

Curriculum Vitae



Associate Professor Alan Lim Teik Cheng

Head, PhD (Engineering) Programme
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Education Qualifications

2015	Managing Innovative Technology, Dept. Continuing Educ., Univ. Oxford
2009	Effective Online Tutoring, Dept. Continuing Educ., Univ. Oxford
2001	PhD, National University of Singapore
1996	BEng (Hons), National University of Singapore

Academic and Professional Experience

2013 - Present	Head of PhD (Engineering) Programme
2007 - Present	Lecturer, Senior Lecturer, Associate Professor, Singapore University of Social Sciences
2012	PhD External Examiner for the School of Medical Science and Technology, Indian Institute of Technology (IIT), Kharagpur, India
2011	Evaluation Team Member for the Engineering Accreditation Board (EAB)
2009	PhD External Examiner for the Department of Applied Mechanics & Hydraulics, National Institute of Technology Karnataka, Surathkal, India
2007	Evaluation Team Member for the Engineering Accreditation Board (EAB)
2001 - 2006	Research Fellow, Professional Officer and Program Manager, National University of Singapore
2000 - 2001	Applications Engineer, Instron Singapore Pte Ltd
1999	Graduate Tutor, National University of Singapore

Memberships and Professional Activities

2007 - Present	Member, Institution of Engineers Singapore (IES)
2007 - Present	Member, International Association of Engineers (IAENG)
2003 - 2006	Member, American Society of Mechanical Engineers (ASME)

Consultancy and Executive Experience

2015	Judge for the Energy Innovation Challenge 2015 competition, organized in conjunction with the National Engineers Day (NED) 2015
2015	Committee member, International Conference on Mechatronics and Mechanical Engineering (ICMME 2015), Singapore.
2015	Scientific committee member, 6th International Conference on Auxetics and other materials and models with negative characteristics, Malta.
2014	Scientific committee member, 5th International Conference and 10th International Workshop on Auxetics and related systems at Poznan.
2012	Scientific committee member, 4th International Conference and 9th International Workshop on Auxetics and Related Systems, Bolton.
2012 - Present	Editorial Board Member, Journal of Chemistry (ISSN: 2090-9063 (Print), 2090-9071 (Online)).
2011	Scientific committee member, 8th International Workshop on Auxetics and Related Systems, Szczecin.
2011	Consultancy team member for evaluating the effectiveness of e-learning in Home Team Academy (HTA).
2010 - Present	Founding Editor-in-Chief, International Journal of Novel Materials (IJNM) (ISSN: 0976-6170).
2009	Scientific committee member, 6th International Workshop on Auxetics and Related Systems, Bolton.
2008 - Present	Editorial Board Member, International Journal of Chemical Modeling (IJCHEMO) (ISSN: 1941-3955)
2004	1st Nano-Engineering and Nano-Science Congress, Singapore.
2004	Thin Films & Nanotech 2004, Singapore.
2004	Guest Editor, Special Issue on Nanobioengineering in Materials Technology journal (ISSN 1066-7857), Volume 19, Issue 1 (2004).
2002 - Present	Peer reviewer for about 30 international journals.

Research Interests

- Auxetic Materials and Structures
- Solid Mechanics
- Composites

Award

1995/96	Faculty of Engineering Annual Book Prize (Applied Mechanics), NUS
1996 - 1999	NUS Research Scholarship
2005 - 2008	NUS Academic Research Fund, WBS no. R-265-000-192-112. As Co-PI.
2006 - 2009	A*STAR SERC Grant, Grant number 062 120 0017. As Co-PI.
2010 - 2011	UniSIM CFAR research grant no. RF10SST01. As PI.

Selected Publications

Books:

- Teik-Cheng Lim, "Auxetic Materials and Structures", Springer, Singapore, 2015 (Hardcover ISBN: 978-981-287-274-6, eBook ISBN: 978-981-287-275-3)
- Wenwei Yu, Subhagata Chattopadhyay, Teik-Cheng Lim and U. Rajendra Acharya, "Advances in Therapeutic Engineering", Taylor and Francis, Boca Raton, 2012 (ISBN: 9781439871713)
- Teik-Cheng Lim, "Nanosensors: Theory and Applications in Industry, Healthcare and Defense", Taylor and Francis, Boca Raton, 2011 (ISBN: 978-1-4398-0736-1).
- S. Ramakrishna, K. Fujihara, W.E. Teo, T.C. Lim and Z.W. Ma, "An Introduction to Electrospinning and Nanofibers", World Scientific, Singapore, June 2005. (Hardcover ISBN: 981-256-415-2; softcover ISBN: 981-256-454-3).
- 拉马克瑞斯纳西拉姆(Seeram Ramakrishna), 藤原和利(Kazutoshi Fujihara), 张伟勇(Wee-Eong Teo), 林德清(Teik-Cheng Lim) & 马祖伟(Zuwei Ma), 静电纺丝与纳米纤维导论(An Introduction To Electrospinning And Nanofibers), 东华大学出版社(Donghua University Press), 2012.

Book Chapters:

- Teik-Cheng Lim, U. Rajendra Acharya and Subhagata Chattopadhyay, "A survey of instruments for eye diagnostics with special emphasis on glaucoma detection", in Chapter 5 of E.Y.K. Ng, J.H. Tan, U. Rajendra Acharya, and J.S. Suri (eds.) Human Eye Imaging and Modeling, pp.83-97. Taylor and Francis (May 2012). ISBN 978-1-4398-6993-2.
- Teik-Cheng Lim, "Modeling and Simulation of Polymeric Nanocomposite Processing" in Recent Advances in Elastomeric Nanocomposites, Eds: Vikas Mittal, Jin Kuk Kim and Kaushik Pal, Advanced Structured Materials, 2011, Volume 9, Part 2, 119-134.
- T.C. Lim, "Computer modeling and simulation of polymer processing", in Advances in Polymer Processing: From Macro- to Nano- Scales, Editors: S. Thomas and W. Yang, Woodhead Publishing Ltd, Cambridge, pp.681-697 (2009). (ISBN 1 84569 396 5, ISBN-13: 978 1 84569 396 1).
- T.C. Lim, "Relationships among Parameters of Molecular Potential Energy Functions: Theory and Applications" in Chemical Physics Research Trends Horizons in World Physics, Editor: Benjamin V. Arnold, Nova Science Publisher, Vol. 252, pp. 269-318 (2007) (ISBN: 1-60021-554-8).
- S. Ramakrishna, K. Fujihara, V.K. Ganesh, W.E. Teo and T.C. Lim, "Science and Engineering of Polymer Nanofibers" in K.E. Geckeler and E. Rosenberg, in Chapter 7, Functional Nanomaterials, American Scientific Publisher, California, pp. 114-148, October 2005 (ISBN: 1-58883-067-5).
- T.C. Lim and S. Ramakrishna, "Next-Generation Applications for Polymer Nanofibers" in Chapter 8, Nanotechnology: Global Strategies, Industry Trends and Applications, Editor: J. Schulte. John Wiley & Sons, United Kingdom, pp.137-147, May 2005 (ISBN 0-470-85400-6).

Refereed International Journals Papers:

- Teik-Cheng Lim, "Higher order shear deformation of very thick simply-supported equilateral triangular plates under uniform load", *Mechanics Based Design of Structures and Machines*, (accepted).
- Teik-Cheng Lim, "Longitudinal wave motion in width-constrained auxetic plates", *Smart Materials and Structures* (in press).
- Teik-Cheng Lim, "Refined Shear Correction Factor for Very Thick Simply-Supported and Uniformly-Loaded Isosceles Right Triangular Auxetic Plates", *Smart Materials and Structures* (in press).
- Teik-Cheng Lim, "Simply-supported elliptical auxetic plates", *Journal of Mechanics*, (in press).
- Teik-Cheng Lim "Bending stresses in triangular auxetic plates", *Journal of Engineering Materials and Technology*, Vol.138, no.1, article 014501 (2016).
- Teik-Cheng Lim, "Shear deformation in beams with negative Poisson's ratio", *Journal of Materials: Design and Applications*, Vol.229, no.6, pp.447-454 (2015).
- P. Sobieszczyk, M. Majka, D. Kuźma, T.C. Lim, and P. Zieliński, "Effect of longitudinal stress on wave propagation in width-constrained elastic plates with arbitrary Poisson's ratio", *Physica Status Solidi B*, Vol.252, no.7, pp.1615-1619 (2015).
- Teik-Cheng Lim, "Elastic stability analysis of auxetic columns using third-order shear deformation theory", *Physica Status Solidi B*, Vol.252, no.7, pp.1575-1579 (2015).
- Teik-Cheng Lim, "Longitudinal wave velocity in auxetic rods", *Journal of Engineering Materials and Technology*, Vol.137, no.2, art.024502 (2015).
- Teik-Cheng Lim, "Thermal stresses in auxetic plates and shells", *Mechanics of Advanced Materials and Structures*, Vol.22, no.3, pp.205-212 (2015).
- Teik-Cheng Lim, "Vibration of thick auxetic plates", *Mechanics Research Communications*, Vol.61, pp.60-66 (2014).
- Teik-Cheng Lim, "Auxetic plates on auxetic foundation", *Applied Mechanics and Materials*, Vol.974, pp.398-401 (2014).
- Teik-Cheng Lim, "Shear deformation in rectangular auxetic plates", *Journal of Engineering Materials and Technology*, Vol.136, no.3, art.031007 (2014).
- Teik-Cheng Lim, "Flexural rigidity of thin auxetic plates", *International Journal of Applied Mechanics*, Vol.6, no.2, article 1450012 (2014).
- Teik-Cheng Lim, "Buckling and vibration of circular auxetic plates", *Journal of Engineering Materials and Technology*, Vol.136, no.2, art.021007 (2014).
- Teik-Cheng Lim, "Elastic stability of thick auxetic plates", *Smart Materials and Structures*, Vol.23, no.4, article 045004 (2014).
- T.C. Lim, A. Alderson, K.L. Alderson, "Experimental Studies on the Impact Properties of Auxetic Materials", *Physica Status Solidi B*, Vol.251, no.2, pp.307-313.
- Teik-Cheng Lim, "Semi-auxetic yarns", *Physica Status Solidi B*, Vol.251, no.2, pp.273-280.
- T.C. Lim, P. Cheang and F. Scarpa, "Wave motion in auxetic solids", *Physica Status Solidi B*, Vol.251, no.2, pp.388-396.
- Teik-Cheng Lim, "Negative thermal expansion in transversely isotropic space frame trusses", *Physica Status Solidi B*, Vol.250, no.10, pp.2062-2069 (2013).

- Tay Swee Hock, Oliver Faust, Teik-Cheng Lim, and Wenwei Yu, "Automated detection of premature ventricular contraction using recurrence quantification analysis on heart rate signals", *Journal of Medical Imaging and Health Informatics*, Vol.3, no.3, pp. 462-469 (2013).
- Lee Wei Jian and Teik-Cheng Lim, "Automated detection of diabetes by means of higher order spectral features obtained from heart rate signals", *Journal of Medical Imaging and Health Informatics*, Vol.3, no.3, pp. 440-447 (2013).
- U. Rajendra Acharya, Oliver Faust, Dhanjoo N. Ghista, S. Vinitha Sree, Ang Peng Chuan Alvin, Subhagata Chattopadhyay, Teik-Cheng Lim, Eddie Yin-Kwee Ng, and Wenwei Yu, "A Systems Approach to Cardiac Health Diagnosis", *Journal of Medical Imaging and Health Informatics*, Vol.3, no.2, pp. 261-267 (2013).
- Teik-Cheng Lim, "Review of data mining methodologies for healthcare applications", *Journal of Medical Imaging and Healthcare Informatics*, Vol.3, no.2, pp.288-293 (2013).
- Teik-Cheng Lim, "Thermal stresses in thin auxetic plates", *Journal of Thermal Stresses*, Vol.36, no.11, pp.1131-1140 (2013).
- Teik-Cheng Lim, "Rotating disks made from materials with negative Poisson's ratio", *Advanced Materials Research*, Vol.804, pp.347-352 (2013).
- Teik-Cheng Lim, "Spherical auxetic shells", *Advanced Materials Research*, Vol.804, pp.146-150 (2013).
- Teik-Cheng Lim, "Stress concentration factors in auxetic rods and plates", *Applied Mechanics and Materials*, Vol.394, pp.134-139 (2013).
- Teik-Cheng Lim, "Stress wave transmission and reflection through auxetic solids", *Smart Materials and Structures*, Vol.22, no.8, art.084002 (10 pages) (2013).
- Teik-Cheng Lim, "Shear deformation in thick auxetic plates", *Smart Materials and Structures*, Vol.22, no.8, art.084001 (7 pages) (2013).
- Teik-Cheng Lim, "Optimal Poisson's Ratios for Laterally Loaded Rectangular Plates", *Journal of Materials: Design and Applications*, Vol.227, no.2, pp.111-123 (2013).
- Donna Giri, U. Rajendra Acharya, Roshan Joy Martis, S. Vinitha Sred, Teik-Cheng Lim, Thajudin Ahamed VI and Jasjit Suri, "Automated Diagnosis of Coronary Artery Disease Affected Patients Using LDA, PCA, ICA and Discrete Wavelet Transform", *Knowledge-Based Systems*, Vol.37, pp.274-282 (2013).
- T.C. Lim, "Circular auxetic plates", *Journal of Mechanics*, Vol.29, no.1, pp.121-133 (2013).
- Oliver Faust, V. Ramanan Prasad, Swapna G., Subhagata Chattopadhyay and Teik-Cheng Lim, "Comprehensive Analysis of Normal and Diabetic Heart Rate Signals: A Review", *Journal of Mechanics in Medicine and Biology*, Vol.12, no.5, art.1240033 (37 pages) (2012).
- E.P. Ng, T.C. Lim, S. Chattopadhyay and M. Bairy, "Automated identification of epileptic and alcoholic EEG signals using recurrence quantification analysis", *Journal of Mechanics in Medicine and Biology*, Vol.12, no.5, art.1240028 (17 pages) (2012).
- T.C. Lim, "Analysis of auxetic beams as resonant frequency biosensors", *Journal of Mechanics in Medicine and Biology*, Vol.12, no.5, art.1240027 (11 pages) (2012).
- T.C. Lim, "Mixed auxeticity of auxetic sandwich structures", *Physica Status Solidi B*, Vol.249, no.7, pp.1366-1372 (2012). This paper was presented in a conference.
- T.C. Lim, "A power series potential energy function with adjustable index", *Journal of Mathematical Chemistry*, Vol.50, no.5, pp.1091-1099 (2012).

- T.C. Lim, S. Chattopadhyay and U. Rajendra Acharya, "A Survey and Comparative Study on the Instruments for Glaucoma Detection", *Medical Engineering and Physics*, Vol.34, no.2, pp.129-139 (2012).
- T.C. Lim, "Negative thermal expansion structures constructed from positive thermal expansion trusses", *Journal of Materials Science*, Vol.47, no.1, pp.368-373 (2012).
- T.C. Lim, "Torsion of semi-auxetic rods", *Journal of Materials Science*, Vol.46, no.21, pp.6904-6909 (2011).
- T.C. Lim, "Size-Dependency Consideration of Montmorillonite-Reinforced Nylon-6 Via Interfacial Stiffness", *Journal of Thermoplastic Composite Materials*, Vol.24, no.5, pp.601-611 (2011).
- U. Rajendra Acharya, Eric Chern-Pin Chua, Oliver Faust, Teik-Cheng Lim and Liang Feng Benjamin Lim, "Automated detection of sleep apnea from electrocardiogram signals using nonlinear parameters", *Physiological Measurement*, Vol.32, no.3, pp.287-303 (2011).
- T.C. Lim, "United Atom Model approach for describing C60 interaction energy in molecular mechanics", *Journal of Theoretical and Computational Chemistry*, Vol.10, no.4, pp.423-434 (2011).
- T.C. Lim, "Application of the Biswas-Hamann Parameters for Describing the Kaxiras-Pandey Bond Energy", *MATCH Communications in Mathematical and in Computer Chemistry*, Vol.66, no.2, pp.573-580 (2011).
- T.C. Lim, "Split series potential energy function" *Journal of Mathematical Chemistry*, Vol.49, no.6, pp.1180-1191 (2011).
- T.C. Lim, "Application of extended-Rydberg parameters in general Morse potential functions", *Journal of Mathematical Chemistry*, Vol.49, no.10, pp.1086-1091 (2011).
- T.C. Lim and U. Rajendra Acharya, "Counterintuitive modulus from semi-auxetic laminates", *Physica Status Solidi B*, Vol.248, no.1, pp.60-65 (2011). This paper was presented in a conference.
- T.C. Lim, "Coefficient of thermal expansion of stacked auxetic and negative thermal expansion laminates" *Physica Status Solidi B*, Vol.248, no.1, pp.140-147 (2011). This paper was presented in a conference.
- T.C. Lim, "Alternative continued nested radical fractions for some constants", *Mathematical Spectrum*, Vol.43, no.2, pp.55-59 (2011).
- T.C. Lim, "Preliminary assessment of a multifunctional potential energy function", *Molecular Physics*, Vol.108, no. 12, pp. 1589-1597 (2010).
- Teik-Cheng Lim, Rajendra U. Acharya, "Performance Evaluation of Auxetic Molecular Sieves with Re-Entrant Structures", *Journal of Biomedical Nanotechnology*, Vol.6, No.6, pp. 718-724 (2010).
- T.C. Lim, "In-plane stiffness of semi-auxetic laminates" *Journal of Engineering Mechanics*, Vol.136, no.9, pp.1176-1180 (2010).
- T.C. Lim, "Application of Kihara parameters in conventional molecular force fields", *Journal of Mathematical Chemistry*, Vol.48, no.2, pp.363-369 (2010).
- T.C. Lim and Rajendra Acharya U, "Longitudinal modulus of semi-auxetic unidirectional fiber composites", *Journal of Reinforced Plastics and Composites*, Vol.29, no.10, pp.1441-1445 (2010).
- Rajendra Udyavara Acharya, Wenwei Yu, Kuanyi Zhu, Jagadish Nayak, Teik-Cheng Lim, Joey Yiptong Chan, "Identification of Cataract and Post-cataract Surgery Optical Images Using Artificial Intelligence Techniques", *Journal of Medical Systems*, Vol.34, no.4, pp.619-628 (2010).
- T.C. Lim, "Correction Factors for the Analytical Transverse Stiffness of Unidirectional Fibre Composites", *Journal of Thermoplastic Composite Materials*, Vol.23, no.4, pp. 389-399 (2010).

- T.C. Lim, "Modification of Morse potential in conventional force fields for applying FPDP parameters", *Journal of Mathematical Chemistry*, Vol.47, pp.984-989 (2010).
- T.C. Lim, "Continued Nested Radical Fractions", *Mathematical Spectrum*, Vol.42, no.2, pp.59-63 (2010).
- T.C. Lim, "Geometrical Correction to the Elastic Stiffness of Particulate Composites", *Journal of Reinforced Plastics and Composites*, Vol.29, no.1, pp.94-104 (2010).
- C.K. See, U.R. Acharya, K. Zhu, T.C. Lim, W.W. Yu, T. Subramaniam and C. Law, "Automated identification of diabetes type-2 subjects with and without neuropathy using eigenvalues", *Proceedings of IMechE Part H: Journal of Engineering in Medicine*, Vol.224, no.1, pp.43-52 (2010).
- T.C. Lim and Rajendra Acharya U, "An hexagonal array of 4-fold interconnected hexagonal nodules for modeling auxetic microporous polymers: A comparison of 2D and 3D models", *Journal of Materials Science*, Vol.44, no.16, pp.4491-4494 (2009).
- U. Rajendra Acharya, C.K. Chua, T.C. Lim, Dorithy and J.S. Suri, "Automatic Identification of Epileptic EEG Signals using Nonlinear Parameters", *Journal of Mechanics in Medicine and Biology*, Vol.9, no.4, pp.539-553 (2009).
- W.W. Yu, U. R. Acharya, T.C. Lim and H.W. Low, "Non-linear analysis of body responses to functional electrical stimulation on hemiplegic subjects", *Proceedings of IMechE Part H: Journal of Engineering in Medicine*, Vol.223 no.6, pp. 653-662 (2009).
- J. Nayak, Rajendra Acharya U, P.S. Bhat, N. Shetty and T.C. Lim, "Automated diagnosis of glaucoma using digital fundus images", *Journal of Medical Systems*, Vol.33, no.5, pp.337-346 (2009).
- T.C. Lim, "Alignment of Buckingham parameters in generalized Lennard-Jones potential functions", *Zeitschrift fur Naturforschung A*, Vol.64, no.3&4, pp.200-204 (2009).
- T.C. Lim, "Improved relationship between parameters of the Buckingham and Linnett potential functions", *Chinese Journal of Physics*, Vol.47, no.1, pp.35-39 (2009).
- T.C. Lim and R.A. Udyavara, "Relations between Varshni and Morse potential energy parameters", *Central European Journal of Physics*, Vol.7, no.1, pp.193-197 (2009).
- T.C. Lim, "Obtaining Varshni potential function using the 2-body Kaxiras-Pandey parameters", *Journal of the Serbian Chemical Society*, Vol.74, no.12, pp.1423-1428 (2009).
- T.C. Lim, "Approximation of the Dymond-Rigby-Smith potential function using the Lennard-Jones form", *Journal of Mathematical Chemistry*, Vol.46, no.2, pp.569-575 (2009).
- T.C. Lim, "Coefficient interrelatedness among polynomial potential functions of diatomic molecules", *Journal of Mathematical Chemistry*, Vol.45, no.4, pp.953-961 (2009).
- T.C. Lim, "Linnett Potential Energy Curves using Morse Parameters", *MATCH Communications in Mathematical and in Computer Chemistry*, Vol.61, no.2, pp.313-323 (2009).
- T.C. Lim, "Two Infinite Nested Radical Constants", *The Mathematical Gazette*, Vol.92, no.523, pp.96-97 (2008).
- T.C. Lim, "Calculation of Rydberg potential energy curve from Murrell-Sorbie parameters", *Molecular Physics*, Vol.106, no.6, pp.753-758 (2008).
- T.C. Lim, "Extraction of Dunham Coefficients from Murrell-Sorbie Parameters", *Zeitschrift fur Naturforschung A*, Vol.63, no.1, pp.1-6 (2008).

- T.C. Lim, "Utilization of Generalized Morse parameters for conventional Morse functions used in molecular mechanics", *Journal of Theoretical and Computational Chemistry*, Vol.7, no.5, pp.1085-1091 (2008).
- T.C. Lim, "The Pascal Triangle Connection between Dunham and Simons-Parr-Finlan diatomic potential energy functions", *MATCH Communications in Mathematical and in Computer Chemistry*, Vol.59, no.3, pp.499-508 (2008).
- T.C. Lim, "Obtaining the Morse parameter for large bond-stretching using Murrell-Sorbie parameters", *Journal of Molecular Modeling*, Vol.14, no.2, pp.103-108 (2008).
- T.C. Lim, "Improved long range relationship between parameters of the Morse and Rydberg potential functions" *Journal of Mathematical Chemistry*, Vol.43, no.4, pp.1573-1577 (2008).
- T.C. Lim, "Connection between the Ogilvie and the Murrell-Sorbie Potential Energy Functions" *Journal of Mathematical Chemistry*, Vol.43, no.4, pp.1345-1354 (2008).
- T.C. Lim, "Kinematical studies of rotation-based semi-auxetics", *Journal of Materials Science*, Vol.42, no.18, pp.7690-7695 (2007).
- T.C. Lim, "Alternative scaling factor between Lennard-Jones and Exponential-6 potential energy functions", *Molecular Simulation*, Vol.33, no.13, pp.1029-1032 (2007).
- T.C. Lim, "Long range relationship between Morse and Lennard-Jones potential energy functions", *Molecular Physics*, Vol.105, no.8, pp.1013-1018 (2007).
- T.C. Lim, "On simultaneous positive and negative Poisson's ratio laminates", *Physica Status Solidi B*, Vol.244, no. 3, pp.910-918 (2007). This paper was presented in a conference.
- T.C. Lim, "Obtaining Simons-Parr-Finlan Coefficients Using Murrell-Sorbie Parameters", *Chemical Physics*, Vol.331, no.2&3, pp.270-274 (2007).
- T.C. Lim, "Extracting the long range Rydberg parameter from the Generalized Morse potential energy function" *MATCH Communications in Mathematical and in Computer Chemistry*, Vol.58, no.3, pp.647-655 (2007).
- T.C. Lim, "Significance of an infinite nested radical number and its application in van der Waals potential functions" *MATCH Communications in Mathematical and in Computer Chemistry*, Vol.57, no.3, pp.549-556 (2007).
- T.C. Lim, "Relationship and discrepancies between the Extended-Rydberg and the Generalized Buckingham potential energy functions", *Journal of the Serbian Chemical Society*, Vol.72, no.2, pp.159-164 (2007).
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- S. Ramakrishna, T.C. Lim, R. Inai and K. Fujihara, "Modified Halpin-Tsai Equation for Clay-Reinforced Polymer Nanofiber", *Mechanics of Advanced Materials and Structures*, Vol.13, no.1, pp.77-81 (2006).
- T.C. Lim, "Application of Binomial Coefficients in Representing Central Difference Solution to a Class of PDE arising in Chemistry", *Journal of Mathematical Chemistry*, Vol.39, no.1, pp.177-186 (2006).
- T.C. Lim and S. Ramakrishna, "A Conceptual Review of Nanosensors", *Zeitschrift fur Naturforschung A*, Vol.61, no.7&8, pp.402-412 (2006).
- T.C. Lim, "Connection between parameters of the Murrell-Sorbie and Fayyazuddin potentials", *Molecular Physics*, Vol.104, no.12, pp.1827-1831 (2006).

- T.C. Lim, "Parametric relationships and discrepancies between the Linnett and the Buckingham interatomic potential energy functions", *Chinese Journal of Physics*, Vol.44, no.1, pp.19-27 (2006).
- T.C. Lim, "Size-Dependency of Nano-Scale Inclusions", *Journal of Materials Science*, Vol.40, no.14, pp.3841-3842 (2005).
- T.C. Lim, "Anisotropic and Negative Thermal Expansion Behavior in a Cellular Microstructure", *Journal of Materials Science*, Vol.40, no.12, pp.3275-3277 (2005).
- T.C. Lim, "Polynomial Forms of Typical Interatomic Potential Functions" *Journal of Mathematical Chemistry*, Vol.38, no.4, pp.495-501 (2005).
- T.C. Lim, "Correlation among Parameters of the Extended-Rydberg Potential Energy Function" *Journal of Mathematical Chemistry*, Vol.38, no.2, pp.195-201 (2005).
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- T.C. Lim, "A Functionally Flexible Interatomic Energy Function Based on Classical Potentials" *Chemical Physics*, Vol.320, no.1, pp.54-58 (2005).
- T.C. Lim, "Two-Body Relationship Between the Pearson-Takai-Halicioglu-Tiller and the Biswas-Hamann Potential Functions" *Brazilian Journal of Physics*, Vol.35, no.3A, pp.641-644 (2005).
- T.C. Lim, "Two-body relationship between the Kaxiras-Pandey and the Murrell-Mottram potential functions", *Chinese Journal of Physics*, Vol.43, no.1, pp.43-51 (2005).
- T.C. Lim, "Elastic Properties of a Poisson-Shear Material", *Journal of Materials Science*, Vol.39, no.15, pp.4965-4969 (2004).
- T.C. Lim, "Reinforcement Parameters of Aligned Ellipsoidal Inclusions by the Generalized Mechanics-of-Materials (GMM) Approach", *Journal of Reinforced Plastics and Composites*, Vol.23, no.5, pp.549-562 (2004).
- T.C. Lim, M. Kotaki, T.K.J. Yong, F. Yang, K. Fujihara and S. Ramakrishna, "Tissue Engineering Applications of Electrospun Polymeric Nanofibers: Recent Advances", *Materials Technology*, Vol.19, no.1, pp.20-27 (2004).
- T.C. Lim, "A Relationship Between the 2-body Energy of Kaxiras-Pandey and Pearson-Takai-Halicioglu-Tiller Potential Functions", *Physica Scripta*, Vol.70, no.6, pp.347-348 (2004).
- T.C. Lim, "Relationship and Discrepancies Among Typical Interatomic Potential Functions" *Chinese Physics Letters*, Vol.21, no.11, pp.2167-2170 (2004).
- T.C. Lim, "Relationship Between the 2-Body Energy of the Biswas-Hamann and the Murrell-Mottram Potential Functions", *Zeitschrift fur Naturforschung A*, Vol. 59, no.3, pp.116-118 (2004).
- T.C. Lim, "Connection Among Classical Interatomic Potential Functions", *Journal of Mathematical Chemistry*, Vol.36, no.3, pp.261-269 (2004).
- T.C. Lim, "Application of Maclaurin Series in Relating Interatomic Potential Functions: A Review", *Journal of Mathematical Chemistry*, Vol.36, no.2, pp.147-160 (2004).
- T.C. Lim, "Relationship Between Morse and Murrell-Mottram Potentials at Long Range", *Journal of Mathematical Chemistry*, Vol.36, no.2, pp.139-145 (2004).

- T.C. Lim, "Spreadsheet-based Molecular Potential Function Converter", MATCH Communications in Mathematical and in Computer Chemistry, Vol.50, pp.185-200 (2004).
- T.C. Lim, "A Three-Level Hierarchical Approach in Modeling Sheet Thermoforming of Knitted-Fabric Composites", International Journal of Mechanical Sciences, Vol.45, no.6-7, pp.1097-1117 (2003).
- T.C. Lim, "Constitutive Relationship of a Material with Unconventional Poisson's Ratio", Journal of Materials Science Letters, Vol.22, no.24, pp.1783-1786 (2003).
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Updated on 27 January 2016