

# Wim T Van Horssen

## List of Publications by Year in descending order

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73  
papers

1,112  
citations

361413

20  
h-index

454955

30  
g-index

74  
all docs

74  
docs citations

74  
times ranked

381  
citing authors

#	ARTICLE	IF	CITATIONS
1	On the transversal vibrations of a conveyor belt with a low and time-varying velocity. Part I: the string-like case. Journal of Sound and Vibration, 2003, 264, 117-133.	3.9	84
2	On the transversal vibrations of a conveyor belt with a low and time-varying velocity. Part II: the beam-like case. Journal of Sound and Vibration, 2003, 267, 1007-1027.	3.9	70
3	Title is missing!. Nonlinear Dynamics, 2003, 31, 197-223.	5.2	62
4	On variable length induced vibrations of a vertical string. Journal of Sound and Vibration, 2014, 333, 2432-2449.	3.9	49
5	On the periodic solutions of a generalized non-linear Van der Pol oscillator. Journal of Sound and Vibration, 2003, 268, 209-215.	3.9	40
6	On the influence of lateral vibrations of supports for an axially moving string. Journal of Sound and Vibration, 2003, 268, 323-330.	3.9	38
7	On the construction of the solution of an equation describing an axially moving string. Journal of Sound and Vibration, 2005, 287, 359-366.	3.9	37
8	On transversal vibrations of an axially moving string with a time-varying velocity. Nonlinear Dynamics, 2007, 50, 315-323.	5.2	34
9	On the transversal vibrations of an axially moving continuum with a time-varying velocity: Transient from string to beam behavior. Journal of Sound and Vibration, 2009, 325, 959-973.	3.9	33
10	On a cascade of autoresonances in an elevator cable system. Nonlinear Dynamics, 2015, 80, 1613-1630.	5.2	33
11	On resonances and the applicability of Galerkin's truncation method for an axially moving string with time-varying velocity. Journal of Sound and Vibration, 2015, 344, 1-17.	3.9	30
12	Resonances and vibrations in an elevator cable system due to boundary sway. Journal of Sound and Vibration, 2018, 424, 272-292.	3.9	30
13	On Boundary Damping for an Axially Moving Tensioned Beam. Journal of Vibration and Acoustics, Transactions of the ASME, 2012, 134, .	1.6	29
14	On the transversal vibrations of a conveyor belt: Applicability of simplified models. Journal of Sound and Vibration, 2008, 313, 822-829.	3.9	28
15	On transverse vibrations of a vertical Timoshenko beam. Journal of Sound and Vibration, 2008, 314, 161-179.	3.9	28
16	Analytical approximations of the period of a generalized nonlinear van der Pol oscillator. Journal of Sound and Vibration, 2006, 295, 1099-1104.	3.9	25
17	On the Transverse, Low Frequency Vibrations of a Traveling String With Boundary Damping. Journal of Vibration and Acoustics, Transactions of the ASME, 2015, 137, .	1.6	24
18	On the effect of the bending stiffness on the damping properties of a tensioned cable with an attached tuned-mass-damper. Engineering Structures, 2009, 31, 1276-1285.	5.3	22

#	ARTICLE	IF	CITATIONS
19	On the free vibrations of an oscillator with a periodically time-varying mass. Journal of Sound and Vibration, 2006, 298, 1166-1172.	3.9	21
20	On wave reflections and energetics for a semi-infinite traveling string with a nonclassical boundary support. Journal of Sound and Vibration, 2016, 370, 336-350.	3.9	21
21	Asymptotics for a class of semilinear hyperbolic equations with an application to a problem with a quadratic nonlinearity. Nonlinear Analysis: Theory, Methods & Applications, 1992, 19, 501-530.	1.1	20
22	On aspects of damping for a vertical beam with a tuned mass damper at the top. Nonlinear Dynamics, 2007, 50, 169-190.	5.2	20
23	ON INTERACTIONS OF OSCILLATION MODES FOR A WEAKLY NON-LINEAR UNDAMPED ELASTIC BEAM WITH AN EXTERNAL FORCE. Journal of Sound and Vibration, 2000, 235, 201-217.	3.9	19
24	On the multiple scales perturbation method for difference equations. Nonlinear Dynamics, 2009, 55, 401-418.	5.2	18
25	On Boundary Damping for a Weakly Nonlinear Wave Equation. Nonlinear Dynamics, 2002, 30, 179-191.	5.2	16
26	On the forced vibrations of an oscillator with a periodically time-varying mass. Journal of Sound and Vibration, 2010, 329, 721-732.	3.9	16
27	Reflection and damping properties for semi-infinite string equations with non-classical boundary conditions. Journal of Sound and Vibration, 2015, 336, 179-190.	3.9	16
28	On the stability properties of a damped oscillator with a periodically time-varying mass. Journal of Sound and Vibration, 2011, 330, 3257-3269.	3.9	15
29	On the periods of the periodic solutions of the non-linear oscillator equation. Journal of Sound and Vibration, 2003, 260, 961-964.	3.9	14
30	On the asymptotic approximation of the solution of an equation for a non-constant axially moving string. Journal of Sound and Vibration, 2016, 367, 203-218.	3.9	13
31	Dynamic simulation of a multi-cable driven parallel suspension platform with slack cables. Mechanism and Machine Theory, 2018, 126, 329-343.	4.5	13
32	Solving systems of nonlinear difference equations by the multiple scales perturbation method. Nonlinear Dynamics, 2012, 69, 1509-1516.	5.2	11
33	On transversal oscillations of a vertically translating string with small time-harmonic length variations. Journal of Sound and Vibration, 2016, 383, 339-348.	3.9	11
34	On the free vibrations of a rectangular plate with two opposite sides simply supported and the other sides attached to linear springs. Journal of Sound and Vibration, 2004, 278, 1081-1093.	3.9	10
35	On asymptotic approximations of first integrals for second order difference equations. Nonlinear Dynamics, 2010, 61, 535-551.	5.2	10
36	On a Rayleigh Wave Equation with Boundary Damping. Nonlinear Dynamics, 2003, 33, 399-429.	5.2	9

#	ARTICLE	IF	CITATIONS
37	On the nonlinear dynamics of a single degree of freedom oscillator with a time-varying mass. Journal of Sound and Vibration, 2012, 331, 1887-1897.	3.9	9
38	On the Weakly Damped Vibrations of a String Attached to a Spring Mass Dashpot System. JVC/Journal of Vibration and Control, 2003, 9, 1231-1248.	2.6	8
39	Bifurcation of Limit Cycles in a Particular Class of Quadratic Systems with Two Centers. Journal of Differential Equations, 1994, 114, 538-569.	2.2	7
40	Asymptotic approximations of first integrals for a nonlinear oscillator. Nonlinear Analysis: Theory, Methods & Applications, 2002, 51, 1327-1346.	1.1	7
41	On the weakly damped vibrations of a vertical beam with a tip-mass. Journal of Sound and Vibration, 2008, 310, 740-754.	3.9	7
42	On oscillations of a beam with a small rigidity and a time-varying mass. Nonlinear Dynamics, 2014, 78, 449-459.	5.2	7
43	On solving wave equations on fixed bounded intervals involving Robin boundary conditions with time-dependent coefficients. Journal of Sound and Vibration, 2018, 424, 263-271.	3.9	7
44	On oscillations in a system with a piecewise smooth coefficient. Journal of Sound and Vibration, 2005, 283, 1229-1234.	3.9	6
45	On the Vibrations of a Simply Supported Square Plate on a Weakly Nonlinear Elastic Foundation. Nonlinear Dynamics, 2005, 40, 35-60.	5.2	6
46	On Approximations of First Integrals for a System of Weakly Nonlinear, Coupled Harmonic Oscillators. Nonlinear Dynamics, 2002, 30, 243-266.	5.2	5
47	On Approximations of First Integrals for Strongly Nonlinear Oscillators. Nonlinear Dynamics, 2003, 32, 109-141.	5.2	5
48	On Aspects of Asymptotics for Plate Equations. Nonlinear Dynamics, 2005, 41, 403-413.	5.2	5
49	A PIECEWISE LINEAR DYNAMICAL SYSTEM WITH TWO DROPPING SECTIONS. International Journal of Bifurcation and Chaos in Applied Sciences and Engineering, 2009, 19, 1367-1372.	1.7	5
50	On the Transverse Vibrations of Strings and Beams on Semi-Infinite Domains. Procedia IUTAM, 2016, 19, 266-273.	1.2	5
51	On Parametric Stability of a Nonconstant Axially Moving String Near Resonances. Journal of Vibration and Acoustics, Transactions of the ASME, 2017, 139, .	1.6	5
52	On aspects of boundary damping for a rectangular plate. Journal of Sound and Vibration, 2006, 292, 844-853.	3.9	4
53	On constructing a Green's function for a semi-infinite beam with boundary damping. Meccanica, 2017, 52, 2251-2263.	2.0	4
54	On resonances in transversally vibrating strings induced by an external force and a time-dependent coefficient in a Robin boundary condition. Journal of Sound and Vibration, 2021, 512, 116356.	3.9	4

#	ARTICLE	IF	CITATIONS
55	On integrating vectors and multiple scales for singularly perturbed ordinary differential equations. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2001, 46, 19-43.	1.1	3
56	On Approximations of First Integrals for a Strongly Nonlinear Forced Oscillator. <i>Nonlinear Dynamics</i> , 2003, 33, 225-252.	5.2	3
57	Global bifurcations of limit and separatrix cycles in a generalized Liénard system. <i>Nonlinear Analysis: Theory, Methods &amp; Applications</i> , 2004, 59, 189-198.	1.1	3
58	Nonlinear vibrations of a beam with time-varying rigidity and mass. <i>Nonlinear Dynamics</i> , 2013, 71, 291-312.	5.2	3
59	On a simple oscillator problem describing ice-induced vibrations of an offshore structure. <i>Nonlinear Dynamics</i> , 2019, 98, 151-166.	5.2	3
60	On boundary damping to reduce the rain-wind oscillations of an inclined cable with small bending stiffness. <i>Nonlinear Dynamics</i> , 2019, 95, 783-808.	5.2	3
61	On constructing solutions for the functional equation Z. <i>Applied Mathematics and Computation</i> , 2014, 237, 373-385.	2.2	2
62	On the Lateral Vibrations of a Vertically Moving String With a Harmonically Varying Length. , 2015, , .		2
63	On the Vibrations of an Axially Moving String With a Time-Dependent Velocity. , 2015, , .		2
64	Dynamics and buckling loads for a vibrating damped Euler-Bernoulli beam connected to an inhomogeneous foundation. <i>Archive of Applied Mechanics</i> , 2021, 91, 1291-1308.	2.2	2
65	On resonances in a weakly nonlinear microbeam due to an electric actuation. <i>Nonlinear Dynamics</i> , 2021, 104, 3157-3185.	5.2	2
66	A mathematical analysis of an extended model describing sea ice-induced frequency lock-in for vertically sided offshore structures. <i>Nonlinear Dynamics</i> , 2022, 107, 683-699.	5.2	2
67	Analysis of longitudinal oscillations in a vertically moving cable subject to nonclassical boundary conditions. <i>Applied Mathematical Modelling</i> , 2022, 111, 44-62.	4.2	2
68	Coupled torsional and vertical oscillations of a beam subjected to boundary damping. <i>Journal of Sound and Vibration</i> , 2006, 298, 1113-1128.	3.9	1
69	On the uniqueness of solutions for the Dirichlet boundary value problem of linear elastostatics in the circular domain. <i>Acta Mechanica</i> , 2008, 197, 43-62.	2.1	1
70	Global analysis of a piecewise linear Liénard-type dynamical system. <i>International Journal of Dynamical Systems and Differential Equations</i> , 2009, 2, 115.	0.0	1
71	On an interaction function for copulas. <i>Journal of Multivariate Analysis</i> , 2015, 138, 127-142.	1.0	1
72	Spreading speeds and monostable waves in a reaction-diffusion model with nonlinear competition. <i>Journal of Mathematical Analysis and Applications</i> , 2022, 511, 126077.	1.0	1

#	ARTICLE	IF	CITATIONS
73	On constructing accurate approximations of first integrals for difference equations. Communications in Nonlinear Science and Numerical Simulation, 2013, 18, 835-850.	3.3	0