

DAFTAR PUSTAKA

- Abu-Dalo, M., Jaradat, A., Albiss, B. A., and Al-Rawashdeh, N. A. F., 2019, Green Synthesis of TiO_2 NPS/Pristine Pomegranate Peel Extract Nanocomposite and Its Antimicrobial Activity for Water Disinfection, *J. Environ. Chem. Eng.*, 7(5).
- Alijani, M., and Ilkhechi, N. N., 2018, Effect of Ni Doping on The Structural and Optical Properties of TiO_2 Nanoparticles at Various Concentration and Temperature, *Silicon*, 10(6), 2569–2575.
- Alorabi, A. Q., Shamshi Hassan, M., and Azizi, M., 2020, Fe_3O_4 -CuO-activated Carbon Composite as An Efficient Adsorbent for Bromophenol Blue Dye Removal from Aqueous Solution, *Arab. J. Chem.*, 13(11), 8080–8091.
- Ang, T. P., Toh, C. S., and Han, Y. F., 2009, Synthesis, Characterization, and Activity of Visible-Light-Driven Nitrogen-Doped TiO_2 - SiO_2 Mixed Oxide Photocatalysts, *J. Phys. Chem. C*, 113(24), 10560–10567.
- Araoyinbo, A. O., Bakri Abdullah, M. M. al, Anuar Mohd Salleh, M. A., Abdul Aziz, N. N., and Iskandar Azmi, A., 2018, Phase Study of Titanium Dioxide Nanoparticle Prepared Via Sol-Gel Process, *IOP Conf. Ser. Mater. Sci. and Engi.*, 343(1).
- Bandosz, T. J., Matos, J., Seredych, M., Islam, M. S. Z., and Alfano, R., 2012, Photoactivity of S-Doped Nanoporous Activated Carbons: A New Perspective for Harvesting Solar Energy on Carbon-Based Semiconductors, *Appl. Catal. A-Gen*, 159–165.
- Bento, R. T., Correa, O. v., and Pillis, M. F., 2021, On The Surface Chemistry and The Reuse of Sulfur-Doped TiO_2 Films as Photocatalysts, *Mater. Chem. Phys.*, 261.
- Beydoun, D., Amal, R., Low, G. K. C., and McEvoy, S., 2000, Novel Photocatalyst: Titania-Coated Magnetite. Activity and Photodissolution, *J. Phys. Chem. B*, 104(18), 4387–4396.
- Bracco, E., Butler, M., Carnelli, P., and Candal, R., 2020, TiO_2 and N- TiO_2 -Photocatalytic Degradation of Salicylic Acid in Water: Characterization of Transformation Products by Mass Spectrometry, *ESPR*, 27(23), 28469–28479.
- Cabrera-Lafaurie, W. A., Román, F. R., and Hernández-Maldonado, A. J., 2012, Transition Metal Modified and Partially Calcined Inorganic-organic Pillared Clays for The Adsorption of Salicylic Acid, Clofibric Acid, Carbamazepine, and Caffeine from Water, *J. Colloid Interface Sci.*, 386(1), 381–391.
- Cargnello, M., Gordon, T. R., and Murray, C. B., 2014, Solution-Phase Synthesis of Titanium Dioxide Nanoparticles and Nanocrystals, *Chem. Rev.*, 114(19), 9319–9345.

- Carmona, E., Andreu, V., and Picó, Y., 2014, Occurrence of Acidic Pharmaceuticals and Personal Care Products in Turia River Basin: from Waste to Drinking Water, *Sci. Total Environ.*, 484(1), 53–63.
- Chen, H., Feng, Y., Suo, N., Long, Y., Li, X., Shi, Y., and Yu, Y., 2019a, Preparation of Particle Electrodes from Manganese Slag and Its Degradation Performance for Salicylic Acid in The Three-Dimensional Electrode Reactor (TDE), *Chemosphere*, 216, 281–288.
- Chen, T., Foo, C., and Tsang, S.C.E., 2021, Interstitial and Substitutional Light Elements in Transition Metals for Heterogeneous Catalyst, *Chem.Sci.J.*, 12(2), 517-532.
- Chen, X., Shen, S., Guo, L., and Mao, S. S., 2010, Semiconductor-based Photocatalytic Hydrogen Generation, *Chem. Rev.*, 110(11), 6503–6570.
- Chen, X., Sun, H., Zhang, J., Guo, Y., and Kuo, D. H., 2019b, Cationic S-Doped $\text{TiO}_2/\text{SiO}_2$ Visible-Light Photocatalyst Synthesized by Co-Hydrolysis Method and Its Application for Organic Degradation, *J. Mol.Liq.*, 273, 50–57.
- Cotton, F.A. and Wilkinson, G., 1989. *Advanced Inorganic Chemistry A Comprehensive Text*, 3rd Ed., John Wiley & Sons Inc., New York.
- Chimupala, Y., 2015, Synthesis and Characterization of The TiO_2 (B) Phase, *Tesis*, School of Chemical and Process Engineering, Yorkshire Barat.
- Cui, J., He, T., and Zhang, X., 2013, Synthesis of $\text{Fe}_3\text{O}_4@\text{SiO}_2@\text{Pt}$ ion- TiO_2 Hybrid Composites with High Efficient UV-Visible Light Photoactivity, *Catal. Commun.*, 40, 66–70.
- Devi, L. G., and Kavitha, R., 2014, Enhanced Photocatalytic Activity of Sulfur Doped TiO_2 for The Decomposition Of Phenol: A New Insight Into The Bulk and Surface Modification, *Mater.Chem.Phys.*, 143(3), 1300–1308.
- Ding, M., Chen, W., Xu, H., Shen, Z., Lin, T., Hu, K., Lu, C. hui, and Xie, Z., 2020, Novel A- $\text{Fe}_2\text{O}_3/\text{Mxene}$ Nanocomposite as Heterogeneous Activator of Peroxymonosulfate for The Degradation of Salicylic Acid, *J.Hazard. Mater.*, 382.
- Enayati Ahangar, L., Movassaghi, K., Emadi, M., and Yaghoobi, F., 2016, Photocatalytic Application of $\text{TiO}_2/\text{SiO}_2$ -Based Magnetic Nanocomposite ($\text{Fe}_3\text{O}_4@\text{SiO}_2/\text{TiO}_2$) for Reusing Of Textile Wastewater, *Nano. Chem. Res*, 1(1),33.

- Escapa, C., Coimbra, R. N., Paniagua, S., García, A. I., and Otero, M., 2017, Paracetamol and Salicylic Acid Removal from Contaminated Water by Microalgae, *J. Environ. Manage.*, 203, 799–806.
- Esfandiari, N., Kashefi, M., Mirjalili, M., and Afsharnezhad, S., 2020, Role of Silica Mid-Layer in Thermal and Chemical Stability of Hierarchical Fe₃O₄-SiO₂-TiO₂ Nanoparticles for Improvement of Lead Adsorption: Kinetics, Thermodynamic and Deep XPS Investigation, *Mater. Sci. Eng. B: Solid-State Mater. Adv. Technol.*, 262.
- Feng, C., Aldrich, C., Eksteen, J. J., and Arrigan, D. W. M., 2017, Removal of Arsenic From Alkaline Process Waters of Gold Cyanidation by Use of Fe₃O₄@SiO₂@TiO₂ Nanosorbents, *Miner. Eng.*, 110, 40–46.
- Ferreiro, C., Villota, N., Lombraña, J. I., Rivero, M. J., Zúñiga, V., and Rituerto, J. M., 2019, Analysis of A Hybrid Suspended-supported Photocatalytic Reactor for The Treatment of Wastewater Containing Benzothiazole and Aniline, *Water*, 11(2).
- Gad-Allah, T. A., Kato, S., Satokawa, S., and Kojima, T., 2007, Role of Core Diameter and Silica Content in Photocatalytic Activity of TiO₂/SiO₂/Fe₃O₄ Composite, *Solid State Sci.*, 9(8), 737–743.
- Ghasemzadeh, M. A., 2015, Synthesis and Characterization of Fe₃O₄@SiO₂ NPS As An Effective Catalyst for The Synthesis of Tetrahydrobenzo[A]Xanthen-11-Ones, *Acta Chim. Slov.*, 62(4), 977–985.
- Grundmann, Marius., 2006, *The Physics of Semiconductors: An Introduction Including Devices and Nanophysics*, Springer, Berlin.
- Guo, Q., Zhou, C., Ma, Z., and Yang, X., 2019, Fundamentals of TiO₂ Photocatalysis: Concepts, Mechanisms, And Challenges, *Adv. Mater.*, 31(50).
- Guo, W., Liu, X., Huo, P., Gao, X., Wu, D., Lu, Z., and Yan, Y., 2012, Hydrothermal Synthesis Spherical TiO₂ and Its Photo-Degradation Property on Salicylic Acid, *Appl. Surf. Sci.*, 258(18), 6891–6896.
- Habila, M. A., Alothman, Z. A., El-Toni, A. M., Labis, J. P., and Soylak, M., 2016, Synthesis and Application of Fe₃O₄@SiO₂@TiO₂ for Photocatalytic Decomposition of Organic Matrix Simultaneously with Magnetic Solid Phase Extraction Of Heavy Metals Prior to ICP-MS Analysis, *Talanta*, 154, 539–547.
- Hanaor, D. A. H., and Sorrell, C. C., 2011, Review of The Anatase to Rutile Phase Transformation, *J. Mater.Sci.*, 46(4), 855–874.

- Hasmath Farzana, M., and Meenakshi, S., 2014, Synergistic Effect of Chitosan and Titanium Dioxide on The Removal of Toxic Dyes by The Photodegradation Technique, *Ind. Eng. Chem. Res.*, 53(1), 55–63.
- He, Q., Zhang, Z., Xiong, J., Xiong, Y., and Xiao, H., 2008, A Novel Biomaterial - $\text{Fe}_3\text{O}_4/\text{TiO}_2$ Core-shell Nano Particle with Magnetic Performance and High Visible Light Photocatalytic Activity, *Opt. Mater.*, 31(2), 380–384.
- Hidaka, H., Honjo, H., Horikoshi, S., and Serpone, N., 2006, Photocatalyzed Degradation on A TiO_2 -coated Quartz Crystal Microbalance. Adsorption/Desorption Processes in Real Time in The Degradation of Benzoic Acid and Salicylic Acid, *Catal. Commun.*, 7(6), 331–335.
- Ho, Y. S., and McKay, G., 1999, Pseudo-second Order Model for Sorption Processes, *Process Biochem.*, 34, 451 – 465.
- Hoang, N. T.-T., Tran, A. T.-K., Le, T.-A., and Nguyen, D. D., 2021, Enhancing Efficiency and Photocatalytic Activity Of $\text{TiO}_2\text{-SiO}_2$ by Combination of Glycerol for MO Degradation in Continuous Reactor under Solar Irradiation, *J. Environ. Chem. Eng.*, 9(5), 105789.
- Hoffmann, M. R., Martin, S. T., Choi, W., and Bahnemann, D. W., 1995, Environmental Applications of Semiconductor Photocatalysis, *Chem. Rev* 95(1), 69-96.
- Hu, X., Hu, X., Tang, C., Wen, S., Wu, X., Long, J., Yang, X., Wang, H., and Zhou, L., 2017, Mechanisms Underlying Degradation Pathways of Microcystin-LR with Doped TiO_2 Photocatalysis, *Chem. Eng. J.*, 330, 355–371.
- Hunge, Y. M., Yadav, A. A., Dhodamani, A. G., Suzuki, N., Terashima, C., Fujishima, A., and Mathe, V. L., 2020, Enhanced Photocatalytic Performance of Ultrasound Treated GO/TiO_2 Composite for Photocatalytic Degradation of Salicylic Acid under Sunlight Illumination, *Ultrason. Sonochem.*, 61.
- Idris, A., Hassan, N., Rashid, R., and Ngomsik, A. F., 2011, Kinetic and Regeneration Studies of Photocatalytic Magnetic Separable Beads for Chromium (VI) Reduction under Sunlight. *J. Hazard. Mater.*, 186(1), 629–635.
- Khodadadi, M., Ehrampoush, M. H., Ghaneian, M. T., Allahresani, A., and Mahvi, A. H., 2018, Synthesis And Characterizations of $\text{FeNi}_3/\text{SiO}_2/\text{TiO}_2$ Nanocomposite and Its Application in Photocatalytic Degradation of Tetracycline in Simulated Wastewater, *J. Mol. Liq.*, 255, 224–232.
- Kittel, C., 2005, *Introduction to Solid State Physics Charles Kittel*, John Wiley & Sons Inc., Berkeley.

- Köktaş, İ. Y., and Gökkuş, Ö., 2022, Removal of Salicylic Acid by Electrochemical Processes using Stainless Steel and Platinum Anodes, *Chemosphere*, 293.
- Kumar, K. V., and Porkodi, K., 2008, Photocatalytic Properties of TiO₂ Modified with Platinum and Silver Nanoparticles in The Degradation of Oxalic Acid in Aqueous Solution Langmuir Hinshelwood Kinetics-A Theoretical Study, *Appl. Catal. B: Environ.*, 79(2), 108–109).
- Kunarti, E.S., Kartini, I., Syoufian, A., and Widyandari, K. M., 2018, Synthesis and Photoactivity of Fe₃O₄/TiO₂-Co As A Magnetically Separable Visible Light Responsive Photocatalyst, *Indones. J. Chem.*, 18(3), 403–410.
- Lapworth, D. J., Das, P., Shaw, A., Mukherjee, A., Civil, W., Petersen, J. O., Gooddy, D. C., Wakefield, O., Finlayson, A., Krishan, G., Sengupta, P., and MacDonald, A. M., 2018, Deep Urban Groundwater Vulnerability in India Revealed through The Use of Emerging Organic Contaminants and Residence Time Tracers, *Environ. Pollut.*, 240, 938–949.
- Lazar, M. A., Varghese, S., and Nair, S. S., 2012, Recent Photocatalytic Water Treatment By Titanium Dioxide, *Catalysts*, 2(4), 572–601.
- Lee, S. Y., and Park, S. J., 2013, TiO₂ Photocatalyst for Water Treatment Applications, *Ind. Eng. Chem. Res.*, 19(6), 1761–1769.
- Li, M., Xing, Z., Jiang, J., Li, Z., Kuang, J., Yin, J., Wan, N., Zhu, Q., and Zhou, W., 2018a, In-Situ Ti³⁺/S Doped High Thermostable Anatase TiO₂ Nanorods as Efficient Visible-Light-Driven Photocatalysts, *Mater. Chem. Phys.*, 219, 303–310.
- Li, Q. Y., Ma, K. R., Ma, Z. J., Wei, Q., Liu, J. G., Cui, S. P., and Nie, Z. R., 2018b, Preparation and Enhanced Photocatalytic Performance of A Novel Photocatalyst: Hollow Network Fe₃O₄/Mesoporous SiO₂/TiO₂ (FST) Composite Microspheres, *Micropor. Mesopor. Mater.*, 265, 18–25.
- Li, T., Abdelhaleem, A., Chu, W., Pu, S., Qi, F., and Zou, J., 2021a, S-Doped TiO₂ Photocatalyst for Visible LED Mediated Oxone Activation: Kinetics and Mechanism Study for The Photocatalytic Degradation of Pyrimethanil Fungicide, *Chem. Eng. J.*, 411.
- Li, X., Li, X., Feng, Y., Wang, X., Suo, N., Yang, S., Long, Y., and Zhang, S., 2021b, Production of An Electro-Biological Particle Electrode (EBPE) from Lithium Slag and Its Removal Performance to Salicylic Acid in A Three-Dimensional Electrocatalytic Biological Coupling Reactor (3D-EBCR), *Chemosphere*, 282.

- Liu, H., Jia, Z., Ji, S., Zheng, Y., Li, M., and Yang, H, 2011, Synthesis Of TiO₂/SiO₂@Fe₃O₄ Magnetic Microspheres And Their Properties Of Photocatalytic Degradation Dyestuff, *Catal. Today*, 175(1), 293–298.
- López, R. and Gómez, R., 2012, Band-gap Energy Estimation from Diffuse Reflectance Measurements on Sol-gel and Commercial TiO₂: A Comparative Study, *J. Sol-Gel Sci. Technol.*, 61, 1 – 7.
- Ma, J., Guo, S., Guo, X., and Ge, H, 2015, A Mild Synthetic Route To Fe₃O₄@TiO₂-Au Composites: Preparation, Characterization And Photocatalytic Activity, *Appl. Surf. Sci.*, 353, 1117–1125.
- Mahvi, A. H., and Maleki, A., 2010, Photosonochemical Degradation of Phenol in Water, *Desalin. Water Treat.*, 20(13), 197–202.
- McManamon, C., O’Connell, J., Delaney, P., Rasappa, S., Holmes, J. D., and Morris, M. A., 2015, A Facile Route to Synthesis of S-Doped TiO₂ Nanoparticles for Photocatalytic Activity, *J. Mol. Catal. A Chem.*, 406, 51-57
- Minner, J. and Hoffhines, A., 2007, The Discovery of Aspirin’s Antithrombotic Effects, *Tex Heart Int. J.*, 34(2), 179 – 186.
- Mironyuk, I. F., Soltys, L. M., Tatarchuk, T. R., and Savka, K. O., 2020, Methods Of Titanium Dioxide Synthesis (Review), *J. Phys. Chem. Solids*, 21(3), 462–477.
- Moreira, J., Serrano, B., Ortiz, A., and de Lasa, H., 2012, A Unified Kinetic Model for Phenol Photocatalytic Degradation over TiO₂ Photocatalysts, *Chem. Eng. Sci.*, 78, 186–203.
- Nakata, K., and Fujishima, A, 2012, TiO₂ Photocatalysis: Design And Applications, *J. Photochem. Photobiol. C: Photochem. Rev.*, 13(3), 169–189.
- Nasikhudin, Diantoro, M., Kusumaatmaja, A., and Triyana, K., 2018, Study on Photocatalytic Properties of TiO₂ Nanoparticle in Various pH Condition, *J. Phys. Conf. Ser.*, 1011(1).
- Niculescu, A. G., Chircov, C., and Grumezescu, A. M., 2022, Magnetite Nanoparticles: Synthesis Methods – A Comparative Review, *Methods*, 199, 16–27.
- Ningsih, L.A., Yoshida, M., Sakai, A., Lin, K.Y.A., Wu, K.C.W., Catherine, H.N., Ahamad, T., and Hu, C., 2022, Ag-modified TiO₂/SiO₂/Fe₃O₄ Sphere with Core-Shell Structure for Photo-assisted Reduction of 4-Nitrophenol, *Environ.Res.*, 214.

- Niyaifar, M., Hasanpour, A., Mohammadpour, H., and Amighian, J., 2013, Capped and Coupled Fe₃O₄/TiO₂ Nanopowder Systems Fabricated by Sol-Gel And A Nonthermal Method, *Phys. Stat.*, 210(6), 1190–1194.
- Nkurikiyimfura, I., Wang, Y., Safari, B., and Nshingabigwi, E., 2020, Temperature-Dependent Magnetic Properties of Magnetite Nanoparticles Synthesized via Coprecipitation Method, *J. Alloys Compd.*, 846.
- Nosaka, Y., and Nosaka, A., 2016, Understanding Hydroxyl Radical (•OH) Generation Processes In Photocatalysis, *ACS Energy Lett.*, 1(2), 356–359.
- Novala, V. E., and Carriazo, J. G., 2019, Fe₃O₄-TiO₂ and Fe₃O₄-SiO₂ Core-shell Powders Synthesized from Industrially Processed Magnetite (Fe₃O₄) Microparticles, *Mater. Res.*, 22(3).
- Ohno, T., Akiyoshi, M., Umebayashi, T., Asai, K., Mitsui, T., and Matsumura, M., 2004, Preparation of S-Doped TiO₂ Photocatalysts and Their Photocatalytic Activities under Visible Light, *Appl. Catal. A-Gen.*, 265(1), 115–121.
- Ohno, T., Mitsui, T., and Matsumura, M., 2003, Photocatalytic Activity of S-Doped TiO₂ Photocatalyst Under Visible Light, *Chem. Lett.*, 32(4), 364–365.
- Ohtani, B., 2011, Photocatalysis By Inorganic Solid Materials: Revisiting Its Definition, Concepts, and Experimental Procedures, *Adv. Inorg. Chem.*, 63.
- Okube, M., and Sasaki, S., 2014, Site-Specific Electronic Structures of Ferrimagnetic Fe₃O₄ Measured by Resonant X-Ray Magnetic Scattering, *J. Appl. Crystallogr.*, 47(4), 1387–1394.
- Pang, S. C., Kho, S. Y., and Chin, S. F., 2012, Fabrication of Magnetite/Silica/Titania Core-Shell Nanoparticles, *J. Nanomater.*, 1-6.
- Patil, S. B., Basavarajappa, P. S., Ganganagappa, N., Jyothi, M. S., Raghu, A. V., and Reddy, K. R., 2019, Recent Advances in Non-Metals-Doped TiO₂ Nanostructured Photocatalysts for Visible-Light Driven Hydrogen Production, CO₂ Reduction and Air Purification, *Int. J. Hydrog. Energy*, 44(26), 13022–13039.
- Peng, X., Ai, F., Yan, L., Ha, E., Hu, X., He, S., and Hu, J., 2021, Synthesis Strategies and Biomedical Applications for Doped Inorganic Semiconductor Nanocrystals, *Cell Rep.*, 2(5).
- Plavac, B., Grčić, I., Brnardić, I., Grozdanić, V., and Papić, S., 2017, Kinetic Study of Salicylic Acid Photocatalytic Degradation using Sol–Gel Anatase Thin Film with Enhanced Long-Term Activity, *React. Kinet., Mech. Catal.*, 120(1), 385–401.

- Pourbaix, M, 1974, *Atlas of Electrochemical Equilibria in-Aqueous Solutions*, 2nd English Ed., Pergamon Press Ltd., Houston.
- Radoń, A., Drygała, A., Hawelek, Ł., and Łukowiec, D., 2017, Structure and Optical Properties of Fe₃O₄ Nanoparticles Synthesized by Co-Precipitation Method with Different Organic Modifiers, *Mater. Charact.*, 131, 148–156.
- Ramacharyulu, P. V. R. K., Praveen Kumar, J., Prasad, G. K., and Sreedhar, B., 2014, Sulphur Doped Nano TiO₂: Synthesis, Characterization and Photocatalytic Degradation of A Toxic Chemical in Presence of Sunlight, *Mater. Chem. Phys.*, 148(3), 692–698.
- Reddy, I. N., Sreedhar, A., Reddy, C. V., Shim, J., Cho, M., Kim, D., Gwag, J. S., and Yoo, K., 2018, Enhanced Visible-Light Photocatalytic Performance of Fe₃O₄ Nanopyramids for Water Splitting and Dye Degradation, *J. Solid State Electr.*, 22(11), 3535–3546.
- Rhodes, C. J., 2010, Solar Energy: Principles and Possibilities, *Sci. Prog.*, 93 (1), 37–112.
- Roto, R., Izza, A., Kunarti, E. S., and Suherman, S., 2020, Effect of Stabilizing Agent of Sodium Citrate and Polyethylene Glycol on Structure of Fe Nanoparticles, *Key Eng. Mater.*, 840, 466–471.
- Shadravan, A., Sadeghian, Z., Nemati, A., and Mohammadi, S. P., 2015, Corrosion Protection of 1050 Aluminium Alloy Using A Smart Self-Cleaning TiO₂-CNT Coating, *Surf. Coat. Technol.*, 275, 224–231.
- Shahid, M. K., and Choi, Y., 2020, Characterization and Application of Magnetite Particles, Synthesized by Reverse Coprecipitation Method in Open Air From Mill Scale, *J. Magn. Magn. Mater.*, 495.
- Shahrezaei, F., Mansouri, Y., Zinatizadeh, A. A. L., and Akhbari, A., 2012, Photocatalytic Degradation of Aniline using TiO₂ Nanoparticles in A Vertical Circulating Photocatalytic Reactor, *Int. J. Photoenergy*, 1-8
- She, H. D., Fan, H. R., Yang, K. F., Li, X. C., Wang, Q. W., Zhang, L. F., Liu, S., Li, X. H., and Dai, Z. H., 2021, In Situ Trace Elements of Magnetite In The Bayan Obo REE-Nb-Fe Deposit: Implications for The Genesis of Mesoproterozoic Iron Mineralization, *Ore Geol. Rev.*, 139.
- Sheikhmohammadi, A., Asgari, E., Nourmoradi, H., Fazli, M. M., and Yeganeh, M., 2021, Ultrasound-Assisted Decomposition of Metronidazole by Synthesized TiO₂/Fe₃O₄ Nanocatalyst: Influencing Factors and Mechanisms, *J. Environ. Chem. Eng.*, 9(5).
- Sobhanardakani, S., and Zandipak, R., 2017, Synthesis and Application of TiO₂/SiO₂/Fe₃O₄ Nanoparticles as Novel Adsorbent for Removal of Cd(II),

- Hg(II) and Ni(II) Ions from Water Samples, *Clean Technol. Environ. Policy*, 19(7), 1913–1925.
- Sunaryono, S., Fitriana, D. R., Novita, L. R., Hidayat, M. F., Hartatiek, H., Mufti, N., and Taufiq, A., 2020, The Effect of Fe₃O₄ Concentration to Photocatalytic Activity of Fe₃O₄@TiO₂-PVP Core-Shell Nanocomposite, *J. Phy. Conf. Ser.*, 1595(1).
- Teixeira, S., Mora, H., Blasse, L. M., Martins, P. M., Carabineiro, S. A. C., Lanceros-Méndez, S., Kühn, K., and Cuniberti, G., 2017, Photocatalytic Degradation of Recalcitrant Micropollutants by Reusable Fe₃O₄/SiO₂/TiO₂ Particles, *J. Photochem. Photobiol. A Chem.*, 345, 27–35.
- Tuan, D. D., Chang, F. C., Chen, P. Y., Kwon, E., You, S., Tong, S., and Lin, K. Y. A., 2021, Covalent Organic Polymer Derived Carbon Nanocapsule-Supported Cobalt as A Catalyst for Activating Monopersulfate To Degrade Salicylic Acid, *J. Environ. Chem. Eng.*, 9(4).
- Umebayashi, T., Yamaki, T., Yamamoto, S., Miyashita, A., Tanaka, S., Sumita, T., and Asai, K., 2003, Sulfur-Doping of Rutile-Titanium Dioxide by Ion Implantation: Photocurrent Spectroscopy and First-Principles Band Calculation Studie, *J. Appl. Phys.*, 93(9), 5156–5160.
- Wang, N., Zhu, L., Huang, Y., She, Y., Yu, Y., and Tang, H., 2009, Drastically Enhanced Visible-Light Photocatalytic Degradation of Colorless Aromatic Pollutants over TiO₂ via A Charge-Transfer-Complex Path: A Correlation between Chemical Structure and Degradation Rate of The Pollutants, *J. Catal.*, 266(2), 199–206.
- Wang, R., Wang, F., An, S., Song, J., and Zhang, Y., 2015, Y/Eu Co-Doped TiO₂: Synthesis and Photocatalytic Activities under UV-Light, *J. Rare Earths*, 33(2), 154–159.
- Wang, Z., Liu, X., Li, W., Wang, H., and Li, H., 2014, Enhancing The Photocatalytic Degradation of Salicylic Acid by Using Molecular Imprinted S-Doped TiO₂ under Simulated Solar Light, *Ceram. Int.*, 40(6), 8863–8867.
- Xing, Z., Li, Z., Wu, X., Wang, G., and Zhou, W., 2016, In-Situ S-Doped Porous Anatase TiO₂ Nanopillars for High-Efficient Visible-Light Photocatalytic Hydrogen Evolution, *Int. J. Hydrog. Energy*, 41(3), 1535–1541.
- Xu, Y., and Langford, C. H., 1997, Photoactivity of Titanium Dioxide Supported on MCM41, Zeolite X, and Zeolite Y, *J. Phys. Chem. B*, 101(16), 3115–3121.
- Yalçın, Y., Kılıç, M., and Çınar, Z., 2010, The Role of Non-Metal Doping in TiO₂ Photocatalysis, *J. Adv. Oxid. Technol.*, 13(3).

- Yang, Y., Yu, Y., Wang, J., Zheng, W., dan Cao, Y., 2017, Doping and Transformation Mechanisms of Fe³⁺ Ions in Fe-doped TiO₂, *Cryst.Eng.Comm.*, 19(7), 1100-1105.
- Yuan, Q., Li, N., Geng, W., Chi, Y., and Li, X., 2012, Preparation of Magnetically Recoverable Fe₃O₄@SiO₂@Meso-TiO₂ Nanocomposites with Enhanced Photocatalytic Ability, *Mater. Res. Bull.*, 47(9), 2396–2402.
- Zhang, Q., Zhu, J., Wang, Y., Feng, J., Yan, W., and Xu, H., 2014, Electrochemical Assisted Photocatalytic Degradation of Salicylic Acid with Highly Ordered TiO₂ Nanotube Electrodes, *Appl. Surf. Sci.*, 308, 161–169.
- Zhang, X., Niu, J., Zhang, X., Xiao, R., Lu, M., and Cai, Z., 2017, Graphene oxide-SiO₂ Nanocomposite as The Adsorbent for Extraction and Preconcentration of Plant hormones for HPLC Analysis. *J. Chromatogr. B.*, 1046, 58 – 64.
- Zhu, M., Zhai, C., Qiu, L., Lu, C., Paton, A. S., Du, Y., and Goh, M. C., 2015, New Method to Synthesize S-Doped TiO₂ with Stable and Highly Efficient Photocatalytic Performance under Indoor Sunlight Irradiation, *ACS Sustain. Chem. Eng.*, 3(12), 3123–3129.
- Zielińska-Jurek, A., Bielan, Z., Dudziak, S., Wolak, I., Sobczak, Z., Klimczuk, T., Nowaczyk, G., and Hupka, J., 2017, Design And Application Of Magnetic Photocatalysts For Water Treatment. The Effect Of Particle Charge On Surface Functionality, *Catalysts*, 7(12).