Gunther Steenackers

List of Publications by Year in Descending Order

51 papers	**512** citations	**14** h-index	**20** g-index
56 ext. papers	**636** ext. citations	**3.4** avg, IF	**3.89** L-index

#	Paper	IF	Citations
51	Dynamic Line Scan Thermography Parameter Design via Gaussian Process Emulation. *Algorithms*, **2022**, 15, 102	1.8	1
50	Spot Weld Inspections Using Active Thermography. *Applied Sciences (Switzerland)*, **2022**, 12, 5668	2.6	1
49	Improving Quality Inspection of Textiles by an Augmented RGB-IR-HS-AI Approach. *Engineering Proceedings*, **2021**, 8, 21	0.5	
48	Dynamic Infrared Thermography (DIRT) in Biomedical Applications: DIEP Flap Breast Reconstruction and Skin Cancer. *Engineering Proceedings*, **2021**, 8, 3	0.5	0
47	Evaluating quality of marquetries by applying active IR thermography and advanced signal processing. *Journal of Thermal Analysis and Calorimetry*, **2021**, 143, 3835-3848	4.1	8
46	Dynamic Line Scan Thermography Optimisation Using Response Surfaces Implemented on PVC Flat Bottom Hole Plates. *Applied Sciences (Switzerland)*, **2021**, 11, 1538	2.6	2
45	Separating positional noise from neutral alignment in multicomponent statistical shape models. *Bone Reports*, **2020**, 12, 100243	2.6	6
44	Cluster Analysis of IR Thermography Data for Differentiating Glass Types in Historical Leaded-Glass Windows. *Applied Sciences (Switzerland)*, **2020**, 10, 4255	2.6	3
43	Optimisation of a Heat Source for Infrared Thermography Measurements: Comparison to Mehler Engineering + Service-Heater. *Applied Sciences (Switzerland)*, **2020**, 10, 1285	2.6	1
42	Mechanics of Psoas Tendon Snapping. A Virtual Population Study. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 264	5.8	6
41	3D Defect detection using weighted principal component thermography. *Optics and Lasers in Engineering*, **2020**, 128, 106039	4.6	4
40	Personalized hip joint kinetics during deep squatting in young, athletic adults. *Computer Methods in Biomechanics and Biomedical Engineering*, **2020**, 23, 23-32	2.1	3
39	A discrete element model to predict anatomy of the psoas muscle and path of the tendon: Design implications for total hip arthroplasty. *Clinical Biomechanics*, **2019**, 70, 186-191	2.2	9
38	Cascaded statistical shape model based segmentation of the full lower limb in CT. *Computer Methods in Biomechanics and Biomedical Engineering*, **2019**, 22, 644-657	2.1	33
37	Optimized dynamic line scanning thermography for aircraft structures. *Quantitative InfraRed Thermography Journal*, **2019**, 16, 260-275	1.1	5
36	Infrared Thermography for DIEP Flap Breast Reconstruction Part I: Measurements *Proceedings (mdpi)*, **2019**, 27, 48	0.3	1
35	Infrared Thermography for DIEP Flap Breast Reconstruction Part II: Analysis of the Results. *Proceedings (mdpi)*, **2019**, 27, 49	0.3	1

34	Statistical Shape Modeling of Skeletal Anatomy for Sex Discrimination: Their Training Size, Sexual Dimorphism, and Asymmetry. *Frontiers in Bioengineering and Biotechnology*, **2019**, 7, 302	5.8	23
33	Hydronic design of cogeneration in collective residential heating systems: state-of-the-art, comparison and improvements. *Applied Thermal Engineering*, **2019**, 148, 1246-1257	5.8	7
32	Optimised dynamic line scan thermographic detection of CFRP inserts using FE updating and POD analysis. *NDT and E International*, **2018**, 93, 141-149	4.1	17
31	Optimized robotic setup for automated active thermography using advanced path planning and visibility study. *Applied Optics*, **2018**, 57, D123-D129	1.7	4
30	From Thermal Inspection to Updating a Numerical Model of a Race Bicycle: Comparison with Structural Dynamics Approach. *Applied Sciences (Switzerland)*, **2018**, 8, 307	2.6	0
29	Excitation Source Optimisation for Active Thermography. *Proceedings (mdpi)*, **2018**, 2, 439	0.3	1
28	IR Reflectography and Active Thermography on Artworks: The Added Value of the 1.5–3 µm Band. *Applied Sciences (Switzerland)*, **2018**, 8, 50	2.6	14
27	Active thermography setup updating for NDE: a comparative study of regression techniques and optimisation routines with high contrast parameter influences for thermal problems. *Optimization and Engineering*, **2018**, 19, 163-185	2.1	8
26	Time calibration of thermal rolling shutter infrared cameras. *Infrared Physics and Technology*, **2017**, 80, 145-152	2.7	4
25	Robust quantitative depth estimation on CFRP samples using active thermography inspection and numerical simulation updating. *NDT and E International*, **2017**, 87, 119-123	4.1	27
24	Computer-based estimation of the hip joint reaction force and hip flexion angle in three different sitting configurations. *Applied Ergonomics*, **2017**, 63, 99-105	4.2	6
23	A simplified model of a mechanical cooling tower with both a fill pack and a coil. *E3S Web of Conferences*, **2017**, 22, 00145	0.5	
22	Determination of stratospheric component behaviour using Finite Element model updating. *Aerospace Science and Technology*, **2016**, 56, 22-28	4.9	0
21	Determining directional emissivity: Numerical estimation and experimental validation by using infrared thermography. *Infrared Physics and Technology*, **2016**, 77, 344-350	2.7	11
20	Development of an Equivalent Composite Honeycomb Model: A Finite Element Study. *Applied Composite Materials*, **2016**, 23, 1177-1194	2	8
19	Updating a finite element model to the real experimental setup by thermographic measurements and adaptive regression optimization. *Mechanical Systems and Signal Processing*, **2015**, 64-65, 428-440	7.8	18
18	Decoupling of mechanical systems based on in-situ frequency response functions: The link-preserving, decoupling method. *Mechanical Systems and Signal Processing*, **2015**, 58-59, 340-354	7.8	22
17	Finite element model updating using thermographic measurements: Comparison between materials with high and low thermal conductivity **2015**, 261-266		

16	Finite element optimization by pulsed thermography with adaptive response surfaces **2014**,		3
15	Experimental study of the flow field induced by a resonating piezoelectric flapping wing. *Experiments in Fluids*, **2013**, 54, 1	2.5	8
14	Acoustic source identification using a Generalized Weighted Inverse Beamforming technique. *Mechanical Systems and Signal Processing*, **2012**, 32, 349-358	7.8	9
13	Determining the Power Flow in a Rectangular Plate Using a Generalized Two-Step Regressive Discrete Fourier Series. *Journal of Vibration and Acoustics, Transactions of the ASME*, **2012**, 134,	1.6	1
12	Optical measurement of the dynamic strain field of a fan blade using a 3D scanning vibrometer. *Optics and Lasers in Engineering*, **2011**, 49, 988-997	4.6	21
11	Reliability-based design optimization of computation-intensive models making use of response surface models. *Quality and Reliability Engineering International*, **2011**, 27, 555-568	2.6	15
10	From operating deflection shapes towards mode shapes using transmissibility measurements. *Mechanical Systems and Signal Processing*, **2010**, 24, 665-677	7.8	35
9	Microphone positioning optimization for conditioning inverse tonal fan noise. *Mechanical Systems and Signal Processing*, **2010**, 24, 1682-1692	7.8	4
8	A Study on the Bandwidth Characteristics of Pleated Pneumatic Artificial Muscles. *Applied Bionics and Biomechanics*, **2009**, 6, 3-9	1.6	2
7	Development of an adaptive response surface method for optimization of computation-intensive models. *Computers and Industrial Engineering*, **2009**, 57, 847-855	6.4	28
6	Development of a regressive finite element model optimization technique making use of transmissibilities. *Structural and Multidisciplinary Optimization*, **2009**, 39, 47-62	3.6	4
5	Robust optimization of an airplane component taking into account the uncertainty of the design parameters. *Quality and Reliability Engineering International*, **2009**, 25, 255-282	2.6	8
4	Fast variance calculation of polyreference least-squares frequency-domain estimates. *Mechanical Systems and Signal Processing*, **2009**, 23, 1423-1433	7.8	13
3	Bias-specified robust design optimization: A generalized mean squared error approach. *Computers and Industrial Engineering*, **2008**, 54, 259-268	6.4	15
2	On the use of transmissibility measurements for finite element model updating. *Journal of Sound and Vibration*, **2007**, 303, 707-722	3.9	38
1	Finite element model updating taking into account the uncertainty on the modal parameters estimates. *Journal of Sound and Vibration*, **2006**, 296, 919-934	3.9	52