

Lich Le Van

List of Publications by Year in descending order

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54
papers

971
citations

394286
19
h-index

477173
29
g-index

54
all docs

54
docs citations

54
times ranked

608
citing authors

#	ARTICLE	IF	CITATIONS
1	Size and surface effects on mechanical behavior of thin nanoplates incorporating microstructures using isogeometric analysis. <i>Computers and Structures</i> , 2019, 212, 173-187.	2.4	69
2	Simulation of dynamic and static thermoelastic fracture problems by extended nodal gradient finite elements. <i>International Journal of Mechanical Sciences</i> , 2017, 134, 370-386.	3.6	66
3	Analysis of transient dynamic fracture parameters of cracked functionally graded composites by improved meshfree methods. <i>Theoretical and Applied Fracture Mechanics</i> , 2018, 96, 642-657.	2.1	62
4	Adaptive multi-patch isogeometric analysis based on locally refined B-splines. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2018, 339, 704-738.	3.4	52
5	Multi-inclusions modeling by adaptive XIGA based on LR B-splines and multiple level sets. <i>Finite Elements in Analysis and Design</i> , 2018, 148, 48-66.	1.7	44
6	Crack growth adaptive XIGA simulation in isotropic and orthotropic materials. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2020, 365, 113016.	3.4	38
7	Anomalous toughening in nanoscale ferroelectrics with polarization vortices. <i>Acta Materialia</i> , 2015, 88, 147-155.	3.8	37
8	Switching the chirality of a ferroelectric vortex in designed nanostructures by a homogeneous electric field. <i>Physical Review B</i> , 2017, 96, .	1.1	36
9	Analysis of thick porous beams by a quasi-3D theory and isogeometric analysis. <i>Composite Structures</i> , 2019, 221, 110890.	3.1	35
10	Size effect on cracked functional composite micro-plates by an XIGA-based effective approach. <i>Meccanica</i> , 2018, 53, 2637-2658.	1.2	34
11	Hierarchical ferroelectric and ferrotoroidic polarizations coexistent in nano-metamaterials. <i>Scientific Reports</i> , 2015, 5, 14653.	1.6	33
12	An effective computational approach based on XFEM and a novel three-step detection algorithm for multiple complex flaw clusters. <i>Computers and Structures</i> , 2017, 193, 207-225.	2.4	30
13	Polar and toroidal electromechanical properties designed by ferroelectric nano-metamaterials. <i>Acta Materialia</i> , 2016, 113, 81-89.	3.8	27
14	Adaptive orthotropic XIGA for fracture analysis of composites. <i>Composites Part B: Engineering</i> , 2019, 176, 107259.	5.9	26
15	Self-ordering of nontrivial topological polarization structures in nanoporous ferroelectrics. <i>Nanoscale</i> , 2017, 9, 15525-15533.	2.8	23
16	Fracture modeling with the adaptive XIGA based on locally refined B-splines. <i>Computer Methods in Applied Mechanics and Engineering</i> , 2019, 354, 527-567.	3.4	23
17	Functionally graded curved Timoshenko microbeams: A numerical study using IGA and modified couple stress theory. <i>Composite Structures</i> , 2020, 254, 112841.	3.1	22
18	Multilevel hysteresis loop engineered with ferroelectric nano-metamaterials. <i>Acta Materialia</i> , 2017, 125, 202-209.	3.8	21

#	ARTICLE	IF	CITATIONS
19	Colossal magnetoelectric effect in 3-1 multiferroic nanocomposites originating from ultrafine nanodomain structures. <i>Applied Physics Letters</i> , 2015, 107, .	1.5	19
20	Instability criterion for ferroelectrics under mechanical/electric multi-fields: Ginzburg-Landau theory based modeling. <i>Acta Materialia</i> , 2016, 112, 1-10.	3.8	18
21	Detection of multiple complicated flaw clusters by dynamic variable-node XFEM with a three-step detection algorithm. <i>European Journal of Mechanics, A/Solids</i> , 2020, 82, 103980.	2.1	17
22	Deterministic Switching of Polarization Vortices in Compositionally Graded Ferroelectrics Using a Mechanical Field. <i>Physical Review Applied</i> , 2019, 11, .	1.5	16
23	Formation of polarization needle-like domain and its unusual switching in compositionally graded ferroelectric thin films: an improved phase field model. <i>RSC Advances</i> , 2019, 9, 7575-7586.	1.7	16
24	Polar Superhelices in Ferroelectric Chiral Nanosprings. <i>Scientific Reports</i> , 2016, 6, 35199.	1.6	15
25	Challenge toward nanometer scale fracture mechanics. <i>Engineering Fracture Mechanics</i> , 2018, 187, 33-44.	2.0	15
26	Asymmetric flux-closure domains in compositionally graded nanoscale ferroelectrics and unusual switching of toroidal ordering by an irrotational electric field. <i>Acta Materialia</i> , 2019, 179, 215-223.	3.8	15
27	Dynamic and static isogeometric analysis for laminated Timoshenko curved microbeams. <i>Engineering Analysis With Boundary Elements</i> , 2021, 128, 90-104.	2.0	15
28	Thermal buckling adaptive multi-patch isogeometric analysis of arbitrary complex-shaped plates based on locally refined NURBS and Nitsche's method. <i>Thin-Walled Structures</i> , 2021, 169, 108383.	2.7	11
29	Periodically-arrayed ferroelectric nanostructures induced by dislocation structures in strontium titanate. <i>Physical Chemistry Chemical Physics</i> , 2019, 21, 22756-22762.	1.3	9
30	Buckling of stomatopod-dactyl-club-inspired functional gradient plates: A numerical study. <i>Composite Structures</i> , 2019, 207, 801-815.	3.1	9
31	Electrocaloric effect enhancement in compositionally graded ferroelectric thin films driven by a needle-to-vortex domain structure transition. <i>Journal Physics D: Applied Physics</i> , 2021, 54, 255307.	1.3	9
32	Emergence of non-trivial polar topologies hidden in singular stress field in SrTiO ₃ : topological strain-field engineering. <i>Journal of Physics Condensed Matter</i> , 2021, 33, 505301.	0.7	9
33	On the correlation between topological defects of polarization field and Euler characteristics of ferroelectric nanostructures. <i>Applied Physics Letters</i> , 2019, 114, 022901.	1.5	8
34	Plastic stress singularity near interface edge of elasto-plastic/elastic bi-material. <i>Computational Materials Science</i> , 2013, 78, 140-146.	1.4	7
35	Continuum thermodynamics of unusual domain evolution-induced toughening effect in nanocracked strontium titanate. <i>Engineering Fracture Mechanics</i> , 2018, 190, 232-244.	2.0	7
36	Beyond conventional nonlinear fracture mechanics in graphene nanoribbons. <i>Nanoscale</i> , 2020, 12, 18363-18370.	2.8	7

#	ARTICLE	IF	CITATIONS
37	Enhancement of electrocaloric effect in compositionally graded ferroelectric nanowires. Journal of Applied Physics, 2020, 127, 214103.	1.1	7
38	Intrinsic and extrinsic effects on the electrotoroidic switching in a ferroelectric notched nanodot by a homogeneous electric field. Physical Chemistry Chemical Physics, 2019, 21, 25011-25022.	1.3	6
39	Enhancement of electromechanical properties in (0 ⁰⁰³) lead-free ferroelectric nanocomposites with multiphase coexistence. Composites Communications, 2020, 22, 100540.	3.3	6
40	Ferrotoroidic polarons in antiferrodistortive SrTiO_3 . Physical Review B, 2020, 101, .	1.1	6
41	Improvement of SiC Crystal Growth Rate and Uniformity via Top-Seeded Solution Growth under External Static Magnetic Field: A Numerical Investigation. Materials, 2020, 13, 651.	1.3	6
42	Analysis of natural frequency for bioinspired functional gradient plates. International Journal of Mechanics and Materials in Design, 2020, 16, 367-386.	1.7	5
43	Effects of Substrate Bias Voltage on Structure of Diamond-Like Carbon Films on AISI 316L Stainless Steel: A Molecular Dynamics Simulation Study. Materials, 2021, 14, 4925.	1.3	5
44	Hierarchical geometric designs for Fe-based amorphous materials with tunable soft magnetic properties. Journal of Alloys and Compounds, 2022, 895, 162628.	2.8	5
45	Topological ferroelectric nanostructures induced by mechanical strain in strontium titanate. Physical Chemistry Chemical Physics, 2019, 21, 22420-22428.	1.3	4
46	Prediction of tunable magnetoelectric properties in compositionally graded ferroelectric/ferromagnetic laminated nanocomposites. Applied Physics Letters, 2021, 118, .	1.5	4
47	Evaluation of interfacial toughness curve of bimaterial in submicron scale. International Journal of Solids and Structures, 2012, 49, 1676-1684.	1.3	3
48	Critical dimensional limit of continuum fracture mechanics for dislocation emission. Engineering Fracture Mechanics, 2016, 163, 108-116.	2.0	3
49	Tuning magnetoelectric effect in $\text{Pb}(\text{1-x})\text{SrTiO}_3/\text{CoFe}_2\text{O}_4$ multiferroic nanocomposites by varying Sr content. Journal of Physics and Chemistry of Solids, 2020, 138, 109293.	1.9	3
50	An efficient space-time phase field discretization for ferroelectrics. Modelling and Simulation in Materials Science and Engineering, 2020, 28, 025005.	0.8	2
51	Direct switching of polarization vortex in triangular ferroelectric nanodots: Role of crystal orientation. Physical Review B, 2021, 104, .	1.1	2
52	Size-dependent electromechanical response and ferroelectric behavior of engineered morphotropic phase boundary $\text{PbZr}_{1-x}\text{Ti}_x\text{O}_3$ nano-heterostructures. Materials Research Bulletin, 2021, 140, 111327.	2.7	2
53	Abnormal Electromechanical Property of Nonlinearly Graded Lead-Free Ferroelectric Thin Films. Advanced Theory and Simulations, 2022, 5, 2100370.	1.3	2
54	Periodically-arrayed ferroelectric nanostructures induced by strain concentration in SrTiO_3 . Transactions of the JSME (in Japanese), 2019, 85, 19-00175-19-00175.	0.1	0