

Vi Khanh Truong  
Full Member  
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 → 20 Aug 2024

**Full Member**  
Flinders Health and Medical Research Institute  
Flinders University  
1 Feb 2022 → present

**Full Member**  
Medical Device Research Institute  
Flinders University  
28 Sept 2023 → present

## Research outputs

**Two-dimensional nonlinear spectroscopy in the extreme ultraviolet to study dynamics of atomic and molecular gases**  
Tran, K. A., Dinh, K. B., Chau, T. H., Truong, V. K., Nguyen, H. B., Nguyen, H. T., Ho, T. P. & Van Dao, L., 1 Aug 2024, In: Optics Communications. 564, 7 p., 130629.

**Development of Novel Antibacterial Ti-Nb-Ga Alloys with Low Stiffness for Medical Implant Applications**  
McHendrie, R., Nguyen, N. H., Nguyen, M. T., Fallahnezhad, K., Vasilev, K., Truong, V. K. & Hashemi, R., 17 Jun 2024, In: Journal of Functional Biomaterials. 15, 6, 23 p., 167.

**Engineering antibacterial bioceramics: Design principles and mechanisms of action**  
Nguyen, N. H., Lu, Z., Elbourne, A., Vasilev, K., Roohani, I., Zreiqat, H. & Truong, V. K., Jun 2024, In: Materials Today Bio. 26, 23 p., 101069.

**Antibacterial Plasma Coating with Aggregation-Induced Emission Photosensitizers to Prevent Surgical Site Infections**  
Sahu, R., Ninan, N., Nguyen, N. H., Wang, J., Nguyen, M. T., Vasilev, K., Truong, V. K. & Tang, Y., 28 May 2024, In: Advanced Materials Interfaces. 11, 15, 10 p., 2400053.

**Biomimetic Bacterium-like Particles Loaded with Aggregation-Induced Emission Photosensitizers as Plasma Coatings for Implant-Associated Infections**  
Wang, J., Ninan, N., Nguyen, N. H., Nguyen, M. T., Sahu, R., Nguyen, T. T., Mierczynska-Vasilev, A., Vasilev, K., Truong, V. K. & Tang, Y., 17 Apr 2024, In: ACS Applied Materials and Interfaces. 16, 15, p. 18449-18458 10 p.

**Shape Programmable and Multifunctional Soft Textile Muscles for Wearable and Soft Robotics**  
Hoang, T. T., Nguyen, C. C., Phan, P. T., Davies, J., Tran, H. A., Thai, M. T., Truong, V. K., Nguyen, T. K., Vo-Doan, T. T., Phan, H. P., Lovell, N. H. & Do, T. N., 16 Apr 2024, (E-pub ahead of print) In: Advanced Intelligent Systems. 17 p., 2300875.

**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 Textile Coating Armoured with Aggregation-Induced Emission Photosensitisers to Prevent Healthcare-Associated Infections**

Sahu, R., Ninan, N., Nguyen, N. H., Wang, J., Vasilev, K., Truong, V. K. & Tang, Y., 8 Mar 2024, In: *Molecules*. 29, 6, 12 p., 1209.

**Rapid screening of bacteriostatic and bactericidal antimicrobial agents against *Escherichia coli* by combining machine learning (artificial intelligence) and UV-VIS spectroscopy**

Orrell-Trigg, R., Awad, M., Gangadoo, S., Cheeseman, S., Shaw, Z. L., Truong, V. K., Cozzolino, D. & Chapman, J., 7 Mar 2024, In: *Analyst*. 149, 5, p. 1597-1608 12 p.

**The 2023 Orthopedic Research Society's international consensus meeting on musculoskeletal infection: Summary from the in vitro section**

Hickok, N. J., Li, B., Oral, E., Zaat, S. A. J., Armbruster, D. A., Atkins, G. J., Chen, A. F., Coraça-Huber, D. C., Dai, T., Greenfield, E. M., Kasinath, R., Libera, M., Marques, C. N. H., Moriarty, T. F., Scott Phillips, K., Raghuraman, K., Ren, D., Rimondini, L., Saeed, K., Schaer, T. P., & 8 othersSchwarz, E. M., Spiegel, C., Stoodley, P., Truong, V. K., Tsang, S. T. J., Wildemann, B., Zelmer, A. R. & Zinkernagel, A. S., Mar 2024, In: *Journal of Orthopaedic Research*. 42, 3, p. 512-517 6 p.

***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**

Dang, T. K. M., Nikzad, M., Arablouei, R., Masood, S., Bui, D. K., Truong, V. K. & Sbarski, I., 12 Jan 2024, In: *CONSTRUCTION AND BUILDING MATERIALS*. 411, 11 p., 134541.

**Synchrotron macro ATR-FTIR micro-spectroscopy to unlock silver ion-induced biochemical alterations in bacteria**

Nguyen, T. T., Nguyen, N. H., Pham, G. T., Vongsvivut, J., Brown, M. H., Truong, V. K. & Vasilev, K., 7 Dec 2023, In: *Materials Advances*. 4, 23, p. 6342-6352 11 p.

**Gallium-Containing Materials and Their Potential within New-Generation Titanium Alloys for Biomedical Applications**

McHendrie, R., Xiao, W., Truong, V. K. & Hashemi, R., Dec 2023, In: *Biomimetics*. 8, 8, 25 p., 573.

**Vancomycin tolerance of adherent *Staphylococcus aureus* is impeded by nanospine-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*. 34, 31, 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**

Pham, T., Nguyen, T. T., Nguyen, N. H., Hayles, A., Li, W., Pham, D. Q., Nguyen, C. K., Nguyen, T., Vongsvivut, J., Ninan, N., Sabri, Y., Zhang, W., Vasilev, K. & Truong, V. K., 15 Sept 2023, (E-pub ahead of print) In: *Small*. 16 p., 2305469.

**Exploring the Role of Compatibilizers in Modulating the Interfacial Phenomena and Improving the Properties of Cork-Nylon Composites**

Alghamdi, S. S., Balu, R., Vongsvivut, J., Truong, V. K., Mettu, S., John, S., Choudhury, N. R. & Dutta, N. K., 8 Sept 2023, In: *ACS Applied Polymer Materials*. 5, 9, p. 6990–7008 19 p.

**Noninvasive and Microinvasive Nanoscale Drug Delivery Platforms for Hard Tissue Engineering**

Stoilov, B., Truong, V. K., Gronthos, S. & Vasilev, K., 21 Aug 2023, In: *ACS Applied Bio Materials*. 6, 8, p. 2925-2943 19 p.

**Gallium Liquid Metal: Nanotoolbox for Antimicrobial Applications**

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.

**Liquid Metal Coated Textiles with Autonomous Electrical Healing and Antibacterial Properties**

Yang, J., Nithyanandam, P., Kanetkar, S., Kwon, K. Y., Ma, J., Im, S., Oh, J. H., Shamsi, M., Wilkins, M., Daniele, M., Kim, T. I., Nguyen, H. N., Truong, V. K. & Dickey, M. D., 24 Jul 2023, In: *Advanced Materials Technologies*. 8, 14, 9 p., 2202183.

**Printable Hydrogel Arrays for Portable and High-Throughput Shear-Mediated Assays**

Luo, X., Xing, W., Delcheva, I., Abdullah Alrashaidi, F., Heydari, A., Palms, D., Truong, V. K., Vasilev, K., Jia, Z., Zhang, W., Su, P., Vimalanathan, K., Igder, A., Weiss, G. A., Tang, Y., MacGregor, M. & Raston, C. L., 5 Jul 2023, In: *ACS Applied Materials and Interfaces*. 15, 26, p. 31114-31123 10 p.

**High Solubility and Bioavailability of Lobster Shell-Derived Calcium for Significantly Proliferating Bone and Skin Cells In Vitro**

Nguyen, T. T., Hoang, T., Pham, T., Truong, V. K., Luo, X., Qin, J. & Zhang, W., 11 Jun 2023, In: *Marine Drugs*. 21, 6, 16 p., 358.

**An atomically smooth container: Can the native oxide promote supercooling of liquid gallium?**

Joshiyura, I. D., Nguyen, C. K., Quinn, C., Yang, J., Morales, D. H., Santiso, E., Daeneke, T., Truong, V. K. & Dickey, M. D., 21 Apr 2023, In: *iScience*. 26, 4, 11 p., 106493.

**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.

**Nature-Inspired Biomimetic Surfaces for Controlling Bacterial Attachment and Biofilm Development**

Oopath, S. V., Baji, A., Abtahi, M., Luu, T. Q., Vasilev, K. & Truong, V. K., 3 Feb 2023, In: *Advanced Materials Interfaces*. 10, 4, 17 p., 2201425.

**Graphene Nanosheets Stabilized by P3HT Nanoparticles for Printable Metal-Free Electrocatalysts for Oxygen Reduction**

Tran, T. S., Balu, R., Nguyen, C. K., Mata, J., Truong, V. K., Dutta, N. K. & Choudhury, N. R., 27 Jan 2023, In: *ACS Applied Nano Materials*. 6, 2, p. 908-917 10 p.

Broad spectrum antibacterial zinc oxide-reduced graphene oxide nanocomposite for water depollution  
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.

#### **Smart suture with iodine contrasting nanoparticles for computed tomography**

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.

#### **Investigation of High Harmonic Generation in Ar-Ne Gas Mixture**

Tran, K. A., Dinh, K. B., Chau, T. H., Chintalwad, S., Truong, V. K., Nguyen, H. B., Nguyen, H. T., Ho, T. P. & Dao, L. V., 2023, In: *Romanian Journal of Physics*. 68, 9-10, 10 p., 207.

#### **Dual-action silver functionalized nanostructured titanium against drug resistant bacterial and fungal species**

Huang, L. Z. Y., Elbourne, A., Shaw, Z. L., Cheeseman, S., Goff, A., Orrell-Trigg, R., Chapman, J., Murdoch, B. J., Crawford, R. J., Friedmann, D., Bryant, S. J., Truong, V. K. & Caruso, R. A., 15 Dec 2022, In: *Journal of Colloid and Interface Science*. 628, Part B, p. 1049-1060 12 p.

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

Dang, T. K. M., Nikzad, M., Truong, V. K., Masood, S., Nguyen, C. K. & Sbarski, I., Dec 2022, In: *Polymers*. 14, 24, 17 p., 5397.

#### **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., Aukaraserenont, 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†

Rajapaksha, P., Orrell-Trigg, R., Truong, Y. B., Cozzolino, D., Truong, V. K. & Chapman, J., 1 Oct 2022, In: *Environmental Science: Advances*. 1, 4, p. 456-469 14 p.

#### **Current perspectives for engineering antimicrobial nanostructured materials**

Truong, V. K., Al Kobaisi, M., Vasilev, K., Cozzolino, D. & Chapman, J., Sept 2022, In: *Current Opinion in Biomedical Engineering*. 23, 8 p., 100399.

#### **Application of Fluconazole-Loaded pH-Sensitive Lipid Nanoparticles for Enhanced Antifungal Therapy**

Rajesh, S., Gangadoo, S., Nguyen, H., Zhai, J., Dekiwadia, C., Drummond, C. J., Chapman, J., Truong, V. K. & Tran, N., 27 Jul 2022, In: *ACS Applied Materials and Interfaces*. 14, 29, p. 32845-32854 10 p.

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., Gangadoo, 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.

**A soft gripper with contamination resistance and large friction coefficient**

Wang, Z., Wu, Y., Yang, J., Song, H., Dinh, K. B., Zhang, D. & Truong, V. K., May 2022, In: *Applied Physics A: Materials Science and Processing*. 128, 5, 11 p., 461.

**Liquid metal polymer composite: Flexible, conductive, biocompatible, and antimicrobial scaffold**

Houshyar, S., Rifai, A., Zizhou, R., Dekiwadia, C., Booth, M. A., John, S., Fox, K. & Truong, V. K., May 2022, In: *Journal of Biomedical Materials Research - Part B Applied Biomaterials*. 110, 5, p. 1131-1139 9 p.

**Skin-Inspired Capacitive Stress Sensor with Large Dynamic Range via Bilayer Liquid Metal Elastomers**

Yang, J., Kwon, K. Y., Kanetkar, S., Xing, R., Nithyanandam, P., Li, Y., Jung, W., Gong, W., Tuman, M., Shen, Q., Wang, M., Ghosh, T., Chatterjee, K., Wang, X., Zhang, D., Kim, T. I., Truong, V. K. & Dickey, M. D., May 2022, In: *Advanced Materials Technologies*. 7, 5, 9 p., 2101074.

**Antibacterial Longevity of a Novel Gallium Liquid Metal/Hydroxyapatite Composite Coating Fabricated by Plasma Spray**

Pham, D. Q., Gangadoo, S., Berndt, C. C., Chapman, J., Zhai, J., Vasilev, K., Truong, V. K. & Ang, A. S. M., 27 Apr 2022, In: *ACS Applied Materials and Interfaces*. 14, 16, p. 18974-18988 15 p.

**Carbon Dot Therapeutic Platforms: Administration, Distribution, Metabolism, Excretion, Toxicity, and Therapeutic Potential**

Truskewycz, A., Yin, H., Halberg, N., Lai, D. T. H., Ball, A. S., Truong, V. K., Rybicka, A. M. & Cole, I., 21 Apr 2022, In: *Small*. 18, 16, 24 p., 2106342.

**Fabrication of superhydrophobic polyvinylidene fluoride-co-hexafluoropropylene films enabled by nanoimprint lithography**

Baji, A., Gangadoo, S., Truong, V. K., Abtahi, M., Budiman, A. & Oopath, S. V., 15 Mar 2022, In: *Materials Letters*. 311, 3 p., 131555.

**Interactions between Liquid Metal Droplets and Bacterial, Fungal, and Mammalian Cells**

Cheeseman, S., Elbourne, A., Gangadoo, S., Shaw, Z. L., Bryant, S. J., Syed, N., Dickey, M. D., Higgins, M. J., Vasilev, K., McConville, C. F., Christofferson, A. J., Crawford, R. J., Daeneke, T., Chapman, J. & Truong, V. K., 2 Mar 2022, In: *Advanced Materials Interfaces*. 9, 7, 14 p., 2102113.

**Tough and stretchable ionogels by in situ phase separation**

Wang, M., Zhang, P., Shamsi, M., Thelen, J. L., Qian, W., Truong, V. K., Ma, J., Hu, J. & Dickey, M. D., Mar 2022, In: *Nature Materials*. 21, 3, p. 359-365 7 p.

**Probing Nanoscale Interactions of Antimicrobial Zinc Oxide Quantum Dots on Bacterial and Fungal Cell Surfaces**

Gangadoo, S., Xu, C., Cozzolino, D., Latham, K., Della Gaspera, E., Chapman, J. & Truong, V. K., 24 Jan 2022, In: *Advanced Materials Interfaces*. 9, 3, 10 p., 2101484.

**Counterpropagating Gradients of Antibacterial and Antifouling Polymer Brushes**

Ko, Y., Truong, V. K., Woo, S. Y., Dickey, M. D., Hsiao, L. & Genzer, J., 10 Jan 2022, In: *Biomacromolecules*. 23, 1, p. 424-430 7 p.

**Artificial intelligence applied to healthcare and biotechnology**

Chapman, J., Truong, V. K. & Cozzolino, D., 2022, *Biotechnology in Healthcare, Volume 1: Technologies and Innovations*. Barh, D. (ed.). Elsevier, Vol. 1. p. 249-257 9 p.

**Challenges and opportunities of the fourth revolution: a brief insight into the future of food**

Chapman, J., Power, A., Netzels, M. E., Sultanbawa, Y., Smyth, H. E., Truong, V. K. & Cozzolino, D., 2022, In: *CRITICAL REVIEWS IN FOOD SCIENCE AND NUTRITION*. 62, 10, p. 2845-2853 9 p.

New nanomaterials for wastewater depollution: Methods using chemometric approaches

Dang, Y. T. H., Gangadoo, S., Truong, V. K., Cozzolino, D. & Chapman, J., 2022, *Separation Science and Technology*. Ahuja, S. (ed.). Elsevier Inc., p. 287-298 12 p. (Separation Science and Technology (New York); vol. 15).

Designing superhydrophobic robotic surfaces: Self-cleaning, high-grip impact, and bacterial repelling

Wu, Y., Wang, Z., Yang, J., Song, H., Li, J., Kobaisi, M. A., Dang, Y. T. H., Zhang, D. & Truong, V. K., 20 Nov 2021, In: *Colloids and Surfaces A: Physicochemical and Engineering Aspects*. 629, 8 p., 127444.

A Liquid Metal Mediated Metallic Coating for Antimicrobial and Antiviral Fabrics

Kwon, K. Y., Cheeseman, S., Frias-De-Diego, A., Hong, H., Yang, J., Jung, W., Yin, H., Murdoch, B. J., Scholle, F., Crook, N., Crisci, E., Dickey, M. D., Truong, V. K. & Kim, T. I., 11 Nov 2021, In: *Advanced Materials*. 33, 45, 13 p., 2104298.

Microplastic adulteration in homogenized fish and seafood - a mid-infrared and machine learning proof of concept

Owen, S., Cureton, S., Szuhan, M., McCarten, J., Arvanitis, P., Ascione, M., Truong, V. K., Chapman, J. & Cozzolino, D., 5 Nov 2021, In: *Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy*. 260, 7 p., 119985.

Are Contact Angle Measurements Useful for Oxide-Coated Liquid Metals?

Joshiyura, I. D., Persson, K. A., Truong, V. K., Oh, J. H., Kong, M., Vong, M. H., Ni, C., Alsafatwi, M., Parekh, D. P., Zhao, H. & Dickey, M. D., 21 Sept 2021, In: *Langmuir*. 37, 37, p. 10914-10923 10 p.

Ultrathin oxysulfide semiconductors from liquid metal: a wet chemical approach

Nguyen, C. K., Low, M. X., Zavabeti, A., Jannat, A., Murdoch, B. J., Della Gaspera, E., Orrell-Trigg, R., Walia, S., Elbourne, A., Truong, V. K., McConville, C. F., Syed, N. & Daeneke, T., 21 Sept 2021, In: *Journal of Materials Chemistry C*. 35, p. 11815-11826 12 p.

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

Baji, A., Truong, V. K., Gangadoo, S., Yin, H., Chapman, J., Abtahi, M. & Oopath, S. V., 13 Aug 2021, In: *ACS Applied Polymer Materials*. 3, 8, p. 4256-4263 8 p.

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

Cheeseman, S., Shaw, Z. L., Vongsvivut, J., Crawford, R. J., Dupont, M. F., Boyce, K. J., Gangadoo, S., Bryant, S. J., Bryant, G., Cozzolino, D., Chapman, J., Elbourne, A. & Truong, V. K., 1 Jul 2021, In: *Molecules*. 26, 13, 12 p., 3890.

Monitoring the Bacterial Response to Antibiotic and Time Growth Using Near-infrared Spectroscopy Combined with Machine Learning

Truong, V. K., Chapman, J. & Cozzolino, D., Jul 2021, In: *Food Analytical Methods*. 14, 7, p. 1394-1401 8 p.

Antipathogenic properties and applications of low-dimensional materials

Shaw, Z. L., Kuriakose, S., Cheeseman, S., Dickey, M. D., Genzer, J., Christofferson, A. J., Crawford, R. J., McConville, C. F., Chapman, J., Truong, V. K., Elbourne, A. & Walia, S., 23 Jun 2021, In: *Nature Communications*. 12, 19 p., 3897.

Fluorescent Magnesium Hydroxide Nanosheet Bandages with Tailored Properties for Biocompatible Antimicrobial Wound Dressings and pH Monitoring

Truskewycz, A., Truong, V. K., Ball, A. S., Houshyar, S., Nassar, N., Yin, H., Murdoch, B. J. & Cole, I., 23 Jun 2021, In: *ACS Applied Materials and Interfaces*. 13, 24, p. 27904-27919 16 p.

Investigating virus-host cell interactions: Comparative binding forces between hepatitis C virus-like particles and host cell receptors in 2D and 3D cell culture models

Collett, S., Torresi, J., Silveira, L. E., Truong, V. K., Christiansen, D., Tran, B. M., Vincan, E., Ramsland, P. A. & Elbourne, A., 15 Jun 2021, In: *Journal of Colloid and Interface Science*. 592, p. 371-384 14 p.

Inorganic nanoparticles as food additives and their influence on the human gut microbiota  
Gangadoo, S., Nguyen, H., Rajapaksha, P., Zreiqat, H., Latham, K., Cozzolino, D., Chapman, J. & Truong, V. K., Jun 2021, In: *Environmental Science: Nano*. 8, 6, p. 1500-1518 19 p.

#### **Broad-Spectrum Solvent-free Layered Black Phosphorus as a Rapid Action Antimicrobial**

Shaw, Z. L., Kuriakose, S., Cheeseman, S., Mayes, E. L. H., Murali, A., Oo, Z. Y., Ahmed, T., Tran, N., Boyce, K., Chapman, J., McConville, C. F., Crawford, R. J., Taylor, P. D., Christofferson, A. J., Truong, V. K., Spencer, M. J. S., Elbourne, A. & Walia, S., 21 Apr 2021, In: *ACS Applied Materials and Interfaces*. 13, 15, p. 17340-17352 13 p.

A high-throughput and machine learning resistance monitoring system to determine the point of resistance for *Escherichia coli* with tetracycline: Combining UV-visible spectrophotometry with principal component analysis

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