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Publications

Author	Year	Title	Publication	DOI / Accession number	DOI länk
Liu, Wei; Andersson, John; Järlebark, Julia; Shaji, Amina; Sha, Jingjie; Dahlin, Andreas	2025	The Electric Field in Solid State Nanopores Causes Dissociation of Strong Biomolecular Interactions	Nano Letters, 25:24, s. 9654–9661	10.1021/acs.nanolett.5c01447	https://doi.org/10.1021/acs.nanolett.5c01447
Llacer Navarro, Saül; Orzan, Eliott; Janewithayapun, Ratchawit; Penttila, Paavo; Andersson, John; Ström, Anna; Kádár, Roland; Nypelö, Tiina	2025	Tert-Butanol as a Structuring Agent for Cellulose Nanocrystal Fluids and Foams	Biomacromolecules, 26:9, s. 5591–5600	10.1021/acs.biomac.5c00184	https://doi.org/10.1021/acs.biomac.5c00184
Paleti, Sri Harish Kumar; Haraguchi, Shuichi; Cao, Zhiqiang; Craighero, Mariavittoria; Kimpel, Joost; Zeng, Zijin; Sowinski, Przemyslaw; Zhu, Di; Pons I Tarres, Judith; Kim, Youngseok; Li, Qifan; Huang, Jun-Da; Kalaboukhov, Alexei; Mekonnen Mihiretie, Besira; Fabiano, Simone; Gu, Xiaodan; Müller, Christian	2025	Benchmarking the Elastic Modulus of Conjugated Polymers with Nanoindentation	Macromolecules, 58:7, s. 3578–3588	10.1021/acs.macromol.4c03081	https://doi.org/10.1021/acs.macromol.4c03081
Pons I Tarres, Judith; Zhu, Di; Musumeci, Chiara; Kim, Youngseok; Meli, Dilara; Yu, Hang; Jha, Meghna; Paulsen, Bryan D.; Wu, Ruiheng; Kimpel, Joost; Laswick, Zachary; Paleti, Sri Harish Kumar; Zhang, Yadong; Barlow, Stephen; Marder, Seth R.; Nelson, Jenny; Rivnay, Jonathan; Mueller, Christian	2025	Anomalous Stiffening of a Conjugated Polymer During Electrochemical Oxidation	Advanced Functional Materials, In Press	10.1002/adfm.202519980	https://doi.org/10.1002/adfm.202519980
Järlebark, Julia; Liu, Wei; Shaji, Amina; Sha, Jingjie; Dahlin, Andreas	2025	Solid-State Nanopore Sensors: Analyte Quantification by Event Frequency Analysis at High Voltages	Analytical Chemistry, 97:8, s. 4359–4364	10.1021/acs.analchem.4c05037	https://doi.org/10.1021/acs.analchem.4c05037
Medin, Jesper; Kyriakidou, Maria; Santoso, Bagus; Gupta, Pankaj; Järlebark, Julia; Schaefer, Andreas; Ferrand-Drake Del Castillo, Gustav; Cans, Ann-Sofie; Dahlin, Andreas	2025	Enzymatic Polymer Brush Interfaces for Electrochemical Sensing in Biofluids	ACS Applied Bio Materials, 8:5, s. 4008–4019	10.1021/acsabm.5c00146	https://doi.org/10.1021/acsabm.5c00146 [research.chalmers.se]
van Chinh, Tran; Morsali, Mohammad; Khan, Ziyauddin; Crispin, Reverant; Sipponen, Mika H.; Engquist, Isak	2025	Lignin Nanoparticles as Biobased Redox Centers for Organic Battery Electrodes	ACS Sustainable Chemistry and Engineering, 13:24, s. 9053–9062	10.1021/acssuschemeng.5c01173	https://doi.org/10.1021/acssuschemeng.5c01173
Xu, Han; Han, Jianhua; Sharma, A.; Paleti, Sri Harish Kumar; Hultmark, Sandra; Yazmaciyan, Aren; Müller, Christian; Baran, Derya	2025	Progress in the Stability of Small Molecule Acceptor-Based Organic Solar Cells	Advanced Materials, 37:4	10.1002/adma.202407119	https://doi.org/10.1002/adma.202407119
Castillo-Moreno, Claudia; Rafsanjani Amin, Kazi; Strandberg, Ingrid; Kervinen, Mikael; Osman, Amr; Gasparinetti, Simone	2025	Dynamical Excitation Control and Multimode Emission of an Atom-Photon Bound State	Physical Review Letters, 134:13	10.1103/PhysRevLett.134.133601	https://doi.org/10.1103/PhysRevLett.134.133601
Huang, Tangyou; Gaikwad, Akshay; Moskalenko, Ilya; Aggarwal, Anuj; Abad, Tahereh; Kuzmanović, Marko; Chang, Yu Han; Stanisavljević, Ognjen; Hogedal, Emil; Warren, Christopher; Ahmad, Irshad; Biznárová, Janka; Osman, Amr; Mamta, Mamta; Rommel, Marcus; Fadavi Roudsari, Anita; Nylander, Andreas; Chen, Liangyu; Bylander, Jonas; Paraoanu, Gheorghe Sorin; Frisk Kockum, Anton; Sammarco Tancredi, Giovanna	2025	Quantum Process Tomography with Digital Twins of Error Matrices	Physical Review Letters, 135:23	10.1103/PhysRevLett.135.230601	https://doi.org/10.1103/dpgy-rtxr
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Gu, Daewon; Choi, Moonnyeong; Kim, Kyung Ho; Kim, Young Duck; Khan, Munis; Yurgens, Avgust; Nam, Youngwoo	2025	Low-voltage operation of graphene p-n junctions on plastic substrates	AIP Advances, 15:7	10.1063/5.0275124	https://doi.org/10.1063/5.0275124
Ghai, Viney; Mishra, Ases Akas; Huang, Enling; Ngaloy, Roselle; Dash, Saroj Prasad; Matic, Aleksandar; Kádár, Roland	2025	Halbach Array Induced Magnetic Field Alignment in Boron Nitride Nanocomposites	Advanced Science, 12:6	10.1002/advs.202408532	https://doi.org/10.1002/advs.202408532
Ngaloy, Roselle; Yamashita, Naoto; Zhao, Bing; Kim, Soojung; Yamashita, Kohei; Cools, Ivo; Agusutrisno, Marlis N.; Lee, Soobeom; Kurokawa, Yuichiro; You, Chun Yeol; Yuasa, Hiromi; Dash, Saroj Prasad	2025	Deterministic spin-orbit torque switching of epitaxial ferrimagnetic insulator with perpendicular magnetic anisotropy fabricated by on-axis magnetron sputtering	NPJ Spintronics, 3:1	10.1038/s44306-025-00105-z	https://doi.org/10.1038/s44306-025-00105-z
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Zhao, Bing; Bainsla, Lakhan; Ershadrad, Soheil; Zeng, Lunjie; Ngaloy, Roselle; Svedlindh, Peter; Olsson, Eva; Sanyal, Biplab; Dash, Saroj Prasad	2025	Coexisting Non-Trivial Van der Waals Magnetic Orders Enable Field-Free Spin-Orbit Torque Magnetization Dynamics	Advanced Materials, 37:37	10.1002/adma.202502822	https://doi.org/10.1002/adma.202502822
Horvath, Istvan; Aning, Obed Akwasi; Kesarimangalam, Sriram; Rehnberg, Nikita; Chawla, Srishti; Molin, Mikael; Westerlund, Fredrik; Wittung Stafshede, Pernilla	2025	Biological Amyloids Chemically Damage DNA	ACS Chemical Neuroscience, 16:3, s. 355–364	10.1021/acschemneuro.4c0046	https://doi.org/10.1021/acschemneuro.4c00461
Nambannor Kunnath, Radhika; Abbaspour, Zahra; Johnning, Anna; Frykholm, Karolin; Wrande, Marie; Dvirnas, Albertas; Kesarimangalam, Sriram; Giske, Christian G.; Ambjornsson, Tobias; Sandegren, Linus; Kristiansson, Erik; Westerlund, Fredrik; Kk, Sriram	2025	Strain-Level Typing of Streptococcus pyogenes Using Optical DNA Mapping	ACS Infectious Diseases, 11:11, s. 3085–3092	10.1021/acsinfecdis.5c00430	https://doi.org/10.1021/acsinfecdis.5c00430
Pavlova, Evgeniya; Nambannor Kunnath, Radhika; Van Erp, Bert; Dvirnas, Albertas; Kesarimangalam, Sriram; Dame, Remus; Westerlund, Fredrik	2025	High-throughput single molecule nanofluidic studies on B. subtilis Rok protein interaction with DNA	QRB Discovery, 6	10.1017/qrd.2025.10007	https://doi.org/10.1017/qrd.2025.10007
Kostan-Carmiel, Mazal; Theodoridis, Athanasios; Eisenberg, Helen R.; Stein, Tamar; Langhammer, Christoph; Gross, Elad	2025	Nanoscale Analysis of Sulfur Poisoning Effects on Hydrogen Sorption in Single Pd Nanoparticles	ACS Nano, 19:42, s. 36969–36981	10.1021/acsnano.5c08917	https://doi.org/10.1021/acsnano.5c10753
Martvall, Viktor; Klein Moberg, Henrik; Theodoridis, Athanasios; Tomecek, David; Ekborg-Tanner, Pernilla; Nilsson, Sara; Volpe, Giovanni; Erhart, Paul; Langhammer, Christoph	2025	Accelerating Plasmonic Hydrogen Sensors for Inert Gas Environments by Transformer-Based Deep Learning	ACS Sensors, 10:1, s. 376–386	10.1021/acssensors.4c02616	https://doi.org/10.1021/acssensors.4c01968
Theodoridis, Athanasios; Andersson, Carl; Nilsson, Sara; Fritzsche, Joachim; Langhammer, Christoph	2025	A Catalytic-Plasmonic Pt Nanoparticle Sensor for Hydrogen Detection in High-Humidity Environments	ACS Sensors, 10:11, s. 8983–8994	10.1021/acssensors.5c03166 [booksci.cn]	https://doi.org/10.1021/acssensors.4c02155
Andersson, Carl; Zimmerman, Jonathan; Fritzsche, Joachim; Rabkin, Eugen; Langhammer, Christoph	2025	Hydride formation pressures and kinetics in individual Pd nanoparticles with systematically varied levels of plastic deformation	Nature Communications, 16:1	10.1038/s41467-025-64311-3	https://doi.org/10.1038/s41467-025-64311-3
Enmark, Markus; Murugesan, Murali; Zhang, Hongfeng; Nilsson, Torbjoern M. J.; Kallio, Kai J.; Kamal, Arian; Liu, Johan	2025	Design and characterization of novel graphene-enhanced vapor chambers for lightweight and high-performance electronics cooling	Nanotechnology, 36:10	10.1088/1361-6528/ad9f6d	https://doi.org/10.1088/1361-6528/ad9f6d
López, Cristian Daniel; Flosason, Karl Birkir; Meledin, Denis; Helldner, Leif; Ferm, Sven-Erik; Belitsky, Victor; Desmaris, Vincent	2025	Microfabricated Waveguide Terminations for Wideband and Low-power THz Applications	IEEE Transactions on Terahertz Science and Technology, 15:2, s. 181–190	10.1109/tthz.2024.3510658	https://doi.org/10.1109/TTHZ.2024.3510658

López, Cristian Daniel; Pavolotski, Alexei; Joint, François; Meledin, Denis; Desmaris, Vincent; Belitsky, Victor	2025	Micromachined metallic substrates as a technological platform for superconductor-insulator-superconductor tunnel devices	Superconductor Science and Technology, 38:7	10.1088/1361-6668/ade93b	https://doi.org/10.1088/1361-6668/ade93b
Mebarki, Mohamed Aniss; Ferrand-Drake Del Castillo, Ragnar; Meledin, Denis; Sundin, Erik; Thorsell, Mattias; Papamichail, Alexis; Darakchieva, Vanya; Rorsman, Niklas; Joint, François; Belitsky, Victor; Desmaris, Vincent	2025	Cryogenic Trapping Effects in GaN-HEMTs: Influences of Fe-Doped Buffer and Field Plates	IEEE Transactions on Electron Devices, 72:8, s. 4042–4048	10.1109/TED.2025.3581541	https://doi.org/10.1109/TED.2025.3581541
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Hult, Björn; Ranjan, Alok; Zeng, Lunjie; Olsson, Eva; Rorsman, Niklas; Vorobiev, Andrei	2025	Investigation of Electrical Breakdown in AlGaN/GaN/AlN HEMTs Through Nanoscale Analysis and Physics-Based Modeling	IEEE Transactions on Device and Materials Reliability, 25:4, s. 861–868	10.1109/TDMR.2025.3621211	https://doi.org/10.1109/TDMR.2025.3621211
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Agrawal, Abhay Vivek; Poliakov, Aleksandr; Eriksson, Jens; Antosiewicz, Tomasz; Shegai, Timur	2025	Humidity-Enhanced NO2 Gas Sensing Using Atomically Sharp Edges in Multilayer MoS2	Small Structures, 6:4	10.1002/sstr.202400409	https://doi.org/10.1002/sstr.202400409
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Marthy, Baptiste; Zangeneh Kamali, Khosro; Käll, Mikael; Baffou, Guillaume	2025	Full-Stokes polarimetric microscopy using cross-grating wavefront microscopy (polar-CGM)	International Conference on Metamaterials, Photonic Crystals and Plasmonics, s. 1317-1514–1515	eISSN 2429-1390 (konferenspublikation	
Olsson, Oliver; Zangeneh Kamali, Khosro; Strandberg, Erik; Jungová, Hana; Käll, Mikael	2025	On-Chip Lasers on Waveguides: A Meta-Morphosis in Waveguide Imaging!	International Conference on Metamaterials, Photonic Crystals and Plasmonics, s. 1532–1533	eISSN 2429-1390 (konferenspublikation	
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Strandberg, Erik; Juodenas, Mindaugas; Jungová, Hana; Käll, Mikael	2025	Enabling flat and miniaturized surface plasmon biosensing with metagrating-integrated lasers	Konferensbidrag (SPIE Optics + Optoelectronics 2025)	10.1117/12.3056344	https://doi.org/10.1117/12.3056344
Strandberg, Erik; Juodenas, Mindaugas; Jungová, Hana; Käll, Mikael	2025	Flat Plasmonic Biosensor with an On-Chip Metagrating-Integrated Laser	ACS Sensors, 10:10, s. 7670–7678	10.1021/acssensors.5c01997	https://doi.org/10.1021/acssensors.5c01997
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Sun, Yi; Lei, Fuchuan; Gao, Yan; Torres Company, Victor	2025	High-power on-chip hyperparametric oscillator	Optics Letters, 50:15, s. 4798–4801	10.1364/OL.564004	https://doi.org/10.1364/OL.564004
Sun, Yi; Lei, Fuchuan; Gao, Yan; Torres Company, Victor	2025	High-power optical parametric oscillators in silicon nitride	CLEO/Europe-EQEC 2025	10.1109/CLEO/EUROPE-EQEC65582.2025.11109604	https://doi.org/10.1109/CLEO/EUROPE-EQEC65582.2025.11109604
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Wang, Gan; Rey, Marcel; Ciarlo, Antonio; Shanei, Mohammad Mahdi; Xiong, Kunli; Pesce, Giuseppe; Käll, Mikael; Volpe, Giovanni	2025	Microscopic geared metamachines	Nature Communications, 16:1	10.1038/s41467-025-62869-6	https://doi.org/10.1038/s41467-025-62869-6
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Avhandlingar

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Ali, H; Rusz, J; Bürgler, DE; Vas, JV; Jin, L; Adam, R; Schneider, CM; Dunin-Borkowski, RE	2025	Visualizing subatomic orbital and spin moments using a scanning transmission electron microscope	NAT MATER	10.1038/s41563-025-02242-6	WOS:001485539600001
Amar, A; Aggarwal, P; Mukherjee, S; Hariram, M; Jain, S; Varma, RM; Sarkar, D	2025	Hexagonal (Cu,Co)Se2 Nanoflakes as Effective and Durable Bifunctional Electrocatalyst for Overall Alkaline Water Splitting: Understanding Local Structure Around Active Sites	SMALL	10.1002/smll.202507915	WOS:001584015600001
Amousa, N; Poll, M; Godeffroy, L; Berastegui, P; Nickel, NH; Sharma, N; Donzel-Gargand, O; Dittrich, T; Fengler, S; Wintz, S; Petit, T; Jansson, U; Gonzalez-Julian, J	2025	Chemical exfoliation of layered Al5C3N for the synthesis of AlN nanosheets	COMMUN MATER	10.1038/s43246-025-01019-3	WOS:001652532900001
Angelsten, A; Forsberg, P; Engqvist, H; Xia, W; Karlsson, M	2025	Waveguide Spectroscopy for Differentiation of Bacteria	ANAL CHEM	10.1021/acs.analchem.5c02661	WOS:001582702200001
Ansari, SR; Imhoff, ED; Suárez-López, YD; Melnyk, A; Rinaldi-Ramos, CM; Teleki, A	2025	Flame-Made Doped Iron Oxide Nanoparticles as Tracers for Magnetic Particle Imaging	CHEM MATER	10.1021/acs.chemmater.5c00331	WOS:001491817500001
Arumskog, P; Khalid, S; Beste, U	2025	Carbide size control in high-speed steels and hardmetals using electron beam powder bed fusion process parameters	PROG ADDIT MANUF	10.1007/s40964-025-01266-3	WOS:001556286900001
Asad, S; Ahl, D; Suárez-López, YD; Erdélyi, M; Phillipson, M; Teleki, A	2025	Click Chemistry-Based Bioconjugation of Iron Oxide Nanoparticles	SMALL	10.1002/smll.202407883	WOS:001418971500001
Augustine, R; Mandal, B; Singh, MA; Mitra, D; Blokhuis, T	2025	Non-Invasive Wearable Microwave Sensing for Sarcopenia and Sarcopenic Obesity	GER MICROW CONF		WOS:001546452000064
Aung, SKK; Chintam, H; Sadhukhan, P; Yang, BW; Boschloo, G	2025	Improved Efficiency of Carbon-Based Perovskite Solar Cells by Using Alternative Solvent for Doping-Free P3HT	SOL RRL	10.1002/solr.202500108	WOS:001486555900001
Azina, C; Palisaitis, J; Bogdanovski, D; Bartsch, T; Sahu, R; Scheu, C; Persson, POÅ; Eklund, P; Schneider, JM	2025	Formation of 3D Cr2C through solid state reaction-mediated Al extraction within Cr2AlC/Cu thin films	NANOSCALE	10.1039/d4nr03664f	WOS:001411400600001
Bagnall, AJ; Zhao, ZW; Cheah, MH; Sekretareva, A	2025	Re-Evaluating the Stability of Al2O3 Barriers Prepared by Atomic Layer Deposition under Electrochemical Conditions	ACS APPL MATER INTER	10.1021/acsami.5c11388	WOS:001553220000001
Belotcerkovtceva, D; Datt, G; Nameirakpam, H; Aitkulova, A; Suntornwipat, N; Majdi, S; Isberg, J; Kamalakar, MV	2025	Extreme current density and breakdown mechanism in graphene on diamond substrate	CARBON	10.1016/j.carbon.2025.120108	WOS:001460969300001
Bonneuil, WV; Katiyar, N; Tenje, M; Bagheri, S	2025	Capacity and limitations of microfluidic flow to increase solute transport in three-dimensional cell cultures	J R SOC INTERFACE	10.1098/rsif.2024.0463	WOS:001409083400002
Botling, E; Gond, R; Thakur, A; Anasori, B; Khataee, A	2025	Molybdenum titanium carbide (Mo2TiC2Tx) MXene coated carbon electrodes for vanadium redox flow batteries	RSC ADV	10.1039/d5ra01163a	WOS:001478097100001
Bouteiller, H; Burcea, R; Poterie, C; Fournier, D; Giovannelli, F; Nyman, J; Ezzahri, Y; Dubois, S; Eklund, P; Febvrier, AL; Barbot, JF	2025	Improving the thermoelectric performance of scandium nitride thin films by implanting helium ions	COMMUN MATER	10.1038/s43246-025-00741-2	WOS:001421645000001
Bouteiller, H; Poterie, C; Burcea, R; Fournier, D; Ezzahri, Y; Dubois, S; Eklund, P; le Febvrier, A; Barbot, J	2025	Engineering Electrical Transport by Implantation-Induced Defects in CrN Films Without Affecting Thermal Conductivity	ADV MATER INTERFACES	10.1002/admi.202500436	WOS:001565611300001
Cai, B; Pavliuk, MV; Berggren, G; Tian, HN	2025	Bio-hybrid photoelectrochemical catalysis for solar fuels and chemicals conversion	NAT COMMUN	10.1038/s41467-025-64931-9	WOS:001594419000037
Chowdhury, S; Gupta, R; Bano, N; Kumar, Y; Prakash, S; Shukla, DK; Sathe, VG; Gupta, M	2025	Stranski-Krastanov growth of disordered ScNx thin films on MgO(100): Influence of defect densities on electronic structure and transport properties	APPL PHYS LETT	10.1063/5.0295353	WOS:001645766200001
Chowdhury, S; Yanez, HG; Honnali, SK; Greczynski, G; Persson, POÅ; le Febvrier, A; Magnuson, M; Eklund, P	2025	Structural and electronic properties of Sc1-xWxNy thin films on MgO(001)	APPL MATER TODAY	10.1016/j.apmt.2025.102730	WOS:001479741100001
Comparotto, C; Whalley, L; Sopiha, K; Frost, RJW; Kubart, T; Scragg, JJS	2025	Thermodynamic insights into the Ba-S system for the formation of BaZrS3 perovskites and other Ba sulfides	J MATER CHEM A	10.1039/d5ta00798d	WOS:001440493000001
Dastanpour, E; Huang, S; Schönecker, S; Ström, V; Varga, LK; Eriksson, O; Vitos, L	2025	Magnetocaloric properties of ternary Al-Mn-Co alloys	J ALLOY COMPD	10.1016/j.jallcom.2025.182006	WOS:001528709000004
Drozdowska, K; Smulko, J; Welearegay, T; Osterlund, L; Rumyantsev, S	2025	Plasmon-Induced Graphene/Silicon Schottky Junctions for Ultrasensitive Gas Sensing	ACS SENSORS	10.1021/acssensors.5c01920	WOS:001584732800001
Eliasson, K; Jiang, FF; Åhlén, M; Stromme, M; Xu, C	2025	Scalable and Versatile Fabrication of Free-Standing Covalent Organic Framework Membranes with Tunable Microstructure for Molecular Separation	J AM CHEM SOC	10.1021/jacs.5c08788	WOS:001540510200001
Fernandes, TV; Gomes, J; Gaspar, J; Patricio, PT; Falcao, BP; da Cunha, AF; Catarino, N; Marques, JG; Peres, M; Lorenz, K; Teixeira, JP; Salome, PMP; Leitao, JP	2025	Evaluating 1 MeV proton damage in Cu(In,Ga)Se2 solar cells and a recovery pathway	J PHYS-ENERGY	10.1088/2515-7655/ade5c9	WOS:001517773900001
Fernandes, TV; Patrício, PT; da Cunha, AF; Peres, M; Lorenz, K; Teixeira, JP; Salomé, PMP; Leitao, JP	2025	Performing Relevant Irradiation Experiments: The Role of Proton Flux in the Dynamic Annealing during Irradiation of Cu(In,Ga)Se2-Based Solar Cells	PHYS STATUS SOLIDI-R	10.1002/pssr.202500374	WOS:001630414000001
Gai, CJ; Thyr, J; Donzel-Gargand, O; Berastegui, P; Edvinsson, T; Jansson, U; Lewin, E	2025	Magnetron sputtering of epitaxial Al5C3N thin films	J ALLOY COMPD	10.1016/j.jallcom.2025.183971	WOS:001584337700001
Ghorai, S; Clulow, R; Cedervall, J; Huang, S; Ericsson, T; Haeggstroem, L; Skini, R; Shtender, V; Vitos, L; Eriksson, O; Scheibel, F; Skokov, K; Gutfleisch, O; Sahlberg, M; Svedlindh, P	2025	Design of thermal hysteresis in nonstoichiometric Fe2P-type alloys with giant magnetocaloric effect	PHYS REV B	10.1103/PhysRevB.111.224401	WOS:001511184900010
Ghosh, A; Saikia, S; Mukherjee, S; Johannesson, E; Rensmo, H; Nag, A	2025	Intra-Configurational Spin-Flip d→$ \to $d Transition of Mo (III) Doped Perovskite for Ultra-Narrow Near Infrared-II Emission in Ambient Conditions	ANGEW CHEM INT EDIT	10.1002/anie.202519144	WOS:001610430500001
Ghosh, S; Aboulsaad, MM; Slimani, S; Cedervall, J; Aslibeiki, B; Edvinsson, T; Barucca, G; Vattuone, L; Peddis, D; Sarkar, T	2025	Triphasic Inter-Dimensional WS2/Magnetic Lithium Iron Oxide Nanocomposite for Electromagnetic Interference Shielding	ADV MATER INTERFACES	10.1002/admi.202500687	WOS:001581811100001
Gupta, D; Pankratova, M; Riepp, M; Pereiro, M; Sanyal, B; Ershadrad, S; Hehn, M; Pontius, N; Schuessler-Langeheine, C; Abrudan, R; Bergeard, N; Bergman, A; Eriksson, O; Boeglin, C	2025	Tuning ultrafast demagnetization with ultrashort spin polarized currents in multi-sublattice ferrimagnets	NAT COMMUN	10.1038/s41467-025-58411-3	WOS:001456731600007
Han, Y; Doyranli, C; Di Vito, A; Auf der Maur, M; Krishnaiah, M; Mäkinen, P; Kumar, R; Al-Anesi, B; Manna, D; Vivo, P	2025	Pyridine-Based Multifunctional Surface Passivators Enable Efficient and Stable Perovskite Indoor Photovoltaics	ACS APPL MATER INTER	10.1021/acsami.5c08539	WOS:001554815100001
Holenák, R; Malatinová, M; Ntemou, E; Tran, TT; Primetzhofer, D	2025	The influence of geometry and specific electronic and nuclear energy deposition on ion-stimulated desorption from thin self-supporting membranes	RADIAT PHYS CHEM	10.1016/j.radphyschem.2025.113123	WOS:001528480200005
Hu, HY; Li, YC; Zhu, YF; Liu, HD; Xiang, W; Wang, JZ; Xiao, Y	2025	Synthetic control guided by growth mechanism insights enable tailored precursors for layered oxide cathodes	CHEM SCI	10.1039/d5sc04432d	WOS:001544494600001
Huang, S; Dastanpour, E; Ström, V; Varga, LK; Eriksson, O; Jin, HY; Vitos, L	2025	Lattice and spin entropy changes in B2-type magnetocaloric Al-Mn-Ni alloy	J PHYS D APPL PHYS	10.1088/1361-6463/ad9591	WOS:001374000600001
Iurchenkova, A; Frasca, S; Åhlén, M; Zhu, Y; Stromme, M; Lindh, J; Galkin, M; Gising, J	2025	From Phenolated Lignin to Few-Layered Graphene: Laser-Induced Carbonization for Micro-Supercapacitor Application	ACS SUSTAIN CHEM ENG	10.1021/acssuschemeng.5c05213	WOS:001561601400001
Jarl, S; Sjölund, J; Frost, RJW; Holst, A; Scragg, JJS	2025	Machine learning for in-situ composition mapping in a self-driving magnetron sputtering system	MATER DESIGN	10.1016/j.matdes.2025.115087	WOS:001619102800004
Jian, ZC; Shi, WJ; Liu, YF; Li, XY; Li, JY; Zhu, YF; Zhu, X; Li, YC; Tan, P; Wang, PF; Chen, SQ; Zhang, SL; Mao, JF; Zhou, GM; Guo, XD; Wang, JZ; Dou, SX; Xiao, Y	2025	Accelerating lattice oxygen kinetics of layered oxide cathodes via active facet modulation and robust mechanochemical interface construction for high-energy-density sodium-ion batteries	ENERG ENVIRON SCI	10.1039/d5ee00467e	WOS:001529399000001
Jiang, S; Kong, XY; Chen, HL; Wu, WB; Xiao, HN; Stromme, M; Xu, C	2025	Laser-etched flexible microsupercapacitors based on nanocellulose and conductive metal-organic frameworks	CHEM ENG J	10.1016/j.cej.2025.161059	WOS:001448408100001
Jiao, MZ; Dong, HJ; Qiao, YT; Guo, RQ; Hung, CM; Duy, NV; Hoa, ND; Wen, CY	2025	Accurate Methane Detection in Combustible Gas Mixtures by Using SnO2-Ag-ZnO Gas Sensors with Rapid Responses	ACS SENSORS	10.1021/acssensors.5c02966	WOS:001641270100001

Joseph, L; Fabioux, M; Chezhian, AS; Voigt, T; Karlsson, R; Augustine, R	2025	Linear dimensional lung phantoms for the microwave-based detection of acute respiratory distress syndrome	INT J MICROW WIREL T	10.1017/S175907872500056X	WOS:001493327200001
Kalal, S; Magnuson, M; Chesini, A; Akshaya, A; Honnali, SK; Sahoo, S; Jain, N; Bhattacharyya, D; Gloskovskii, A; Gupta, M; Wang, F; Orlandi, M; Greczynski, G; Järrendahl, K; Eklund, P; Birch, J; Hsiao, C-	2025	Defect Engineering in Ti-Doped Ta3N5 Thin Films for Enhanced Photoelectrochemical Water Splitting: Electronic Structure Modulation and Charge Carrier Dynamics	SMALL STRUCT	10.1002/sstr.202500504	WOS:001619255700001
Kammlander, B; García-Fernández, A; Svanström, S; Giangrisostomi, E; Ovsyannikov, R; Rensmo, H; Cappel, UB	2025	Investigating charge dynamics at lead halide perovskite single crystal surfaces	J PHYS-ENERGY	10.1088/2515-7655/ada63a	WOS:001398136500001
Kandappa, SK; Gray, V	2025	Improving Triplet-Triplet Annihilation Upconversion Output by a Triplet Mediator Approach: Mechanistic Insights on Homo and Hetero-Annihilation in Three-Component Systems	J AM CHEM SOC	10.1021/jacs.5c09906	WOS:001600327000001
Kargeti, K; Mallick, B; Borisov, V; Ali, SS; Hellsvik, J; Eriksson, O; Panda, SK	2025	Charge-state dependent spin-orbit coupling and quantum phase transitions in Ir-Ru oxides	PHYS REV B	10.1103/PhysRevB.111.195148	WOS:001501648400004
Keller, J; Mudgal, S; Hägglund, C; Kiselman, K; Edoff, M	2025	Ultrathin AlOx Films for Back Contact Passivation in Bifacial Wide-Gap (Ag,Cu)(In,Ga)Se2 Solar Cells	SOL RRL	10.1002/solr.202500101	WOS:001450407000001
Keller, J; Mudgal, S; Martin, NM; Donzel-Gargand, O; Edoff, M	2025	Rubidium Fluoride Absorber Treatment for Wide-Gap and Bifacial Ag(In,Ga)Se2 Solar Cells	SOL RRL	10.1002/solr.202500423	WOS:001529891400001
Keller, T; Benesperi, I; Thyr, J; Edvinsson, T; Gibson, EA; Freitag, M	2025	Temperature-guided solidification of copper coordination complexes as hole transport materials	PHYS CHEM CHEM PHYS	10.1039/d5cp01292a	WOS:001527430400001
Kessler, J; Donzel-Gargand, O; Moldarev, D; Franzén, C; Primetzhofer, D; Jansson, U; Lewin, E	2025	Magnetron sputtering of titanium carbonitride nanocomposite coatings - Does the choice of carbon source affect film properties?	SURF COAT TECH	10.1016/j.surfcoat.2025.131830	WOS:001422608600001
Kiselman, K; Keller, J; Pearson, P; Sopiha, K; Wallin, E; Edoff, M	2025	Light-Soaking Effects in High-Efficiency Cu(In,Ga)Se2 and (Ag,Cu)(In,Ga)Se2 Solar Cells	PROG PHOTOVOLTAICS	10.1002/pip.3912	WOS:001480851600001
Kong, XY; Afewerki, S; Pan, Y; Huang, P; Xu, C	2025	Aqueous and Surfactant-Free Synthesis of Nanoscale Covalent Organic Frameworks	ANGEW CHEM INT EDIT	10.1002/anie.202523595	WOS:001632039800001
Kuang, D; Romand, S; Zvereva, AS; Marchesano, BMO; Grenzi, M; Buratti, S; Yang, Q; Zheng, K; Valadorou, D; Mylle, E; Benedikty, Z; Trtilek, M; Tenje, M; Spetea, C; Van Damme, D; Wurzinger, B; Schwarzländer, M; Teige, M; Costa, A; Stael, S	2025	The burning glass effect of water droplets triggers a high light-induced calcium response in the chloroplast stroma	CURR BIOL	10.1016/j.cub.2025.04.065	WOS:001509145400034
Kumar, A; Li, JG; Beiler, AM; Ott, S	2025	Switching between Limiting Charge Extraction Regimes in an Illuminated Semiconductor-Metal-Organic Framework Junction	J AM CHEM SOC	10.1021/jacs.5c05700	WOS:001507238400001
Kumar, R; Rakheja, B; Lamminen, N; Fasulo, F; Cachafeiro, MAT; Hanmandlu, C; Grandhi, GK; Bag, M; Muñoz-Garcia, AB; Boschloo, G; Tress, W; Pavone, M; Vivo, P; Johansson, EMJ	2025	Mechanistic Insights into Ionic Conduction in Lead Halide Perovskites and Perovskite-Inspired Materials	ADV ENERGY MATER	10.1002/aenm.202503331	WOS:001575912000001
Kumar, T; Kumar, M; Saini, A; Kumar, R; Dudi, D; Thakuria, R; Bag, M	2025	Tailoring Defects in Bismuth-Based Cs3Bi2Br9 Perovskite-Inspired Materials through Cooling-Rate Modulation for Photo-Supercapacitors	SMALL	10.1002/smll.202512040	WOS:001638384400001
Lahiji, FAF; Paul, B; Greczynski, G; Ramanath, G; le Febvrier, A; Eklund, P	2025	Phase selection and texturing in molybdenum oxide films grown by reactive magnetron sputtering	APPL PHYS LETT	10.1063/5.0273462	WOS:001527977700004
Larsson, L; D'Elia, F; Sahlberg, M; Persson, C	2025	Leveraging laser powder bed fusion to alter texture and mechanical properties of magnesium alloy WE43	MATER DESIGN	10.1016/j.matdes.2025.114299	WOS:001522100600001
Latchev, DV; Andreis, A; Heeg, JM; Sá, J	2025	Plasmonic Hot-Carrier Redox Enables Proton-Coupled Electron Transfer at C—H Bonds	ANGEW CHEM INT EDIT	10.1002/anie.202518818	WOS:001640464000001
Lee, T; You, M; Kim, S; Song, P	2025	The Growth Mechanism of Boron-Doped Diamond in Relation to the Carbon-to-Hydrogen Ratio Using the Hot-Filament Chemical Vapor Deposition Method	MICROMACHINES-BASEL	10.3390/mi16070742	WOS:001535472900001
Li, H; Noa, FMA; Åhlén, M; Cao, ZJ; Andréasson, J; Cheung, O; Öhrström, L	2025	On metal-organic framework isomers, and the SF6 sorption and fluorescence of an In and a Zr MOF with a tritopic linker	CHEM COMMUN	10.1039/d5cc02180d	WOS:001563077800001
Lim, J; Hoang, AT; Li, ZJ; Van, TTN; Lee, JI; Lee, KHY; Gauriot, N; Frohna, K; Taniguchi, T; Watanabe, K; Shong, B; Kim, K; Stranks, SD; Ahn, JH; Chhowalla, M; Rao, AK	2025	Dual-Step Chemical Treatment of Wafer-Scale Metal-Organic Chemical Vapor Deposition Grown Monolayer Molybdenum Disulfides	ACS NANO	10.1021/acsnano.5c08927	WOS:001579189700001
Liu, BY; Wang, TF; Pang, Q; Yang, J; Liu, HD; Wang, HY	2025	Enhancing the high-voltage electrochemical performance of Single-crystal LiNi0.5Co0.2Mn0.3O2 with mesoporous TiO2 coating and Ti doping	CERAM INT	10.1016/j.ceramint.2025.06.050	WOS:001564023700008
Loukeris, G; Baretzky, C; Bogachuk, D; Gillen, AE; Yang, BW; Suo, JJ; Kaiser, W; Mosconi, E; De Angelis, F; Boschloo, G; Bett, AW; Würfel, U; Kohlstädt, M	2025	Suppressing Halide Segregation in Wide-Bandgap Perovskite Absorbers by Transamination of Formamidinium	CHEMPHYSCHEM	10.1002/cphc.202500022	WOS:001469044700001
Lu, ZJ; Patranika, T; Naylor, AJ; Mindemark, J; Tardif, S; Hernández, G; Lyonnard, S	2025	Formation and Evolution of the Solid Electrolyte Interphase on Silicon Electrodes from Fluorine-Free Electrolytes	SMALL	10.1002/smll.202410654	WOS:001389878800001
Luhar, B; Thakur, D; Gulati, R; Singhal, T; Balakrishnan, V	2025	Substrate Reflectance Controlled Optical Emission in a Chemical Vapor Deposition-Grown WS2 Monolayer	ACS APPL NANO MATER	10.1021/acsanm.5c02055	WOS:001520437900001
Luo, HW; Han, XR; Yang, BW; Ou, WN; Suo, JJ; Sun, HF; Zheng, XT; Hong, JJ; Chu, ZJ; Zhao, L; Yang, SC; Wu, P; Duan, CY; Liu, CSY; Li, MY; Li, LD; Lin, RX; Kong, WC; Tan, HR	2025	Damp-Stable Perovskite/Silicon Tandem Solar Cells with Internal Encapsulating Sulfonium-Based Molecules	ACS ENERGY LETT	10.1021/acsenergylett.5c01010	WOS:001514121700001
Löfstrand, J; Tidefelt, M; Fisk, M; Kaplan, M; Sahlberg, M; Han, XL; Kaban, I; Jönsson, PE	2025	Uncovering the initial nucleation process during rapid heating of Fe-Co-Nb-B metallic glasses	MATER DESIGN	10.1016/j.matdes.2025.114799	WOS:001592562700001
Magnuson, M; Eklund, P; Polley, C	2025	Fermiology and Band Structure of Oxygen-Terminated Ti3C2Tx MXene	PHYS REV LETT	10.1103/PhysRevLett.134.106201	WOS:001509091000002
Mansoorie, FN; Bhatt, P; Tewari, A; Kumar, R; Bag, M	2025	Unveiling the Impact of Bi3+ Heterovalent Doping on the Negative Capacitance and Ionic Conductivity of Perovskite Single Crystals: Implication in Neuromorphic Computing	ACS APPL MATER INTER	10.1021/acsami.4c18821	WOS:001387432500001
Mirabelli, AJ; Kammlander, B; Lu, Y; Varma, RM; Gu, QC; Radetzky, K; Selby, TA; Liu, TJ; Riva, S; Wei, ZM; Lee, TL; Rawle, J; Rensmo, H; Anaya, M; Cappel, UB; Stranks, SD	2025	Interfacial Chemistry Limits the Stability of Deep Blue Perovskite LEDs Revealed by Operando Characterization	ACS ENERGY LETT	10.1021/acsenergylett.5c00989	WOS:001519726200001
Nasane, MP; Rahane, GK; Rahane, SN; Jathar, SB; Jadkar, SR; Jadhav, YA; Deepak, K; Dzade, NY	2025	Integrated Experimental and Density Functional Theory Study of SnS/SnSe Heterojunction Nanostructures: Synthesis, Band Alignment, and Electronic Structure Insights	LANGMUIR	10.1021/acs.langmuir.5c02657	WOS:001584790300001
Owuor, B; Boschloo, G; Ji, FX; Sadhukhan, P; Chintam, H; Nyongesa, F; Aduda, B; Waita, S	2025	Impact of Dopant-Free Hole Transport Materials on the Performance of Layered Cs3Sb2I9 Perovskite Solar Cells	ENERGY TECHNOL-GER	10.1002/ente.202501795	WOS:001632180200001
Owuor, B; Boschloo, G; Ji, FX; Sadhukhan, P; Nyongesa, F; Aduda, B; Waita, S	2025	Enhanced Optoelectronic Properties of Cs3Sb2I9 Perovskite Solar Cells through Sulfonium-Based Treatment	ACS APPL ENERG MATER	10.1021/acsaem.5c00830	WOS:001520436000001
Palierse, E; Mihailescu, AM; Bergquist, I; Persson, C; Aramesh, M	2025	Tuning the mechanical properties and printability of viscoelastic skin-derived hydrogels for 3D cell culture	BIOMATER SCI-UK	10.1039/d5bm00403a	WOS:001571753200001
Pandey, M; Wang, GR; Singh, G; Ahuja, R; Kumar, R	2025	Instabilities in the blistering of two-dimensional materials	2D MATER	10.1088/2053-1583/adba75	WOS:001438647200001
Papaderakis, AA; Paschalidou, EM; Medina, LZ; Hatipoglu, E; Saksena, A; Gault, B; Malmström, D; Sefer, B; Hosseini, P; Trost, O; Lozinko, A; Ramkaran, M; Juel, A; Tschulik, K; Dryfe, RAW	2025	Hydrogen induced superhydrophilicity in an amorphous CrFeNi-based multi-principal element alloy thin film	ACTA MATER	10.1016/j.actamat.2025.120756	WOS:001406862900001
Pearson, P; Keller, J; Carron, R; Björkman, CP	2025	Extended thermal admittance spectroscopy for the investigation of composition-dependent meta-stability behaviours in wide-gap (Ag,Cu)(In,Ga)Se2 solar cells	J PHYS-ENERGY	10.1088/2515-7655/add5a0	WOS:001489921000001
Poterie, C; Bouteiller, H; Burcea, R; Dubois, S; Eklund, P; Le Febvrier, A; Cabioc'h, T; Barbot, JF	2025	Electrical properties of ScN thin films controlled by defect engineering using oxygen ion implantation	J APPL PHYS	10.1063/5.0230961	WOS:001390828300017
Puttaraksa, N; Sada, S; Kosumsupamala, K; Seki, H; Whitlow, HJ; Nishikawa, H	2025	Precise Fabrication of Elongated Janus Microparticles	PART PART SYST CHAR	10.1002/ppsc.202400210	WOS:001399558700001
Rainer, D; Marattukalam, JJ; Karlsson, D; Beran, P; Hervoches, C; Andersson, G; Pant, P; Sahlberg, M	2025	Crystal-Symmetry-Driven Build Orientation and its Impact on the {110}<100> Goss Texture Formation and Mechanical Properties of Laser Powder Bed Fused AISI 316L	ADV ENG MATER	10.1002/adem.202500423	WOS:001552562300001
Rakheja, B; Hultqvist, A; Varma, RM; Martin, NM; Radetzky, K; Riva, S; Johannesson, E; Cappel, UB; Rensmo, H; Johansson, EMJ; Törndahl, T	2025	Interfacial Chemistry between Formamidinium Lead Trihalide Perovskites and Atomic-Layer-Deposited Tin Oxide	ACS APPL ENERG MATER	10.1021/acsaem.5c00968	WOS:001502333000001
Rangaiah, PKB; Kumar, BPP; Augustine, R	2025	From Microwave Measurement to Application: Enhancement of Fat-Intrabody Communication by Advanced Computational Techniques	GER MICROW CONF		WOS:001546452000305
Rao, SG; Yao, Y; Törne, K; Molmen, L; Nederstedt, H; Leisner, P; Lundblad, A; Kubart, T	2025	Corrosion resistance of coated aluminum bipolar plates for proton exchange membrane fuel cells	ELECTROCHIM ACTA	10.1016/j.electacta.2025.146966	WOS:001551881700001
Rathod, KN; Datt, G; Aslibeiki, B; Johansson, T; Barucca, G; Peddis, D; Kamalakar, MV; Sarkar, T	2025	Interface-Induced Synaptic Performance in CeO2/La0.8Ba0.2MnO3 Oxygen Reservoir Junction	ACS APPL MATER INTER	10.1021/acsami.5c19731	WOS:001635382700001
Riva, S; Johansson, FOL; Butorin, SM; Comparotto, C; Donzel-Gargand, O; Thakur, PK; Lee, TL; Nameirakpam, H; Kamalakar, MV; Mukherjee, S; Scragg, JJS; Rensmo, H	2025	Surface Processing and Characterization of Stoichiometry-Varied BaZrS3 Thin Films	ACS APPL ENERG MATER	10.1021/acsaem.5c01766	WOS:001550180400001
Roondhe, B; Ahuja, R; Luo, W	2025	Harnessing the Efficiency of Twin Boron Nitride and Graphene Monolayers for Anticancer Drug Delivery: Insights from DFT	ACS APPL BIO MATER	10.1021/acsabm.4c01507	WOS:001416505000001
Sadowski, G; Febvrier, AL; Hektor, J; Eklund, P; Music, D	2025	The effect of stress on thermoelectric properties of flexible Mg3Bi2 thin films	APPL PHYS LETT	10.1063/5.0280888	WOS:001588225900001
Saha, J; Sahu, TK; Montero, J; Rydh, A; Alvarez, GS; Johnsson, M	2025	Magnetic Field-Driven Dynamic Reorganization of Electrocatalytic Interfaces for Improved Oxygen Evolution	ACS APPL ENERG MATER	10.1021/acsaem.5c00746	WOS:001540525100001
Santosa, ASS; Chang, YW; Dahlin, AB; Österlund, L; Volpe, G; Xiong, KL	2025	Video-rate tunable colour electronic paper with human resolution	NATURE	10.1038/s41586-025-09642-3	WOS:001599891800001
Shaw, T; Mandal, B; Augustine, R	2025	Analysis of Shielding and Discontinuous Phantom Medium Effect on the Performance of Fat-Intra Body Communication System	PROC EUR CONF ANTENN		WOS:001507659900723
Shaw, T; Mandal, B; Augustine, R	2025	Design of Fat-Intra Body Power Transfer System for Implantable Biomedical Devices	PROC EUR CONF ANTENN		WOS:001507659900238
Shaw, T; Mandal, B; Engstrand, J; Karlsson, RL; Voigt, T; Augustine, R	2025	Design and Analysis of Low Profile Antenna Shielding to Enhance the Performance of Wearable Fat-IBC System	IEEE SENS J	10.1109/JSEN.2025.3544346	WOS:001468982900044
Shi, H; Zhang, XK; Liu, C; Gong, X; Li, Y; Azmi, R; Gong, YL; Ponge, D; Weisenburger, A; Müller, G	2025	Exceptional high-temperature corrosion resistance of multi-component alloys via modulating Al and Nb	CORROS SCI	10.1016/j.corsci.2025.112990	WOS:001485932800002
Sihn, LM; Vadell, RB; Araujo, RB; Mukherjee, A; Kloz, M; Sá, J; Toma, HE	2025	Exploring radical formation and ultrafast intersystem crossing in a heavy-atom-free thiophene derivative	PHYS CHEM CHEM PHYS	10.1039/d5cp01512j	WOS:001541281900001
Singh, A; Mandal, B; Mitra, D; Blokhuis, TJ; Augustine, R	2025	Non-Invasive Wearable Microwave Sensing for Sarcopenia and Sarcopenic Obesity	GER MICROW CONF		WOS:001546452000238

Singh, A; Neogy, R; Mandal, B; Das, S; Mitra, D; Augustine, R	2025	Non-Invasive Glucose Sensing System Using Microwave Technology for Saliva-Based Diabetes Management	PROC EUR CONF ANTENN		WOS:001507659900485
Singh, A; Paul, S; Gayen, S; Mandal, B; Mitra, D; Augustine, R	2025	Design of AI-driven microwave imaging for lung tumor monitoring	SCI REP-UK	10.1038/s41598-025-20566-w	WOS:001586631500019
Singh, A; Paul, S; Mandal, B; Mitra, D; Augustine, R	2025	AI-Integrated Noninvasive Microwave Sensor System for ARDS Diagnosis	IEEE SENS J	10.1109/JSEN.2025.3549184	WOS:001480475700038
Singh, A; Rawat, D; Hjort, V; Mishra, A; le Febvrier, A; Bedanta, S; Eklund, P; Soni, A	2025	Lattice Mismatch-Driven In-Plane Strain Engineering for Enhanced Upper Critical Fields in Mo2N Superconducting Thin Films	ADV MATER INTERFACES	10.1002/admi.202500586	WOS:001570588600001
Sopiha, KV; Keller, J; Persson, C; Scragg, JJS; Platzer-Björkman, C; Edoff, M	2025	Functional off-stoichiometry in Cu(In,Ga)Se2. Part I: topotactic continuum of ordered defect compounds	J MATER CHEM A	10.1039/d5ta07043k	WOS:001628059000001
Spanou, A; Hjort, K; Welch, K; Andersson, DI; Persson, C	2025	Influence of printing configuration on the resulting topology and antibacterial effectiveness of PVDF-graphene composites	POLYM TEST	10.1016/j.polymertesting.2025.108895	WOS:001514558200002
Suhail, A; Beniwal, S; Kumar, R; Kumar, A; Bag, M	2025	Hybrid halide perovskite quantum dots for optoelectronics applications: recent progress and perspective	J PHYS-CONDENS MAT	10.1088/1361-648X/adbb47	WOS:001444787000001
Sun, Y; Wang, MY; Zheng, XX; Li, ZH; Han, N; Li, MY; Wang, ZY; Han, L; Ning, YF; Fatima, S; Leifer, K; Li, H; Song, AM	2025	Superior self-powered infrared photodetector via semiconducting graphene-nanoribbons-based vertical heterojunctions	APPL PHYS REV	10.1063/5.0251103	WOS:001461241300002
Suo, JJ; Pettersson, H; Yang, BW	2025	Sustainable Approaches to Address Lead Toxicity in Halide Perovskite Solar Cells: A Review of Lead Encapsulation and Recycling Solutions	ECOMAT	10.1002/eom2.12511	WOS:001396374600001
Suo, JJ; Yang, BW; Prideaux, S; Pettersson, H; Kloo, L	2025	From lead-acid batteries to perovskite solar cells - efficient recycling of Pb-containing materials	RSC SUSTAIN	10.1039/d4su00470a	WOS:001400364000001
Suremann, NF; Greenwell, F; Beiler, AM; Ott, S	2025	Photoelectrochemical Hydrogen Production by a Porphyrinic Metal-Organic Framework Thin Film on p-Type Silicon	ENERG FUEL	10.1021/acs.energyfuels.5c01628	WOS:001501834200001
Suremann, NF; Laporte, AAH; Greenwell, F; Ott, S	2025	Pseudomorphic replication as enabling technology for porphyrinic metal-organic framework thin film growth	POLYHEDRON	10.1016/j.poly.2025.117519	WOS:001464481800001
Svensson, FG; Djurberg, E; Kim, S; Westin, G; Osterlund, L	2025	Effect of Surface Impurities and Lattice Defects on the Photocatalytic Activity of ZnO Nanoparticles	LANGMUIR	10.1021/acs.langmuir.5c03385	WOS:001595310200001
Tkachenko, O; Li, HS; Dobele, G; Sevastyanova, O; Budnyak, TM	2025	Lignin-enriched cellulose membranes for efficient removal of synthetic dyes from aqueous environments	REACT FUNCT POLYM	10.1016/j.reactfunctpolym.2025.106275	WOS:001461339800001
Torkamani, R; Aslibeiki, B; Salari, S; Azizi, H; Peddis, D; Sarkar, T	2025	High-performance hydrogen gas sensor based on Ag-incorporated ZnO nanoparticles	SCI REP-UK	10.1038/s41598-025-22222-9	WOS:001608125200017
Tran, TT; Persson, POÅ; Pham, N; Holenak, R; Primetzhofer, D	2025	Mobility of Single Vacancies and Adatoms in Graphene at Room Temperature	SMALL	10.1002/smll.202504370	WOS:001523668400001
Tsuppayakorn-aek, P; Luo, W; Bovornratanaraks, T	2025	Phonon-mediated high-temperature superconductivity in clathrate superhydride ThCeH18 under pressure	SCI REP-UK	10.1038/s41598-025-99738-7	WOS:001522980000013
Tsuppayakorn-aek, P; Luo, W; Bovornratanaraks, T	2025	Superconductivity in LaHeH8 under High Pressure	J PHYS CHEM C	10.1021/acs.jpcc.5c05371	WOS:001574271400001
Tsuppayakorn-aek, P; Pluengphon, P; Sukmas, W; Kotmool, K; Sakulkalavek, A; Inceesungvorn, B; Luo, W; Bovornratanaraks, T	2025	Influence of aluminium substitution on phonon mediated-superconductivity in sodium host atom with carbon hexagon-like structure under varying pressure	PHYS SCRIPTA	10.1088/1402-4896/adc20f	WOS:001458727300001
Tsuppayakorn-aek, P; Sukmas, W; Luo, W; Bovornratanaraks, T	2025	Room-Temperature Superconductivity in Metallic Alloy S0.5He0.5H3 under High Pressures	J PHYS CHEM C	10.1021/acs.jpcc.5c03601	WOS:001588876200001
Tunghathaithip, N; Tsuppayakorn-aek, P; Sukmas, W; Luo, W; Bovornratanaraks, T	2025	Superconductivity of Sc(BN)3 under pressure	J APPL PHYS	10.1063/5.0234943	WOS:001399046500001
Upreti, T; Keller, J; Vines, L; Israr-Qadir, M; Niemi, E; Edoff, M	2025	Studying the Impact of Impurities on the Performance of Cadmium-Free all Sputtered CIGS Solar Cells Using Titanium-Tungsten Barrier	SOL RRL	10.1002/solr.202500468	WOS:001606392700001
Valli, D; Ooi, SA; Kaya, I; Thomassen, AB; Chaudhary, H; Weidner, T; Andrén, PE; Maj, M	2025	Cryo-Electron Microscopy Provides Mechanistic Insights into Solution-Dependent Polymorphism and Cross-Aggregation Phenomena of the Human and Rat Islet Amyloid Polypeptides	BIOCHEMISTRY-US	10.1021/acs.biochem.5c00042	WOS:001494654200001
Valluvar Oli, A; Kaur, K; Melchiorre, M; Prot, A; Gharabeiki, S; Hu, YC; Kusch, G; Hultqvist, A; Törndahl, T; Hempel, W; Witte, W; Oliver, R; Siebentritt, S	2025	Sodium Induced Beneficial Effects in Wide Bandgap Cu(In,Ga)S2 Solar Cell With 15.7% Efficiency	PROG PHOTOVOLTAICS	10.1002/pip.70033	WOS:001635106000001
Vantaraki, C; Grassi, MP; Ignatova, K; Foerster, M; Arnalds, UB; Primetzhofer, D; Kapaklis, V	2025	Magnetic order and long-range interactions in mesoscopic Ising chains	PHYS REV B	10.1103/PhysRevB.111.L020408	WOS:001417190800001
Vantaraki, C; Ignatova, K; Moldarev, D; Grassi, MP; Foerster, M; Primetzhofer, D; Arnalds, UB; Kapaklis, V	2025	Magnetic texture control in ion-implanted metamaterials	PHYS REV MATER	10.1103/vq7j-w4gk	WOS:001546481200001
Varzaneh, AG; Kameli, P; Ríos, M; Aslibeiki, B; Orue, I; Sarkar, T; Chernenko, V; Kohl, M; Xu, JY; Salazar, D	2025	Tailoring Ni-Co-Mn-Sn Ribbons by Ge Doping for Enhanced Magnetocaloric Effect	ADV ELECTRON MATER	10.1002/aelm.202500596	WOS:001617608100001
Violas, AF; Oliveira, AJN; Yakovleva, E; Sieira, BL; Pinto, F; Rocha, B; Ribeiro, EJ; Pinheiro, XL; Bondarchuk, O; Capitao, J; Mendes, A; Fernandes, PA; Teixeira, JP; Edoff, M; Salomé, PMP	2025	One-Step Lithography Nanostructured Au Encapsulation for Light Management in Ultrathin ACIGS Solar Cells	SOL RRL	10.1002/solr.202400837	WOS:001394200800001
Wach, A; Bericat-Vadell, R; Bacellar, C; Cirelli, C; Johnson, PJM; Castillo, RG; Silveira, VR; Broqvist, P; Kullgren, J; Maximenko, A; Sobol, T; Partyka-Jankowska, E; Nordlander, P; Halas, NJ; Szlachetko, J; Sá, J	2025	The dynamics of plasmon-induced hot carrier creation in colloidal gold	NAT COMMUN	10.1038/s41467-025-57657-1	WOS:001439784100001
Wang, G; Rey, M; Ciarlo, A; Shanei, M; Xiong, KL; Pesce, G; Käll, M; Volpe, G	2025	Microscopic geared metamachines	NAT COMMUN	10.1038/s41467-025-62869-6	WOS:001554898500009
Wang, JC; Kuorak, J; Priamushko, T; Gunnarsdóttir, AB; Stojanovski, K; Tryggvason, TK; Lewin, E; Magnus, F; Ingason, AS; Hanifpour, A; Höskuldsson, AB; Cherevko, S; Skúlason, E; Flosadóttir, HD	2025	Understanding the Activity and Stability of Vanadium Oxynitride Thin Films for N2 Reduction to Ammonia by Combining Theory and Operando Measurements	SMALL METHODS	10.1002/smtd.202501448	WOS:001607535000001
Welch, J; van Ekeren, WWA; Mindemark, J; Younesi, R	2025	Effect of additives on the high-temperature performance of a sodium bis(oxalato)borate in trimethyl phosphate electrolyte in sodium-ion batteries	COMMUN CHEM	10.1038/s42004-025-01515-0	WOS:001476241800001
Wen, JJ; Zhao, XF; Teng, YC; Li, YX; Wang, SL; Chen, QG; Wang, WP; Luo, W; Ahuja, R; Zhang, ZJ	2025	Surface charge effects on Sr-hydroxyapatite degradation in water solution: Surface and penetration diffusion	J AM CERAM SOC	10.1111/jace.70160	WOS:001542881500001
Weng, CH; Yang, TY; Li, YB; Pan, JD; Zang, XF; Wang, SW; Cai, B; Cheng, HL	2025	Unlocking the full potential of spiro-OMeTAD in perovskite solar cells: towards synthetic routes, doping mechanism, degradation, and stability	J MATER CHEM C	10.1039/d5tc03840e	WOS:001631976000001
Weng, YC; Nameirakpam, H; Andersson, EKW; Cartwright, E; Kamalakar, MV; Hahlin, M; Lindblad, A	2025	Determination of inelastic mean free path for solid polymer electrolytes: PTMC:LiBOB and PCL:LiBOB	APPL PHYS LETT	10.1063/5.0254600	WOS:001483041400014
Wilks, RG; Demling, A; Efimenko, A; Gorgoi, M; Pineau, F; Keller, J; Hågglund, C; Edoff, M; Barreau, N; Bär, M	2025	Wide band-gap Cu-chalcopyrite/In-based transparent conductive oxide interfaces: What affects the gallium oxide formation and its properties?	IEEE PHOT SPEC CONF	10.1109/PVSC59419.2025.11133106	WOS:001572091100398
Wrede, S; Liu, QH; Chen, LB; D'Amario, L; Cai, B; Scardamaglia, M; Zhang, ZB; Hahlin, M; Tian, HN	2025	Insights into the surface of mesoporous nickel oxide and its interaction with oxygen and water	PHYS CHEM CHEM PHYS	10.1039/d5cp00137d	WOS:001507096800001
Xing, JQ; Liu, YZ; Zhang, ZZ; Chen, LB; Hasan, MN; Zhang, ZB	2025	An Intrinsically Knowledge-Transferring Developmental Spiking Neural Network for Tactile Classification	IEEE T NEUR NET LEAR	10.1109/TNNLS.2025.3623703	WOS:001606824800001
Xiong, KL	2025	Electronic paper could enable virtual reality with human-eye resolution	NATURE	10.1038/d41586-025-03462-1	WOS:001605494500001
Xu, CY; Chen, YF; Zhao, ZJ; Yang, BW; Suo, JJ; Ba, K; Tarasov, A; Wu, YL; Lian, XX; Luo, M; Zhan, YQ; Chen, YF; Gao, JF; Mo, XL; Choy, WCH; Wang, JL; Zhang, H; Chu, JH	2025	Semi-transparent photovoltaics	ENERG ENVIRON SCI	10.1039/d4ee04209c	WOS:001412087300001
Xu, J; Jeong, SH; Hjort, K	2025	Hot-Plugging Logic-Enabled Valves	ADV INTELL SYST-GER	10.1002/aisy.202400582	WOS:001455614200001
Xu, QC; Shen, ZL; Edstroem, A; Miranda, IP; Lu, ZW; Bergman, A; Thonig, D; Yin, WJ; Eriksson, O; Delin, A	2025	Design of 2D skyrmionic metamaterials through controlled assembly	NPJ COMPUT MATER	10.1038/s41524-025-01534-4	WOS:001435385600001
Xu, ZQ; Yu, YT; Solomon, P; Zhang, Z	2025	Integration of AC bias-stabilized SiNRFETs with microscale Ag/AgCl pseudo-reference electrodes for lab-on-chip biosensing application	SENSOR ACTUAT B-CHEM	10.1016/j.snb.2025.138000	WOS:001499471300003
Yakovleva, E; Violas, AF; Donzel-Gargand, O; Kiselman, K; Pearson, P; Salomé, PMP; Stolt, L; Edoff, M	2025	Back contact passivation with Ga-grading in narrow bandgap (Ag,Cu)(In,Ga)Se2 bifacial solar cells on In2O3:Sn back contact	IEEE PHOT SPEC CONF	10.1109/PVSC59419.2025.11133411	WOS:001572091100085
Yamazaki, R; Isberg, J; Suntornwipat, N; Moldarev, D; Magnusson, B; Aitkulova, A; Majdi, S	2025	Defect investigation of undoped wide bandgap materials: Comparison between charge transient spectroscopy (QTS) and inverse Laplace QTS	J APPL PHYS	10.1063/5.0257511	WOS:001472585200019
Yang, H; Li, FS; Zhan, SQ; Liu, YW; Liu, TQ; Wang, LQ; Li, WL; Ahlquist, MSG; Farid, S; Ge, RL; Wang, JH; Koper, MTM; Sun, LC	2025	Metal-hydroxyls mediate intramolecular proton transfer in heterogeneous O-O bond formation	NAT CHEM	10.1038/s41557-025-01993-8	WOS:001614418100001
Yang, YP; Dev, A; Lu, X; Sychugov, I; Zhang, SL	2025	Plasmon-enhanced photoluminescence of single upconversion nanoparticles site-selectively captured between gold nanorods	APPL PHYS LETT	10.1063/5.0271485	WOS:001522175600014
Zeng, P; Hu, YQ; Su, B; Chen, XJ; Li, XQ; Zhao, XF; Wang, L; Liu, GL; Luo, W; Yuan, C; Song, YZ; Wang, QY; Zhang, L	2025	Activating Transition-Metal Oxides through In Situ Regulation of Lower Hubbard Band for Catalytic Conversion of Lithium Polysulfides	ACS NANO	10.1021/acsnano.5c03325	WOS:001479394400001
Zhang, YL; Dai, ZX; Tan, ZH; Yang, HL; Xu, C; Zhou, SY; Li, ZM	2025	Unveiling the electron-phonon coupling anisotropy in 2D covalent organic frameworks	CHEM SCI	10.1039/d5sc08033a	WOS:001652348100001
Zhang, ZB; Chen, LB	2025	Neuromorphic electronic tactile system for human-level tactile feedback	CLIN TRANSL MED	10.1002/ctm2.70413	WOS:001526634100001
Zhang, ZH; Ahuja, R; Luo, W	2025	Designing a sensor based on a π-conjugated 6-membered boron ring and its properties	PHYS REV MATER	10.1103/y1wh-fjp3	WOS:001513329200003
Zhang, ZH; Leifer, K; Ahuja, R; Luo, W	2025	Design of planar 2D semiconductors incorporating sp2-hybridized group 13 metals with boron, carbon, and nitrogen	NANO ENERGY	10.1016/j.nanoen.2025.111550	WOS:001611900500001
Zhao, YG; Dongfang, NC; Huang, C; Erni, R; Li, JG; Zhao, H; Pan, L; Iannuzzi, M; Patzke, GR	2025	Operando monitoring of the functional role of tetrahedral cobalt centers for the oxygen evolution reaction	NAT COMMUN	10.1038/s41467-025-55857-3	WOS:001396064400006
Zheng, XX; Han, L; Fatima, S; Khan, S; Sun, Y; Li, ZH; Ning, YF; Leifer, K; Zhu, GC; Li, H; Song, AM	2025	Large-Scale and Ultraclean Dry Transfer of Two-Dimensional Materials via Liquid Nitrogen-Assisted Cryogenic Exfoliation	NANO LETT	10.1021/acs.nanolett.5c01548	WOS:001508936000001
Zheng, XX; Liu, JW; Liu, BQ; Liu, WC; Han, L; Wang, L; Li, ZH; Wang, ZY; Sun, Y; Fatima, S; Zhu, GC; Li, H; Leifer, K	2025	Superior thermal conductivity graphene films achieved by laser-irradiation-treatment	CARBON	10.1016/j.carbon.2025.120838	WOS:001577220300002
Zhong, HD; Zhao, XF; Xue, XT; Hu, YH; Yang, YX; Yang, F; Shan, BH; Zheng, YH; Xu, TZ; Zhao, ZY; Sun, K; Luo, W; Yu, R; Wang, WP; Zhang, ZJ	2025	Unexpected ultraviolet plasmonic properties of Ge2Sb2Te5: Exploration through double Tauc-Lorentz model	J APPL PHYS	10.1063/5.0293056	WOS:001595425900001
Zhou, HS; Liu, Y; Fu, L; Engqvist, H; Xia, W	2025	Highly toughened translucent glass matrix nanoceramics enhanced by amorphous Al2O3	J ADV CERAM	10.26599/JAC.2025.9221032	WOS:001433432600002
Zhou, HS; Wang, YR; Yu, HY; Fu, L; Wu, CT; Engqvist, H; Xia, W	2025	Toughening glass ceramics nanocomposites via engineering interfaces	MATER DESIGN	10.1016/j.matdes.2025.115005	WOS:001608514900005

Zubayer, A; Eriksson, F; Falk, M; Lorentzon, M; Palisaitis, J; Klauser, C; Nagy, G; Wolf, PM; Pitthan, E; Holenák, R; Primetzhofer, D; Stenning, GBG; Glavic, A; Stahn, J; Dorri, S; Eklund, P; Birch, J; Ghafoor, N	2025	The Role of 11B4C Interlayers in Enhancing Fe/Si Multilayer Performance for Polarized Neutron Mirrors	J PHYS CHEM C	10.1021/acs.jpcc.5c00068	WOS:001467593600001
Åkerfeldt, E; Thornell, G	2025	Experimental investigation and modelling of heat losses in a hydrogen peroxide monopropellant microthruster	AEROSP SCI TECHNOL	10.1016/j.ast.2025.110380	WOS:001510718400002

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Aitkulova, Aisuluu	2025	Graphene on Diamond : Device Fabrication and Characterization for Electronics Applications
Andruszkiewicz, Aneta	2025	Quantum Dots for Tandem Solar Cells Applications
Bericat Vadell, Robert	2025	Plasmon mediated photo-redox catalysis : From fundamentals to reactions
Comparotto, Corrado	2025	Synthesis of $BaZrS_3$ perovskite thin films for photovoltaic applications
Eliasson, Kasper	2025	Scalable Fabrication of Structured Covalent Organic Frameworks for Chemical Separation
Fernandes, Daniel Filipe Félix	2025	Exploring Pathways for Low-Temperature Reactive Sputter Deposition of Crystalline TiO_2 Thin Films
Hedbom, Daniel	2025	Adsorbent Characteristics and Pollutant Capture in Metal-Organic Framework Design
Iurchenkova, Anna	2025	Sustainable Carbon Materials from Biomass: Pyrolysis and Laser-Induced Carbonisation for Energy Storage Applications
Kariattukarakaran Thilakan, Karthika	2025	Neutron scattering on magnetic materials : Investigating structure-property links in selected magnetic alloys
Kumar, Amol	2025	Phenomena based on Electron hopping transport in Metal-Organic Frameworks
Levine, Valerie R.	2025	Semisolid Extrusion and Selective Laser Sintering in Pharmaceutics : From Clinical Application to Mass Customization
Löfstrand, Julia	2025	Design and additive manufacturing of soft-magnetic materials and metallic glasses
Manjeshwar Sathyanath, Sharath Kumar	2025	Electron magnetic circular dichroism of thin films and at single interfaces at atomic lattice plane resolution
Nielsen, Ida	2025	Water in Prussian blue analogues : A blessing or a curse?
Pearson, Patrick	2025	An Investigation of Meta-Stability in $(Ag,Cu)(In,Ga)Se_2$ Solar Cells
Rezaei, Farnaz	2025	3D printing of high-detail resolution structures for biotechnological applications
Riva, Stefania	2025	Surfaces and Interfaces of Chalcogenide and Lead Halide Perovskites for Photovoltaics : A Photoelectron Spectroscopy Study
Shi, Qian	2025	Acoustic manipulation in two-phase systems
Spallacci, Claudia	2025	Minimal metal-binding peptides towards integrated bioinspired electrocatalysis : From sequence to surface
Suremann, Nina Fabienne	2025	Brick by Brick: Assembly and Exploration of Metal-Organic Framework Thin Films
Vantaraki, Christina	2025	Planar Magnetic Metamaterials : An Additive Approach
Xu, Zheqiang	2025	A Lab-on-a-silicon Chip Platform for Profiling Bacterial Metabolism
Zhao, Ziwen	2025	Advancing Single-Entity Electrochemistry from Methods to Applications