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College of Medicine and Public Health
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Qualifications

PhD, Swinburne University of Technology
1 Apr 2009 → 1 Aug 2012
Bachelor (Honours), Swinburne University of Technology
1 Feb 2005 → 1 Dec 2007

Employment

Senior Lecturer in Biotechnology
College of Medicine and Public Health
Flinders University
1 Feb 2022 → 28 Feb 2025

Full Member
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1 Feb 2022 → present

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28 Sept 2023 → present

Research outputs

The distribution, fate, and environmental impacts of food additive nanomaterials in soil and aquatic ecosystems
Bolan, S., Sharma, S., Mukherjee, S., Zhou, P., Mandal, J., Srivastava, P., Hou, D., Edussuriya, R., Vithanage, M., Truong, V. K., Chapman, J., Xu, Q., Zhang, T., Bandara, P., Wijesekara, H., Rinklebe, J., Wang, H., Siddique, K. H. M., Kirkham, M. B. & Bolan, N., 15 Mar 2024, In: *Science of The Total Environment*. 916, 21 p., 170013.

Antibacterial Plasma Coating with Aggregation-Induced Emission Photosensitizers to Prevent Surgical Site Infections
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Staphylococcus aureus surface attachment selectively influences tolerance against charged antibiotics
Hayles, A., Bright, R., Nguyen, N. H., Truong, V. K., Vongsvivut, J., Wood, J., Kidd, S. P. & Vasilev, K., Feb 2024, In: *Acta Biomaterialia*. 175, p. 369-381 13 p.

Cell Adhesion, Elasticity, and Rupture Forces Guide Microbial Cell Death on Nanostructured Antimicrobial Titanium Surfaces
Huang, L. Z. Y., Shaw, Z. L., Penman, R., Cheeseman, S., Truong, V. K., Higgins, M. J., Caruso, R. A. & Elbourne, A., 15 Jan 2024, In: *ACS Applied Bio Materials*. 7, 1, p. 344–361 18 p.

Experimental study and predictive modelling of damping ratio in hybrid polymer concrete
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Vancomycin tolerance of adherent Staphylococcus aureus is impeded by nanopike-induced physiological changes
Hayles, A., Bright, R., Nguyen, N. H., Truong, V. K., Wood, J., Palms, D., Vongsvivut, J., Barker, D. & Vasilev, K., 29 Nov 2023, In: npj Biofilms and Microbiomes. 9, 1, 11 p., 90.

Silver–Gallium Nano-Amalgamated Particles as a Novel, Biocompatible Solution for Antibacterial Coatings
Nguyen, T. T., Zhang, P., Bi, J., Nguyen, N. H., Dang, Y., Xu, Z., Wang, H., Ninan, N., Bright, R., Pham, T., Nguyen, C. K., Sabri, Y., Nguyen, M. T., Vongsvivut, J., Zhao, Y., Vasilev, K. & Truong, V. K., 5 Nov 2023, (E-pub ahead of print) In: Advanced Functional Materials. 20 p., 2310539.

Antibacterial surface based on hierarchical polyurethane acrylate/zinc oxide structures
Oopath, S. V., Kakarla, A. B., Kong, I., Nguyen, T. T., Truong, V. K. & Baji, A., 21 Sept 2023, In: Materials Advances. 4, 18, p. 4151-4158 8 p.

Transforming Spirulina maxima Biomass into Ultrathin Bioactive Coatings Using an Atmospheric Plasma Jet: A New Approach to Healing of Infected Wounds
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Truong, V. K., Hayles, A., Bright, R., Luu, T. Q., Dickey, M. D., Kalantar-Zadeh, K. & Vasilev, K., 8 Aug 2023, In: ACS nano. 17, 15, p. 14406-14423 18 p.

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2-nm-Thick Indium Oxide Featuring High Mobility

Nguyen, C. K., Mazumder, A., Mayes, E. L. H., Krishnamurthi, V., Zavabeti, A., Murdoch, B. J., Guo, X., Aukarasereenont, P., Dubey, A., Jannat, A., Wei, X., Truong, V. K., Bao, L., Roberts, A., McConville, C. F., Walia, S., Syed, N. & Daeneke, T., 24 Mar 2023, In: *Advanced Materials Interfaces*. 10, 9, 8 p., 2202036.

Compositional Design of Surface Oxides in Gallium-Indium Alloys

Farrell, Z. J., Jacob, A. R., Truong, V. K., Elbourne, A., Kong, W., Hsiao, L., Dickey, M. D. & Tabor, C., 14 Feb 2023, In: *Chemistry of Materials*. 35, 3, p. 964-975 12 p.

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Rajapaksha, P., Orrell-Trigg, R., Shah, D., Cheeseman, S., Vu, K. B., Ngo, S. T., Murdoch, B. J., Choudhury, N. R., Yin, H., Cozzolino, D., Truong, Y. B., Lee, A. F., Truong, V. K. & Chapman, J., Jan 2023, In: *Materials Today Chemistry*. 27, 11 p., 101242.

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Houshyar, S., Yin, H., Pope, L., Zizhou, R., Dekiwadia, C., Hill-Yardin, E. L., Yeung, J. MC., John, S., Fox, K., Tran, N., Cole, I., Elbourne, A., Truong, V. K. & Truskewycz, A., Jan 2023, In: *OpenNano*. 9, 10 p., 100120.

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Thermomechanical Properties and Fracture Toughness Improvement of Thermosetting Vinyl Ester Using Liquid Metal and Graphene Nanoplatelets

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Assessment of the Cytotoxicity of Nano Gallium Liquid Metal Droplets for Biomedical Applications

Cheeseman, S., Bryant, S. J., Huang, L. Z. Y., Mayes, E. L. H., Crawford, R. J., Daeneke, T., Chapman, J., Truong, V. K. & Elbourne, A., 25 Nov 2022, In: *ACS Applied Nano Materials*. 5, 11, p. 16584-16593 10 p.

Atomically Thin Antimony-Doped Indium Oxide Nanosheets for Optoelectronics

Nguyen, C. K., Low, M. X., Zavabeti, A., Murdoch, B. J., Guo, X., Aukarasereenont, P., Mazumder, A., Dubey, A., Jannat, A., Rahman, M. A., Chiang, K., Truong, V. K., Bao, L., McConville, C. F., Walia, S., Daeneke, T. & Syed, N., 18 Oct 2022, In: *Advanced Optical Materials*. 10, 20, 9 p., 2200925.

Illuminating the biochemical interaction of antimicrobial few-layer black phosphorus with microbial cells using synchrotron macro-ATR-FTIR

Shaw, Z. L., Cheeseman, S., Huang, L. Z. Y., Penman, R., Ahmed, T., Bryant, S. J., Bryant, G., Christofferson, A. J., Orrell-Trigg, R., Dekiwadia, C., Truong, V. K., Vongsvivut, J. P., Walia, S. & Elbourne, A., 7 Oct 2022, In: *Journal of materials chemistry. B*. 10, 37, p. 7527-7539 13 p.

Wastewater depollution of textile dyes and antibiotics using unmodified and copper oxide/zinc oxide nanofunctionalised graphene oxide materials†

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Analytical Characterisation of Material Corrosion by Biofilms

Dang, Y. T. H., Power, A., Cozzolino, D., Dinh, K. B., Ha, B. S., Kolobaric, A., Vongsvivut, J., Truong, V. K. & Chapman, J., Jun 2022, In: *Journal of Bio- and Tribo-Corrosion*. 8, 2, 17 p., 50.

Strontium-doped hardystonite plasma sprayed coatings with robust antimicrobial activity

Pham, D. Q., Gangadool, S., Lu, Z., Berndt, C. C., Newsom, E. T., Zreiqat, H., Truong, V. K. & Ang, A. S. M., Jun 2022, In: *Materials Today Chemistry*. 24, 16 p., 100822.

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Durable Antibacterial and Antifungal Hierarchical Silver-Embedded Poly(vinylidene fluoride- co-hexafluoropropylene) Fabricated Using Electrospinning

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Analysis of Pathogenic Bacterial and Yeast Biofilms Using the Combination of Synchrotron ATR-FTIR Microspectroscopy and Chemometric Approaches

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