

Curriculum Vitae of Prof. Nikhil K. Singha (M.Tech., Ph.D.)

Professor Nikhil K. Singha, FRSC

Indian Institute of Technology
Rubber Technology Centre
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Research Interest:

- Tailor-made functional polymers and elastomers via controlled polymerization and “Click” reactions.
- Smart self-healing, self-cleaning, super-hydrophobic, Shape-memory polymer materials
- Block, graft, brush-like, multi-armed star copolymers, bio-active functional polymers and their composites based on polystyrene, polyacrylates and polyurethanes.
- Stimuli-responsive polymers, polyzwitterionic gels for bio-applications.
- Green & sustainable materials and process ((Ionic liquid as additive & solvent synthesis of polymers / bio-elastomers from bio-feedstock, like glycopolymer, polymyrcene etc.)

Education:

B.Sc.: Chemistry (Main) University of Calcutta, India
M.Sc.: Chemistry (Organic), Indian Institute of Technology (IIT), Kharagpur, India, 1988
M.Tech.: Rubber Technology Centre, IIT, Kharagpur, India, 1990
Ph.D.: IIT Bombay, India, **1996**

Awards / fellowships & members of scientific organization:

Fellow of Royal Society Chemistry (FRSC), Awarded **Prof. M. Santappa Award** (2014) by Society of Polymer Science India (SPSI), **MRSI Medal** by Material Research Society of India (MRSI) (2013), **Fulbright Senior Fellowship** (2013), **Fifth Polymer Foundation Award** by Prof. SukumarMaiti Polymer Award Foundation (2012), Visiting Scientist in University of Sheffield, UK with fellowship from **Royal Society**, London, UK (2006), in Institute for Polymer Research, Germany with **INSA-DFG & DAAD** fellowship (2008 & 2011) and in EPFL, Switzerland, Fellowship from **Swiss Federal Institute** (2009).

Fellow of Royal Society Chemistry (**FRSC**), Life member of Materials Research Society of India (**MRSI**), Society of Polymer science of India (**SPSI**) & Chemical Research Society of India (**CRSI**), Affiliated member of ACS (1997-2009), Member of ACS, Rubber Division (since 2009). Member of ACS Polymer Chemistry (2012),

Professional Experience:

October, 2016 to September, 2019, Chair, Rubber Technology Centre, IIT Kharagpur
Feb, 2015- till date: Professor in Indian Institute of Technology, Kharagpur, India
May, 2010- Jan. 2015: Associate Professor in Indian Institute of Technology, Kharagpur, India
August, 2013 to April, 2014; **Fulbright Senior Fellow**, University of Tennessee, Knoxville, USA
2003- May, 2010: Assistant Professor Indian Institute of Technology, Kharagpur, India
2001-2002: Research Scientist in Netherlands Organization Applied & Scientific Research, Eindhoven, NL
1999-2000: Post Doc.Fellow; Dutch Polymer Institute, Eindhoven University of Technology, NL
1996-1998: Post Doctoral fellow in DSM Research, Geleen, The Netherlands
Supervisor: Ph.D. students; 22 (Completed), (10 under progress) & M. Tech students (~ 50)

Editor & Member of the Editorial Board:

Associate Editor in Frontiers in Chemistry (Polymer Section) (**IF 5.12**) Published from EPFL, Switzerland.

Guest-Editor of Special Issue, Functional Elastomers and their Composites in the journal **Functional Materials Composites**, Published by Springer **Nature**.

Editorial Board member of

European Polymer Journal (IF: 4.45), Elsevier Publications; **SPE Polymers**, Wiley Online Publications;

International Conferences & Workshop organized as Convener:

- International Webinar entitled “**Functional Polymer Gels; Design and its Applications**” (**FPGDA 2021**) held on 17th June, 2021 via online under DST-DFG collaborative program with University of Aachen, Germany.
- International Workshop under the SPARC project (**with University of Melbourne**) on “**Green and Sustainability in Polymers and Functional Materials**” (**GSPFM-2020**) held in February 7-8, 2020 in IIT Kharagpur,
- Convenor of International Conference “**Advances in Polymer Science and Rubber Technology (APSRT-2019); Vision 2030**” held in IIT Kharagpur during September 24-27, 2019 (**attended by > 250 delegates from 10 different countries**),
- **International Year of Chemistry (IYC)** & National Symposium on **Frontiers in Polymer Chemistry**, November 29-30, 2011 in IIT Kharagpur,
- Convener of International Conference on “**Advances in Polymer Science and Rubber Technology; Challenges towards 2020 and beyond**” held in IIT, Kharagpur, India in March 3-5, 2011,
- As Co-Convenor, International Workshop on “**Materials for Regeneration & Therapy of the Eye**” held in July 25-29, 2011 in Sheffield, UK under Indo-UK Science Network Program
- International Workshop on “**Recent Advances in Polymeric and Rubbery Materials**” in January 15-19, 2007, in IIT Kharagpur.

Reviewer of PhD thesis; Technology University of Dresden, Germany, IISc Bangalore, IIT Bombay, IIT Madras, IIT Guwahati, IIT Patna, NCL Pune, IISER Mohali, Jadavpur University, University of Calcutta, Central University of Hyderabad, University of Trivandrum, University of Guwahati, Tezpur University, Cochin University,

Referee of the International Peer-Reviewed Major Journals: Journal of American Chemical Society, Macromolecules, Biomacromolecules, Langmuir, ACS Applied Materials & Interfaces, ACS Applied Bio Materials, ACS Applied Polymer Materials, Chemistry of Materials, ACS Sustainable Chemistry and Engineering,

Journal of Material Chemistry (A & B), Chemical Communications, Polymer Chemistry, Chemical Soc. Rev., Biomaterials Science

European Polymer Journal, Chemical Engineering Journal, Progress in Organic Coatings, Acta Biomaterialia, Polymer

Macromolecular Materials Engineering, Macromolecular Chemistry Physics, Macromolecular Rapid Communication, Journal of Material Science,

Invited Seminars/Lectures: Delivered several invited talks/lectures in different Institutes as well as in different conferences. Few of them are as follow;

- August 2019, Invited talk on “**A New Class of Elastomers from Renewable Bioresources**” in the International Conference on “Sustainable Polymers” held in IIT-Guwahati.
- July 2019, Invited talk on ”**Click” Chemistry in Polymer Science; Opportunities & Challenges**” in the International Symposium held in IISER Kolkata.
- June 2019, Invited talk on “**Functional Polymers via Controlled Radical Polymerization and “Click” Chemistry**” in the Symposium “Advances in Polymer Science” NCL, Pune
- November, 2018 Keynote lecture on "Self-healing Polymers; An emerging Technology in Materials Science" in the 56th National Metallurgists' Day (NMD) and 72nd Annual Technical Meeting (ATM) organized by the Indian Institute of Metals in association with Tata Steel.
- Delivered invited talk in **MACRO-2018**, the International Conference organized by Society of Polymer Science India (SPSI) in December, 2018 organized by IISER, Pune and NCL, Pune.
- In December, 2018 delivered invited lectures in **University of Kyoto, Toyota Institute of Technology, Nagoya, Gifu University, Shizuoka University, Japan**.
- In June 2018, delivered Invited lectures in **University of Aachen, Germany, Institute for Polymer Research (IPF), Dresden, Germany and in Lanxess, Germany**.
- In July 2018, invited talk in **University of Melbourne, Royal Melbourne Institute of Technology (RMIT) Australia**.
- In January 13, 2017, invited lecture on "Tailor-made Functional Polymer via Controlled Radical Polymerization; Synthesis, properties and application" in University of Hyderabad.
- Invited talk on "Tailor-made Functional Polymers via Controlled Radical Polymerization" in IICT, Hyderabad in January 12, 2017.
- July 5, 2017 delivered Invited talk on "Functional polymers, synthesis and applications" in University of Manchester, UK.
- **May, 2013;** Invited talk in the International Conference, 3rd Polymer Congress of the Federation of Asian Polymer Societies (FAPS) FAPS-MACRO-2013] held in IISC Bangalore.
- **October, 2013;** Invited talks in University of Akron, USA, University of Tennessee, Knoxville, USA, Oak Ridge National Lab, USA.
- **December, 2012;** Invited talk in Indian Institute for Space Technology (IIST), Trivandrum, Kerala
- **June, 2012;** Invited talk in IUPAC Polymer Congress held in Virginia Institute of Technology, Virginia, USA, Clarke-Atlanta University, Atlanta, USA,
- **June, 2009;** Visit and invited talk in EPFL, Switzerland and in ETH Zurich, Switzerland.

Publications/Patents

Peer-reviewed journals 177, Patents 17 (incl. US, European patents), Book 2 (Smithers Rapra), Book Chapter 10 and Conference Proceedings 88.. H-index is 40, i-10 index 111 and citations index is 6977 (by Google Scholar).

Publications in major journals like (with Impact Factor, IF); Progress in polymer Science (IF 24.50), Chemical Eng. Journal (IF 10.62), Green Chemistry (IF 9.45), ACS Applied Materials & Interfaces (8.34), Macromolecules (IF 6.00), Chemical Communications (IF 5.96), Materials Science Eng. C (IF 5.88), Journal of Materials Chemistry B (IF 5.24), Polymer Chemistry (IF 4.96), Polymer (IF 4.23), European Polymer Journal (IF 3.86),

Full List of Publications/Patents of Prof. Nikhil K. Singha (M.Tech., Ph.D.)

Peer-reviewed journals 177, (* indicates corresponding author), Patent 17 (one US, one European and fifteen Indian patents), Book 2 (Smithers Rapra), Book Chapter 11, H-index is 40, i-10 index 112 and citations index is 7075 (by Google Scholar).

1	Kalita, Uddhab; Samanta, Sarthik; Banerjee, Sovan Lal; Das, Narayan C.; Singha, Nikhil K.* (2021): Biobased Thermoplastic Elastomer Based on an SMS Triblock Copolymer Prepared Via RAFT Polymerization in Aqueous Medium, Macromolecules, 54(3), 1478-1488.
2	Sarkar, Shrabana; Banerjee, Sovan Lal; Singha, Nikhil K.* (2021): Dual-Responsive Self-Healable Carboxylated Acrylonitrile Butadiene Rubber Based on Dynamic Diels-Alder "Click Chemistry" and Disulfide Metathesis Reaction, Macromolecular Materials and Engineering, 306(3), 2000626.
3	Behera, Prasanta Kumar; Raut, Sagar Kumar; Mondal, Prantik; Sarkar, Shrabana; Singha, Nikhil K.* (2021): Self-Healable Polyurethane Elastomer Based on Dual Dynamic Covalent Chemistry Using Diels-Alder "Click" and Disulfide Metathesis Reactions, ACS Applied Polymer Materials, 3(2), 847-856.
4	Saha P., Ganguly R. , Li X. , Das R. , Singha N. K.* , Pich A. (2021): Zwitterionic Nanogels and Microgels: An Overview on Their Synthesis and Applications, Macromolecular Rapid Communications, 2100112 (1-23).
5	Mondal, Prantik; Behera, Prasanta Kumar; Singha, Nikhil K* (2020): Macromolecular Engineering in Functional Polymers via 'Click Chemistry' Using Triazolinedione Derivatives, Progress in Polymer Science, 113, 101343.
6	Mirchandania, Girish; Samanta, Sarthik; Raghavendra, B. Venugopal; Chaudhary, Sumit; Baustkarb, Sachin; Shyamroy, Subarna; Singha, Nikhil K.* (2021): Self-stratifying amphiphobic coating based on functional polyacrylates, Progress in Organic Coatings, 152, 106106.
7	Saha, Pabitra; Palanisamy, Anand Raj; Santi, Marta; Ganguly, Ritabrata; Mondal, Somashree; Singha, Nikhil K.* ; Andrij Pich (2021): Thermoresponsive zwitterionic poly(phosphobetaine) microgels: Effect of macro-RAFT chain length and cross-linker molecular weight on their antifouling properties, Polym. Adv. Technol. 32; 2710-2726.
8	Ponnupandian, Siva; Mondal, Prantik; Becker, Thomas; Hoogenboom, Richard; Lowe, Andrew B; Singha, Nikhil K* (2021): Self-healing hydrophobic POSS-functionalized fluorinated copolymers via RAFT polymerization and dynamic Diels–Alder reaction, Polymer Chemistry, 12(6), 876-884.
9	Raut, Sagar K.; Behera, Prasanta K.; Pal, Tuhin S.; Mondal, Prantik; Naskar, Kinsuk; Singha, Nikhil K* (2021): Self-healable Hydrophobic Polymer Material having Urethane Linkages via Non-Isocyanate Route and Dynamic Diels-Alder 'Click' Reaction, Chemical Communications, 57, 1149-1152.
10	Mondal, Prantik; Jana, Gourhari; Behera, Prasanta Kumar; Chattaraj, Pratim K; Singha, Nikhil K* (2020): Fast "ES-Click" Reaction Involving Furfuryl and Triazolinedione Functionalities toward Designing a Healable Polymethacrylate, Macromolecules, 53(19), 8313-8323.
11	Saha, Pabitra; Santi, Marta; Emondts, Meike; Roth, Hannah; Rahimi, Khosrow; Grosskurth, Johannes; Ganguly, Ritabrata; Wessling, Matthias; Singha, Nikhil K*;

	Pich, Andrij*, (2020): Stimuli-Responsive Zwitterionic Core-Shell Microgels for Antifouling Surface Coatings, ACS Applied Materials & Interfaces , 12 (52), 58223-58238.
12	Ramasamy, Natarajan; Padmakumar, Amrishkumar; Haralur, Gurulingamurthy; Singha, Nikhil K* . (2021): Structure-property relationship of highly crosslinked rubber-iron oxide composite based on chloroprene rubber (CR) as well as on nitrile rubber (NBR); a comparative study using different models, Journal of Macromolecular Science, Part A: Pure and Applied Chemistry , 58 (1), 59-68.
13	Sovan Lal Banerjee, Pabitra Saha, Ritabrata Ganguly, Koushik Bhattacharya, Uddhab Kalita, AndrijPich, Nikhil K. Singha* (2020): A Dual Thermoresponsive and Antifouling Zwitterionic Microgel with pH Triggered Fluorescent “On-Off” Core, Journal of Colloid and Interface Science , 589 , 110-126.
14	Bhattacharjee, M., Pramanik, N.B., Singha, N.K. * , Haloi, Dhruba J. (2020): Recent advances in RDRP-modified chitosan: A review of its synthesis, properties and applications, Polymer Chemistry , 11 , 42, 6718-6738.
15	Banerjee, S.L.; Das, S.; Bhattacharya, K.; Kundu, M.;Mandal, M. Singha, N.K.* (2021):Ag NPs incorporated self-healable thermoresponsive hydrogel using precise structural “Interlocking” complex of polyelectrolyte BCPs: A potential new wound healing material, Chemical Engineering Journal , Volume 405, 1 February 2021, Article number 126436 .
16	Raut, Sagar Kumar; Mondal, Prantik; Parameswaran, Bhavya; Sarkar, Shrabana; Dey, Pranab; Gilbert, Rupesh; Bhadra, Sambhu; Naskar, Kinsuk; Nair, Sujith; Singha, Nikhil K* (2020): Self-healable Ultrahydrophobic Modified Bio-based Elastomer Using Dynamic Diels-Alder ‘Click Chemistry’, European Polymer Journal , 146 , 110204.
17	Bhattacharya, Koushik; Banerjee, Sovan Lal; Das, Subhayan; Mandal, Mahitosh; Singha, Nikhil Kumar* (2020); Glycopolymer Ornamented Octa-arm POSS Based Organic-Inorganic Hybrid Star Block Copolymer as a Lectin Binding Ligand, Materials Science and Engineering C., Accepted (Published on line) , 116 , 111210.
18	Saha, Chinmoy; Behera, Prasanta K.; Raut, Sagar Kumar; Singha, Nikhil K.* (2020): Polyurethane–POSS hybrid materials: by solution blending and in-situ polymerization processes, Bulletin of Materials Science , 43 ,(1) 190.
19	Mondal P.; Behera, P.K; Voit, B. Boheme*; Singha, Nikhil K.* (2020): Tailor-made Functional Polymethacrylates with Dual Characteristics of Self-healing and Shape-memory based on Dynamic Covalent Chemistry, Macromolecular Materials and Engineering , 305 , 2000142.
20	Banerjee, SL; Samanta, S.; Sarkar, S; Singha, N. K.* (2020): A self-healable and antifouling hydrogel based on PDMS centered ABA tri-block copolymer polymersomes: a potential material for therapeutic contact lenses, Journal of Materials Chemistry B , 8 , 226-243.
21	Saha, C, Behera, P.K, Raut S.G. Singha, Nikhil K.* (2020): A Thermoplastic Polyurethane/Nanosilica Composite via Melt mixing process and Its Properties, Silicon , 13 (4), 1041-1049.
22	Siva, P.; Chakrabarty, A.; Mondal, P.; Hoogenboom, R.; Lowe, A.B.; Singha, Nikhil, K.* (2020): POSS and fluorine containing nanostructured block copolymer; Synthesis via RAFT polymerization and its application as hydrophobic coating material, European Polymer Journal , 131 , 109679.

23	Pal, S., Banerjee S, Kather M., SahaPabitra, Pich A, Singha Nikhil K* (2020): Dual Stimuli-Responsive Self-Assembly Behavior of a Tailor-made ABC-type Amphiphilic Tri-block Copolymer, <i>Journal of Polymer Science, Part A: Polymer Chemistry</i> , 58 , 843-851.
24	Gnanaseelan, M.; Kalita, U.; Janke, A.; Pionteck, J.; Voit, B. Singha, N. K. (2020): All methacrylate block copolymer/TiO ₂ nanocomposite via ATRP and <i>in-situ</i> sol-gel process, <i>Materials Today Communications</i> , 22 , 100728
25	Murugan, N.; Amrishkumar, P.; Nando, G. B.; Singha, N. K.* (2020): Thermoplastic elastomer blend based on EMA and NBR; optimization of process parameters, <i>Journal of Applied Polymer Science</i> , 137 (27), 48900.
26	Saha, P.; Santi, M.; Frenken, M.; Palanisamy, AR.; Ganguly, R.; and Singha, Nikhil K* , Pich, A* (2020): Dual-Temperature-Responsive Microgels from a Zwitterionic Functional Graft Copolymer with Superior Protein Repelling Property, <i>ACS Macro Letters</i> , 9 , 895-901
27	Kumar, ARSS and Singha, N. K.* . (2020): Reversible Addition-Fragmentation Chain Transfer (RAFT) Polymerization in Ionic Liquids: A Sustainable Process, <i>Advances in Sustainable Polymers</i> , 183-193 .
28	Samanta, S.; Banerjee, SL.; Ghosh, S.; Singha, N. K.* (2019): A Smart Polyacrylate Emulsion Based on a New ABC Type Triblock Copolymer via RAFT Mediated Surfactant-free Miniemulsion Polymerization: Its Multifunctional Properties, <i>ACS Applied Materials & Interfaces</i> , 11 , 47, 44722-44734.
29	Santha Kumar, ARRS; Singha, N. K.* (2019): RAFT polymerization of 2-hydroxyethyl methacrylate in a deep eutectic solvent, <i>Journal of Polymer Science, Part A: Polymer Chemistry</i> , 57 , 2281–2286.
30	Mondal, P.; Jana, G. ; Behera, P. K., Chattaraj, Pratim K; Singha, Nikhil K* (2019): A New Healable Polymer Material based on Ultrafast Diels-Alder ‘Click’ Chemistry using Triazolinedione and Fluorescent Anthracyl Derivatives; A Mechanistic Approach, <i>Polymer Chemistry</i> , 10 , 5070–5079.
31	Banerjee, Sovan Lal; Swift, Thomas; Hoskins, Richard; Rimmer, Stephen*; Singha, Nikhil K.* (2019): A muscle mimetic polyelectrolyte-nanoclay organic-inorganic hybrid hydrogel: its self-healing, shape-memory and actuation properties, <i>Journal of Materials Chemistry B: Materials for Biology and Medicine</i> , 7 , 1475-1493.
32	Ata, Souvik, Banerjee, Sovan Lal, Singha, Nikhil. K.* (2019): Self-assembly behavior of POSS based ABA type amphiphilic tri-block copolymer prepared via ATRP, <i>European Polymer Journal</i> , 118 , 10-16.
33	Saha, P., Kather, M. , Banerjee, S.L. , Singha, N.K*. , Pich, A*. (2019): Aqueous solution behavior of thermoresponsivepolyzwitterionicmicrogels based on poly(N-vinylcaprolactam) synthesized via RAFT precipitation polymerization, <i>European Polymer Journal</i> , 118 , 195-204.
34	Ghosh, S., Ganguly, S., Das, P., Singha, N. K. , Das, A.K., Das, N.C. (2019): Fabrication of Reduced Graphene Oxide/Silver Nanoparticles Decorated Conductive Cotton Fabric for High Performing Electromagnetic Interference Shielding and Antibacterial Application, <i>Fibers and Polymers</i> , 20 (6), 1161-1171.
35	Bhattacharya, Koushik; Banerjee, Sovan Lal; Das, Subhayan; Samanta, Sarthik; Mandal, Mahitosh; Singha, Nikhil Kumar* ; (2019): REDOX Responsive Fluorescence Active

	Glycopolymer Based Nanogel: A Potential Material for Targeted Anticancer Drug Delivery, <i>ACS Applied Bio Materials</i> , 2(6), 2587-2599.
36	Banerjee, Sovan Lal; Potluri, Prasad; Singha, Nikhil K.* ; (2019): Antimicrobial cotton fibre coated with UV cured colloidal natural rubber latex: A sustainable material, <i>Colloids and Surfaces, A: Physicochemical and Engineering Aspects</i> , 566, 176-187.
37	Mondal, Prantik; Raut, Sagar K. and Singha, Nikhil K.* ; (2018): Thermally Amendable Tailor-made Acrylate Copolymers via RAFT Polymerization and Ultrafast Alder-ene 'Click' Chemistry, <i>Journal of Polymer Science Part A: Polymer Chemistry</i> , 56(20), 2310-2318.
38	Santha Kumar, Arunjunai R. S.; Roy, Manta; Singha, Nikhil K.* , (2018): Effect of ionic liquids on the RAFT polymerization of butyl methacrylate, <i>European Polymer Journal</i> , 107, 294-302.
39	Banerjee, Sovan Lal; Bhattacharya, K., Samanta, S. and Singha, Nikhil K.* , (2018): Self-healable Antifouling Zwitterionic Hydrogel Based on Synergistic Photo-triggered Dynamic Disulfide Metathesis Reaction and Ionic Interaction, <i>ACS Applied Materials & Interfaces</i> , 10, 27391-27406.
40	Behera, Prasanta Kumar; Mondal, Prantik and Singha, Nikhil K.* , (2018): Self-Healable and Ultrahydrophobic Polyurethane-POSS Hybrids by Diels–Alder “Click” Reaction: A New Class of Coating Material, <i>Macromolecules</i> , 51(13), 4770-4781.
41	Behera, Prasanta Kumar; Mondal, Prantik and Singha, Nikhil K.* , (2018): Polyurethane by Ionic Liquid Crosslink; A New Class of Super Shape-Memory Like Polymer, <i>Polymer Chemistry</i> , 9, 4205-4217.
42	Mandal, P., Lal Banerjee, S., Bhattacharya, K., Singha, N.K.* , (2018): A superparamagnetic metallopolypolymer using tailor-made poly[2-(acetoacetoxy)ethyl methacrylate] bearing pendant β -keto ester functionality, <i>European Polymer Journal</i> , 103, 31-39.
43	Ghosh, Sabyasachi; Mondal, Subhadip; Ganguly, Sayan; Remanan, Sanjay; Singha, Nikhil, K ; Das, Narayan Ch. (2018): Carbon Nanostructures Based Mechanically Robust Conducting Cotton Fabric for Improved Electromagnetic Interference Shielding, <i>Fibers and Polymers</i> , 19, 5, 1064-1073.
44	Ghosh, S., Remanan, S., Mondal, S., Ganguly, S., Das, P., Singha, Nikhil K. , Das, N. C., (2018): An approach to prepare mechanically robust full IPN strengthened conductive cotton fabric for high strain tolerant electromagnetic interference shielding, <i>Chemical Engineering Journal</i> , 344, 138-154.
45	Banerjee, SovanLal; Hoskins, Richard; Swift, Thomas; Rimmer, Stephen; Singha, Nikhil K.* . (2018): A self-healable fluorescence active hydrogel based on ionic block copolymers prepared via ring opening polymerization and xanthate mediated RAFT polymerization, <i>Polymer Chemistry</i> , 9(10), 1190-1205.
46	Ghosh, S., Ganguly, S., Remanan, S., Mondal, S., Jana, S., Maji, P.K., Singha, Nikhil K. , Das, N.C. (2018): Ultra-light weight, water durable and flexible highly electrical conductive polyurethane foam for superior electromagnetic interference shielding materials, <i>Journal of Materials Science: Materials in Electronics</i> , 29 (12) 10177-10189.

47	Chakrabarty, A.; Ponnupandian, S.; Kang, Nam-Goo; Mays, Jimmy W.; Singha* Nikhil K. (2018): Designing Superhydrophobic Surface Based on Fluoropolymer–Silica Nanocomposite via RAFT-Mediated Polymerization-Induced Self-Assembly, <i>Journal of Polymer Science, Part A: Polymer Chemistry</i> , 56 (3), 266-275.
48	Suckow, M.; Mordvinkin, A.; Roy, M.; Singha, N. K. ; Heinrich, G.; Voit, B.; Saalwaechter, K.; Boehme, F. (2018): Tuning the Properties and Self-Healing Behavior of Ionically Modified Poly(isobutylene-co-isoprene) Rubber, <i>Macromolecules</i> , 51 (2), 468-479.
49	Mondal, Prantik; Behera, Prasanta K. and Singha, Nikhil K.* ; (2017):Self-healable thermo-reversible functional polymer via RAFT polymerization and ultrafast ‘click’ chemistry using triazolinedione derivative, <i>Chemical Communications</i> , 53 (62) 8715-8718.
50	Banerjee, SovanLal; Singha, Nikhil K.* ; (2017):A New Class of Dual Responsive Self-healable Hydrogels Based on Core Crosslinked Ionic Block Copolymer Micelle Prepared via RAFT Polymerization and Diels-Alder "click" chemistry, <i>Soft Matter</i> , 13 (47), 9024-9035.
51	Pramanik, NabenduB.;Mondal, Prantik; Mukherjee, Rabibrata; Singha, Nikhil K.* ; (2017): A new class of self-healable hydrophobic materials based on ABA triblock copolymer via RAFT polymerization and Diels-Alder “click chemistry”, <i>Polymer</i> , 119 , 195-205.
52	Suckow, M.; Roy, M.; Sahre, K.; Haeussler, L.; Singha, Nikhil K. ; Voit, B.; Boehme, F. (2017): Synthesis of polymeric ionic liquids with unidirectional chain topology by AB step growth polymerization, <i>Polymer</i> , 111 , 123-129.
53	Ata, Souvik; Basak, Shyam; Mal, Dipakranjan; Singha, Nikhil K* . (2017): Synthesis and self-assembly behavior of POSS tethered amphiphilic polymer based on poly(caprolactone) (PCL) grafted with poly(acrylic acid) (PAA) via ROP, ATRP, and CuAAC reaction, <i>Journal of Polymer Research</i> , 24 (2), 1-13.
54	Mandal, Prithviraj; Ponnupandian, Siva; Choudhury, Soumyadip.; Singha,Nikhil K.* (2017):Tuning Properties and Morphology in High Vinyl Content SBS Block Copolymer, A Thermoplastic Elastomer via Thiol-Ene Modification, <i>Rubber Chemistry and Technology</i> , 550-561 (2017).
55	Bhandari, Subhendu; Singha, Nikhil K. ; Khastgir, Dipak (2017): Synthesis of graphene-like ultrathin polyaniline and its post-polymerization coating on nanosilica leading towards superhydrophobicity of composites, <i>Chemical Engineering Journal</i> , 313 , 1302-1310.
56	Singha, Nikhil K*. ; Pramanik, Nabendu B.; Behera, Prasanta K.; Chakrabarty, Arindam; Mays, Jimmy W. (2016): Tailor-made thermoreversible functional polymer via RAFT polymerization in an ionic liquid: a remarkably fast polymerization process, <i>Green Chemistry</i> , 18 , 6115 - 6122.
57	Behara, Prasanta K.; Usha, K. M.; Guchhait, P. K.; Jehnichen, Dieter; Das, Amit; Voit, Brigitte; Singha, Nikhil K*. (2016): A Novel Ionomeric Polyurethane Elastomer Based on Ionic Liquid as Crosslinker, <i>RSC Advances</i> , 6 , 99404-99413.

58	Chakrabarty, Arindam; Ponnupandian, Siva; Naskar, Kinsuk; Singha, Nikhil K. * (2016): Nanoclay Stabilized Pickering Miniemulsion of Fluorinated Copolymer with Improved Hydrophobicity via RAFT Polymerization <i>RSC Advances</i> , 6 , 34987-34995.
59	Pramanik, Nabendu B. and Singha, Nikhil K. * (2016): Amphiphilic Functional Block Copolymer Bearing Reactive Furfuryl Group via RAFT Polymerization; Reversible Core Cross-linked Micelles via Diels-Alder "Click Reaction", <i>RSC Advances</i> , 6 , 2455-2463.
60	Ata, Souvik; Banerjee, SovanLal; Singha, Nikhil K. *. (2016): Polymer nano-hybrid material based on grapheme oxide/POSS via surface initiated atom transfer radical polymerization (SI-ATRP): Its application in specialty hydrogel system, <i>Polymer</i> , 103 , 46-56.
61	Ata, Souvik; Dhara, Palash; Mukherjee, Rabibrata; Singha, Nikhil K. * (2016): Thermally amendable and thermally stable thin film of POSS tethered Poly(methyl methacrylate) (PMMA) synthesized by ATRP, <i>European Polymer Journal</i> , 75 , 276-290.
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