

Samuel Shian

List of Publications by Year in descending order

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Version: 2024-02-01

27
papers

3,201
citations

331670

21
h-index

501196

28
g-index

30
all docs

30
docs citations

30
times ranked

4259
citing authors

#	ARTICLE	IF	CITATIONS
1	Chemical reduction of three-dimensional silica micro-assemblies into microporous silicon replicas. <i>Nature</i> , 2007, 446, 172-175.	27.8	727
2	Dielectric Elastomer Based "Grippers" for Soft Robotics. <i>Advanced Materials</i> , 2015, 27, 6814-6819.	21.0	383
3	Tunable lenses using transparent dielectric elastomer actuators. <i>Optics Express</i> , 2013, 21, 8669.	3.4	281
4	Adaptive metalenses with simultaneous electrical control of focal length, astigmatism, and shift. <i>Science Advances</i> , 2018, 4, eaap9957.	10.3	275
5	Maximizing the Energy Density of Dielectric Elastomer Generators Using Equibiaxial Loading. <i>Advanced Functional Materials</i> , 2013, 23, 5056-5061.	14.9	189
6	Harnessing Multiple Folding Mechanisms in Soft Periodic Structures for Tunable Control of Elastic Waves. <i>Advanced Functional Materials</i> , 2014, 24, 4935-4942.	14.9	167
7	The thickness and stretch dependence of the electrical breakdown strength of an acrylic dielectric elastomer. <i>Applied Physics Letters</i> , 2012, 101, .	3.3	135
8	The tetragonal"monoclinic, ferroelastic transformation in yttrium tantalate and effect of zirconia alloying. <i>Acta Materialia</i> , 2014, 69, 196-202.	7.9	112
9	Complex Ordered Patterns in Mechanical Instability Induced Geometrically Frustrated Triangular Cellular Structures. <i>Physical Review Letters</i> , 2014, 112, 098701.	7.8	111
10	Optimizing the Electrical Energy Conversion Cycle of Dielectric Elastomer Generators. <i>Advanced Materials</i> , 2014, 26, 6617-6621.	21.0	110
11	First-principles calculations of the high-temperature phase transformation in yttrium tantalate. <i>Physical Review B</i> , 2014, 90, .	3.2	80
12	Organic liquid-crystal devices based on ionic conductors. <i>Materials Horizons</i> , 2017, 4, 1102-1109.	12.2	76
13	Thin, Conformal, and Continuous SnO ₂ Coatings on Three-Dimensional Biosilica Templates through Hydroxy-Group Amplification and Layer-By-Layer Alkoxide Deposition. <i>Angewandte Chemie - International Edition</i> , 2007, 46, 5724-5727.	13.8	68
14	Merging Biological Self-Assembly with Synthetic Chemical Tailoring: The Potential for 3-D Genetically Engineered Micro/Nano-Devices (3-D GEMS). <i>International Journal of Applied Ceramic Technology</i> , 2005, 2, 317-326.	2.1	67
15	Protein-Mediated Layer-by-Layer Syntheses of Freestanding Microscale Titania Structures with Biologically Assembled 3-D Morphologies. <i>Chemistry of Materials</i> , 2009, 21, 5704-5710.	6.7	62
16	Biocatalytic Nanoscale Coatings Through Biomimetic Layer-by-Layer Mineralization. <i>Advanced Functional Materials</i> , 2011, 21, 4243-4251.	14.9	61
17	Highly compliant transparent electrodes. <i>Applied Physics Letters</i> , 2012, 101, 061101.	3.3	53
18	Rapid Hydrolysis of Organophosphorous Esters Induced by Nanostructured, Fluorine-Doped Titania Replicas of Diatom Frustules. <i>Journal of the American Ceramic Society</i> , 2007, 90, 1632-1636.	3.8	47

#	ARTICLE	IF	CITATIONS
19	Electrically tunable window device. <i>Optics Letters</i> , 2016, 41, 1289.	3.3	44
20	Three-Dimensional Assemblies of Zirconia Nanocrystals Via Shape-Preserving Reactive Conversion of Diatom Microshells. <i>Journal of the American Ceramic Society</i> , 2006, 89, 694-698.	3.8	42
21	Hexagonal and cubic TiOF ₂ . <i>Journal of Applied Crystallography</i> , 2010, 43, 757-761.	4.5	21
22	Use of aligned fibers to enhance the performance of dielectric elastomer inchworm robots. <i>Proceedings of SPIE</i> , 2015, , .	0.8	21
23	Electrically-tunable surface deformation of a soft elastomer. <i>Soft Matter</i> , 2016, 12, 3137-3141.	2.7	21
24	Electric-field induced surface instabilities of soft dielectrics and their effects on optical transmittance and scattering. <i>Journal of Applied Physics</i> , 2018, 123, .	2.5	11
25	Power generation performance of dielectric elastomer generator with laterally-constrained configuration. <i>Smart Materials and Structures</i> , 2020, 29, 015018.	3.5	10
26	A gas-tight Cu ⁺ x-ray transparent reaction chamber for high-temperature x-ray diffraction analyses of halide gas/solid reactions. <i>Review of Scientific Instruments</i> , 2009, 80, 115108.	1.3	5
27	Characterization of Tetragonal-Monoclinic, Ferroelastic Transformation and Domain Boundaries in Zirconia-Alloyed Yttrium Tantalate. <i>Microscopy and Microanalysis</i> , 2014, 20, 1930-1931.	0.4	1