

# Christopher Earls

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1890000/publications.pdf>

Version: 2024-02-01

42  
papers

465  
citations

623188

14  
h-index

752256

20  
g-index

42  
all docs

42  
docs citations

42  
times ranked

288  
citing authors

#	ARTICLE	IF	CITATIONS
1	Model-based structural health monitoring of naval ship hulls. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2011, 200, 1137-1149.	3.4	37
2	Generalized finite element method using proper orthogonal decomposition. <i>International Journal for Numerical Methods in Engineering</i> , 2009, 79, 887-906.	1.5	35
3	Structural Ductility in Hybrid High Performance Steel Beams. <i>Journal of Structural Engineering</i> , 2003, 129, 1584-1595.	1.7	27
4	Influence of Material Effects on Structural Ductility of Compact I-Shaped Beams. <i>Journal of Structural Engineering</i> , 2000, 126, 1268-1278.	1.7	26
5	Service Load Effective Compression Flange Width in Fiber Reinforced Polymer Deck Systems Acting Compositely with Steel Stringers. <i>Journal of Composites for Construction</i> , 2004, 8, 289-297.	1.7	25
6	Cross-Sectional Compactness and Bracing Requirements for HPS483W Girders. <i>Journal of Structural Engineering</i> , 2003, 129, 1569-1583.	1.7	24
7	Constant moment behavior of high-performance steel I-shaped beams. <i>Journal of Constructional Steel Research</i> , 2001, 57, 711-728.	1.7	22
8	Geometric Factors Influencing Structural Ductility in Compact I-Shaped Beams. <i>Journal of Structural Engineering</i> , 2000, 126, 780-789.	1.7	19
9	Stochastic inverse identification of geometric imperfections in shell structures. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2011, 200, 2256-2267.	3.4	18
10	A posteriori initial imperfection identification in shell buckling problems. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2008, 198, 260-268.	3.4	17
11	Air blast load generation for simulating structural response. <i>Steel and Composite Structures</i> , 2010, 10, 429-455.	1.3	17
12	Construction of a Horizontally Curved Steel I-Girder Bridge. Part II: Inconsistent Detailing. <i>Journal of Bridge Engineering</i> , 2006, 11, 91-98.	1.4	16
13	Data-driven discovery of Greenâ€™s functions with human-understandable deep learning. <i>Scientific Reports</i> , 2022, 12, 4824.	1.6	16
14	Construction of a Horizontally Curved Steel I-Girder Bridge. Part I: Erection Sequence. <i>Journal of Bridge Engineering</i> , 2006, 11, 81-90.	1.4	14
15	Inverting for Maritime Environments Using Proper Orthogonal Bases From Sparsely Sampled Electromagnetic Propagation Data. <i>IEEE Transactions on Geoscience and Remote Sensing</i> , 2016, 54, 7166-7176.	2.7	14
16	Single angle geometric axis flexure I. Background and model verification. <i>Journal of Constructional Steel Research</i> , 2001, 57, 603-623.	1.7	13
17	Reduced-order model tracking and interpolation to solve PDE-based Bayesian inverse problems. <i>Inverse Problems</i> , 2013, 29, 075014.	1.0	11
18	Single Angle Geometric Axis Flexural Compactness Criteria: Horizontal Leg Tension. <i>Journal of Structural Engineering</i> , 2001, 127, 616-624.	1.7	10

#	ARTICLE	IF	CITATIONS
19	Simulating blast effects on steel beam-column members: Methods. Computers and Structures, 2011, 89, 2133-2148.	2.4	10
20	Duct heights inferred from radar sea clutter using proper orthogonal bases. Radio Science, 2016, 51, 1614-1626.	0.8	10
21	A Subspace Pursuit Method to Infer Refractivity in the Marine Atmospheric Boundary Layer. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 5606-5617.	2.7	10
22	Characterizing Evaporation Ducts Within the Marine Atmospheric Boundary Layer Using Artificial Neural Networks. Radio Science, 2019, 54, 1181-1191.	0.8	9
23	Curved Steel I-Girder Bridge Response during Construction Loading: Effects of Web Plumbness. Journal of Bridge Engineering, 2007, 12, 485-493.	1.4	6
24	Single angle geometric axis flexure. Journal of Constructional Steel Research, 2001, 57, 625-648.	1.7	5
25	Bearing Capacity in Long-Span Tubular Truss Chords. Journal of Structural Engineering, 2007, 133, 356-367.	1.7	5
26	Analysis of heterogeneous computing approaches to simulating heat transfer in heterogeneous material. Journal of Parallel and Distributed Computing, 2019, 133, 1-17.	2.7	5
27	Gaussian Process Regression for Estimating EM Ducting Within the Marine Atmospheric Boundary Layer. Radio Science, 2020, 55, e2019RS006890.	0.8	5
28	Deep learning for classifying and characterizing atmospheric ducting within the maritime setting. Computers and Geosciences, 2021, 157, 104919.	2.0	5
29	Electrochemical tomography as a nondestructive technique to study localized corrosion of metals. Npj Materials Degradation, 2021, 5, .	2.6	5
30	Fatigue and Strength Performance of Concrete-Filled Steel-Grid Bridge Deck. Journal of Bridge Engineering, 2004, 9, 435-443.	1.4	4
31	Optimized inspection design for the thermographic characterization of sub-pixel sized through cracks. NDT and E International, 2016, 82, 44-55.	1.7	4
32	A principled approach to design using high fidelity fluid-structure interaction simulations. Finite Elements in Analysis and Design, 2021, 194, 103562.	1.7	4
33	Minor Axis Moment-Thrust Response Behavior in Steel I-Shaped Members. Journal of Structural Engineering, 2006, 132, 1079-1086.	1.7	3
34	Stochastic inversion for the roll gyradius second moment mass property in ships at full-scale and model-scale. Applied Ocean Research, 2017, 63, 24-35.	1.8	3
35	A new engineering theory describing oblique free surface impact by flexible plates. Ocean Engineering, 2022, 256, 111473.	1.9	3
36	Multi-parameter stochastic inversion for first and second moment mass properties of a model-scale ship with topside ice accumulation. Applied Ocean Research, 2019, 82, 143-157.	1.8	2

#	ARTICLE	IF	CITATIONS
37	CU-BENs: A structural modeling finite element library. <i>SoftwareX</i> , 2020, 11, 100485.	1.2	2
38	Behavior of Field Splice Details in Precast Concrete-Filled Steel Grid Bridge Deck. <i>Journal of Bridge Engineering</i> , 2004, 9, 127-136.	1.4	1
39	Bayesian inference approaches for the detection and characterization of hidden pitting corrosion. <i>Mechanical Systems and Signal Processing</i> , 2021, 154, 107545.	4.4	1
40	Validation Experiment of a Single-View Image-Sequence Algorithm to Identify Scale and Sea-State Characteristics. <i>IEEE Journal of Oceanic Engineering</i> , 2021, 46, 864-878.	2.1	1
41	Gaussian processes for shock test emulation. <i>Reliability Engineering and System Safety</i> , 2021, 212, 107624.	5.1	1
42	Concrete-Steel Interfacial Bond Strength in Composite Flooring: Shoring and Form Removal. <i>Practice Periodical on Structural Design and Construction</i> , 2004, 9, 9-15.	0.7	0