Katia Bertoldi

List of Publications by Year
in descending order

133 papers	12,979 citations	38552 50 h-index	24106 111 g-index
146 all docs	146 docs citations	146 times ranked	14370 citing authors

#	Article	IF	Citations
1	Unfolding Textile-Based Pneumatic Actuators for Wearable Applications. Soft Robotics, 2022, 9, 163-172.	8.1	48
2	A Modular and Selfâ€Contained Fluidic Engine for Soft Actuators. Advanced Intelligent Systems, 2022, 4, 2100094.	6.7	12
3	Architected Multimaterial Lattices with Thermally Programmable Mechanical Response. Advanced Functional Materials, 2022, 32, 2105128.	16.5	51
4	Multiple instance learning detects peripheral arterial disease from high-resolution color fundus photography. Scientific Reports, 2022, 12, 1389.	3.4	12
5	Welcome to the year 2022. Visual Computer, 2022, 38, 27-28.	3.7	4
6	Association between Chlamydia trachomatis, Neisseria gonorrhea, Mycoplasma genitalium, and Trichomonas vaginalis and Secondary Infertility in Cameroon: A case-control study. PLoS ONE, 2022, 17, e0263186.	2.5	4
7	Curvilinear Kirigami Skins Let Soft Bending Actuators Slither Faster. Frontiers in Robotics and AI, 2022, 9, 872007.	3.4	9
8	Self-regulated non-reciprocal motions in single-material microstructures. Nature, 2022, 605, 76-83.	36.2	86
9	Inflatable Origami: Multimodal Deformation via Multistability. Advanced Functional Materials, 2022, 32, .	16.5	42
10	A Pilot Study of Allogeneic Hematopoietic Stem Cell Transplantation for Intermediated-risk Acute Myeloid Leukemia Patients. In Vivo, 2021, 35, 617-622.	1.4	1
11	Collagen Type XI Alpha 1 (COL11A1): A Novel Biomarker and a Key Player in Cancer. Cancers, 2021, 13, 935.	3.8	64
12	A Modeling Framework for Jamming Structures. Advanced Functional Materials, 2021, 31, 2007554.	16.5	40
13	The importance of anesthesiological methods in the creation of arteriovenous fistulas. International Surgery Journal, 2021, 8, 1068.	0.1	2
14	Increased acquired protease inhibitor drug resistance mutations in minor HIV-1 quasispecies from infected patients suspected of failing on national second-line therapy in South Africa. BMC Infectious Diseases, 2021, 21, 214.	3.0	6
15	Global Impact of COVID-19 on Stroke Care and IV Thrombolysis. Neurology, 2021, 96, e2824-e2838.	1.1	101
16	Conventional versus reverse sequence of neoadjuvant epirubicin/cyclophosphamide and docetaxel: sequencing results from ABCSG-34. British Journal of Cancer, 2021, 124, 1795-1802.	6.6	6
17	Comparative Genome Analyses of Lactobacillus crispatus Isolates from Different Ecological Niches Reveal an Adaptation of This Species to the Human Vaginal Environment. Applied and Environmental Microbiology, 2021, 87, .	3.2	8
18	Liquid-induced topological transformations of cellular microstructures. Nature, 2021, 592, 386-391.	36.2	92

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19	Highly selective electrochemical nitrate reduction using copper phosphide self-supported copper foam electrode: Performance, mechanism, and application. Water Research, 2021, 193, 116881.	11.4	151
20	Deployable Structures Based on Buckling of Curved Beams Upon a Rotational Input. Advanced Functional Materials, 2021, 31, 2101144.	16.5	11
21	Microstructural design for mechanicalâ€“optical multifunctionality in the exoskeleton of the flower beetle Torynorrhina flammea. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.6	26
22	Increasing Opportunities for Trainees to Engage in Global Health Radiology: Radiology In Training. Radiology, 2021, 300, E320-E322.	8.8	7
23	Mechanical and hydrodynamic analyses of helical strake-like ridges in a glass sponge. Journal of the Royal Society Interface, 2021, 18, 20210559.	3.4	20
24	Controlling Liquid Crystal Orientations for Programmable Anisotropic Transformations in Cellular Microstructures. Advanced Materials, 2021, 33, e2105024.	24.3	27
25	Mechanical Valves for Onâ€Board Flow Control of Inflatable Robots. Advanced Science, 2021, 8, e2101941.	12.4	24
26	Harnessing Viscous Flow to Simplify the Actuation of Fluidic Soft Robots. Soft Robotics, 2020, 7, 1-9.	8.1	77
27	Programmable Hierarchical Kirigami. Advanced Functional Materials, 2020, 30, 1906711.	16.5	76
28	Characterization, stability, and application of domain walls in flexible mechanical metamaterials. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 31002-31009.	7.6	36
29	Evaluation of Corrosion Phenomena of T91 Steel in Stagnant Liquid Lead at High Operational Temperatures. Corrosion, 2020, 76, .	1.1	3
30	Model of electron transport in dense plasmas spanning temperature regimes. Physical Review E, 2020, 101, 053204.	2.1	22
31	Entanglement Detection beyond Measuring Fidelities. Physical Review Letters, 2020, 124, 200502.	8.0	24
32	Mass spectrometryâ€“based lipidomics of oral squamous cell carcinoma tissue reveals aberrant cholesterol and glycerophospholipid metabolism â€” A Pilot study. Translational Oncology, 2020, 13, 100807.	3.8	27
33	Octopus Arm-Inspired Tapered Soft Actuators with Suckers for Improved Grasping. Soft Robotics, 2020, 7, 639-648.	8.1	205
34	Phase Engineering of Transition Metal Dichalcogenides with Unprecedentedly High Phase Purity, Stability, and Scalability via Moltenâ€Metalâ€Assisted Intercalation. Advanced Materials, 2020, 32, e2001889.	24.3	73
35	Navigating the landscape of nonlinear mechanical metamaterials for advanced programmability. Physical Review B, 2020, 101, .	3.3	25
36	Harnessing transition waves to realize deployable structures. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4015-4020.	7.6	58

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37	President Trump vs. CEOs: a comparison of presidential and corporate agenda building. Journal of Public Relations Research, 2020, 32, 30-46.	2.9	13
38	A Stochastic Second-Order Generalized Estimating Equations Approach for Estimating Association Parameters. Journal of Computational and Graphical Statistics, 2020, 29, 547-561.	1.8	7
39	Guided transition waves in multistable mechanical metamaterials. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 2319-2325.	7.6	163
40	Geometric charges and nonlinear elasticity of two-dimensional elastic metamaterials. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 10195-10202.	7.6	24
41	Relationship between the plasma acylcarnitine profile and cardiometabolic risk factors in adults diagnosed with cardiovascular diseases. Clinica Chimica Acta, 2020, 507, 250-256.	1.6	26
42	Optimal turbine blade design enabled by auxetic honeycomb. Smart Materials and Structures, 2020, 29, 125004.	3.5	7
43	A Soft, Modular, and Bi-stable Dome Actuator for Programmable Multi-Modal Locomotion. , 2020, , .		8
44	Genome-wide studies of time of day in the brain: Design and analysis. Brain Science Advances, 2020, 6, 92-105.	0.9	10
45	Ontology: Introduction. , 2019, , 785-789.		0
46	Reconfigurable soft body trajectories using unidirectionally stretchable composite laminae. Nature Communications, 2019, 10, 3464.	13.2	81
47	Focusing and Mode Separation of Elastic Vector Solitons in a 2D Soft Mechanical Metamaterial. Physical Review Letters, 2019, 123, 024101.	8.0	39
48	MotifAnalyzerâ€PDZ: A computational program to investigate the evolution of PDZâ€binding target specificity. Protein Science, 2019, 28, 2127-2143.	7.8	12
49	Anomalous Collisions of Elastic Vector Solitons in Mechanical Metamaterials. Physical Review Letters, 2019, 122, 044101.	8.0	34
50	Additive Manufacturing of Nanostructures That Are Delicate, Complex, and Smaller than Ever. Small, 2019, 15, e1902370.	11.2	18
51	Frequency-doubling effect in acoustic reflection by a nonlinear, architected rotating-square metasurface. Physical Review E, 2019, 99, 052209.	2.1	20
52	Propagation of pop ups in kirigami shells. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 8200-8205.	7.6	100
53	Spectroscopic Signatures of the Dynamical Hydrophobic Solvation Shell Formation. Journal of Physical Chemistry B, 2019, 123, 2106-2113.	2.7	3
54	Has adventitial arterial dissection for R0-pancreatic surgery an impact on the postoperative mortality?. Hpb, 2019, 21, S420-S421.	0.3	0

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55	Extreme learning machine model for water network management. Neural Computing and Applications, 2019, 31, 157-169.	5.7	104
56	Manipulating acoustic wave reflection by a nonlinear elastic metasurface. Journal of Applied Physics, 2018, 123, .	2.3	26
57	Nonlnear elastic metasurface design achieving acoustic wave scatering control. , 2018, , .		0
58	Preparation of mechanically strong poly (ether block amide)/Mercaptoethanol breathable membranes for biomedical applications. Journal of Polymer Research, 2018, 25, 1.	2.5	10
59	Metamaterials with amplitude gaps for elastic solitons. Nature Communications, 2018, 9, 3410.	13.2	101
60	Rational design of reconfigurable prismatic architected materials. Nature, 2017, 541, 347-352.	36.2	250
61	Buckling-Induced Kirigami. Physical Review Letters, 2017, 118, 084301.	8.0	198
62	Harnessing Geometric Frustration to Form Band Gaps in Acoustic Channel Lattices. Physical Review Letters, 2017, 118, 084302.	8.0	26
63	A cold-atom Fermiâ€“Hubbard antiferromagnet. Nature, 2017, 545, 462-466.	36.2	551
64	The level and clinical significance of 5-hydroxymethylcytosine in oral squamous cell carcinoma: An immunohistochemical study in 95 patients. Pathology Research and Practice, 2017, 213, 969-974.	2.3	13
65	Harnessing Instabilities to Design Tunable Architected Cellular Materials. Annual Review of Materials Research, 2017, 47, 51-61.	9.8	114
66	Motion microscopy for visualizing and quantifying small motions. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 11639-11644.	7.6	62
67	A Biologically Inspired, Functionally Graded End Effector for Soft Robotics Applications. Soft Robotics, 2017, 4, 317-323.	8.1	43
68	Flexible mechanical metamaterials. Nature Reviews Materials, 2017, 2, .	40.2	1,110
69	Stability of Lattice Materials. , 2017, , 139-153.		2
70	Adenoviruses in Intestinal Transplantation; UNMC experience.. Transplantation, 2017, 101, S55.	1.1	0
71	Peridynamic Modeling of Ruptures in Biomembranes. PLoS ONE, 2016, 11, e0165947.	2.5	23
72	Harnessing Buckling to Design Architected Materials that Exhibit Effective Negative Swelling. Advanced Materials, 2016, 28, 6619-6624.	24.3	114

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73	Hierarchical honeycomb auxetic metamaterials. Scientific Reports, 2016, 5, 18306.	3.4	149
74	Dimpled elastic sheets: a new class of non-porous negative Poissonâ€™s ratio materials. Scientific Reports, 2016, 5, 18373.	3.4	53
75	Stable propagation of mechanical signals in soft media using stored elastic energy. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9722-9727.	7.6	270
76	Characterization of a Mechanically Tunable Gyroid Photonic Crystal Inspired by the Butterfly Parides Sesostris. Advanced Optical Materials, 2016, 4, 99-105.	7.9	47
77	Tensile Instability in a Thick Elastic Body. Physical Review Letters, 2016, 117, 094301.	8.0	20
78	A three-dimensional actuated origami-inspired transformable metamaterial with multiple degrees of freedom. Nature Communications, 2016, 7, 10929.	13.2	331
79	Elastic metamaterials for tuning circular polarization of electromagnetic waves. Scientific Reports, 2016, 6, 28273.	3.4	15
80	Harnessing Deformation to Switch On and Off the Propagation of Sound. Advanced Materials, 2016, 28, 1631-1635.	24.3	148
81	Architected Materials with Ultraâ€Low Porosity for Vibration Control. Advanced Materials, 2016, 28, 5943-5948.	24.3	58
82	Structure, biomimetics, and fluid dynamics of fish skin surfaces. Physical Review Fluids, 2016, 1, .	2.6	81
83	Honeycomb phononic crystals with self-similar hierarchy. Physical Review B, 2015, 92, .	3.3	108
84	Topological Phononic Crystals with One-Way Elastic Edge Waves. Physical Review Letters, 2015, 115, 104302.	8.0	678
85	Staple line reinforcement for adults undergoing bariatric surgery with gastric transection. The Cochrane Library, 2015, , .	2.8	0
86	Dielectric Elastomer Based â€œGrippersâ€•for Soft Robotics. Advanced Materials, 2015, 27, 6814-6819.	24.3	400
87	Multistable Architected Materials for Trapping Elastic Strain Energy. Advanced Materials, 2015, 27, 4296-4301.	24.3	666
88	Perceptions about Eclampsia, Birth Preparedness, and Complications Readiness among Antenatal Clients Attending a Specialist Hospital in Kano, Nigeria. Journal of Tropical Medicine, 2015, 2015, 1-7.	1.7	6
89	Discontinuous Buckling of Wide Beams and Metabeams. Physical Review Letters, 2015, 115, 044301.	8.0	102
90	Locally resonant band gaps in periodic beam lattices by tuning connectivity. Physical Review B, 2015, 91, .	3.3	67

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91	Mechanical Programming of Soft Actuators by Varying Fiber Angle. Soft Robotics, 2015, 2, 26-32.	8.1	400
92	Microfluidic Fabrication and Micromechanics of Permeable and Impermeable Elastomeric Microbubbles. Langmuir, 2015, 31, 3489-3493.	3.7	18
93	Amplifying the response of soft actuators by harnessing snap-through instabilities. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 10863-10868.	7.6	191
94	Treatment of Medial Collateral Ligament Injuries of the Elbow with Use of the â€œTommy Johnâ€• Operation: Indications and Results. JBJS Reviews, 2014, 2, .	2.0	3
95	Harnessing Multiple Folding Mechanisms in Soft Periodic Structures for Tunable Control of Elastic Waves. Advanced Functional Materials, 2014, 24, 4935-4942.	16.5	176
96	Structural properties in<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>R</mml:mi><mml:msub><mml:mi>Fe</mml:mi><mml:mn mathvariant="normal">O</mml:mi><mml:mn>4</mml:mn></mml:msub></mml:mrow></mml:math>compounds (<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>R</mml:mi><mml:mspace) Tj ETQq0 0 0 rgBT /Overlock 1	3.3	20
97	Harnessing fluid-structure interactions to design self-regulating acoustic metamaterials. Journal of Applied Physics, 2014, 115, 034907.	2.3	34
98	Complex Ordered Patterns in Mechanical Instability Induced Geometrically Frustrated Triangular Cellular Structures. Physical Review Letters, 2014, 112, 098701.	8.0	114
99	Pneumatic Networks for Soft Robotics that Actuate Rapidly. Advanced Functional Materials, 2014, 24, 2163-2170.	16.5	1,215
100	Polymorphic crystals selected in the nucleation stage. Europhysics Letters, 2014, 107, 46002.	2.0	14
101	Harnessing Buckling to Design Tunable Locally Resonant Acoustic Metamaterials. Physical Review Letters, 2014, 113, 014301.	8.0	494
102	Structural Transition from Helices to Hemihelices. PLoS ONE, 2014, 9, e93183.	2.5	59
103	Harnessing instabilities for design of soft reconfigurable auxetic/chiral materials. Soft Matter, 2013, 9, 8198.	2.8	186
104	Low-temperature solution-processed alumina as gate dielectric for reducing the operating-voltage of organic field-effect transistors. Applied Physics Letters, 2013, 103, .	3.2	33
105	A merged presentation of clinical and radiographic data using probability plots in a clinical trial, the JESMR study. Annals of the Rheumatic Diseases, 2013, 72, 310-312.	7.6	6
106	Effects of geometric and material nonlinearities on tunable band gaps and low-frequency directionality of phononic crystals. Physical Review B, 2013, 88, .	3.3	147
107	Dificultades en la elecciÃ³n de una ecuaciÃ³n de referencia para la interpretaciÃ³n de los resultados de capacidad de difusiÃ³n de monÃ³xido de carbono. Revista Chilena De Enfermedades Respiratorias, 2013, 29, 191-195.	0.1	0
108	Evidence for a Retroviral Insertion in TRPM1 as the Cause of Congenital Stationary Night Blindness and Leopard Complex Spotting in the Horse. PLoS ONE, 2013, 8, e78280.	2.5	115

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109	The effect of maleic anhydride grafting efficiency on the flexural properties of polyethylene composites. Journal of Applied Polymer Science, 2012, 124, 4799-4808.	2.7	12
110	Some Remarks on the Effect of Interphases on the Mechanical Response and Stability of Fiber-Reinforced Elastomers. Journal of Applied Mechanics, Transactions ASME, 2012, 79, .	2.3	15
111	Spectroscopic Evidence for the Structure Directing Role of the Solvent in the Synthesis of Two Iron Carboxylates. Angewandte Chemie - International Edition, 2012, 51, 12490-12494.	14.8	27
112	Spontaneous and deterministic three-dimensional curling of pre-strained elastomeric bi-strips. Soft Matter, 2012, 8, 6291.	2.8	57
113	Enzymeâ€Mediated Controlled Release Systems by Anchoring Peptide Sequences on Mesoporous Silica Supports. Angewandte Chemie, 2011, 123, 2186-2188.	2.1	26
114	Are asymmetric stretch Raman spectra by centrosymmetric molecules depolarized?: The 2Î½3 overtone of CO2. Journal of Chemical Physics, 2011, 134, 044318.	3.1	9
115	Rapamycin Is a Potent Inhibitor of Skin Tumor Promotion by 12-O-Tetradecanoylphorbol-13-Acetate. Cancer Prevention Research, 2011, 4, 1011-1020.	1.6	56
116	Osmotic collapse of a void in an elastomer: breathing, buckling and creasing. Soft Matter, 2010, 6, 5770.	2.8	63
117	A novel induction motor control scheme using IDA-PBC. Journal of Control Theory and Applications, 2008, 6, 59-68.	0.8	33
118	High mobility group box 1 (HMGB1) is implicated in preimplantation embryo development in the mouse. Molecular Reproduction and Development, 2008, 75, 1290-1299.	2.0	29
119	Potential of Magnetic Resonance Plaque Imaging Using Superparamagnetic Particles of Iron Oxide for the Detection of Carotid Plaque. Neurologia Medico-Chirurgica, 2008, 48, 157-162.	2.3	30
120	Synchrotron X-ray studies of heavy metal mineral-microbe interactions. Mineralogical Magazine, 2008, 72, 169-173.	1.6	2
121	Crystal Structure of 2,5-Bis(1-butyl-benzimidazol-2-yl)thiophene. Analytical Sciences: X-ray Structure Analysis Online, 2007, 23, X95-X96.	0.1	0
122	A 400 Gbps backplane switch with 10 Gbps/port optical I/O interfaces. , 2005, 6014, 158.		6
123	Colonic obstruction due to giant inflammatory polyposis in a patient with ulcerative colitis. Journal of Gastroenterology, 2005, 40, 536-539.	5.1	22
124	Further signatures of long-term changes in atmospheric electrical parameters observed in Europe. Annales Geophysicae, 2005, 23, 1987-1995.	1.6	18
125	Understanding the New Clinical Landscape for Psoriasis: A Comparative Review of Biologics. Journal of Cutaneous Medicine and Surgery, 2004, 8, 205-212.	1.3	13
126	The dynamic kinetochore-microtubule interface. Journal of Cell Science, 2004, 117, 5461-5477.	2.1	351

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127	Asymmetric Dearomatization of the Furan Ring Promoted by Conjugate Organolithium Addition to (Menthyloxy)(3-furyl)carbene Complexes of Chromium. Chemistry - A European Journal, 2003, 9, 5725-5736.	3.9	34
128	The use of clay minerals and microfossils in palaeoenvironmental reconstructions: The Holocene littoral strand of Las Nuevas (DoÃ±ana National Park) SW Spain. Clay Minerals, 2002, 37, 93-103.	0.8	11
129	Mitochondrial function in glucocorticoid triggered T-ALL cells with transgenic bcl-2 expression. Molecular Biology Reports, 2002, 29, 97-101.	2.4	16
130	The Commerce Layer: A Framework for Commercial Transactions. Lecture Notes in Computer Science, 2000, , 121-153.	1.0	0
131	IMPLEMENTING A SUCCESSFUL METRICS PROGRAM. Incose International Symposium, 1996, 6, 1036-1042.	0.6	0
132	William Howland Kenney, Chicago Jazz: A Cultural History, 1904â€“1930 (New York & Oxford: Oxford) Tj ETQq0 0 0 rgBT /Overlock 10 T (New York & Oxford: Oxford University Press, 1993, Â£19.95). Pp. 536. ISBN 0 19 505410 5.. Journal of American Studies, 1995, 29, 110-112.	0.1	0
133	Occurrence of a 16SrII subgroup D phytoplasma strain associated with leaf roll of greenhouse tomato in Iran. Indian Phytopathology, 0, , .	1.2	2