 4th International Symposium on Computational Mechanics (ISCM VI), 11-14 December 2013, Singapore.
- [3] **P. Phung-Van**, T. Nguyen-Thoi, H. Nguyen-Chanh, C. Le-Van. An effective adaptive limit analysis of soil using FEM and second-order cone programming. The International Conference on Advances in Computational Mechanics (ACOME), Ton Duc Thang University, 14-16 August 2012, Ho Chi Minh City, Vietnam.
- [2] **P. Phung-Van**, T. Nguyen-Thoi. Static analysis of Reissner-Mindlin plates by a cell-based smoothed discrete shear gap method (CS-DSG3) using triangular elements. The 1st International Symposium on Engineering Physics and Mechanics (ISEPM 2011), 25-26 October 2011, University of Technology, Ho Chi Minh City, Vietnam.
- [1] **P. Phung-Van**, T. Nguyen-Thoi. A n-side polygonal edge-based smoothed FEM (nES-FEM) for dynamic analysis of 2D fluid-solid interaction problems. International Conference on Advanced Computing and Applications Ho Chi Minh City (ACOMP), 19-21 October 2011, University of Technology, Ho Chi Minh City, Vietnam.

9. Honor & Awards

- Best paper award, Engineering Analysis with Boundary Elements - Journal, 2020-2022.
- Best Rising Stars of Science in the World, 2022, 2023.
- The World's top 1% of leading scientists from the area of Mechanical and Aerospace Engineering, 2022, 2023.
- The World's top 2% of the most-cited researchers in all fields of science, 2019-2023.
- The World's Top 1% of reviewer in Cross-Field, Publons – Web of Science, 09/2019.
- The World's Top 1% of reviewer in Materials Science, Publons – Web of Science, 09/2018.
- Special Research Fund Ghent University, Belgium, 10/2016 – 10/2019.
- Erasmus Mundus scholarship (Lotus scholarship): 05/2015 – 04/2016.
- The SRS VLIR-UOS scholarship (Short research stays in Belgium), 02/2014 – 05/2014.