Lich Le Van

List of Publications by Year
in descending order

54	971	394421 19	477307 29
papers	citations	h-index	g-index

54	54	54	608
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Size and surface effects on mechanical behavior of thin nanoplates incorporating microstructures using isogeometric analysis. Computers and Structures, 2019, 212, 173-187.	4.4	69
2	Simulation of dynamic and static thermoelastic fracture problems by extended nodal gradient finite elements. International Journal of Mechanical Sciences, 2017, 134, 370-386.	6.7	66
3	Analysis of transient dynamic fracture parameters of cracked functionally graded composites by improved meshfree methods. Theoretical and Applied Fracture Mechanics, 2018, 96, 642-657.	4.7	62
4	Adaptive multi-patch isogeometric analysis based on locally refined B-splines. Computer Methods in Applied Mechanics and Engineering, 2018, 339, 704-738.	6.6	52
5	Multi-inclusions modeling by adaptive XIGA based on LR B-splines and multiple level sets. Finite Elements in Analysis and Design, 2018, 148, 48-66.	3.2	44
6	Crack growth adaptive XIGA simulation in isotropic and orthotropic materials. Computer Methods in Applied Mechanics and Engineering, 2020, 365, 113016.	6.6	38
7	Anomalous toughening in nanoscale ferroelectrics with polarization vortices. Acta Materialia, 2015, 88, 147-155.	7.9	37
8	Switching the chirality of a ferroelectric vortex in designed nanostructures by a homogeneous electric field. Physical Review B, 2017, 96, .	3.2	36
9	Analysis of thick porous beams by a quasi-3D theory and isogeometric analysis. Composite Structures, 2019, 221, 110890.	5.8	35
10	Size effect on cracked functional composite micro-plates by an XIGA-based effective approach. Meccanica, 2018, 53, 2637-2658.	2.0	34
11	Hierarchical ferroelectric and ferrotoroidic polarizations coexistent in nano-metamaterials. Scientific Reports, 2015, 5, 14653.	3.3	33
12	An effective computational approach based on XFEM and a novel three-step detection algorithm for multiple complex flaw clusters. Computers and Structures, 2017, 193, 207-225.	4.4	30
13	Polar and toroidal electromechanical properties designed by ferroelectric nano-metamaterials. Acta Materialia, 2016, 113, 81-89.	7.9	27
14	Adaptive orthotropic XIGA for fracture analysis of composites. Composites Part B: Engineering, 2019, 176, 107259.	12.0	26
15	Self-ordering of nontrivial topological polarization structures in nanoporous ferroelectrics. Nanoscale, 2017, 9, 15525-15533.	5.6	23
16	Fracture modeling with the adaptive XIGA based on locally refined B-splines. Computer Methods in Applied Mechanics and Engineering, 2019, 354, 527-567.	6.6	23
17	Functionally graded curved Timoshenko microbeams: A numerical study using IGA and modified couple stress theory. Composite Structures, 2020, 254, 112841.	5.8	22
18	Multilevel hysteresis loop engineered with ferroelectric nano-metamaterials. Acta Materialia, 2017, 125, 202-209.	7.9	21

#	Article	IF	Citations
19	Colossal magnetoelectric effect in 3-1 multiferroic nanocomposites originating from ultrafine nanodomain structures. Applied Physics Letters, 2015, 107, .	3.3	19
20	Instability criterion for ferroelectrics under mechanical/electric multi-fields: Ginzburg-Landau theory based modeling. Acta Materialia, 2016, 112, 1-10.	7.9	18
21	Detection of multiple complicated flaw clusters by dynamic variable-node XFEM with a three-step detection algorithm. European Journal of Mechanics, A/Solids, 2020, 82, 103980.	3.7	17
22	Deterministic Switching of Polarization Vortices in Compositionally Graded Ferroelectrics Using a Mechanical Field. Physical Review Applied, 2019, 11, .	3.8	16
23	Formation of polarization needle-like domain and its unusual switching in compositionally graded ferroelectric thin films: an improved phase field model. RSC Advances, 2019, 9, 7575-7586.	3.6	16
24	Polar Superhelices in Ferroelectric Chiral Nanosprings. Scientific Reports, 2016, 6, 35199.	3.3	15
25	Challenge toward nanometer scale fracture mechanics. Engineering Fracture Mechanics, 2018, 187, 33-44.	4.3	15
26	Asymmetric flux-closure domains in compositionally graded nanoscale ferroelectrics and unusual switching of toroidal ordering by an irrotational electric field. Acta Materialia, 2019, 179, 215-223.	7.9	15
27	Dynamic and static isogeometric analysis for laminated Timoshenko curved microbeams. Engineering Analysis With Boundary Elements, 2021, 128, 90-104.	3.7	15
28	Thermal buckling adaptive multi-patch isogeometric analysis of arbitrary complex-shaped plates based on locally refined NURBS and Nitscheâ€™s method. Thin-Walled Structures, 2021, 169, 108383.	5.3	11
29	Periodically-arrayed ferroelectric nanostructures induced by dislocation structures in strontium titanate. Physical Chemistry Chemical Physics, 2019, 21, 22756-22762.	2.8	9
30	Buckling of stomatopod-dactyl-club-inspired functional gradient plates: A numerical study. Composite Structures, 2019, 207, 801-815.	5.8	9
31	Electrocaloric effect enhancement in compositionally graded ferroelectric thin films driven by a needle-to-vortex domain structure transition. Journal Physics D: Applied Physics, 2021, 54, 255307.	2.8	9
32	Emergence of non-trivial polar topologies hidden in singular stress field in SrTiO₃: topological strain-field engineering. Journal of Physics Condensed Matter, 2021, 33, 505301.	1.8	9
33	On the correlation between topological defects of polarization field and Euler characteristics of ferroelectric nanostructures. Applied Physics Letters, 2019, 114, 022901.	3.3	8
34	Plastic stress singularity near interface edge of elasto-plastic/elastic bi-material. Computational Materials Science, 2013, 78, 140-146.	3.0	7
35	Continuum thermodynamics of unusual domain evolution-induced toughening effect in nanocracked strontium titanate. Engineering Fracture Mechanics, 2018, 190, 232-244.	4.3	7
36	Beyond conventional nonlinear fracture mechanics in graphene nanoribbons. Nanoscale, 2020, 12, 18363-18370.	5.6	7

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37	Enhancement of electrocaloric effect in compositionally graded ferroelectric nanowires. Journal of Applied Physics, 2020, 127, 214103.	2.5	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.	2.8	6
39	Enhancement of electromechanical properties in (0â€“3) lead-free ferroelectric nanocomposites with multiphase coexistence. Composites Communications, 2020, 22, 100540.	6.3	6
40	Ferrotoroidic polarons in antiferrodistortive <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mi>SrTi</mml:mi><mml:msub><mml:mi mathvariant="normal">O</mml:mi><mml:mn>3</mml:mn></mml:msub></mml:mrow></mml:math>. Physical Review B, 2020, 101, .	3.2	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.	2.9	6
42	Analysis of natural frequency for bioinspired functional gradient plates. International Journal of Mechanics and Materials in Design, 2020, 16, 367-386.	3.0	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.	2.9	5
44	Hierarchical geometric designs for Fe-based amorphous materials with tunable soft magnetic properties. Journal of Alloys and Compounds, 2022, 895, 162628.	5.5	5
45	Topological ferroelectric nanostructures induced by mechanical strain in strontium titanate. Physical Chemistry Chemical Physics, 2019, 21, 22420-22428.	2.8	4
46	Prediction of tunable magnetoelectric properties in compositionally graded ferroelectric/ferromagnetic laminated nanocomposites. Applied Physics Letters, 2021, 118, .	3.3	4
47	Evaluation of interfacial toughness curve of bimaterial in submicron scale. International Journal of Solids and Structures, 2012, 49, 1676-1684.	2.7	3
48	Critical dimensional limit of continuum fracture mechanics for dislocation emission. Engineering Fracture Mechanics, 2016, 163, 108-116.	4.3	3
49	Tuning magnetoelectric effect in Pb(1â^')Sr TiO3/CoFe2O4 multiferroic nanocomposites by varying Sr content. Journal of Physics and Chemistry of Solids, 2020, 138, 109293.	4.0	3
50	An efficient space-time phase field discretization for ferroelectrics. Modelling and Simulation in Materials Science and Engineering, 2020, 28, 025005.	2.0	2
51	Direct switching of polarization vortex in triangular ferroelectric nanodots: Role of crystal orientation. Physical Review B, 2021, 104, .	3.2	2
52	Size-dependent electromechanical response and ferroelectric behavior of engineered morphotropic phase boundary PbZr1â^'Ti O3 nano-heterostructures. Materials Research Bulletin, 2021, 140, 111327.	5.2	2
53	Abnormal Electromechanical Property of Nonlinearly Graded Leadâ€Free Ferroelectric Thin Films. Advanced Theory and Simulations, 2022, 5, 2100370.	2.8	2
54	Periodically-arrayed ferroelectric nanostructures induced by strain concentration in SrTiO₃. Transactions of the JSME (in Japanese), 2019, 85, 19-00175-19-00175.	0.2	0