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12

Citations (Scopus):

551

### Supervised MSc Theses

#	Thesis title	By	Date
1	fabricating transparent flexible polymer electrode using graphene carbon nano structures	Farimah Aminfar & Saeed Pourmahdian	October 2021
2	Synthesise of acrylic hydrogel sensors to sense humidity	Mahsa Hatami & Saeed Pourmahdian	September 2021
3	Synthesis and fabrication of water -based polyurethane conductive nanocomposite and its properties electromagnetic	Mohammad Moradi & Saeed Pourmahdian	September 2021
4	Biodegradable and environmentally friendly agricultural hydrogels based on urea	Ali Barahimi & Saeed Pourmahdian	October 2020
5	study on uv_curable polyurethane acrylate hydrogels	Zahra Rahmani & Saeed Pourmahdian	July 2019
6	Synthesis of NanoParticles PAAc Hydrogel as a Controlled Drug Delivery Carriers	Ladan Moallem & Saeed Pourmahdian	July 2019
7	Study on the effect of hydrophobicity in formation of magnonic crystals in nanocomposits	Roxana Moaref & Saeed Pourmahdian	February 2019
8	colloidal stability in water-based polyurethane systems	Mohammad Javad Nazari & Saeed Pourmahdian	January 2019
9	three dimensional magnonic crystal synthesis	Narges Elmjamili & Saeed Pourmahdian	February 2018

10	Augmentation of mechanical strength of inorganic shell of organic/inorganic hybrid nanoparticles made by emulsion polymerization and its application as thermal insulation	Sadegh Kazemidoustdemouchali & Saeed Pourmahdian	February 2017
11	Synthesis of PEG based hydrogels by UV radiation and study of their swelling an degradation behavior	Masoumeh Hasani & Saeed Pourmahdian	October 2016
12	Investigating on physical and mechanical properties of reinforced polyurethane foam composi	Sorour Kordani & Saeed Pourmahdian	October 2016
13	Study of Effective Parameters on Kinetic and Swelling Behavior in Synthesized hydrogels based on acrylamide and AMPS by Inverse Emulsion Copolymerization	Mohammadbagher Sobhanimatin & Saeed Pourmahdian	February 2014
14	Study of Effective Parameters on Gelation in Free Radical Copolymerization of gels based on acrylamide and AMPS	Sepideh Ranji & Saeed Pourmahdian	October 2013
15	Study of the Residance Time of Hydrogels with Nanoparticles on Their Surface Through Flowing Porous Media	Fatemeh Jalali Nezhad & Saeed Pourmahdian	October 2013
16	Study of binding of MMT-Nonoparticles coated on hydrogels used in enhanced oil recovery by polymer chains	Mohammad Vahabiyan & Saeed Pourmahdian	July 2013
17	Synthesis of poly (vinyl alcohol) hydrogel nanoparticles	Sohela Nahi & Saeed Pourmahdian	November 2012
18	Study of patterning of hydrogel nanoparticle on calcium carbonate substrate for enhanced oil recovery	Hossein Adelnia & Saeed Pourmahdian	October 2012
19	Synthesis polymeric hydrogel basd on inverse pickering polymerization using nano particles	Samira Abdolalbaghi & Saeed Pourmahdian	November 2011
20	Study of effective parameters on gelation in free radical copolymerization of divinyl monomers	Sahar Qavi & Saeed Pourmahdian	October 2011
21	Study of thermal properties of hydrogels and their improvment using nanoparticle	Mohammadreza Khabazian Pour & Saeed Pourmahdian	October 2011
22	study on the main parameters controlling particle size distribution of nano particle of polystyrene made by miniemulsion polymerization in order to use in template polymerization	Sara Maleki Esfandabadi & Saeed Pourmahdian	February 2011
23	synthesis of permeable nano silica - based coating by sol - gel method in order to adsorb toxic gases	Zohre Taherkhani & Saeed Pourmahdian	February 2011
24	synthesis of organic - inorganic core- shell nano particles using miniemulsion polymerization	Amir Saeid Pakdel & Saeed Pourmahdian	October 2010
25	evaluation of styrenic nano- templates using for nano wires	Sepehr Mastour Tehrani & Saeed Pourmahdian	October 2010
26	Production of styrene-based template nano particles in order to use as Zn-Catalyst support for propylene polymerization	Arsia Afshar Taromi & Saeed Pourmahdian	September 2009
27	Study of the effective parameters on PP particle morphology made by Ziegler-Natta catalists supported by nano silica in slurry process	Babak Eshragh & Saeed Pourmahdian	February 2009
28	Influence of porosity of spherical Ziegler-Natta catalyst support on yield of polymerization of propylene in slurry phase	Ebrahim Jalali Dil & Saeed Pourmahdian	November 2008
29	SYNTHESIS OF UV CURABLE ACRYLATE - TERMINATED OLIGOESTER DERIVED FORM PET WASTE	Ehsan Mokhtari & Saeed Pourmahdian	September 2008
30	STUDY ON THE POLYMERIZATION OF PROPYLENE USING SPHERICAL CATALYST	Majid Monji & Saeed Pourmahdian	October 2007

31	SYNTHESIS OF UNSATURATED POLYESTER RESIN FROM POSTCONSUMER PET	Sina Chaeichian & Saeed Pourmahdian	March 2007
32	STUDY ON THE EFFECT OF PREPOLYMERIZATION PARAMETERS ON CATALYST PERFORMANCE IN POLYPROPYLENE POLYMERIZATION	Gholamreza Pircheraghi & Saeed Pourmahdian	September 2006

## Journal Papers

### Portal Records

- 1 Roxana Moaref, Saeed Pourmahdian, Farzad Zahedi, Mohammad Mehdi Tehrani, "Synthesis and characterization of nearly monodisperse superparamagnetic (Fe<sub>3</sub>O<sub>4</sub>/ Poly(methyl methacrylate))-SiO<sub>2</sub>", POLYMERS & POLYMER COMPOSITES, April 2022 Vol. 30, Num. 1, Page 1-12, April 2022,
- 2 Mansoor Sheikhzadeh, Saeed Pourmahdian, "A Multipore Model for Heterogeneous Catalytic Polymerization: Structure-Performance Relationships", MACROMOLECULAR REACTION ENGINEERING, September 2021 Vol. 2021, Num. 6, Page 1-44, September 2021,
- 3 Mohammadbagher Sobhanimatin, Saeed Pourmahdian, Mohammad Mehdi Tehrani, "Colorimetric monitoring of humidity by opal photonic hydrogel", POLYMER TESTING, June 2021 Vol. 98, Num. 106999, Page 1-6, June 2021,
- 4 Mohammadbagher Sobhanimatin, Saeed Pourmahdian, Mohammad Mehdi Tehrani, "Fast inverse opal humidity sensor based on acrylamide/AMPS hydrogel", Materialstoday Communications, March 2021 Vol. 26, Num. 101997, Page 1-7, March 2021,
- 5 Ali Safinejad, Saeed Pourmahdian, Behzad Shirkavand Hadavand, "Emulsifier-free emulsion polymerization of acrylonitrile-butadiene-carboxylic acid monomers:", JOURNAL OF DISPERSION SCIENCE AND TECHNOLOGY, January 2020 Vol. 45, Num. 2, Page 157-167, January 2020,
- 6 Parisa Salarizadeh, Mehran Javanbakht, Saeed Pourmahdian, Maryam Sabooni Asre Hazer, Khadijeh Hooshiari, Mohammad Bagheraskari, "Novel proton exchange membranes based on proton conductive sulfonated PAMPS/PSSA-TiO<sub>2</sub> hybrid nanoparticles and sulfonated poly (ether ether ketone) for PEMFC", INTERNATIONAL JOURNAL OF HYDROGEN ENERGY, January 2019 Vol. 44, Num. 5, Page 3099-3114, January 2019,
- 7 Ali Safinejad, Saeed Pourmahdian, Behzad Shirkavand, "A robust computational method based on the thermodynamic approach for determining monomer partitioning in emulsion polymerization systems", CANADIAN JOURNAL OF CHEMICAL ENGINEERING, November 2018 Vol. 97, Num. 51, Page 1694-1707, November 2018,
- 8 Parisa Salarizadeh, Mehran Javanbakht, Saeed Pourmahdian, "Enhancing the performance of SPEEK polymer electrolyte membranes using functionalized TiO<sub>2</sub> nanoparticles with proton hopping sites", RSC Advances, January 2017 Vol. 7, Num. 1, Page 8303-8314, January 2017,
- 9 Parisa Salarizadeh, Mehran Javanbakht, Saeed Pourmahdian, Ahmad Bagheri, Hosin Beydaghi, Morteza Enhessari, "Surface modification of Fe<sub>2</sub>TiO<sub>5</sub> nanoparticles by silane coupling agent: Synthesis and application in proton exchange composite membranes", JOURNAL OF COLLOID AND INTERFACE SCIENCE, December 2016 Vol. 472, Num. 0, Page 135-144, December 2016,
- 10 Zahra Azizi, M.M> Tehrani, S.M. Hamidi, H. Vakili, Saeed Pourmahdian, "Thermoelastic-tunable magnetic response of BiFeO<sub>3</sub> thin film on colloidal photonic crystal substrate fabricated by pulsed laser deposition", PHYSICA STATUS SOLIDI A-APPLICATIONS AND MATERIALS SCIENCE, November 2016 Vol. 1, Num. 1, Page 135-144, November 2016,
- 11 H. Vakili, Saeed Pourmahdian, B. Shirkavand, Zahra Azizi, M.M> Tehrani, "Thermal tuning the reversible optical band gap of self-assembled polystyrene photonic crystals", PHOTONICS AND NANOSTRUCTURES-FUNDAMENTALS AND APPLICATIONS, October 2016 Vol. 22, Num. 1, Page 40-45, October 2016,
- 12 Parisa Salarizadeh, Mehran Javanbakht, Saeed Pourmahdian, Hosin Beydaghi, "Influence of amine-functionalized iron titanate as filler for improving conductivity and electrochemical properties of SPEEK nanocomposite membranes", CHEMICAL ENGINEERING JOURNAL, May 2016 Vol. 299, Num. 1, Page 320-331, May 2016,
- 13 Mohammadbagher Sobhanimatin, Saeed Pourmahdian, "Study on the inverse emulsion copolymerization of microgels based on acrylamide/2?acrylamido?2?methylpropane sulfonic acid", IRANIAN POLYMER JOURNAL, April 2016 Vol. 1, Num. 1, Page 1-10, April 2016,

- 14 Sasan Talebnezhad, Saeed Pourmahdian, "MUTI-WALLED CABON NANOTUBES AS A LIGAND IN NICKEL ALPHA-DIIMINE BASED ETHYLENE POLYMERIZATION", CHINESE JOURNAL OF POLYMER SCIENCE, October 2015 Vol. 33, Num. 10, Page 1389-1403, October 2015,
- 15 Mehran Javanbakht, Parisa Salarizadeh, Saeed Pourmahdian, "Fabrication and physico-chemical properties of iron titanate nanoparticles based sulfonated poly (ether ether ketone) membrane for proton exchange membrane fuel cell application", SOLID STATE IONICS, April 2015 Vol. 281, Num. 2, Page 12-20, April 2015,
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- 19 Samira Abdolbaghi, Saeed Pourmahdian, Younes Saadat Gharebagh, "Preparation of poly (acrylamide)/nanoclay organic-inorganic hybrid nanoparticles with average size of? 250 nm via inverse Pickering emulsion polymerization", COLLOID AND POLYMER SCIENCE, January 2014 Vol. 292, Num. 5, Page 1091-1097, January 2014,
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- 21 Amir Jangizehi, Saeed Pourmahdian, Payam Semsarilar, Mohammad Ali Etmnani Esfahani, Abdolkamal Dordinejad Kor, Gholamreza Pircheraghi, "use of poly urethane foam condensation polymerization in designing a brake system for a chemical automotive", , October 2013 Vol. 12, Num. 67, Page 39-45, October 2013,
- 22 Hossein Adelnia, Saeed Pourmahdian, "Soap-free emulsion polymerization of poly (methyl methacrylate-co-butyl acrylate): effects of anionic comonomers and methanol on the different characteristics of the latexes", JOURNAL OF COLLOID AND INTERFACE SCIENCE, September 2013 Vol. 292, Num. 1, Page 197-205, September 2013,
- 23 Seyamack Jafari, Alireza Khosravi, Kamaladin Gharanjig, Siamak Moradian, Saeed Pourmahdian, "A novel utilisation of principal component analysis to optimise sorption isotherms and determine diffusion coefficients of five naphthalimide disperse dyes on polyester fibres", CANADIAN JOURNAL OF CHEMICAL ENGINEERING, June 2013 Vol. 3, Num. 92, Page 553-562, June 2013,
- 24 Vahid Karimkhani, Faramarz Afshar Taromi, Saeed Pourmahdian, Florian J. Stadler, "Revisiting Long-chain Branch Formation Mechanism in Metallocene Catalyzed Polyethylenes", Polymer Chemistry, April 2013 Vol. 4, Num. 13, Page 3774-3790, April 2013,
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- 27 Mohammad Vatankhah Varnoosfaderani, Saeed Pourmahdian, Faramarz Afshar Taromi, "High Performance Bulky alpha-Diimine Nickel(II) Catalysts for Ethylene Polymerization", Iranian Polymer Journal, September 2011 Vol. 20, Num. 11, Page 897-912, September 2011,
- 28 Manouchehr Khorasani, Faramarz Afshar Taromi, Saeed Pourmahdian, "Latex Dispersability Index", Journal of Applied Polymerscience, August 2010 Vol. 1180, Num. 2, Page 2336-2341, August 2010,
- 29 Manouchehr Khorasani, Faramarz Afshar Taromi, Seyed Mohsen Mohseni, Saeed Pourmahdian, "The Role of Auxiliary Monomers and Emulsifiers on Wet Scrub Resistance of Various Latex Paints at Different Pigment Volume Concentrations", , September 2009 Vol. , Num. 113, Page 0-0, September 2009,
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- 32 Miaad Ganbari, Saeed Pourmahdian, "calculation of kinetic parameters and active sites concentration", , December 2008 Vol. 0, Num. 3, Page 0-0, December 2008,
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- 36 Masoud Jamshidi, Faramarz Afshar Taromi, Naser Mohammadi, Saeed Pourmahdian, "Study on cord/rubber interface at elevated temperatures by H-pull test method", , August 2005 Vol. , Num. 249, Page 0-0, August 2005,
- 37 Abolfazl Kiashemshaki, [en-name N/A], [en-name N/A], Saeed Pourmahdian, "Reactor modeling of gas-phase polymerization of ethylene", , November 2004 Vol. , Num. 27, Page 0-0, November 2004,
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## Conference Papers

### Portal Records

- 1 Parinaz Nezakati, Saeed Pourmahdian, Reza Khorasani, "Synthesis and characterization of solution copolymerized Acrylamide-co-Acrylic acid hydrogels", The 9th International Chemical Engineering Congress & Exhibition (IChEC 2015), December 2015
- 2 N. Shohani, Saeed Pourmahdian, B. Shirkavand, "Synthesis and surface modification of organic-inorganic hybrid particles of polystyrene silica as thermal insulator coatings", The 6th International Color & Coating Congress, November 2015
- 3 Zahra Azizi, M.M> Tehranchi, H. Vakili, Saeed Pourmahdian, B. Shirkavand, S.M. Hamidi, "Preparation and optical characterization of magnetic BiFeO<sub>3</sub> film on colloidal photonic crystals", The 6th International Color & Coating Congress, November 2015
- 4 H. Vakili, Saeed Pourmahdian, B. Shirkavand, M.M> Tehranchi, "Optimization of emulsion polymerization of self-assembled colloidal crystals", The 6th International Color & Coating Congress, November 2015
- 5 M. Ghafoori, Saeed Pourmahdian, M.J. Sotoudeh Kheirabadi, Amin Amini, "Modification method of GAP binder through copolymerization by PPG", The 6th International Color & Coating Congress, November 2015
- 6 Vahid Karimkhani, Faramarz Afshar Taromi, Saeed Pourmahdian, Fatemeh Goharpey, Tahmine Mahmoudi, Kihyun Kim, Taihyun Chang, Il Kim, Florian Stadler, "Rheology of Denritic polyethylene nanoparticles synthesized with chain walking  $\alpha$ -diimine Pd catalysts", polymer processing society, PPS 2011, November 2012

- 7 Mohammad Vatankhah Varoosfaderani, Saeed Pourmahdian, Faramarz Afshar Taromi, Saud Hashmi, Amin Ghavaminejad, "New strategy for Attachment of a-diimine nickel(II) catalysts on support for ethylene polymerization with controlled morphology ", 10th international seminar on polymer science and Technology, October 2012
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- 11 Saeed Pourmahdian, Amir Rouhi Sefat, Mohammad Vatankhah Varoosfaderani, "High Active Ziegler–Natta Catalyst On Spherical Magnesium Chloride for Propylene Polymerization ", pps 2011 Asia/Australia regional meeting, November 2011
- 12 Amir Rouhi Sefat, Saeed Pourmahdian, Mohammad Vatankhah Varoosfaderani, "Ethylene polymerization using MgCl<sub>2</sub>/SiO<sub>2</sub> supported Ziegler Natta catalyst ", the 27th World Congress of the Polymer Processing Society (PPS, May 2011
- 13 Il Kim, Faramarz Afshar Taromi, Saeed Pourmahdian, Fatemeh Goharpey, Vahid Karimkhani, "synthesis of dendritic polyethylene nanoparticles with modulated  $\beta$ -diimine Pd(II) catalysts ", the polymer society of korea, spring meeting and conference, April 2011
- 14 Amir Saeid Pakdel, Hormoz Eslami, Saeed Pourmahdian, "A new single step synthesis method for hybrid polymer / Inorganic nanoparticle Latexes ", Polymer Blend Symposium, March 2011
- 15 Amir Saeid Pakdel, Hormoz Eslami, Saeed Pourmahdian, "synthesis of hybrid nanostructure of polymeric latex in the presence of inorganic nanopolymeric latexes as surfactant ", Australasian Polymer Symposium, February 2011
- 16 Amir Rouhi Sefat, Mohammad Vatankhah Varoosfaderani, Saeed Pourmahdian, "Preparation of ZN-silica based catalyst for Ethylene polymerization ", 1st national conference of nano science and technology, February 2011
- 17 Zohre Taherkhani, Saeed Pourmahdian, Seyed Mohsen Mohseni, "organic templating to synthesis of nanoporous silica/alpha alumina composite membranes for gas separation ", International congress on nanoscience and nanotechnology, November 2010
- 18 Sepehr Mastour Tehrani, Hormoz Eslami, Saeed Pourmahdian, "Asymmetric nano-particles assembly in photonic crystals ", International congress on nanoscience and nanotechnology, November 2010
- 19 Zahra Sadredini Ahmadiani, Saeed Pourmahdian, Seyed Mohsen Mohseni, Sahar Qavi, "Synthesis of mesoporous catalyst support silica particles by sol-gel process ", the 6th international chemical engineering congress, November 2010
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- 21 Zohre Taherkhani, Saeed Pourmahdian, Seyed Mohsen Mohseni, "Synthesis and characterization of supported gamma alumina membranes for gas separation ", 13th Iranian National Chemical engineering congress & 1st international regional chemical and petroleum, October 2010
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- 39 Saeed Pourmahdian, Amir Rouhi Sefat, Mohammad Vatankhah Varnoosfaderani, "Ethylene polymerization using MgCl<sub>2</sub>/SiO<sub>2</sub>-supported Ziegler Natta catalyst " , 9th international seminar on polymer science and technology, October 2008
- 40 Ehsan Mokhtari, Saeed Pourmahdian, Faramarz Afshar Taromi, "Synthesis of radiation curable resin derived from poly ethylene terphthalate PET wastes " , , October 2008
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## Taught Courses

#	Course title	Description	Headlines	Date
1	Mass Transfer	Introduction to 3rd transport phenomenon (Mass Transfer)		Spring 2022
2	Advanced Polymer Synthesis & Catalytic Systems	new methods of polymerization and studying catalyst systems used to produce polyethylene and polypropylene plastics family		Spring 2022
3	Colloids & Interfaces in Coatings	study on colloidal systems, interface phenomena, and surface active agents		Spring 2022
4	Mass Transfer	Introduction to 3rd transport phenomenon (Mass Transfer)		Fall 2021
5	Colloids & Interfaces in Coatings	study on colloidal systems, interface phenomena, and surface active agents		Spring 2021
6	Mass Transfer	Introduction to 3rd transport phenomenon (Mass Transfer)		Spring 2021
7	Advanced Polymer Synthesis & Catalytic Systems	new methods of polymerization and studying catalyst systems used to produce polyethylene and polypropylene plastics family		Spring 2021

## Inventions/Patents

#	Invention title	Reg. number	Country	contributers	Reg. date	Exp. date
1	Flexible colloidal crystal heterostructure	US2018/0339281 A1			2018/11/1	2038/01/19
2	Synthesis of 2- acryl amide 2- methyl propane sulfonic acid (AMPS) hydrogel using emulsion polymerization	86546			2015/08/1	2035/01/1