Masato Tanaka

List of Publications by Year
in descending order

		1478505	1199594
13 papers	**169** citations	**6** h-index	**12** g-index
13 all docs	**13** docs citations	**13** times ranked	**85** citing authors

#	Article	IF	Citations
1	Robust numerical calculation of tangent moduli at finite strains based on complex-step derivative approximation and its application to localization analysis. Computer Methods in Applied Mechanics and Engineering, 2014, 269, 454-470.	6.6	47
2	A highly accurate 1st- and 2nd-order differentiation scheme for hyperelastic material models based on hyper-dual numbers. Computer Methods in Applied Mechanics and Engineering, 2015, 283, 22-45.	6.6	42
3	Numerical calculation of thermo-mechanical problems at large strains based on complex step derivative approximation of tangent stiffness matrices. Computational Mechanics, 2015, 55, 861-871.	4.0	21
4	Implementation of incremental variational formulations based on the numerical calculation of derivatives using hyper dual numbers. Computer Methods in Applied Mechanics and Engineering, 2016, 301, 216-241.	6.6	19
5	Complex step derivative approximation of consistent tangent operators for viscoelasticity based on fractional calculus. Computational Mechanics, 2015, 56, 1055-1071.	4.0	10
6	Computational two-mode asymptotic bifurcation theory combined with hyper dual numbers and applied to plate/shell buckling. Computer Methods in Applied Mechanics and Engineering, 2017, 325, 666-688.	6.6	10
7	Hill-top branching: Its asymptotically expanded and visually solved bifurcation equations. Computer Methods in Applied Mechanics and Engineering, 2020, 362, 112763.	6.6	5
8	Fundamental theorem of matrix representations of hyper-dual numbers for computing higher-order derivatives. JSIAM Letters, 2020, 12, 29-32.	0.5	4
9	Formulation of a computational asymptotic bifurcation theory applicable to hill-top branching and multiple bifurcation analyses. Transactions of the JSME (in Japanese), 2018, 84, 18-00346-18-00346.	0.2	3
10	Multiple bifurcation paths visualized by a computational asymptotic stability theory. Computer Methods in Applied Mechanics and Engineering, 2021, 381, 113702.	6.6	3
11	Hyper-dual number-based numerical differentiation of eigensystems. Computer Methods in Applied Mechanics and Engineering, 2022, 390, 114452.	6.6	3
12	Formulation for an Ogden-type hyperelastic analysis with hyper dual numbers and its performance evaluation. Transactions of the JSME (in Japanese), 2020, 86, 19-00256-19-00256.	0.2	1
13	Mathematical design and graphical solution of the multiple bifurcation equations of a 4-DoF benchmark model. Thin-Walled Structures, 2021, 166, 108010.	5.3	1