

Curriculum Vitae

(I) Personal Information

Name: Ruey-An Doong

Birth date: 1964/08/19

Position: Chair Professor

Affiliation: Institute of Analytical and Environmental Sciences,
National Tsing Hua University.

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(II) EDUCATION

June 1992 Ph.D. Environmental Engineering National Taiwan University

June 1987 B.S. Environmental Engineering National Chung Hsing University

(III) POSITIONS HELD

- 2020/01 – now Convener, Program of Environmental Engineering, Ministry of Science and Technology (MOST), Taiwan.
- 2019/01 – now Dean, Tsing Hua International College, National Tsing Hua University.
- 2019/08 – now Chair Professor, Institute of Analytical and Environmental Sciences, National Tsing Hua University.
- 2019/08 – now Director, Center for Energy and Environmental Research, National Tsing Hua University.
- 2018/05 – now World Class Professor, Ministry of Education and Culture,

Indonesia.

- 2020/01 – now Visiting Adjunct Professor, Universitas Airlangga, Indonesia.
- 2020/03 – now Visiting Adjunct Professor, University of Shizuoka, Japan.
- 2018/08 – 2019/07 Distinguished Professor, Department of Biomedical Engineering and Environmental Sciences, National Tsing Hua University, Taiwan
- 2017/11–2018/07 Chair Professor, Institute of Environmental Engineering, National Chiao Tung University, Taiwan.
- 2015/08–2017/11 Distinguished Professor, Institute of Environmental Engineering, National Chiao Tung University, Taiwan.
- 2017/07–2017/10 Visiting Professor, Department of Civil and Environmental Engineering, University of Delaware, USA.
- 2011-2015 Dean, College of Nuclear Science, National Tsing Hua University.
- 2008-2011 Chairperson, Department of Biomedical Engineering and Environmental Sciences, National Tsing Hua University, Taiwan.
- 2006-2015 Professor, Department of Biomedical Engineering and Environmental Sciences, National Tsing Hua University, Taiwan.
- 2003-2006 Professor, Department of Atomic Science, National Tsing Hua University, Taiwan.
- 2005 Visiting professor, Department of Civil and Environmental Engineering, University of Delaware, USA.
- 2000-2001 Visiting professor, Department of Biology, University of Konstanz, Germany.
- 1998-2003 Associate professor, Department of Atomic Science, National Tsing Hua University, Taiwan.
- 1994-1998 Assistant professor, Department of Atomic Science, National Tsing Hua University, Taiwan.

(IV) HONORS AND AWARDS

- **2020 Fellow of International Association of Advanced Materials (FIAAM)**
 - **2020 The World Top 2% Scientists (Environmental Science)**
 - 2019 Ho Chin Tui Outstanding Award in the Environmental Protection Category.
 - 2018 Y.Z. Hsu Science Paper Award in the Green Science and Technology Category, Far Eastern Y.Z. Hsu Science and Technology Memorial Foundation.
 - 2016 **International Honorable Member Award of "American Academy of Environmental Engineers and Scientists"**
 - 2015 **Outstanding Research Award, Ministry of Science and Technology, Taiwan.**
 - 2006-2012 Faculty Excellence in Research Award, National Tsing Hua University
 - 2008 Outstanding Research Award, National Science Council, Taiwan.
 - 2006 Most cited paper of J. Chromatography A (Title: Determination of organochlorine pesticides and their metabolites in soil samples using headspace solid-phase microextraction)
 - 2005 Best Conference Paper Award, 2005 Annual Conference on Soil and Groundwater Contamination, Taiwan.
 - 2005 Excellence in Teaching Award, National Tsing Hua University, Taiwan.
 - 2003 Dr. Wu Da-Yu Memorial Award, National Science Council, Taiwan.
 - 2000 **Humboldtian, Alexander von Humboldt Foundation, Germany.**
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(V) RESEARCH INTERESTS

1. Environmental Nanotechnology for Energy-Saving Water and Wastewater Treatment
2. Water-Energy Nexus
3. Energy Materials for Energy Storage.
4. Photoelectrochemistry
5. Biosensors and Nanosensing technology.

Publication:

Web of Science (WOS) database: Time cited: 7,099; H-index: 52

Google Scholar database: Time cited: 9,777; H-index: 60, i-10: 148.

Selected Papers in recent years (2017 – 2021):

1. Tran, H. L.; W. Darmanto; **Doong, R. A.*** (2021). Ultra-sensitive electrochemical immunosensor for the detection of attomolar prostate specific antigen using sulfur-doped graphene quantum dots decorated gold nanostar, **Electrochim. Acta**, 389, 138700. <https://doi.org/10.1016/j.electacta.2021.138700>
2. Md. Asadul Islam, M. D.; Ong, H. L.; Villagracia, A. R.; Halim, K. A.; Ganganboina, A. B.; Doong, R. A. (2021). Biomass-derived cellulose nanofibrils membrane from rice straw as sustainable separator for high performance supercapacitor, **Ind. Crop Prod.** 170, 113694. <https://doi.org/10.1016/j.indcrop.2021.113694>
3. Fatimah, I.; Ardianti, S.; Sahroni, I.; Purwiandono, G.; Sagadevan, S.; **Doong, R.A.** (2021) Visible light sensitized porous clay heterostructure photocatalyst of zinc-silica modified montmorillonite by using tris (2,2'-bipyridyl) dichlororuthenium. **Appl. Clay Sci.** 204, 106023
4. Ganganboina, A. B.; Dega, N. K; Tran, H. L.; Darmanto, W.; **Doong, R. A.*** (2021). Application of sulfur-doped graphene quantum dots@gold-carbon nanosphere for electrical pulse-induced impedimetric detection of glioma cells. **Biosens. Bioelectron.** 181, 113151.
5. Van Dien Dang, V.D.; Adorna J. Jr; Annadurai, T.; Bui, T. A. N. Tran, H. L.; Lin, L. Y.; **Doong, R. A.*** (2021) Indirect Z-scheme nitrogen-doped carbon dot decorated Bi₂MoO₆/g-C₃N₄ photocatalyst for enhanced visible-light-driven degradation of ciprofloxacin. **Chem. Eng. J.** 422 130103.

6. Diah Purwaningsari, D.; Nugraha J.; Wahyuningsih, S. P. A.; Hayaza, S.; Susilo, R. J. K.; Punnapayak, H.; **Doong, R. A.**; Darmanto A. (2021) Immunomodulating effect of polysaccharide krestin from *Cariacus v. versicolor* grown in Indonesia against rheumatoid arthritis in rat. **Res. J. Pharm. Technol.** 14(3), 1360-1364.
7. Paragas, L. K. B.; Dang, V. D.; Sahu, R. S.; de Luna, M. D. G.*; Pimentel, J. A. I.; Doong, R. A.* (2021). Enhanced visible-light-driven photocatalytic degradation of acetaminophen over CeO₂/I, K-codoped C₃N₄ heterojunction with tunable properties in simulated water matrix. **Sep. Purif. Technol.** 272, 1175677 (doi.org/10.1016/j.seppur.2020.117567).
8. Mamaril, G. S. S.; de Luna, M. D. G.*, Bindumadhavan, K.; Ong, D. C.; **Doong, R. A.*** (2021). Nitrogen and fluorine codoped 3-dimensional reduced graphene oxide architectures as high performance electrode material for capacitive deionization of copper ions. **Sep. Purif. Technol.** 272, 117559 (doi.org/10.1016/j.seppur.2020.117559).
9. You, S. M.; El Rouby, W. M. A; Assaud, L.; Doong, R. A.*; Millet, P.* (2021). Water photo-electrooxidation using mats of TiO₂ nanorods, surface sensitized by a metal organic framework of nickel and 1,2-benzene dicarboxylic acid. **Hydrogen** 2(1), 58-75.
10. Fatimah, I.; Fadillah, G.; Sahroni, I.; Kamari, A.; Sagadevan, S.; Doong, R. A. (2021) Nanoflower-like composites of ZnO/SiO₂ synthesized using bamboo leaves ash as reusable photocatalyst. **Arab. J. Chem.** 14, 102973.
11. Viet, H. T.; Anh, N. T. N.; Doong, R. A. (2021) Erbium-doped graphene quantum dots with up- and down-conversion luminescence for effective detection of ferric ions in water and human serum. **Sens. Actuator B Chem.** 328, 129056
12. Oliveros, A. P.; Pimentel, J. A. I.; de Luna, M. D. G.*, Garcia-Segura, S.; Abarca, R. R. M.; Doong, R. A.* (2021). Visible-light photocatalytic diclofenac removal by tunable vanadium pentoxide/boron-doped graphitic carbon nitride composite. **Chem. Eng. J.** 403, 126213. <https://doi.org/10.1016/j.cej.2020.126213>
13. Nguyen, T. B.; Huang, C. P.; **Doong, R. A.**; Chen, C. W.; Dong, C. D. (2021). CoO-3D ordered mesoporous carbon nitride (CoO@mpgCN) composite as peroxy monosulfate activator for the degradation of sulfamethoxazole in water. **J. Hazard. Mater.** 401, 123326. <https://doi.org/10.1016/j.jhazmat.2020.123326>.
14. Sahu, R. S.; **Doong, R. A.*** (2020) Functionalized Fe/Ni@g-C₃N₄ nanostructures for the enhanced trichloroethylene dechlorination and successive oxygen reduction reaction activity.

- Environ. Sci. Nano** 7, 3469-3481.
15. Ganganboina, A. B.; Chowdhury, A. D.; Khoris, I. M.; **Doong, R. A.**; Li, T. C.; Hara, T.; Abe, F.; Suzuki, T.; Park, E. Y. (2020) Hollow magnetic-fluorescent nanoparticles for dual-modality virus detection, **Biosens. Bioelectron.** 170, 112680.
 16. Tran, H. L.; Darmanto, W.; **Doong, R. A.*** (2020). Ultrasensitive detection of tetracycline of B, N-codoped graphene quantum dots from natural product as the paper-based nanosensing probe in difference matrices. **Nanomaterials**, 10, 1883.
 17. Bui, T. A. N.; Nguyen, T. G.; Darmanto, W.; **Doong, R. A.*** (2020). 3-Dimensional ordered reduced graphene oxide embedded with N-doped graphene quantum dots for high performance supercapacitors. **Electrochim. Acta** 361, 137018.
 18. Pahari, S. K.; **Doong, R. A.*** (2020). Few-Layered Phosphorene-Graphitic Carbon Nitride Nanohetero-structure as Metal Free Photocatalyst for C-H Activation Reaction. **ACS Sustain. Chem Eng.**, 8(35), 13342-13351.
 19. You, S. M.; El Rouby, W. M. A; Thamilselvan, A.; Tsai, C. K.; Darmanto, W.; **Doong, R. A.***; Millet, P.* (2020). Fe/Ni bimetallic organic framework deposited on TiO₂ nanotube array for enhancing higher and stable photoelectrochemical activity of oxygen evolution reaction, **Nanomaterials**, 10, 1866.
 20. Ganganboina, A. B.; Park, E. Y.; **Doong, R. A.*** (2020) Boosting the energy storage performance of V₂O₅ nanosheets by intercalating conductive graphene quantum dots. **Nanoscale** 12, 16944-16955. DOI: 10.1039/D0NR04362A
 21. Adorna, J. Jr*; Borines, M.; Dang, V. D.; **Doong, R. A.*** (2020) Coconut shell derived activated biochar–manganese dioxide nanocomposites for high performance capacitive deionization. **Desalination** 492, 114602
 22. You, S. M.; Tasi, C. K.; Millet, P.; **Doong, R. A.*** (2020). Electrochemically capacitive deionization of copper (II) using 3D hierarchically reduced graphene oxide architectures. **Sep. Purif. Technol.** 251, 117368. <https://doi.org/10.1016/j.seppur.2020.117368>
 23. Dang, V. D.; Ganganboina, A. B.; **Doong, R. A.*** (2020). Bipyridine and copper functionalized N-doped carbon dots for fluorescence turn off-on detection of ciprofloxacin. **ACS Appl. Mater. Interfaces.** 12, 32247-32258. <https://dx.doi.org/10.1021/acsami.0c04645>.
 24. Adorna, J.; Aleman, C. K.; Gonzaga, I. L.; Pangasinan, J.; Sisican, K. M.; Dang, V. D.; Doong, R. A.; Ruby Lynn Ventura, R. L.; Ventura, J. R. (2020) Effect of lauric acid on the thermal

- and mechanical properties of polyhydroxybutyrate (PHB)/starch composite biofilms. **Int. J. Polym. Sci.**, 2020, 7947019.
25. Bautista-Patacsil, L.; Lazarte, J. P. L.; Dipasupil, R. C. D.; Pasco, G. Y.; Eusebio, R. C.; Orbecido, E. A.; **Doong, R. A.** (2020) Deionization utilizing reduced graphene oxide-titanium dioxide nanotubes composite for the removal of Pb^{2+} and Cu^{2+} . **J. Environ. Chem. Eng.** 8(4) 103063.
 26. Ramachandran, P.; Lee, C. Y.; **Doong, R. A.**; Oon, C. E.; Thanh, N. T. K.; Lee, K. L. (2020) A titanium dioxide/nitrogen-doped graphene quantum dots nanocomposite to mitigate Cytotoxicity: synthesis, characterization, and cell viability evaluation. **RSC Adv.** 10, 21795.
 27. Ganganboina, A. B.; **Doong, R. A.*** (2020). Nitrogen doped graphene quantum dots-decorated earth-abundant nanotubes for enhanced capacitive deionization. **Environ. Sci. Nano.** 7, 228 – 237.
 28. Nguyen, T. B.; Huang, C. P.; **Doong, R. A.**; Chen, C. W.; Dong, C. D.* (2020). Visible-light photodegradation of sulfamethoxazole (SMX) over Ag-P-codoped g-C₃N₄ (Ag-P@UCN) photocatalyst in water, **Chem. Eng. J.** 384, 123383.
 29. Fatimah, I.*; Sahroni, I.; Muraza, O.; **Doong, R. A.** (2020). One-pot biosynthesis of SnO₂ quantum dots mediated by *Clitoria ternatea* flower extract for photocatalytic degradation of rhodamine B. **J. Environ. Chem. Eng.** 8(4), 103879.
 30. Babakhani, P.*; Bridge, J.; Fagerlund, F.; **Doong, R. A.**; Whittle, K. (2019) Comparison of a novel chain-reaction model 1 with population-balance model for early- and late-aggregation of shattered graphene oxide nanoparticles. **Colloids Surf. A.** 582, 123862.
 31. Tsai, C. K.; Lee, N. T.; Huang, G. H.; Suzuki, Y.; **Doong, R. A.*** (2019) Simultaneous recovery of display panel waste glass and wastewater boron by chemical oxo-precipitation with fluidized-bed heterogeneous crystallization. **ACS Omega**, 4, 14057-14066.
 32. Nguyen, T. N. A.; Chang, P.Y.; **Doong, R. A.*** (2019). Sulfur doped graphene quantum dots as a fluorescence sensing probe for highly sensitive and selective detection of 4-nitrophenol in water and wastewater. **RSC Advances**, 9, 26588-26597.
 33. Tran, H L.; **Doong, R. A.*** (2019) Sustainable fabrication of green luminescent sulfur-doped graphene quantum dots for rapidly visual detection of hemoglobin. **Anal. Methods** 11, 4421-4430 (Cover story).
 34. Ganganboina, A. B.; **Doong, R. A.*** (2019). Impedimetric label-free N, S-graphene quantum

- dots decorated gold-polyaniline nanowire immunosensor for the ultrasensitive detection of carcinoembryonic antigen. **Sci. Rep.**, 9, 7214.
35. Riyanto; Sahroni, I.; Bindumadhavan, K.; Chang, P. Y.; **Doong, R. A.*** (2019) Boron doped graphene quantum structure and MoS₂ nanohybrid as anode materials for highly reversible lithium storage. **Front. Chem.** 7, 116
 36. De Luna, M. D. G.*; Paragasb, L. K. B.; **Doong, R. A.*** (2019) Insights into the rapid elimination of antibiotics from aqueous media by tunable C₃N₄ photocatalysts: Effects of dopant amount, coexisting ions and reactive oxygen species. **Sci. Total Environ.** 669, 1053-1061.
 37. Nguyen, T. B.; **Doong, R. A.**; Huang, C. P.; Chen, C. W.; Dong, C. D. (2019). Activation of persulfate by CoO nanoparticles loaded on 3D mesoporous carbon nitride (CoO@meso-CN) for the degradation of methylene blue (MB). **Sci. Total Environ.** 675, 531-541.
 38. Tsai, C. K.; **Doong, R. A.***; Huang, H. Y. (2019). Sustainable valorization of mesoporous aluminosilicate composite from display panel glasses waste for adsorption of heavy metal ions. **Sci. Total Environ.** 673, 337-346.
 39. Chang, P. Y.; **Doong, R. A.*** (2019). Architecture of ordered mesoporous carbon spheres@SnO₂ core satellite nanostructures for enhanced high-rate lithium storage, **J. Alloy Compd.**, 775, 214-224.
 40. Nguyen, T. B.; Huang, C. P.; **Doong, R. A.*** (2019). Enhanced catalytic reduction of nitrophenols by sodium borohydride over highly recyclable Au@graphitic carbon nitride nanocomposites. **Appl. Catal. B Environ.** 240, 337-347.
 41. Nguyen, T. B.; Huang, C. P.; **Doong, R. A.*** (2019) Photocatalytic degradation of bisphenol A over a p-n heterojunction of ZnFe₂O₄/TiO₂ under visible light. **Sci. Total Environ.** 646, 745-756.
 42. Lazarte, J. P. L.; Dipasupil, R. C.; Pasco, G. Y. S.; Eusebio, R. C. P., Orbecido, A. H.; **Doong, R. A.**; Bautista-Patacsil, L. (2018) Synthesis of reduced graphene oxide/titanium dioxide nanotubes (rGO/TNT) composites as an electrical double layer capacitor. **Nanomaterials**, 8(11), 934.
 43. Ganganboina, A. B.; **Doong, R. A.*** (2018) Functionalized N-doped graphene quantum dots for electrochemical determination of cholesterol through host-guest inclusion. **Microchimica Acta.**, 185(11), Article 526 (11 pages)

44. Dutta Chowdhury, A.; Ganganboina, A. B.; Nasrin, F.; Takemura, K.; **Doong, R. A.**; Lee, J. W.; Khoris, I. M.; Park, E. Y. (2018). Femtomolar detection of Dengue virus DNA with serotype identification ability. **Anal. Chem.**, 90, 12464–12474.
45. Dutta Chowdhury, A.; Ganganboina A. B.; Park, E. Y.; **Doong, R. A.*** (2018) Impedimetric biosensor for selective detection of cancer cells employing cancer targeting ability of Concanavalin A. **Biosens. Bioelectron.** 122, 95-103.
46. G. Y. Toh, Ong, H. L.*; Bindumadhavan, K; **Doong, R. A.** (2018) Reduced graphite oxide conglomerated low density polyethylene nanocomposites for electronics packaging applications. **Polymer International**, 67(12), 1638-1647.
47. Babakhani, P.*; Bridge, J.; Phenrat, T.; **Doong, R. A***, Whittle, K. (2018) Aggregation and sedimentation of shattered graphene oxide nanoparticles (SGO) in dynamic environments: a solid-body rotational approach. **Environ. Sci: Nano** 5, 1859-1872.
48. Babakhani, P.; Bridge, J.*; **Doong, R. A.** (2018). The significance of early and late stages of coupled aggregation and sedimentation in the fate of nanoparticles: measurement and modelling. **Environ. Sci. Technol.** 52, 8419-8428.
49. Paragas, L. K. B.; De Luna, M. D. G.*; **Doong R. A.*** (2018). Rapid removal of sulfamethoxazole from simulated water matrix by visible-light responsive iodine and potassium co-doped graphitic carbon nitride photocatalysts. **Chemosphere**, 210, 1099-1107.
50. Nguyen, T. N. A.; **Doong, R. A.*** (2018). One-step synthesis of size-tunable gold@sulfur-doped graphene quantum dot nanocomposites for highly selective and sensitive detection of nanomolar 4-nitrophenol in wastewater with complex matrix. **ACS Appl. Nano Mater.** 1(5), 614-624. doi: 10.1021/acsanm.8b00210
51. Ganganboina, A. B.; **Doong, R. A.*** (2018). The biomimic oxidase activity of layered V₂O₅ nanozyme for rapid and sensitive nanomolar detection of glutathione. **Sens. Actuat. B Chem.** 273, 1179-1186.
52. Dutta Chowdhury, A.; Ganganboina, A. B.; Tsai, Y. C.; Chiu, H. C.*; **Doong, R. A.*** (2018). Targeted nanocarriers for pH-responsive drug delivery using graphene quantum dot conjugated concanavalin A capped iron oxide nanoparticles. **Anal. Chim. Acta** 1027, 109-120.
53. Singh, B.; **Doong, R. A.**, Chauhan, D. S.; Dubey, A. K. Anshumali. (2018) Synthesis and characterization of Fe₃O₄/polythiophene hybrid nanocomposites for electroanalytical

- application. **Mater. Chem. Phys.** 205, 462-469.
54. Ganganboina, A. B.; Dutta Chowdhury, A.; **Doong, R. A.*** (2018). N-doped graphene quantum dots decorated V₂O₅ nanosheet for fluorescence turn off-on detection of cysteine. **ACS Appl. Mater. Interfaces.** 10, 614-624
 55. Saha, R. S.; Lee, D. L.; **Doong, R. A.*** (2018) Enhanced reactivity of reduced graphene oxide supported bimetallic Fe/Ni nanoparticles for trichloroethylene dechlorination, **Chem. Eng. J.** 334, 30-40.
 56. Yang, C. C.; **Doong, R. A.**; Chen. K. F; Chen G. S.; Tsai, Y. P. (2018) The photocatalytic degradation of methylene blue by green semiconductor films that is induced by irradiation by a light emitting diode and visible light. **J. Air. Waste Manage. Assoc.** 68, 29-38
 57. Dutta Chowdhury, A.*; Agnihotri, N.; Doong, R. A.; De A. (2017). A label-free and non-destructive separation technique for isolation of targeted DNA from DNA-protein mixture using magnetic Au-Fe₃O₄ nanoprobos. **Anal. Chem.** 89, 12244-12251.
 58. Nguyen, T. B.; **Doong, R. A.*** (2017) Enhanced visible-light-driven photoactivity of ZnFe₂O₄/TiO₂ heterojunction nanocomposites for bisphenol A degradation, **RSC Adv.** 7, 50006-50016.
 59. Nguyen, T. N. A.; Dutta Chowdhury, A.; **Doong, R. A.*** (2017) Highly sensitive and selective detection of mercury ions using N, S-codoped graphene quantum dots and its paper strip based sensing application in wastewater, **Sens. Actuat. B Chem.** 252, 1169-1178.
 60. Babakhani, P.; Bridge, J.; **Doong, R. A.***; Phenrat T.* (2017) Continuum-Based Models and Concepts for the Transport of Nanoparticles in Saturated Porous Media: A State-of-the-Science Review. **Adv. Colloid Interface Sci.** 246, 75-104
 61. Babakhani, P.; Bridge, J.; **Doong, R. A.***; Phenrat T. (2017) Parameterization and prediction of nanoparticles transport in porous media: A reanalysis using artificial neural network. **Water Res. Resour.**, 53, 4564-4585.
 62. Bansala, T.; Joshi, M.; Mukhopadhyay, S. **Doong, R. A.**; Chaudhary, M. (2017). Electrical and dielectric properties of exfoliated thermally reduced graphene based polyurethane nanocomposites. **J. Nanosci. Nanotechnol.** 17, 8782-8790.
 63. Ganganboina, A. B.; Dutta Chowdhury, A.; **Doong, R. A.*** (2017). Nano assembly of N-doped graphene quantum dots anchored Fe₃O₄/halloysite nanotubes for high performance supercapacitor. **Electrochim. Acta** 245, 912-923.

64. Bindumadhavan, K.; Chang, P. Y.; Yeh, M. H.; **Doong, R. A.*** (2017). Enhanced electrochemical performance of CoO/rGO anode materials for lithium ion battery. **MRS Commun.**, 7(2), 236-244.
65. Ganganboina, A. B.; Dutta Chowdhury, A.; Doong, R. A.* (2017). A new avenue for appendage of graphene quantum dots on halloysite nanotubes as anode materials for high performance supercapacitor. **ACS Sustain. Chem. Eng.**, 5, 4930-4940.
66. Chaudhary, M.; **Doong, R. A.***; Kuman, N; Tseng, T. Y. (2017) Ternary Au/ZnO/rGO nanocomposites electrodes for high performance electrochemical storage devices. **Appl. Surface Sci.**, 420, 118-128.
67. Bindumadhavan, K.; Chang, P. Y.; **Doong, R. A.*** (2017) Silver nanoparticles embedded boron-doped reduced graphene oxide as anode material for high performance lithium ion battery, **Electrochim. Acta** 243, 282-290.
68. Lin, F. H.; **Doong, R. A.*** (2017). Catalytic nanoreactors of Au@Fe₃O₄ yolk-shell nanostructures with various Au sizes for efficient nitroarenes reduction. **J. Phys. Chem. C.** 121, 7844-7853.
69. Saha, R. S.; Bindumadhavan K.; **Doong, R. A.*** (2017) Boron-doped reduced graphene oxide based bimetallic Ni/Fe nanohybrids for rapid dechlorination of trichloroethylene. **Environ. Sci: Nano**, 4, 565-576 (Cover story).
70. **Doong, R. A.***; Liao, C. Y. (2017) Enhanced photocatalytic activity of Cu-deposited N-TiO₂/titanate nanotubes under UV and visible light irradiations. **Sep. Purif. Technol.**, 179, 403-411.
71. **Doong, R. A.***; Liao, C. Y. (2017) Enhanced visible-light-responsive photodegradation of bisphenol A by Cu, N-codoped titanate nanotubes prepared by microwave-assisted hydrothermal method, **J. Hazard. Mater.** 322, 254-262.
72. Bansala, T.; Joshi, M.; Mukhopadhyay, S.; **Doong, R. A.**; Chaudhary, M.* (2017). Electrically conducting graphene based polyurethane nanocomposites for microwave shielding applications in the Ku band. **J. Mater. Sci.**, 52, 1546-1560.
73. Lee, S. H.; Ong, H. L.; **Doong, R. A.*** (2017) Design of size-tunable molecularly imprinted polymer for selective adsorption of acetaminophen, **Clean Technol. Environ. Policy**, 19, 243-250.
74. G. Y. Toh, H. L. Ong*, Bindumadhavan, K.; **Doong, R. A.*** (2017). Unveiling the thermal

kinetics and scissoring mechanism of neolatripolyethylene/reduced graphite oxide nanocomposites. **J. Anal. Appl. Pyrolysis**, 123, 20-29