# Olivier Polit

List of Publications by Year
in descending order



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|---|---|---|---|
| 115 papers | 2,607 citations | 159525 30 h-index | 233338 45 g-index |
| 118 all docs | 118 docs citations | 118 times ranked | 1098 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Analysis of laminated shells by a sinusoidal shear deformation theory and radial basis functions collocation, accounting for through-the-thickness deformations. Composites Part B: Engineering, 2011, 42, 1276-1284. | 5.9 | 143 |
| 2 | A family of sinus finite elements for the analysis of rectangular laminated beams. Composite Structures, 2008, 84, 56-72. | 3.1 | 128 |
| 3 | Functionally graded graphene reinforced porous nanocomposite curved beams: Bending and elastic stability using a higher-order model with thickness stretch effect. Composites Part B: Engineering, 2019, 166, 310-327. | 5.9 | 110 |
| 4 | A comprehensive analysis of porous graphene-reinforced curved beams by finite element approach using higher-order structural theory: Bending, vibration and buckling. Composite Structures, 2019, 222, 110899. | 3.1 | 99 |
| 5 | A sine finite element using a zig-zag function for the analysis of laminated composite beams. Composites Part B: Engineering, 2011, 42, 1671-1682. | 5.9 | 76 |
| 6 | An efficient finite element model for static and dynamic analyses of functionally graded piezoelectric beams. Composite Structures, 2013, 104, 71-84. | 3.1 | 74 |
| 7 | A new eight-node quadrilateral shear-bending plate finite element. International Journal for Numerical Methods in Engineering, 1994, 37, 387-411. | 1.5 | 61 |
| 8 | High-order triangular sandwich plate finite element for linear and non-linear analyses. Computer Methods in Applied Mechanics and Engineering, 2000, 185, 305-324. | 3.4 | 58 |
| 9 | On the application of the Ritz method to free vibration and buckling analysis of highly anisotropic plates. Composite Structures, 2018, 192, 460-474. | 3.1 | 54 |
| 10 | Proper Generalized Decomposition and layer-wise approach for the modeling of composite plate structures. International Journal of Solids and Structures, 2013, 50, 2239-2250. | 1.3 | 49 |
| 11 | Buckling and wrinkling of anisotropic sandwich plates. International Journal of Engineering Science, 2018, 130, 136-156. | 2.7 | 47 |
| 12 | A multilayered/sandwich triangular finite element applied to linear and non-linear analyses. Composite Structures, 2002, 58, 121-128. | 3.1 | 46 |
| 13 | Bending analysis of composite laminated and sandwich structures using sublaminate variable-kinematic Ritz models. Composite Structures, 2016, 155, 45-62. | 3.1 | 46 |
| 14 | Flexural loss factors of sandwich and laminated composite beams using linear and nonlinear dynamic analysis. Composites Part B: Engineering, 1999, 30, 245-256. | 5.9 | 45 |
| 15 | AC0 EIGHT-NODE MEMBRANE-SHEAR-BENDING ELEMENT FOR GEOMETRICALLY NON-LINEAR (STATIC AND) Tj ETQq1 1 0.784314 rgB<br>39, 3453-3474. | 1.5 | 43 |
| 16 | Vibration of multilayered beams using sinus finite elements with transverse normal stress. Composite Structures, 2010, 92, 1524-1534. | 3.1 | 43 |
| 17 | A nonlocal higher-order model including thickness stretching effect for bending and buckling of curved nanobeams. Applied Mathematical Modelling, 2018, 57, 121-141. | 2.2 | 43 |
| 18 | Assessment of the refined sinus model for the non-linear analysis of composite beams. Composite Structures, 2009, 87, 370-381. | 3.1 | 42 |

| # | Article | IF | Citations |
|---|---|---|---|
| 19 | An Efficient Finite Shell Element for the Static Response of Piezoelectric Laminates. Journal of Intelligent Material Systems and Structures, 2011, 22, 671-690. | 1.4 | 42 |
| 20 | Dynamic characteristics of curved nanobeams using nonlocal higher-order curved beam theory. Physica E: Low-Dimensional Systems and Nanostructures, 2017, 91, 190-202. | 1.3 | 42 |
| 21 | Radial basis functions collocation and a unified formulation for bending, vibration and buckling analysis of laminated plates, according to a variation of Murakamiâ€™s zig-zag theory. European Journal of Mechanics, A/Solids, 2011, 30, 559-570. | 2.1 | 41 |
| 22 | On the numerical investigation of cardiovascular balloon-expandable stent using finite element method. Computational Materials Science, 2013, 79, 326-335. | 1.4 | 40 |
| 23 | A refined sine-based finite element with transverse normal deformation for the analysis of laminated beams under thermomechanical loads. Journal of Mechanics of Materials and Structures, 2009, 4, 1127-1155. | 0.4 | 39 |
| 24 | Large amplitude free flexural vibrations of functionally graded graphene platelets reinforced porous composite curved beams using finite element based on trigonometric shear deformation theory. International Journal of Non-Linear Mechanics, 2019, 116, 302-317. | 1.4 | 39 |
| 25 | A Refined Sinus Finite Element Model for the Analysis of Piezoelectric-Laminated Beams. Journal of Intelligent Material Systems and Structures, 2011, 22, 203-219. | 1.4 | 38 |
| 26 | AC1 finite element including transverse shear and torsion warping for rectangular sandwich beams. International Journal for Numerical Methods in Engineering, 1999, 45, 47-75. | 1.5 | 35 |
| 27 | Robust C<sup>0</sup> highâ€order plate finite element for thin to very thick structures: mechanical and thermoâ€mechanical analysis. International Journal for Numerical Methods in Engineering, 2012, 90, 429-451. | 1.5 | 34 |
| 28 | Composite beam finite element based on the Proper Generalized Decomposition. Computers and Structures, 2012, 102-103, 76-86. | 2.4 | 34 |
| 29 | Benchmark solutions and assessment of variable kinematics models for global and local buckling of sandwich struts. Composite Structures, 2016, 156, 125-134. | 3.1 | 34 |
| 30 | Vibration study of curved nanobeams based on nonlocal higher-order shear deformation theory using finite element approach. Composite Structures, 2018, 184, 821-838. | 3.1 | 34 |
| 31 | An efficient C1 finite element with continuity requirements for multilayered/sandwich shell structures. Computers and Structures, 2004, 82, 1889-1899. | 2.4 | 32 |
| 32 | Elastic stability of curved nanobeam based on higher-order shear deformation theory and nonlocal analysis by finite element approach. Finite Elements in Analysis and Design, 2018, 146, 1-15. | 1.7 | 32 |
| 33 | C1 plate and shell finite elements for geometrically nonlinear analysis of multilayered structures. Computers and Structures, 2006, 84, 1264-1274. | 2.4 | 31 |
| 34 | Two higher order Zig-Zag theories for the accurate analysis of bending, vibration and buckling response of laminated plates by radial basis functions collocation and a unified formulation. Journal of Composite Materials, 2011, 45, 2523-2536. | 1.2 | 31 |
| 35 | Assessment of plate theories for free-edge effects. Composites Part B: Engineering, 2013, 48, 111-121. | 5.9 | 31 |
| 36 | Dynamic characteristics of functionally graded graphene reinforced porous nanocomposite curved beams based on trigonometric shear deformation theory with thickness stretch effect. Mechanics of Advanced Materials and Structures, 2021, 28, 741-752. | 1.5 | 31 |

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|---|---|---|---|
| 37 | A thermomechanical finite element for the analysis of rectangular laminated beams. Finite Elements in Analysis and Design, 2006, 42, 868-883. | 1.7 | 29 |
| 38 | NURBS-based isogeometric analysis of laminated composite beams using refined sinus model. European Journal of Mechanics, A/Solids, 2015, 53, 34-47. | 2.1 | 29 |
| 39 | Electric potential approximations for an eight node plate finite element. Computers and Structures, 2006, 84, 1480-1493. | 2.4 | 28 |
| 40 | A refined sinus plate finite element for laminated and sandwich structures under mechanical and thermomechanical loads. Computer Methods in Applied Mechanics and Engineering, 2013, 253, 396-412. | 3.4 | 25 |
| 41 | Shell finite element based on the Proper Generalized Decomposition for the modeling of cylindrical composite structures. Computers and Structures, 2014, 132, 1-11. | 2.4 | 25 |
| 42 | High-order plate finite elements for smart structure analysis. Composite Structures, 2016, 151, 81-90. | 3.1 | 24 |
| 43 | Thermal buckling response of laminated and sandwich plates using refined 2-D models. Composite Structures, 2017, 176, 313-328. | 3.1 | 24 |
| 44 | A high-fidelity first-order reliability analysis for shear deformable laminated composite plates. Composite Structures, 2014, 115, 12-28. | 3.1 | 23 |
| 45 | A sinus shear deformation model for static analysis of composite steel-concrete beams and twin-girder decks including shear lag and interfacial slip effects. Thin-Walled Structures, 2019, 134, 61-70. | 2.7 | 23 |
| 46 | Nonlinear bending of porous curved beams reinforced by functionally graded nanocomposite graphene platelets applying an efficient shear flexible finite element approach. International Journal of Non-Linear Mechanics, 2020, 119, 103346. | 1.4 | 23 |
| 47 | Dynamic buckling of classical/non-classical curved beams by nonlocal nonlinear finite element accounting for size dependent effect and using higher-order shear flexible model. International Journal of Non-Linear Mechanics, 2020, 125, 103536. | 1.4 | 23 |
| 48 | Supersonic flutter study of porous 2D curved panels reinforced with graphene platelets using an accurate shear deformable finite element procedure. Composite Structures, 2020, 241, 112058. | 3.1 | 19 |
| 49 | Coupling finite element and reliability analysis through proper generalized decomposition model reduction. International Journal for Numerical Methods in Engineering, 2013, 95, 1079-1093. | 1.5 | 18 |
| 50 | Assessment of variable separation for finite element modeling of free edge effect for composite plates. Composite Structures, 2015, 123, 19-29. | 3.1 | 18 |
| 51 | Assessment of a composite beam finite element based on the proper generalized decomposition. Composite Structures, 2012, 94, 1900-1910. | 3.1 | 17 |
| 52 | Dynamic response of viscoelastic multiple-core sandwich structures. Journal of Sound and Vibration, 2021, 491, 115753. | 2.1 | 17 |
| 53 | Bending and Vibration of Laminated Plates by a Layerwise Formulation and Collocation with Radial Basis Functions. Mechanics of Advanced Materials and Structures, 2013, 20, 624-637. | 1.5 | 16 |
| 54 | Linearized global and local buckling analysis of sandwich struts with a refined quasi-3D model. Acta Mechanica, 2015, 226, 81-101. | 1.1 | 16 |

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|---|---|---|---|
| 55 | A nonlocal higher-order curved beam finite model including thickness stretching effect for bending analysis of curved nanobeams. Mechanics of Advanced Materials and Structures, 2019, 26, 614-630. | 1.5 | 16 |
| 56 | A quasi-3D finite element model for the analysis of thin-walled beams under axialâ€“flexuralâ€“torsional loads. Thin-Walled Structures, 2021, 164, 107811. | 2.7 | 16 |
| 57 | Assessment of free-edge singularities in composite laminates using higher-order plate elements. Mechanics of Advanced Materials and Structures, 2016, 23, 948-959. | 1.5 | 15 |
| 58 | Analysis of sandwich plates by radial basis functions collocation, according to Murakami's Zig-Zag theory. Journal of Sandwich Structures and Materials, 2012, 14, 505-524. | 2.0 | 14 |
| 59 | Assessment of the refined sinus plate finite element: Free edge effect and Meyer-Piening sandwich test. Finite Elements in Analysis and Design, 2014, 92, 60-71. | 1.7 | 14 |
| 60 | Sensitivity Analysis of Thickness Assumptions for Piezoelectric Plate Models. Journal of Intelligent Material Systems and Structures, 2009, 20, 1815-1834. | 1.4 | 13 |
| 61 | Coupling of heterogeneous kinematics and Finite Element approximations applied to composite beam structures. Composite Structures, 2014, 116, 177-192. | 3.1 | 13 |
| 62 | Nonlinear supersonic flutter study of porous 2D curved panels including graphene platelets reinforcement effect using trigonometric shear deformable finite element. International Journal of Non-Linear Mechanics, 2020, 125, 103543. | 1.4 | 12 |
| 63 | Nonlinear flexural free vibrations of size-dependent graphene platelets reinforced curved nano/micro beams by finite element approach coupled with trigonometric shear flexible theory. Mechanics of Advanced Materials and Structures, 2022, 29, 2489-2515. | 1.5 | 12 |
| 64 | Active Control of Laminated Plates Using a Piezoelectric Finite Element. Mechanics of Advanced Materials and Structures, 2008, 15, 276-290. | 1.5 | 10 |
| 65 | Refined shell model for the linear analysis of isotropic and composite elastic structures. European Journal of Mechanics, A/Solids, 2012, 34, 102-119. | 2.1 | 10 |
| 66 | An analysis of composite beams by means of hierarchical finite elements and a variables separation method. Computers and Structures, 2015, 158, 15-29. | 2.4 | 10 |
| 67 | Modeling of piezoelectric plates with variables separation for static analysis. Smart Materials and Structures, 2016, 25, 055043. | 1.8 | 10 |
| 68 | Assessment of FGPM shunt damping for vibration reduction of laminated composite beams. Journal of Sound and Vibration, 2017, 389, 101-118. | 2.1 | 10 |
| 69 | A family of higher-order single layer plate models meeting <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML" altimg="si1598.svg"><mml:mrow><mml:msubsup><mml:mrow><mml:mi>C</mml:mi></mml:mrow><mml:mrow><mml:mi>2</mml:mi> for arbitrary laminates. Composite Structures, 2019, 225, 111146. | 3.1 | 10 |
| 70 | Free vibration analysis of composite plates based on a variable separation method. Composite Structures, 2019, 230, 111493. | 3.1 | 10 |
| 71 | A new laminated triangular finite element assuring interface continuity for displacements and stresses. Composite Structures, 1997, 38, 37-44. | 3.1 | 9 |
| 72 | Thermo-mechanical analysis of laminated composite and sandwich beams based on a variables separation. Composite Structures, 2016, 152, 755-766. | 3.1 | 9 |

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|---|---|---|---|
| 73 | A 1D nonlinear finite element model for analysis of composite foam-insulated concrete sandwich panels. Composite Structures, 2019, 210, 663-675. | 3.1 | 9 |
| 74 | Benchmark of wrinkling formulae and methods for pre-sizing of aircraft lightweight sandwich structures. Composite Structures, 2021, 273, 114387. | 3.1 | 9 |
| 75 | Explicit solutions for the modeling of laminated composite plates with arbitrary stacking sequences. Composites Part B: Engineering, 2014, 60, 697-706. | 5.9 | 8 |
| 76 | The Ritz â€“ Sublaminate Generalized Unified Formulation approach for piezoelectric composite plates. International Journal of Smart and Nano Materials, 2018, 9, 34-55. | 2.0 | 8 |
| 77 | Use of Classical Plate Finite Elements for the Analysis of Electroactive Composite Plates. Numerical Validations. Journal of Intelligent Material Systems and Structures, 2009, 20, 1861-1873. | 1.4 | 7 |
| 78 | A new robust quadrilateral four-node variable kinematics plate element for composite structures. Finite Elements in Analysis and Design, 2017, 133, 10-24. | 1.7 | 7 |
| 79 | Robust layerwise C 0 finite element approach based on a variable separation method for the modeling of composite and sandwich plates. Finite Elements in Analysis and Design, 2018, 139, 1-13. | 1.7 | 7 |
| 80 | Modeling of composite and sandwich beams with a generic cross-section using a variable separation method. Composites Part B: Engineering, 2019, 165, 648-661. | 5.9 | 7 |
| 81 | A penalty-based multifiber finite element model for coupled bending and torsional-warping analysis of composite beams. European Journal of Mechanics, A/Solids, 2020, 80, 103915. | 2.1 | 7 |
| 82 | Hierarchical Beam Finite Elements Based Upon a Variables Separation Method. International Journal of Applied Mechanics, 2016, 08, 1650026. | 1.3 | 6 |
| 83 | Assessment of MITC plate elements based on CUF with respect to distorted meshes. Composite Structures, 2020, 238, 111962. | 3.1 | 6 |
| 84 | Thermal phenomenon of glass fibre composite under tensile static and fatigue loading. Journal of Mechanical Engineering and Sciences, 2017, 11, 2755-2769. | 0.3 | 6 |
| 85 | Thermal and thermo-mechanical solution of laminated composite beam based on a variables separation for arbitrary volume heat source locations. Applied Mathematical Modelling, 2017, 46, 98-115. | 2.2 | 5 |
| 86 | Forced vibration analysis of composite beams based on the variable separation method. Mechanics of Advanced Materials and Structures, 2021, 28, 618-634. | 1.5 | 5 |
| 87 | Robust Displacement and Mixed CUF-Based Four-Node and Eight-Node Quadrilateral Plate Elements. Advanced Structured Materials, 2018, , 89-118. | 0.3 | 5 |
| 88 | A Refined Sine Finite Element with Transverse Normal Stress for Thermoelastic Analysis of Laminated Composite in Cylindrical Bending. Journal of Thermal Stresses, 2011, 34, 1185-1204. | 1.1 | 4 |
| 89 | Modeling of composite plates based on Reissner's Mixed Variational Theorem with variables separation. Composites Part B: Engineering, 2016, 86, 229-242. | 5.9 | 4 |
| 90 | Multiresolution strategies for the modeling of composite shell structures based on the variable separation method. International Journal for Numerical Methods in Engineering, 2019, 117, 778-799. | 1.5 | 4 |

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|---|---|---|---|
| 91 | Forced vibration analysis of composite beams with piezoelectric layers based on the variable separation method. Composite Structures, 2021, 273, 114248. | 3.1 | 4 |
| 92 | Experimental analysis of thermal and damage evolutions of DCFC under static and fatigue loading. Revue Des Composites Et Des Materiaux Avances, 2016, 26, 165-184. | 0.2 | 4 |
| 93 | Refined Sine Theory Including Transverse Normal Stress in Cylindrical Bending. Mechanics of Advanced Materials and Structures, 2013, 20, 405-414. | 1.5 | 3 |
| 94 | Features selection and classification to estimate elbow movements. Journal of Physics: Conference Series, 2015, 657, 012012. | 0.3 | 3 |
| 95 | Analysis of functionally graded plates based on a variable separation method. Mechanics of Advanced Materials and Structures, 2022, 29, 4890-4901. | 1.5 | 3 |
| 96 | Optimisation of an ultrasonic torsion fatigue system for high strength materials. International Journal of Fatigue, 2021, 151, 106395. | 2.8 | 3 |
| 97 | Damage Observation of Glass Fiber/Epoxy Composites Using Thermography and Supported by Acoustic Emission. Applied Mechanics and Materials, 0, 627, 187-190. | 0.2 | 2 |
| 98 | Modeling of composite plates with an arbitrary hole location using the variable separation method. Computers and Structures, 2017, 192, 157-170. | 2.4 | 2 |
| 99 | Classical, first order, and advanced theories. , 2017, , 91-140. | | 2 |
| 100 | Acoustic fluidâ€“structure study of 2D cavity with composite curved flexible walls using graphene platelets reinforcement by higher-order finite element approach. Composite Structures, 2021, 272, 114180. | 3.1 | 2 |
| 101 | A C<sup>0</sup>eight node finite element based on a shell theory. Revue Europeenne Des Elements, 1999, 8, 111-134. | 0.1 | 1 |
| 102 | Analysis of Laminated Plates by Trigonometric Theory, Radial Basis, and Unified Formulation. AIAA Journal, 2011, 49, 1559-1562. | 1.5 | 1 |
| 103 | Design, Modeling and Experiments of Adaptive Structures and Smart Systems III. Mechanics of Advanced Materials and Structures, 2011, 18, 467-468. | 1.5 | 1 |
| 104 | Elbow flexion and extension identification using surface electromyography signals. , 2015, , . | | 1 |
| 105 | Hybrid kinematic model applied to the under-actuated robotic hand prosthesis ProMain-I and experimental evaluation. , 2015, , . | | 1 |
| 106 | Modeling of cylindrical composite shell structures based on the Reissnerâ€™s Mixed Variational Theorem with a variable separation method. Advanced Modeling and Simulation in Engineering Sciences, 2019, 6, . | 0.7 | 1 |
| 107 | Analytical and experimental postbuckling of conditioned cables. Structural Engineering and Mechanics, 2001, 12, 595-614. | 1.0 | 1 |
| 108 | Application d'un modÃƒÂ¨le de flambement conditionnÃƒÂ© ÃƒÂ la pose des cÃƒÂ¢bles ÃƒÂ fibres optiques. Mecanique Et Industries, 2000, 1, 131-139. | 0.2 | 0 |

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| 109 | Analyse non linÃ©aire gÃ©omÃ©trique de plaques multicouches. Revue Europeenne Des Elements, 2000, 9, 295-314. | 0.1 | 0 |
| 110 | Optimization of Laminated Composite Plates with Reliability Constraints. , 2008, , . | | 0 |
| 111 | Morphological Optimization of Prosthesisâ€™ Finger for Precision Grasping. Mechanisms and Machine Science, 2016, , 249-263. | 0.3 | 0 |
| 112 | Variable Kinematics Models for Advanced Composite Plates. Advanced Structured Materials, 2022, , 23-34. | 0.3 | 0 |
| 113 | Comparison of different degenerated approaches for the modeling of composite shell structures. Finite Elements in Analysis and Design, 2021, 195, 103585. | 1.7 | 0 |
| 114 | Thermal Stress Analysis of Homogeneous and Laminated Shells by Finite Element Method. , 2014, , 5174-5190. | | 0 |
| 115 | Explicit solution of functionally graded plates with respect to law indexes based on a variable separation method. European Journal of Mechanics, A/Solids, 2022, 96, 104668. | 2.1 | 0 |