Peter D Claes

List of Publications by Year
in descending order

140 papers	3,788 citations	126907 33 h-index	161849 54 g-index
159 all docs	159 docs citations	159 times ranked	3619 citing authors

#	Article	IF	Citations
1	Large-scale in-vivo Caucasian facial soft tissue thickness database for craniofacial reconstruction. Forensic Science International, 2006, 159, S126-S146.	2.2	215
2	Genome-wide mapping of global-to-local genetic effects on human facial shape. Nature Genetics, 2018, 50, 414-423.	21.4	205
3	Modeling 3D Facial Shape from DNA. PLoS Genetics, 2014, 10, e1004224.	3.5	190
4	Population genomics of Mesolithic Scandinavia: Investigating early postglacial migration routes and high-latitude adaptation. PLoS Biology, 2018, 16, e2003703.	5.6	174
5	Computerized craniofacial reconstruction: Conceptual framework and review. Forensic Science International, 2010, 201, 138-145.	2.2	115
6	Craniofacial reconstruction using a combined statistical model of face shape and soft tissue depths: Methodology and validation. Forensic Science International, 2006, 159, S147-S158.	2.2	113
7	Improved facial outcome assessment using a 3D anthropometric mask. International Journal of Oral and Maxillofacial Surgery, 2012, 41, 324-330.	1.5	104
8	Spatiallyâ€dense 3D facial asymmetry assessment in both typical and disordered growth. Journal of Anatomy, 2011, 219, 444-455.	1.5	97
9	Insights into the genetic architecture of the human face. Nature Genetics, 2021, 53, 45-53.	21.4	94
10	MeshMonk: Open-source large-scale intensive 3D phenotyping. Scientific Reports, 2019, 9, 6085.	3.3	92
11	Association Between Prenatal Alcohol Exposure and Craniofacial Shape of Children at 12 Months of Age. JAMA Pediatrics, 2017, 171, 771.	6.2	88
12	Sexual dimorphism in multiple aspects of 3D facial symmetry and asymmetry defined by spatially dense geometric morphometrics. Journal of Anatomy, 2012, 221, 97-114.	1.5	84
13	Objective 3D face recognition: Evolution, approaches and challenges. Forensic Science International, 2010, 201, 125-132.	2.2	83
14	Investigating the case of human nose shape and climate adaptation. PLoS Genetics, 2017, 13, e1006616.	3.5	75
15	The influence of sex, age and body mass index on facial soft tissue depths. Forensic Science, Medicine, and Pathology, 2009, 5, 60-65.	1.4	70
16	Computerized craniofacial reconstruction using CT-derived implicit surface representations. Forensic Science International, 2006, 159, S164-S174.	2.2	69
17	Toward DNA-based facial composites: Preliminary results and validation. Forensic Science International: Genetics, 2014, 13, 208-216.	3.1	61
18	Statistical Shape Modeling of the Left Ventricle: Myocardial Infarct Classification Challenge. IEEE Journal of Biomedical and Health Informatics, 2018, 22, 503-515.	6.3	61

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19	Are there vocal cues to human developmental stability? Relationships between facial fluctuating asymmetry and voice attractiveness. Evolution and Human Behavior, 2017, 38, 249-258.	2.2	59
20	Shared heritability of human face and brain shape. Nature Genetics, 2021, 53, 830-839.	21.4	57
21	A spatially-dense regression study of facial form and tissue depth: Towards an interactive tool for craniofacial reconstruction. Forensic Science International, 2014, 234, 103-110.	2.2	54
22	Modelling 3D craniofacial growth trajectories for population comparison and classification illustrated using sex-differences. Scientific Reports, 2018, 8, 4771.	3.3	53
23	Semi-automated Ultrasound Facial Soft Tissue Depth Registration: Method and Validation. Journal of Forensic Sciences, 2005, 50, 1-7.	1.6	52
24	A Comparative Study of 3-D Face Recognition Under Expression Variations. IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews, 2012, 42, 710-727.	2.9	50
25	Exploring the Underlying Genetics of Craniofacial Morphology through Various Sources of Knowledge. BioMed Research International, 2016, 2016, 1-9.	1.9	50
26	Statistical Shape Modeling of Skeletal Anatomy for Sex Discrimination: Their Training Size, Sexual Dimorphism, and Asymmetry. Frontiers in Bioengineering and Biotechnology, 2019, 7, 302.	4.1	47
27	Three-Dimensional Surface Imaging and the Continuous Evolution of Preoperative and Postoperative Assessment in Rhinoplasty. Facial Plastic Surgery, 2016, 32, 088-094.	0.9	46
28	Facial recognition from DNA using face-to-DNA classifiers. Nature Communications, 2019, 10, 2557.	12.8	46
29	Facial masculinity does not appear to be a condition-dependent male ornament and does not reflect MHC heterozygosity in humans. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1633-1638.	7.1	46
30	Bayesian estimation of optimal craniofacial reconstructions. Forensic Science International, 2010, 201, 146-152.	2.2	41
31	Statistically Deformable Face Models for Cranio-Facial Reconstruction. Journal of Computing and Information Technology, 2006, 14, 21.	0.3	38
32	Dysmorphometrics: the modelling of morphological abnormalities. Theoretical Biology and Medical Modelling, 2012, 9, 5.	2.1	36
33	The Facial Evolution: Looking Backward and Moving Forward. Human Mutation, 2013, 34, 14-22.	2.5	36
34	Marker-based watershed transform method for fully automatic mandibular segmentation from CBCT images. Dentomaxillofacial Radiology, 2019, 48, 20180261.	2.7	36
35	Robust and regional 3D facial asymmetry assessment in hemimandibular hyperplasia and hemimandibular elongation anomalies. International Journal of Oral and Maxillofacial Surgery, 2013, 42, 36-42.	1.5	35
36	Secondary Cleft Rhinoplasty. Plastic and Reconstructive Surgery, 2014, 134, 1285-1292.	1.4	31

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37	An overview of the latest developments in facial imaging. Forensic Sciences Research, 2019, 4, 10-28.	1.6	31
38	Phenotyping: Targeting genotype's rich cousin for diagnosis. Journal of Paediatrics and Child Health, 2015, 51, 381-386.	0.8	29
39	Evolution of Preoperative Rhinoplasty Consult by Computer Imaging. Facial Plastic Surgery, 2016, 32, 080-087.	0.9	29
40	Spatially dense morphometrics of craniofacial sexual dimorphism in 1â€yearâ€olds. Journal of Anatomy, 2016, 229, 549-559.	1.5	26
41	A Comprehensive Craniofacial Study of 22q11.2 Deletion Syndrome. Journal of Dental Research, 2017, 96, 1386-1391.	5.2	26
42	Measuring asymmetry from high-density 3D surface scans: An application to human faces. PLoS ONE, 2018, 13, e0207895.	2.5	25
43	SNPs Associated With Testosterone Levels Influence Human Facial Morphology. Frontiers in Genetics, 2018, 9, 497.	2.3	23
44	An investigation of matching symmetry in the human pinnae with possible implications for 3D ear recognition and sound localization. Journal of Anatomy, 2015, 226, 60-72.	1.5	22
45	Hunting for genes that shape human faces: Initial successes and challenges for the future. Orthodontics and Craniofacial Research, 2019, 22, 207-212.	2.8	22
46	Three-dimensional Morphing and Its Added Value in the Rhinoplasty Consult. Plastic and Reconstructive Surgery - Global Open, 2019, 7, e2063.	0.6	22
47	Sources of variation in the 3dMDface and Vectra H1 3D facial imaging systems. Scientific Reports, 2020, 10, 4443.	3.3	22
48	Six NSCL/P Loci Show Associations With Normal-Range Craniofacial Variation. Frontiers in Genetics, 2018, 9, 502.	2.3	20
49	Genetic variants underlying differences in facial morphology in East Asian and European populations. Nature Genetics, 2022, 54, 403-411.	21.4	20
50	Decoding the Human Face: Progress and Challenges in Understanding the Genetics of Craniofacial Morphology. Annual Review of Genomics and Human Genetics, 2022, 23, 383-412.	6.2	20
51	Rapid neural categorization of angry and fearful faces is specifically impaired in boys with autism spectrum disorder. Journal of Child Psychology and Psychiatry and Allied Disciplines, 2020, 61, 1019-1029.	5.2	19
52	Intersections of Epigenetics, Twinning and Developmental Asymmetries: Insights Into Monogenic and Complex Diseases and a Role for 3D Facial Analysis. Twin Research and Human Genetics, 2011, 14, 305-315.	0.6	18
53	HemoVision: An automated and virtual approach to bloodstain pattern analysis. Forensic Science International, 2015, 251, 116-123.	2.2	18
54	Quantification of mandibular sexual dimorphism during adolescence. Journal of Anatomy, 2019, 234, 709-717.	1.5	18

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55	Large-scale open-source three-dimensional growth curves for clinical facial assessment and objective description of facial dysmorphism. Scientific Reports, 2021, 11, 12175.	3.3	17
56	Targeting specific facial variation for different identification tasks. Forensic Science International, 2010, 201, 118-124.	2.2	16
57	Augmentation of linear facial anthropometrics through modern morphometrics: a facial convexity example. Australian Dental Journal, 2011, 56, 141-147.	1.5	14
58	How Different is Different? Criterion and Sensitivity in Face-Space. Frontiers in Psychology, 2011, 2, 41.	2.1	14
59	Objective Monitoring of mTOR Inhibitor Therapy by Three-Dimensional Facial Analysis. Twin Research and Human Genetics, 2013, 16, 840-844.	0.6	14
60	Estimating age and synthesising growth in children and adolescents using 3D facial prototypes. Forensic Science International, 2018, 286, 61-69.	2.2	14
61	The normal-equivalent: a patient-specific assessment of facial harmony. International Journal of Oral and Maxillofacial Surgery, 2013, 42, 1150-1158.	1.5	13
62	3D facial phenotyping by biometric sibling matching used in contemporary genomic methodologies. PLoS Genetics, 2021, 17, e1009528.	3.5	13
63	Genome scans of facial features in East Africans and cross-population comparisons reveal novel associations. PLoS Genetics, 2021, 17, e1009695.	3.5	13
64	Establishing a Multidisciplinary Context for Modeling 3D Facial Shape from DNA. PLoS Genetics, 2014, 10, e1004725.	3.5	12
65	Facial Characteristics and Olfactory Dysfunction: Two Endophenotypes Related to Nonsyndromic Cleft Lip and/or Palate. BioMed Research International, 2015, 2015, 1-8.	1.9	12
66	Spatially Dense 3D Facial Heritability and Modules of Co-heritability in a Father-Offspring Design. Frontiers in Genetics, 2018, 9, 554.	2.3	12
67	Exploring palatal and dental shape variation with 3D shape analysis and geometric deep learning. Orthodontics and Craniofacial Research, 2021, 24, 134-143.	2.8	12
68	Calculation of bloodstain impact angles using an Active Bloodstain Shape Model. Journal of Forensic Radiology and Imaging, 2014, 2, 188-198.	1.2	11
69	About Face: Matching Unfamiliar Faces Across Rotations of View and Lighting. I-Perception, 2017, 8, 204166951774422.	1.4	11
70	Pitfalls and Promise of 3-dimensional Image Comparison for Craniofacial Surgical Assessment. Plastic and Reconstructive Surgery - Global Open, 2020, Publish Ahead of Print, e2847.	0.6	10
71	Accurate reconstructions of pelvic defects and discontinuities using statistical shape models. Computer Methods in Biomechanics and Biomedical Engineering, 2020, 23, 1026-1033.	1.6	10
72	3D assessment of mandibular skeletal effects produced by the Herbst appliance. BMC Oral Health, 2020, 20, 117.	2.3	10

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73	Determination of pre-arthropathy scapular anatomy with a statistical shape model: part Iâ€"rotator cuff tear arthropathy. Journal of Shoulder and Elbow Surgery, 2021, 30, 1095-1106.	2.6	10
74	Effects of Male Facial Masculinity on Perceived Attractiveness. Adaptive Human Behavior and Physiology, 2021, 7, 73-88.	1.1	10
75	The Intersection of the Genetic Architectures of Orofacial Clefts and Normal Facial Variation. Frontiers in Genetics, 2021, 12, 626403.	2.3	10
76	A survey of U.S. public perspectives on facial recognition technology and facial imaging data practices in health and research contexts. PLoS ONE, 2021, 16, e0257923.	2.5	10
77	A Dysmorphometric Analysis to Investigate Facial Phenotypic Signatures as a Foundation for Non-invasive Monitoring of Lysosomal Storage Disorders. JIMD Reports, 2012, 8, 31-39.	1.5	9
78	A Multivariate Approach to Determine the Dimensionality of Human Facial Asymmetry. Symmetry, 2020, 12, 348.	2.2	9
79	The PAX1 locus at 20p11 is a potential genetic modifier for bilateral cleft lip. Human Genetics and Genomics Advances, 2021, 2, 100025.	1.7	9
80	Semi-automated ultrasound facial soft tissue depth registration: method and validation. Journal of Forensic Sciences, 2005, 50, 1282-8.	1.6	9
81	Volumetric deformable face models for cranio-facial reconstruction. Proc Int Symp Image Signal Process Anal, 2005, , .	0.0	8
82	Symmetric surface-feature based 3D face recognition for partial data. , 2011, , .		8
83	Prehensile and non-prehensile tails among syngnathid fishes: whatâ€™s the difference?. Zoology, 2017, 120, 62-72.	1.2	8
84	Separating positional noise from neutral alignment in multicomponent statistical shape models. Bone Reports, 2020, 12, 100243.	0.4	8
85	Statistically deformable face models for cranio-facial reconstruction. Proc Int Symp Image Signal Process Anal, 2005, , .	0.0	7
86	Monitoring of Therapy for Mucopolysaccharidosis Type I Using Dysmorphometric Facial Phenotypic Signatures. JIMD Reports, 2015, 22, 99-106.	1.5	7
87	New Entries in the Lottery of Facial GWAS Discovery. PLoS Genetics, 2016, 12, e1006250.	3.5	7
88	Testing the face shape hypothesis in twins discordant for nonsyndromic orofacial clefting. American Journal of Medical Genetics, Part A, 2017, 173, 2886-2892.	1.2	7
89	Robust genome-wide ancestry inference for heterogeneous datasets: illustrated using the 1,000 genome project with 3D facial images. Scientific Reports, 2020, 10, 11850.	3.3	7
90	Facial asymmetry assessment in skeletal Class III patients with spatially-dense geometric morphometrics. European Journal of Orthodontics, 2022, 44, 155-162.	2.4	7

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91	Ischiofemoral impingement: the evolutionary cost of pelvic obstetric adaptation. Journal of Hip Preservation Surgery, 2021, 7, 677-687.	1.3	7
92	Facial morphology and growth following surgery for congenital midline cervical cleft patients. International Journal of Oral and Maxillofacial Surgery, 2018, 47, 437-441.	1.5	6
93	Multilevel principal components analysis of three-dimensional facial growth in adolescents. Computer Methods and Programs in Biomedicine, 2020, 188, 105272.	4.7	6
94	Mechanics of Psoas Tendon Snapping. A Virtual Population Study. Frontiers in Bioengineering and Biotechnology, 2020, 8, 264.	4.1	6
95	Fluctuating Asymmetry and Sexual Dimorphism in Human Facial Morphology: A Multi-Variate Study. Symmetry, 2021, 13, 304.	2.2	6
96	An exploration of adolescent facial shape changes with age via multilevel partial least squares regression. Computer Methods and Programs in Biomedicine, 2021, 200, 105935.	4.7	6
97	A textural feature based tumor therapy response prediction model for longitudinal evaluation with PET imaging. , 2012, , .		5
98	Automated facial reconstruction. , 0, , 203-221.		5
99	An automatic approach for classification and categorisation of lip morphological traits. PLoS ONE, 2019, 14, e0221197.	2.5	5
100	Three-dimensional facial capture using a custom-built photogrammetry setup: Design, performance, and cost. American Journal of Orthodontics and Dentofacial Orthopedics, 2020, 158, 286-299.	1.7	5
101	Investigating automatic emotion processing in boys with autism via eye tracking and facial mimicry recordings. Autism Research, 2021, 14, 1404-1420.	3.8	5
102	Robust initialization for 2D/3D registration of knee implant models to single-plane fluoroscopy. , 2007, 6512, 86.		4
103	Hierarchical spectral clustering of MRI for global-to-local shape analysis: Applied to brain variations in Alzheimer's disease. , 2017, , .		4
104	The effect of manual lymphatic drainage on patient recovery after orthognathic surgeryâ€"A qualitative and 3-dimensional facial analysis. Oral Surgery, Oral Medicine, Oral Pathology and Oral Radiology, 2020, 130, 478-485.	0.4	4
105	The Effect of Autologous Alveolar Bone Grafting on Nasolabial Asymmetry in Unilateral Cleft Lip and Palate. Journal of Craniofacial Surgery, 2020, 31, 1687-1691.	0.7	4
106	3D Facial Matching by Spiral Convolutional Metric Learning and a Biometric Fusion-Net of Demographic Properties. , 2021, , .		4
107	Matching 3D Facial Shape to Demographic Properties by Geometric Metric Learning: A Part-Based Approach. IEEE Transactions on Biometrics, Behavior, and Identity Science, 2022, 4, 163-172.	4.4	4
108	Lack of Correlation between Facial Sexual Dimorphism, Fluctuating Asymmetry and Self-Perceived Attractiveness in Men and Women. Symmetry, 2020, 12, 236.	2.2	4

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109	Novel approaches in 3-dimensional facial profiling to establish facial aesthetic objectives in the treatment of facial dysmorphologies. Annals of the Royal Australasian College of Dental Surgeons, 2010, 20, 56-8.	0.0	4
110	Principal Polynomial Shape Analysis: a non-linear tool for Statistical Shape Modeling. Computer Methods and Programs in Biomedicine, 2022, 220, 106812.	4.7	4
111	Automated assessment of mandibular shape asymmetry in 3-dimensions. American Journal of Orthodontics and Dentofacial Orthopedics, 2022, 161, 698-707.	1.7	4
112	TWIST1 interacts with Î²/Î´-catenins during neural tube development and regulates fate transition in cranial neural crest cells. Development (Cambridge), 2022, 149, .	2.5	4
113	A robust optimization strategy for intensity-based 2D/3D registration of knee implant models to single-plane fluoroscopy. , 2007, , .		3
114	3D facial analysis can investigate vaccine responses. Medical Hypotheses, 2012, 78, 497-501.	1.5	3
115	Human Centric Recognition of 3D Ear Models. International Journal of Computational Intelligence Systems, 2016, 9, 296.	2.7	3
116	Preprocessing of Heteroscedastic Medical Images. IEEE Access, 2018, 6, 26047-26058.	4.2	3
117	Impact of low-frequency coding variants on human facial shape. Scientific Reports, 2021, 11, 748.	3.3	3
118	Automated landmarking for palatal shape analysis using geometric deep learning. Orthodontics and Craniofacial Research, 2021, , .	2.8	3
119	U.S. Adult Perspectives on Facial Images, DNA, and Other Biometrics. IEEE Transactions on Technology and Society, 2022, 3, 9-15.	3.2	3
120	Multi-Scale Part-Based Syndrome Classification of 3D Facial Images. IEEE Access, 2022, 10, 23450-23462.	4.2	3
121	Static and Motion Facial Analysis for Craniofacial Assessment and Diagnosing Diseases. Annual Review of Biomedical Data Science, 2022, 5, .	6.5	3
122	Robust and Accurate Partial Surface Registration Based on Variational Implicit Surfaces for Automatic 3D Model Building. , 0, , .		2
123	Partial Surface Integration Based on Variational Implicit Functions and Surfaces for 3D Model Building. , 0, , .		2
124	No evidence for an association between facial fluctuating asymmetry and vocal attractiveness in men or women. Evolutionary Human Sciences, 2020, 2, .	1.7	2
125	Facial Morphological Changes Following Denture Treatment in Children with Hypohidrotic Ectodermal Dysplasia. Pediatric Dentistry (discontinued), 2020, 42, 315-320.	0.4	2
126	LSP based comparison of 3D ear models. , 2014, , .		1

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127	Notice of Removal: Machine learning to understand anthropomorphic modulators of spatiotemporal myocardial mechanics. , 2017, , .		1
128	Olfactory function in patients with nonsyndromic orofacial clefts and their unaffected relatives. American Journal of Medical Genetics, Part A, 2018, 176, 2375-2381.	1.2	1
129	Unsupervised Diffeomorphic Surface Registration and Non-linear Modelling. Lecture Notes in Computer Science, 2021, , 118-128.	1.3	1
130	3D analysis of facial morphology in Dutch children with cancer. Computer Methods and Programs in Biomedicine, 2021, 205, 106093.	4.7	1
131	Bipolar Comparison of 3D Ear Models. Communications in Computer and Information Science, 2014, , 160-169.	0.5	1
132	A PLS Regression Framework for Spatially-dense Geometric Morphometrics to Analyze Effects on Shape and Shape Characteristics: Applied to the Study of Genomic Ancestry and Sex on Facial Morphology. , 2015, , .		1
133	Automatic Detection of Myocardial Infarction Through a Global Shape Feature Based on Local Statistical Modeling. Lecture Notes in Computer Science, 2016, , 208-216.	1.3	1
134	Quantification and visualization of the tooth extraction effects on face with spatially dense geometric morphometrics. Orthodontics and Craniofacial Research, 0, , .	2.8	1
135	Noise-robust assessment of SNP array based CNV calls through local noise estimation of log R ratios. Statistical Applications in Genetics and Molecular Biology, 2018, 17, .	0.6	0
136	Fluctuating Asymmetry, Sexual Dimorphism and Attractiveness in Humans: The Development towards a 3D Approach. Proceedings (mdpi), 2018, 2, .	0.2	0
137	Mapping the Spectrum of Prenatal Alcohol Effects with Dense Surface Models of the Face and Brain. Alcoholism: Clinical and Experimental Research, 2018, 42, 1880-1882.	2.4	0
138	Robust Generalized Superimposition Methods: A Comparison Using 3D Facial Images. , 2015, , .		0
139	A Phenotypically Driven Segmentation for 3-D Facial Morphology: Modularity of 3-D Faces Through Spectral Clustering. , 2017, , .		0
140	Bloodstain impact pattern Area of Origin estimation using least-squares angles: A HemoVision validation study. Forensic Science International, 2022, 333, 111211.	2.2	0